Investigating the Impact of Employee Age and Gender on Organisational Commitment, Retention and Possible Turnover Intentions in an Irish Call Centre Setting

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Abstract

This research was aimed at discovering the impact of age and gender on organisational commitment levels in an Irish call centre setting and how organisational commitment levels may have an impact over employee retention and employee turnover levels. The reasoning behind this research was that there was a gap in the literature regarding these factors in an Irish call centre setting, as many of the studies were conducted in countries such as India who are renowned for their call centre industry.

In relation to age and organisational commitment, research shown in the literature found contrasting results when the influence of age on organisational commitment was tested. Regarding gender and organisational commitment, research found that females had higher organisational commitment levels than males and that the call centre industry was better suited to females due to characteristics valued in the call centre sector that are often considered to be feminine characteristics such as empathy and patience. Organisational commitment levels have been shown to have a large impact on employee retention and employee turnover intentions.

Findings from this research has shown that in the chosen call centre, there was no significant difference between gender and organisational commitment, although there was a significant difference between age and organisational commitment. It was also shown that call centre employees who have low levels of organisational commitment were more likely to leave their current position than those who had high levels of organisational commitment.

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Chapter 1: Introduction

This research will be investigating the impact of employee age and gender on organisational commitment, employee retention and employee turnover intentions in

an Irish call centre setting. In this research, the author will be investigating whether the age and gender of employees in the call centre sector have differences in organisational commitment levels and how commitment levels may influence employee retention and employee turnover intentions.

1.1 Background of Research

According to the Industrial Development Authority Ireland (IDA) (2011), call centres in Ireland have grown significantly in recent years (IDA, 2011) as it gives the ability to organisations to handle numerous customer concerns and queries in an efficient and low cost manner (Mukherjee and Malhotra, 2009). However, negative aspects of call centres has been a major influence in previous research as many call centre employees have been found to have high stress levels (Choi, Cheong and Feinberg, 2012), high workloads, burnouts (Simons and Buitendach, 2013), few promotional opportunities and little to no career advancement (Budhwar, Varma, Singh and Dhar, 2006). Organisational commitment can be defined as "an employee's identification with, and adoption of, an organisation's values, norms and traditions" (McGuire and McLaren, 2008, p.35). Allen and Meyer (1990) introduced three different types of organisational commitment. These are affective commitment, continuance commitment and normative commitment. Affective commitment refers to when an individual is committed to their organisation due to a sense of belonging there. Continuance commitment refers to when an individual is committed to their organisation because they feel they will suffer a financial loss by leaving, but a financial gain by staying in the organisation and normative commitment refers to when an individual is committed to their organisation because they feel morally obliged to do so (Allen and Meyer, 1990). By having high levels of organisational commitment in a company, employees will show high levels of organisational citizenship whereby they will make an extraordinary effort to achieve the goals of the organisation (Ansari, 2011). Factors influencing organisational commitment in call centre employees include training and development schemes (Chew and Chan, 2007), working flexibility (Verma, Bhal and Vrat, 2013), a supportive culture (McGuire and McLaren, 2008) and promotional opportunities with the possibility of career advancements (Bozionelos, 2008). Low levels of organisational commitment can lead to an increased intention to leave amongst employees therefore reducing employee retention within the organisation (Mathieu and Zajac, 1990). Employee retention refers to "the ability of an organisation to retain its

employees" (Zareen, Razzaq and Ramzan, 2013, p. 822) and employee turnover refers to when an employees leaves their job for another job in a different organisation (Riggio, 2013). Previous research has shown that the key factors that influence employee turnover intentions in call centres include the large volume of negative customer interactions (Poddar and Madupalli, 2012), the lack of promotional opportunities (Mukherjee and Malhotra, 2009) and career advancements (McGuire and McLaren, 2008) and the biggest factor, stress (Hannif, Connell, McDonnell and Burgess, 2014).

1.2 Aims and Objectives of this Research

The aims and objectives of this research examine gender and organisational commitment in an Irish call centre setting, age and organisational commitment in an Irish call centre setting and organisational commitment, employee retention and employee turnover in an Irish call centre setting.

1.2.1 Hypothesis 1

In relation to gender and organisational commitment, it is hypothesised that 'females working in the call centre will have a higher level of organisational commitment towards their organisation than males working for the same organisation'.

1.2.2 Hypothesis 2

In relation to age and organisational commitment, it is hypothesised that 'as individuals working for the organisation get older, they will have a higher organisational commitment level than those at a younger age working in the same organisation'.

1.2.3 Hypothesis 3

In relation to organisational commitment, employee retention and employee turnover, it is hypothesised that 'Individuals with high levels of organisational commitment will be less likely to leave the organisation than those who have low levels of organisational commitment'.

1.3 Justification for this Research

The justification for this research is that organisational commitment levels and employee retention levels in call centre employees are extremely low and employee turnover is very high in comparison to other Irish sectors, however there is a gap in the literature regarding these issues in Irish call centres. There has been numerous studies conducted on organisational commitment levels, employee retention and employee turnover in the call centre sector however, there has been very little research conducted in the Irish call centre sector as many of the studies have been executed in countries such as India and Australia, showing a gap in the literature. It is of interest to the author to determine how age and gender have an impact on organisational commitment levels and how in turn these organisational commitment levels have an impact on employee retention and possible turnover intentions in the Irish call centre sector. By addressing these issues, it is hoped that the results obtained will be of use to managers in the call centre sector in retaining staff members.

Chapter 2: Literature Review

In this chapter, previous research will be addressed regarding the call centre sector, organisational commitment, employee retention and employee turnover in the call centre sector as well as the factors that have an impact over these issues. Previous studies examining the impact of age and gender will also be addressed.

2.1 Call Centres in Ireland

The use of call centres in Ireland, both in-house and outsourced, have become increasingly prominent in recent years due to the ability to deliver a vast amount of information to organisation's customers (Scholarios and Taylor, 2010) and handling customer complaints whilst keeping the loyalty of the customer, in an efficient and lowcost manner (Mukherjee and Malhotra, 2009). The emphasis on customer satisfaction in organisations has led to the huge growth in the call centre sector. In an attempt to further reduce costs many Irish and European organisations outsource business to countries such as India who have a less costly labour force. India has become renowned for it's call centre industry, as it can save European countries up to ten million pounds annually by utilising this less costly labour force (Budhwar, Varma, Malhotra and Mukherjee, 2009). There are numerous categories of call centres in Ireland in areas such as the banking sector, retail sector, health sector and hospitality sector that all require different levels of expertise and qualifications depending on the hierarchical structure of the call centre as well as the type of call centre (Glucksmann, 2004). Some may have flat hierarchies whereas others can have layers within the hierarchy, needing more qualification and skill (Bozionelos, 2008). For example, some areas in the call centre sector may require a minimum honours degree whilst others do not require any university degree whatsoever. It is important to note this, as those working in the call centre sector that have obtained an honours undergraduate university degree or perhaps a postgraduate degree may have a greater degree of freedom and self-direction than those who may not possess such qualifications (Jaoua, L'Ecuyer and Delorme, 2013). In 2006, Ireland had the highest percentage of the working population working in call centres in Europe (De Grip, Sieben and Van Jaarsveld, 2006). According to IDA Ireland (2011), over 29,000 people were employed in the call centre industry based in over 100 locations around Ireland. Over 150 million phone calls were recorded in 2010 alone, showing that the call centre industry in Ireland is thriving. These figures were expected to grow further over the coming years (IDA Ireland, 2011).

2.2 Common Characteristics of Call Centres

2.2.1 Positive Characteristics of Call Centres

Organisations that use call centres have the ability to handle a vast amount of inquiries, complaints and general organisational information in a low cost, timely manner

(Scholarios and Taylor, 2010). This would be a primary benefit of the call centre sector as it allows the organisation to effectively operate the organisation to achieve the overall organisational business strategy and goal by allocating specific jobs to govern other organisational queries (Borst, Mandelbaum and Reiman, 2004). Employers have a great deal of control exerted onto their employees. With this control, it ensures that employees are conducting their duties and expectations of the organisation correctly, in a way that the organisation can be accurately represented through their employees (Hannif et al., 2014). Many call centres have employment contracts that allow flexibility such as fixed or temporary workers, part-time or full-time workers and flexible working hours. This flexibility is needed in call centres due to many needing 24 hour services available to their customers as well as having the ability to manage high volumes of phone calls during peak times (Schalk and Van Rijckevorsel, 2007).

2.2.2 Negative characteristics of Call Centres

However, call centres have also been met with criticisms such as poor working conditions (McGuire and McLaren, 2008), high pressure and stress (Choi et al., 2012), little career prospects and promotional opportunities (Budhwar et al., 2006), burnouts and high workloads (Simons and Buitendach, 2013) and a flat organisational hierarchy by nature (Bozionelos, 2008). They have been said to be highly bureaucratic with little employee control (Budhwar et al., 2006). The lack of control that employees have is largely due to scripting and excessive scripting procedures. This means that they must follow this strict procedure and cannot deviate away from these scripts, which in turn can increase stress levels (Hannif et al., 2014). Because of this scripting, training is not a crucial aspect in the call centre sector as there is a reliance on the scripts as well as IT systems within the organisations (Sprigg and Jackson, 2006). Call centres are believed to de-skill employees due to the repetitive nature and automaton approach many employers put in place (Hannif et al., 2014). Call centres are renowned for high turnover rates that can range from 1% to 80% per year with the average lifespan of a job in a call centre lasting approximately two years (Mukherjee and Malhotra, 2009). Call centres are often referred to as "electronic sweatshops" due to the large monotonous workloads with low pay and little to no promotional opportunities or possible career advancements (Budhwar et al., 2006; Choi et el., 2012). Many call centre employees can become ill, both physically and mentally due to the nature of call centres. Working conditions is a large factor involved with employee physical well

being, as employees can have back problems and issues with their eyesight from sitting at a computer all day (McGuire and McLaren, 2008; Mukherjee and Malhotra, 2009). Mental health can be affected in call centre employees as often customers with complaints take their anger out on the call handler and can be quite verbally abusive to them. This can lead to poor mental health, high stress levels and in time, an increased intention to leave (Budhwar et al., 2006; Simons and Buitendach, 2013; Hannif et al., 2014). Organisational commitment is crucial for organisations to increase retention and to decrease employee turnover intentions (Ansari, 2011).

2.3 Organisational Commitment

Organisational commitment can be broadly defined as "an employee's identification with, and adoption of, an organisation's values, norms and traditions" (McGuire and McLaren, 2008, p.35). It is how employees feel and act towards their organisation (Riggio, 2013). Allen and Meyer (1990) believed that organisational commitment does not have one broad term to define it, as individuals can be committed to their organisations in some aspects but not in others. They devised three different definitions to suit all aspects of organisational commitment. These are affective commitment, continuance commitment and normative commitment. Affective commitment refers to "an affective or emotional attachment to the organisation such that the strongly committed individual identifies with, is involved in, and enjoys membership in, the organisation" (Allen and Meyer, 1990, p. 2). Continuance commitment refers to "a tendency to engage in consistent lines of activity based on the individual's recognition of the 'costs' associated with discontinuing the activity" (Allen and Meyer, 1990, p. 3) in other words, these employees feel that if they continue to work for the organisation, a profit is involved by staying in the organisation and a loss is involved if they decided to leave the organisation. Normative commitment occurs when an employee feels morally obliged to stay in their organisation. For example, if a close family member spent their entire career in the same organisation, it could increase their commitment levels as they could feel they should stay because their family member or family members stayed for their entire career. Normative commitment is defined as "the totality of internalised normative pressures to act in a way which meets organisational goals and interests, and suggests that individuals exhibit behaviours solely because they believe it is the "right" and moral thing to do" (Allen and Meyer, 1990, p. 3). To summarise, employees who continue to work for the organisation because they want to

have high affective commitment levels. Those who feel they need to stay due to financial factors or a lack of available alternatives have high continuance commitment levels and those who feel they are morally obliged to stay in the organisation have high normative commitment levels.

2.4 Increasing Organisational Commitment in Call Centre Employees

It is crucial to keep organisational commitment levels high amongst call centre employees as studies have shown that those who have high levels of organisational commitment have an increased level of job satisfaction, high levels of job performance, high output levels where they are reaching targets set by management, excellent supervisor appraisal and low levels of absenteeism (Ansari, 2011). They also have lower levels of stress and are less likely to leave the organisation in comparison to those who are not committed to the organisation (Khan, Jam, Akbar, Khan and Hijazi, 2010; Verma et al., 2013). Individuals with high levels of organisational commitment have shown that they have high levels of organisational citizenship whereby they make an extraordinary effort to achieve the goals of the organisation rather than do the bare minimum as some employees with low levels of, or no organisational commitment may do (Ansari, 2011). According to Chew and Chan (2007), organisations should aim to have a happy, upbeat and positive environment for employees to work in. When organisations are recruiting new employees, they should be searching for an individual with similar aims and objectives as the organisation. If the employee understands what they are working towards, their commitment levels will be higher (Chew and Chan, 2007).

2.4.1 Training and Development

A crucial factor in increasing organisational commitment amongst call centre employees lies within the recruitment, training and development of these employees (Chew and Chan, 2007). The training and development is vital to show employees that the organisation sees them as an investment rather than another number in the workforce. Training and development can lead to higher job performance and productivity in which employees should receive recognition and possible rewards to show their work is valued, which can increase organisational commitment (Dean and Rainnie, 2009).

2.4.2 Employment Flexibility

It has also been found that employment flexibility increases organisational commitment amongst employees (Verma et al., 2013). Women are also more likely to work flexible hours as they often attempt to balance work and family life. In previous years, there was very limited flexibility in the work place due to the fact that the working environment was predominantly male suited. This was because it was tradition for women to stay at home considering it was seen as taboo for women to have careers, however in recent times women have the same opportunities as males in relation to education, skill, qualifications and job opportunities (Verma et al., 2013).

2.4.3 Provide a Supportive Culture

By introducing a supportive culture in an organisation, employees understand that there are co-workers and supervisors to help and encourage them, which has been found to increase commitment levels as employees feel a sense of belonging in the organisation, therefore are less likely to leave as they may feel they will not have the same sense of belonging in another organisation (McGuire and McLaren, 2008). When an employee feels a strong sense of belonging within their organisation, they often have high levels of affective commitment towards their organisation (Allen and Meyer, 1990).

2.4.4 Bonuses and Promotional Opportunities

Pay and bonuses can increase organisational commitment although employees look for promotional opportunities and career progression, meaning pay and bonuses alone will not help commitment levels, although it is a factor that satisfies employees to a certain extent (Chew and Chan, 2007; Bozionelos, 2008). If layers were added to organisations instead of having a flat hierarchy, employees would be more committed as they would believe that there is a possibility for promotion thus enhancing their career (Bozionelos, 2008).

2.5 The Influence of Age and Gender on Organisational Commitment

2.5.1 The Influence of Age on Organisational Commitment

According to Masibigiri and Nienaber (2011), Generation X employees often have reduced loyalty and commitment towards their organisations out of boredom and from feelings that their current organisations do not value their skill and expertise (Masibigiri and Nienaber, 2011). In their study, numerous Generation X employees participated in their research, each with different degrees and qualifications. Results obtained through

interviews found that salary was a major indicator of reasons for retention, as well as acknowledgement from their employers. Many employees believed that the salary they received did not accurately match up to the Generation X employee's work attributes, which in turn increased turnover intention levels amongst these employees (Masibigiri and Nienaber, 2011). However, Kraemer and Gouthier (2013) found that employees who had been working in their call centre organisation for a long period of time had higher levels of organisational commitment and low levels of turnover intentions in comparison to those who had not been working for the organisation for a long period of time. Many of the individuals who had been working in the organisation for a long period of time were older in age than those working for a shorter period of time (Kraemer and Gouthier, 2013).

2.5.2 The Influence of Gender on Organisational Commitment

Kraemer and Gouthier (2013) also found that females had greater organisational commitment towards their organisation in comparison to males (Kraemer and Gouthier, 2013). Females account for a large percentage of call centre employees due to their feminine characteristics that appear to be valued in the call centre sector as they constantly interact with customers (Hannif et al., 2014; Verma et al., 2013). Walsh and Bartikowski (2013) found that when males suffer from emotional exhaustion from customers, they have a decreased level in organisational commitment and an increased level in turnover intentions whereas females had more organisational commitment than the males and they also had lower levels of turnover intentions caused by emotional exhaustion from customers in comparison to males, which may be a reason why the call centre sector is believed to be largely female populated (Walsh and Bartikowski, 2013). According to Russell (2008), the reason for the call centre sector being predominantly female populated is due to the recruitment and selection strategies employers use. The reason for this is that as previously mentioned, attributes in which call centre employees are expected to have are largely feminine traits such as empathy and patience (Hannif et al., 2014). This in turn causes the call centre sector to be a favourable work environment for females where females can progress in layered organisational hierarchies (Russell, 2008).

2.6 The Impact of Organisational Commitment on Possible Employee Retention and Turnover Intentions

Organisational commitment amongst employees is crucial for organisations due to numerous factors such as retention primarily, an increased level in performance, lower levels of absenteeism and a decrease in employee turnover intention levels within the organisation (Mathieu and Zajac, 1990). Kraemer and Gouthier (2013) conducted a study to determine how organisational pride and emotional exhaustion had an impact on turnover intentions amongst call centre employees. Gender and organisational tenure were also hypothesised to have an impact on turnover intentions. Results obtained showed that high levels of organisational commitment lowered turnover intentions in females and employees who had been employed by the organisation for a long period of time also had lower turnover intentions. However, organisational commitment levels in those who had not been working for the organisation for a long period of time did not affect turnover intentions and organisational commitment levels in males who were working for the organisation did not have an impact on turnover intentions (Kraemer and Gouthier, 2013). Ansari (2011) found that employees who have high levels of organisational commitment have lower levels of intention to leave as well as other organisational benefits such as high levels of organisational citizenship and higher performance levels than those who were not highly committed to the organisation (Ansari, 2011). Another study yielded similar results where employees who were committed to their organisation and their job characteristics would not search for other jobs as they were content in their current one, whereby those who were not committed to their organisation and who did not enjoy their job were more likely to leave the organisation or attempt to change their roles within the organisation (Khan et al., 2010). However, those who have high levels of continuance commitment towards their organisation don't necessarily enjoy working in the organisation but they need to continue to work there due to the financial aspects of staying verses leaving their current employment (Allen and Meyer, 1990). Those who are loyal towards the organisation develop higher profitability, sales, productivity levels and they also are less likely to leave the organisation, increasing employee retention levels (Mahal, 2012).

2.7 Employee Retention and Turnover in Irish Call Centres

2.7.1 Employee Retention

Employee retention is defined as "the ability of an organisation to retain its employees. Retention of employees plays a vital role in increasing organisational productivity and enhances the cumulative performance of employees" (Zareen et al., 2013, p. 822). The call centre sector has been characterised by many as an "electronic sweatshop" (Budhwar et al., 2006; Mukherjee and Malhotra, 2009) whilst using a bureaucratic approach with strict management control (Choi et al., 2012) and high efficiency levels (Budhwar et al., 2006). Employee retention is extremely low in the call centre sector due to factors such as lack of promotional opportunities (Hannif et al., 2014), few career prospects (Mukherjee and Malhotra, 2009) and high stress levels (Simons and Buitendach, 2013). The lack of promotional opportunities and few career prospects are often due to the flat hierarchical structure in call centres. Although some call centre organisations have a layered hierarchy where individuals can progress to become a team leader, supervisor or manager, many do not (Bozionelos, 2008). A major cause for stress in the call centre sector is abusive or unpleasant customer interactions. Customers often blame the call handlers for their issues, which can lead to an increased level of stress in call centre employees as well as many call centres using rigid scripting to deal with customer interactions that do not always satisfy the customer's query or complaint. This stress can lead to employee turnover in organisations (Hannif et al., 2014).

2.7.2 Employee Turnover

There are two different types of employee turnover. Involuntary turnover refers to when an employer fires an employee or lets them go as a result of factors such as a recession or incompetency (Riggio, 2013). Voluntary turnover occurs when an employee leaves their job to work for another organisation. Job satisfaction and organisational commitment are believed to have an impact on turnover intentions (Riggio, 2013). Voluntary turnover is the most common type of turnover in the call centre sector due to the negative aspects involved such as the factors previously mentioned such as high stress levels and few promotional and career progression opportunities (Budhwar et al., 2006).

2.8 Employee Turnover in the Call Centre Sector

As previously mentioned, employee turnover in the call centre sector is extremely high in comparison to other sectors as the average turnover for the call centre sector is 20%, varying from 1% to as high as 80% in some cases with the average working lifespan of a call centre being only two years (Mukherjee and Malhotra, 2009). Extensive research has been conducted in recent years with the extreme growth in the call centre industry due to the beneficial factors such as low cost, the fast manner of delivering information and handling customer queries and complaints (Scholarios and Taylor, 2010).

2.8.1 Negative Customer Interactions

Due to the nature of many call centres, handling queries in an efficient manner is central to the organisation's goals and overall business strategy where employees come second to customers. This in turn increases stress levels and work pressure amongst call centre employees (Mukherjee and Malhotra, 2009), as customers can often take their frustration and anger out on the call handler (Hannif et al., 2014) often causing employees to consider leaving the organisation, increasing employee turnover (Budhwar et al., 2006). It is believed that approximately 20% of customer interactions are adverse in nature (Poddar and Madupalli, 2012).

2.8.2 The Lack of Promotional Opportunities and Career Prospects

Another key factor that has emerged that influences employee turnover intentions has been the lack of promotional opportunities in call centres, as well as very few career prospects (Budhwar et al., 2006; McGuire and McLaren, 2008; Mukherjee and Malhotra, 2009; Hannif et al., 2014). Many call centres depend on their employees to have good personal skills and communication skills, as they must interact with customers daily over the phone. These characteristics are believed to be feminine traits and within call centres, the majority of employees are believed to be female and young (Glucksmann, 2004). However, it has been found that many individuals who have quit their jobs in call centres have quit early because the nature of the call centre did not suit them (Bozionelos, 2008). This may be due to factors such as high bureaucracy, little control, high workloads and numerous pressures from customers, co-workers and managers, which in time can increase stress levels (Budhwar et al., 2006; Mukherjee and Malhotra, 2009; Hannif et al., 2014).

2.9 The Influence of Stress on Employee Retention

There are many factors that can increase stress levels in call centre employees. These factors include excessive scripting (Hannif et al., 2014), abusive interactions from customers (Choi et al., 2012) and a lack of control felt by employees (Russell, 2008). Other factors that contribute to stress in a call centre setting include rigid performance monitoring whilst ensuring the customer has received satisfactory service, strict targets to meet daily that often result in large workloads, time pressures (Dean and Rainnie, 2009), phone rage from customers (Grandey, Dickter and Sin, 2004), conflicting demands from various parties such as the customers, co-workers and supervisors (Ashill, Rod, Thirkell and Carruthers, 2009) and a lack of training and development (Hannif et al., 2014).

2.9.1 The Impact of Scripting on Call Centre Employees

Scripting and excessive scripting can often have a negative impact on employees instead of positive, as each customer is different therefore it will not always suffice to abide by steps given by the employer to the employee. It can also result in deskilling of employees as they are not given a lot of room for their own personal thoughts and ways of handling issues if scripting is strict in the organisation, resulting in higher levels of stress and lower motivational levels therefore increasing the risk of turnover intentions (Hannif et al., 2014). Winiecki (2009) referred to call centre agents as actors due to the excessive scripting used by call centre agents. In his study, the call centre studied handled queries relating to the whereabouts of a person's delivery. In this case, there were numerous individuals involved such as the van or truck drivers as well as those who took orders and organised them on to the transit vans. The call centre agents had two specific responses regarding these queries and often, these responses would result in the customer becoming agitated and aggressive towards the handler. In this case the handler could not give any more information without breaching company policy which often led to an increase in stress levels and a negative impact on the employees emotionally (Winiecki, 2009).

2.9.2 The Impact of Negative Customer Interactions on Call Centre Employees

Often when customers have an issue with an organisation they are agitated and angry at the organisation. Unfortunately for call handlers, this anger is taken out on them as they are linked to the organisation and the customer directs their abuse towards them for this reason (Hannif et al., 2014). Rather than seeing the call handler as an individual,

they tend to dehumanise them and treat them as though they are the issue when this is not the case. This can lead the call handlers to have extremely high stress levels, as they must treat the customer with respect even if the respect is not mutual (Hannif et al., 2014). With high stress levels, this makes call centre employees more likely to leave their jobs (Sawyerr, Srinivas and Wang, 2009).

2.10 The Influence of Few Promotional Opportunities on Employee Retention

Organisations that do not have a large amount of promotional opportunities available, or any at all, tend to have greater employee turnover than those who provide many promotional opportunities within the organisation (Bozionelos, 2008). Call centres are often believed to be a temporary job where employees work before moving on to something better (Hannif et al., 2014). As call centre employment is associated with high stress, large workloads and little control, employees are often dissatisfied and therefore they are not motivated to continue to work, as there are no major career enhancing benefits associated with high motivation and productivity levels (Chew and Chan, 2007).

2.10.1 Pay and Promotional Opportunities

Studies have shown that pay can influence retention levels as employees will be less likely to leave if they are satisfied with their pay, although it was also found that pay alone was not sufficient to keep the employees motivated and productive at work. Good wages and promotional opportunities were factors that employees believed to increase their interest in continuing to work for the organisation (Chew and Chan, 2007; Bozionelos, 2008). Call centre employees often have to accept high levels of control exerted upon them whilst following strict scripting when handling customer queries and complaints. Without any positive feedback or career progression in their organisation, they will be more likely to have high turnover intentions as it would be difficult to see the reasons for their retention (Dean and Rainnie, 2009).

2.10.2 Maslow's Hierarchy of Needs

According to Abraham Maslow (1954), individuals subconsciously follow a hierarchy of needs, which is a hierarchy of basic fulfilments that can improve psychological health. This hierarchy includes physiological needs such as food and water, health and safety needs such as a home and general protection, belongingness, which refers to

close relationships with family and friends, esteem needs that refer to an individual's self-esteem and sense of achievement and self actualisation, whereby an individual has become the best version of themselves. It was believed that once a hierarchical level was attained, an individual would strive to attain the next level, improving psychological health (Lester, 2013). Without being able to satisfy the esteem or self-actualisation levels, a person cannot progress within themselves and their own psychological health, which can influence their work (Lester, 2013). To improve promotional opportunities within the call centre sector, managers should attempt to introduce layers into the organisation whereby employees can then strive towards promotion to become a supervisor or manager, increasing productivity and organisational commitment whilst increasing employee retention levels (Chew and Chan, 2007; Bozionelos, 2008; Dean and Rainnie, 2009).

2.11 Keeping Employee Retention Levels High in the Call Centre Sector

Attracting, training, developing and retaining employees is necessary to ensure the organisation has a competitive advantage in the workforce as well as ensuring costs are kept at a minimum (Masibigiri and Nienaber, 2011).

2.11.1 Costs Involved with Employee Turnover

When there are high levels of employee turnover in organisations, both direct costs and indirect costs are involved. Direct costs include costs involved with the recruitment process such as interviewing, screening and assessing potential recruits as well as the possibility of the cost of a recruitment agency. Indirect costs include the loss of skill and talent, specifically if these employees have been trained in specific areas that other employees may not have been trained in (Masibigiri and Nienaber, 2011). However, some authors believe that by recruiting new employees, productivity levels will increase and it is possible that there will an influx of new suggestions and methods to increase productivity and reduce costs (DeTienne, Agle, Phillips and Ingerson, 2012). The reason for this is that many reasons for turnover include stress, fatigue and poor job satisfaction which in turn decrease productivity levels and increase absenteeism rates, also increasing organisational costs as the organisation must use other employees to act as a substitute for the employees when they are absent from work (Kraemer and Gouthier, 2014). By introducing teams into the call centre sector, employees can feel as though they belong in the organisation (Jiang, 2010), as their team leader or supervisor, as well as their other teammates can support them. Each team strives

towards one common goal giving the team members a purpose in their career (Jiang, 2010).

2.11.2 Issues with Employee Turnover

With such high turnover within the call centre sector, negative consequences arise frequently. These include a negative public image as individuals would believe that the organisation is not a nice place to work due to the large levels in employee turnover, demoralisation as with high turnover levels, this can begin to make employees question their reasons for staying which could possibly further increase turnover levels and increased costs involved with the organisation undergoing recruitment and training processes (Mowday, 1984).

2.12 Increasing Employee Retention in the Call Centre Sector

2.12.1 Improving the Work Environment

According to Mahal (2012), there are numerous initiatives employers can establish to increase employee retention within the organisation. These include rewarding employees for successful completion of difficult tasks, have an open, welcoming relationship with employees whereby employees can discuss any potential issues or suggestions they may have in relation to improving the organisation and to provide a healthy working environment to benefit both physical and mental health (Mahal, 2012). This is something that was also suggested by McGuire and McLaren (2008) who found that a stressful environment can result in physical and mental ill-health for employees although a clear, clean physical environment can increase organisational commitment levels, innovation and creativity which can all benefit the organisation and potentially reduce costs (McGuire and McLaren, 2008). By having a welcoming relationship with employees, employers can increase retention by offering approaches to dealing with issues such as problematic customers, as this has been reported to have a significant impact on employee turnover intentions, which in turn decreases the level of retention in the call centre sector (Poddar and Madupalli, 2012; Kumar Madupalli and Poddar, 2014).

2.12.2 Training and Development Opportunities

Other factors to influence retention levels in the call centre sector include training and development opportunities, as these are not seen as a priority in the call centre sector as training in some organisations is seen as a nice element to have rather than a

necessity, as scripting is often in place for employees to follow whilst handling queries or complaints (Hannif et al., 2014). Supervisor support, clear job roles and policies in place to ensure a work/life balance such as flexitime (Schalk and Van Rijckevorsel, 2007) are also believed to influence employee retention in organisations (Mahal, 2012). By ensuring job roles are clear and understood by employees and that employees are properly trained, this can reduce the need for scripting and excessive scripting in regards to how employees should interact with customers. Scripting and excessive scripting can have a negative impact on employee wellbeing and mental health primarily (McGuire and McLaren, 2008).

2.12.3 Promotional Opportunities and Teams

A career advancement opportunity such as promotion is an extremely important factor to consider when retaining employees as well as wages and compensation (Mahal, 2012). Although wages and compensation are important to motivate and retain employees these factors alone will not be sufficient, as employees have been found to have more interest in career advancement and promotional opportunities (Bozionelos, 2008). According to Mowday (1984), to manage turnover in organisations, managers should alter training and development programmes to ensure employees believe that they are needed in their roles as well as cross training employees to ensure they can handle any issues arising from employee turnover. Also, by introducing teams and allocating specific jobs to each team, this gives individuals a sense of importance therefore they will not want to let team members down by not conducting their work appropriately and by ensuring individuals have high organisational commitment levels, this may transfer to other employees, reducing turnover levels and increasing employee retention for the organisation (Mowday, 1984).

2.13 HRM Strategies to Increase Employee Retention and Organisational Commitment Levels

In organisations that have extremely low levels of employee retention, managers need to introduce various HRM strategies to attempt to discover why employee retention is so low as well as strategies to implement to increase employee retention and to increase organisational commitment levels amongst the call centre employees.

2.13.1 Recruitment and Selection

Managers should look at the recruitment and selection processes that are in place in the organisation. As there are costs involved with recruitment and selection processes, organisations need to determine the characteristics needed for 'best fit' within the organisation (Budhwar et al., 2006). By ensuring the recruitment and selection processes are accurate and meet the company's needs by hiring individuals who suit the organisation, this would reduce costs by increasing employee retention and organisational commitment levels. Retaining individuals with high organisational commitment is crucial to an organisation's success (Chew and Chan, 2007).

2.13.2 Training and Development

Training and development schemes are believed to increase organisational commitment levels amongst employees (Hannif et al., 2014) as scripting is not heavily relied on and employees can use their knowledge and skill to assist customers (McGuire and McLaren, 2008). Training and development schemes can improve employee retention levels in organisations as the employees will realise that the managers are putting aside time, costs and effort into improving employees' skills and knowledge, a factor that has been found to be important in retaining employees, especially amongst Generation X employees (Masibigiri and Nienaber, 2011). By showing employees that their skills are valued, this increases organisational commitment and the employees are then less likely to leave the organisation (Rhoades and Eisenberger, 2002). Training and development schemes should be considered as it is minimal in the call centre sector.

2.13.3 Introducing a Layered Hierarchy

If call centre organisations introduce a layered hierarchy into the organisation rather than having a flat hierarchy, employees would have an increased level of organisational commitment as they would have the opportunity to progress within their careers within the organisation (Khan et al., 2010). Retention levels would also increase within the call centre sector as the lack of career progression and minimal promotional opportunities have been said to be a major factor in employee turnover intentions (Mukherjee and Malhotra, 2009).

2.13.4 Flexitime

Flexitime is another factor that can increase organisational commitment (Mahal, 2012), especially amongst women who may require flexible working hours to suit a family life

to attain a positive work/life balance (Verma et al., 2013). Flexibility within the workplace has been shown to increase organisational commitment and decrease absenteeism and employee turnover (Verma et al., 2013).

2.13.5 Pay and Rewards

Rewards are another aspect to consider in increasing organisational commitment levels and employee turnover and retention. Rewards can show employees that they are valued in the organisation (Masibigiri and Nienaber, 2011). Pay and rewards have been found to have an impact on organisational commitment and employee retention although these alone would not be sufficient to retain employees (Chew and Chan, 2007). This is due to employees wanting challenging tasks, promotional opportunities and the possibility of career progression within the organisation (Bozionelos, 2008). By introducing rewards along with the possibility of career progression and promotional opportunities, organisational commitment levels would increase, which in turn would decrease employee turnover intentions and increase employee retention within the call centre sector (Chew and Chan, 2007; Bozionelos, 2008; Dean and Rainnie, 2009; Mahal, 2012).

2.14 Conclusion

To conclude the literature review, there are both positive and negative characteristics of call centres including efficiency, low-costing and having the ability to deliver a vast amount of information to customers (Mukherjee and Malhotra, 2009). However call centres also have negative characteristics such as high stress levels amongst employees (Hannif et al., 2014), little to no promotional opportunities or career advancements (Budhwar et al., 2006), high employee turnover with low retention levels and low organisational commitment levels (Simons and Buitendach, 2013). Recruitment, training and development are a major factor in increasing organisational commitment amongst employees (Chew and Chan, 2007) as well as working time flexibility (Verma et al., 2013), membership in a team (McGuire and McLaren (2008) and promotional opportunities (Bozionelos, 2008). In relation to the impact of age on organisational commitment, Masibigiri and Nienaber (2011) found that Generation X employees had lower levels of organisational commitment than Generation Y employees, however Kraemer and Gouthier (2013) found that those who were older and had been working in the organisation for a longer period of time had higher commitment levels than those who were not working in the organisation for as long and who were also younger

(Kraemer and Gouthier, 2013). In relation to the impact of gender on organisational commitment, it was found that females had higher organisational commitment than males (Walsh and Bartikowski, 2013) and that the call centre sector was predominantly female due to feminine characteristics such as patience and empathy being central to the call centre sector (Verma et al., 2013). When examining employee retention and turnover, stress and the lack of promotional opportunities were key factors influencing employee turnover intentions amongst employees in the call centre sector. Key factors mentioned that can lead to high stress levels in call centre employees include scripting and abusive customers (Winiecki, 2009; Hannif et al., 2014). The main reason for few promotional opportunities within the call centre sector is that many call centres have flat hierarchies, meaning there are very few areas that employees can be promoted to or to progress within their careers (Bozionelos, 2008). By having such high turnover within a sector such as the call centre sector this can lead to the organisation having a poor public image, as individuals may believe that the organisation is not a pleasant company to work for and therefore will not look for a position within the organisation (Mowday, 1984). HRM strategies that managers should consider to increase organisational commitment and employee retention include the recruitment and selection process as this process determines if an individual is suitable for the organisation (Budhwar et al., 2006) and training and development schemes as this shows the employees that management are investing in their skills and knowledge (Masibigiri and Nienaber, 2011).

Chapter 3: Aims and Objectives

In this section, the aims and objectives will be put forward for this quantitative based study. The main research title for this study is:

"To investigate how employee age and gender impact organisational commitment, retention and turnover intentions in an Irish call centre setting".

Based on the research shown previously in the literature review, this quantitative research aims to acquire deeper knowledge regarding how organisational commitment impacts employee retention and turnover intentions in an Irish call centre. It is anticipated that the results obtained will show the connection between organisational

commitment and age and gender and the impact organisational commitment has on employee retention and possible turnover intentions. It is expected that the results found from this research will aid managers in managing their staff to increase organisational commitment and employee retention and decrease levels of employee turnover intentions. The fundamental reason for conducting this research is that although much of the research previously mentioned in the literature review have addressed these issues, very few studies have been conducted in an Irish call centre setting, showing a gap in the literature in organisational commitment, employee retention and employee turnover intentions in the call centre sector and the impact age and gender has over these factors. By addressing previous research and findings, three key research hypotheses have been developed below:

3.1 Gender and Organisational Commitment in an Irish Call Centre Setting

The first hypothesis of this research is in regards to the impact of gender on organisational commitment levels in the call centre sector. It is:

'Females working in call centres will have a higher level of organisational commitment towards their organisation than males working for the same organisation'.

The reason for this hypothesis is that studies have shown that female attributes are highly suited to the call centre sector, as they are believed to have more empathy and patience than males (Russell, 2008). Walsh and Bartikowski (2013) also found that due to interactions with customers that are often negative, emotional exhaustion occur amongst call centre employees. This emotional exhaustion decreased organisational commitment amongst males whilst females' organisational commitment did not decrease as drastically as the males' organisational commitment (Walsh and Bartikowski, 2013).

3.2 Age and Organisational Commitment in an Irish Call Centre Setting

The second hypothesis of this research is related to the impact age has on organisational commitment in the call centre sector. It is:

'As individuals working for the organisation get older, they will have a higher organisational commitment level than those at a younger age working in the same organisation'.

The reason for this hypothesis is that many studies have yielded different results. Masibigiri and Nienaber (2011) found that Generation X employees have lower levels of organisational commitment towards their organisation (Masibigiri and Nienaber, 2011) while another, more recent study (Kraemer and Gouthier, 2013) found that employees who were working for their organisation for a longer period of time had higher levels of organisational commitment than those who were not working in the organisation for a long period of time, and those who were working for a longer period of time were older in age than those working for a shorter period of time (Kraemer and Gouthier, 2013).

3.3 Organisational Commitment, Employee Retention and Employee Turnover in an Irish Call Centre Setting

The third and final hypothesis of this research is related to the impact organisational commitment amongst employees has on employee retention and employee turnover in the call centre sector. It is:

'Individuals with high levels of organisational commitment will be less likely to leave the organisation than those who have low levels of organisational commitment'.

This will be analysed by looking at how those who have low levels of organisational commitment responded to questions regarding their attitudes towards leaving the organisation in the Organisational Commitment Questionnaire (OCQ) developed by Allen and Meyer (1990). Previous studies have shown that organisational commitment has a major impact on employee retention and employee turnover intentions in a call centre sector (Mathieu and Zajac, 1990; Khan et al., 2010; Ansari, 2011; Kraemer and Gouthier, 2013) although very little of this research has been conducted in an Irish call centre sector.

Chapter 4: Methodology

4.1 The Research Onion

The research onion was created by Saunders, Lewis and Thornhill (2009). In figure 4.1.1, the research onion shows different layers that individuals should consider before beginning research.

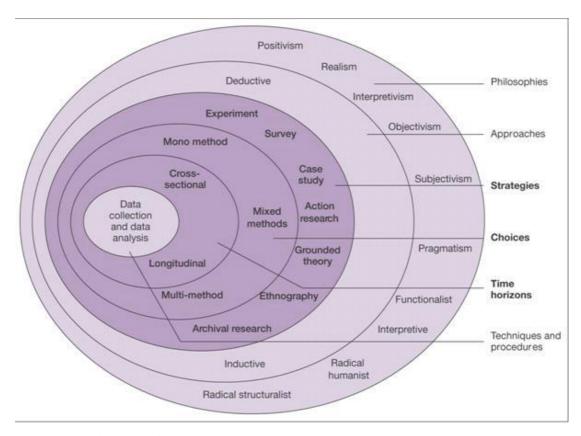


Figure 4.1.1- The Research Onion

The research onion shows numerous layers and as each layer is pulled back, another research factor must be considered. After the first layer is pulled back, the approach of the research should be questioned. The approach refers to whether the researcher will use a qualitative or quantitative approach. After this, research strategies must be considered to determine how the researcher will conduct their study. Once this is complete, time horizons should be considered, as it must be decided whether a cross-sectional or longitudinal study should take place based on the amount of time the researcher has (Saunders, Lewis and Thornhill, 2009).

4.2 Instruments

This research was a quantitative based study. Quantitative refers to "data in numerical form, the results of measurement" (Coolican, 2009, p. 26). To conduct this quantitative research, the Organisational Commitment Questionnaire (OCQ) (Allen and Meyer, 1990) was used. This questionnaire was chosen, as the author believed that it would target each aspect of organisational commitment. It is a highly recognised questionnaire that has been used in other research regarding organisational commitment. In this

questionnaire, commitment levels were addressed under the headings of affective commitment scale, continuance commitment scale and normative commitment scale. Employees were given a series of statements such as "I would be happy to spend the rest of my career with this organisation" and "It wouldn't be too costly for me to leave my organisation now" (Allen and Meyer, 1990) and were asked to answer using a Likert scale with responses labelled 1 to 7 (1 meaning strongly disagree, 2 meaning disagree, 3 meaning slightly disagree, 4 meaning undecided, 5 meaning slightly agree, 6 meaning agree and 7 meaning strongly agree). The questionnaire was entered into Survey Monkey from the website <u>www.surveymonkey.com</u>, where each question was marked in order that all questions would be completed before exiting the survey and it was then emailed to the organisation to be completed by employees. It was explained to both employees and employers that every response would be anonymous to ensure each individual answered truthfully. It was also agreed that the name of the organisation would be kept anonymous for ethical purposes. The reasoning behind conducting this study, as well as what participating would entail were explained to the participants and they were encouraged to email the author if they had any queries regarding any question to ensure clarity in the questions and to ensure understanding was present amongst the participants. The Survey Monkey link was open for responses for two weeks, where employees could complete the survey at a time that suited them best, outside of their working hours, based on an agreement with the organisation. Microsoft Excel was used to import the data from Survey Monkey and to alter the labels to numbers to suit the SPSS software. SPSS software was used to input the data collected from Survey Monkey to interpret the results obtained. The reason a quantitative method was used for this research was that many authors from previous research mentioned in the literature review collected data through means of a survey rather than interviews (McGuire and McLaren, 2008; Mahal, 2012; Poddar and Madupalli, 2012; Hannif et al., 2014). By collecting data through surveys, it allows employees to complete the surveys in their own time rather than taking time out of their working schedules to partake in interviews, something which both employees and employers were satisfied with. Obtaining information by means of an anonymous survey was believed to be the most accurate option for this research as employees were aware that their answers were anonymous, therefore could openly select the answers on the Likert scale without fear of potential repercussion from managers or supervisors.

4.3 Sampling

The research sample comprised of employees working in the chosen department in the chosen call centre who were willing to complete the survey. Employees were not obliged to complete the survey if they did not want to or did not feel comfortable in doing so, meaning that all employees in the chosen department did not partake in this research. This call centre was chosen as it is a large organisation with various departments and a heavily relied upon call centre, therefore one department that dealt with queries related to the organisation's website was chosen to conduct this research. Each employee must handle a certain amount of phone calls per day to reach their targets set by the employer although the employees did not make phone calls themselves, they only received them. This department was open at all times due to the demand from customers meaning employees often worked unsocial hours and had the availability of flexitime. The reason this department was selected for this research was that it is open at all times and they did not make outgoing phone calls, unlike other departments within the organisation. To gain access to the department, the department's supervisor was contacted through email to seek permission to gain access to the department and to explain the study to them to avoid any confusion. Once access was granted, the survey was then distributed to the employees through email to be completed outside of their working hours. The call centre department had 127 employees in total with a varied age group ranging from late teens to early sixties. Out of these 127 employees, 98 responses were recorded from Survey Monkey. 57 of these respondents were female, accounting for 58% of the responses overall, and 41 were male, accounting for 42% of the responses in total. 81% of the respondents were between the ages of 18 to 44 and 19% of the respondents were between the ages of 45 to 64. A pilot study was not conducted for this research, as the author did not want to predetermine the participants' responses.

4.4 Data Analysis

To begin analysing the data obtained from the employees from the chosen call centre, the data was exported from Survey Monkey to Excel. Once the data was exported, the male and female labels were changed to 1 and 2, 1 replacing male and 2 replacing female. The numbers 1 to 5 replaced the age groups. Each response was also replaced. Strongly disagree was replaced by the number 1, disagree was replaced by the number 2, slightly disagree was replaced by the number 3, undecided was replaced by the

number 4, slightly agree was replaced by the number 5, agree was replaced by the number 6 and strongly agree was replaced by the number 7. The reason that these responses were replaced was that they could then be transferred to SPSS to begin analysing the data. To begin analysing the data on SPSS software, a test for reliability was conducted to ensure the OCQ was a reliable scale. A scale is considered to be reliable if the Cronbach's Alpha score is greater than 0.70. Once the reliability testing was complete, a composite variable was created to combine the scores of each individual in relation to organisational commitment. Age and gender were then tested for normality using a Shapiro-Wilk test. Using a Shapiro-Wilk test, if the group scores are below 0.05 they are considered to be significant. The Mann-Whitney U test was conducted to test gender and the Kruskal Wallis test was conducted to test for age. The results obtained from these tests will be discussed in chapter 5.

4.5 Ethical Considerations

Prior to conducting this research, ethical concerns were taken into account by the author to ensure that the organisation and participants were not unhappy with the research topic, research methodology or how the individuals and organisation were portrayed. Firstly, the author ensured that no details would be released about the organisation in question, other than that it was a call centre. This was to protect the organisation against any backlash that may occur if the null hypotheses were rejected as this could influence the decision of potential recruits if they believed that the organisation would not be a nice company to work for. Mowday (1964) believed that when organisations have high turnover levels, a negative public image would arise, therefore the anonymity of the organisation used for this research was an essential ethical consideration to ensure a negative public image would not arise from this research. Another ethical concern that was taken into account by the author was the anonymity of the employees taking part in this research. The reason it was ensured that the employees would be kept anonymous was that with anonymity, they had the ability to answer the OCQ (Allen and Meyer, 1990) truthfully without fear of potential backlash or repercussions from their employers. Potential repercussions could take place without anonymity as the survey contained statements such as "I would be happy to spend the rest of my career with this organisation" where the employees were asked to answer this using a scale ranging from strongly disagree to strongly agree. Employees who answered strongly disagree could face backlash from employers if anonymity was not present.

4.6 Limitations of the Methodology Used

As this research is quantitative based, a survey was used to obtain data from the employees of the chosen call centre. An issue with surveys is that often participants believe that there is a correct or incorrect answer and they can attempt to manipulate their answers to suit what they believe the researcher wants for the responses. Orne (1962) found that after surveys were distributed and collected, participants made statements in relation to the study and that they had hoped they had given the right answers to yield the expected results (Orne, 1962). Another issue regarding the use of surveys is that the respondent can only answer the questions from a list of answers. This means that the participant cannot go into detail or elaborate any answers, which may be of use towards the study. For this reason it is believed that both quantitative and qualitative methods would be useful for a study similar to this to ensure responses address every aspect of the research. In relation to the OCQ (Allen and Meyer, 1990), the participants' qualifications were not asked as well as whether they were part time or full time employees of the organisation. These factors may have an impact on the given results as an individual with high qualifications may feel as though they are not working to their full potential, or utilising their skills as much as possible. An employee who is working full time may also have higher commitment levels than those working part time as they are in the organisation more often and may have built up relationships within the organisation, which can add to overall organisational commitment. The duration of the participants' employment within the call centre was not addressed. If this was addressed it may have given explanations for commitment levels for each individual as Bozionelos (2008) found that newer employees were more likely to leave their call handling job as the nature of the call centre did not suit them (Bozionelos, 2008). Another limitation of this research is that only one department in one call centre in Dublin was used to conduct this research in, eliminating all other call centres in Dublin and Ireland meaning that generalization of call centre employees is limited (Kulchmanov and Kaliannan, 2014). As this research only looks at the call centre sector in Dublin, the results obtained may not be easily transferred to other sectors such as the hospitality and retail sector as they are extremely different in nature and culture (Sengupta and Dev, 2013).

Chapter 5: Findings

In this chapter, the data collected from each participant has been analysed and categorised into the influence of age on organisational commitment and the influence of gender on organisational commitment. The results from each test are shown below to show the significance of these factors on organisational commitment in Irish call centres.

5.1 Affective Commitment Reliability

In this subsection, the reliability of affective commitment subscale was analysed, as this is a subscale of the OCQ (Allen and Meyer, 1990). Shown in Table 1 and 2, there were 98 responses with a Cronbach's Alpha value of 0.861.

Case Processing Summary

		N	%
Cases	Valid	98	100.0
	Excluded ^a	0	.0
	Total	98	100.0

a. Listwise deletion based on all variables in the procedure.

ary Reliability Statistics

Cronbach's	
Alpha	N of Items
.861	8

Table 2: Affective Organisational Commitment Subscale Reliability Score

Table 1: Affective Organisational Commitment Subscale Summary

5.2 Continuance Commitment Reliability

In this subsection, continuance commitment reliability was tested. Shown below in Table 3 and 4 show there were 98 responses and a Cronbach's Alpha value of 0.848.

Case Processing Summary

		N	%
Cases	Valid	98	100.0
	Excluded ^a	0	.0
	Total	98	100.0

Listwise deletion based on all variables in the procedure.

Reliability Statistics

Cronbach's	
Alpha	N of Items
.848	8

Table 4: Continuance Organisational

Commitment Subscale Reliability Score

Table 3: Continuance Organisational Commitment Subscale Summary

5.3. Normative Commitment Reliability

In this subsection, the normative commitment reliability test is shown in Table 5 and 6. Here it shows 98 responses were collected and a Cronbach's Alpha of 0.820.

Case Processing Summary

		N	%
Cases	Valid	98	100.0
	Excluded ^a	0	.0
	Total	98	100.0

 a. Listwise deletion based on all variables in the procedure.

Reliability Statistics

Cronbach's Alpha	N of Items
.820	8

Table 6: Normative Organisational

Commitment Subscale Reliability

Table 5: Normative Organisational Commitment

Subscale Summary

5.4 Total Commitment Scales Reliability

In this subsection, the total commitment scales reliability is shown in Table 7 and 8. 98 responses were recorded and the Cronbach's Alpha value was 0.899 meaning the organisational commitment scales used were reliable as they were over the Cronbach's Alpha of 0.7.

Case Processing Summary

		N	%
Cases	Valid	98	100.0
	Excluded ^a	0	.0
	Total	98	100.0

Listwise deletion based on all variables in the procedure.

Reliability Statistics

Cronbach's Alpha	N of Items
.899	24

Table 8: Total Organisational Commitment Scales Reliability

Table 7: Total Organisational Commitment Scales
Summary

5.5 Testing for Gender Normality

Within this research, a total of 98 call centre employees participated. 41 of these employees were male and 57 of these employees were female as shown in Table 9. In Figure 1 and 2, histograms are shown to present organisational commitment levels in males and females.

Case Processing Summary

		Cases					
		Va	lid	Miss	sing	To	tal
	Gender	N	Percent	Ν	Percent	N	Percent
CommitmentCompositeS	Male	41	100.0%	0	0.0%	41	100.0%
core	Female	57	100.0%	0	0.0%	57	100.0%

Table 9: Gender and Organisational Commitment Sample Size

Descriptive statistics involved with the analysis for both genders and organisational commitment are shown below in Table 10.

Descriptives

	Gender			Statistic	Std. Error
CommitmentCompositeS	Male	Mean		97.00	2.553
core		95% Confidence Interval	Lower Bound	91.84	
		for Mean	Upper Bound	102.16	
		5% Trimmed Mean		96.25	
		Median		96.00	
		Variance		267.200	
		Std. Deviation		16.346	
		Minimum		70	
		Maximum		138	
		Range		68	
		Interquartile Range	17		
		Skewness		.805	.369
	·	Kurtosis		.476	.724
	Female	Mean		98.18	2.654
		95% Confidence Interval	Lower Bound	92.86	
		for Mean	Upper Bound	103.49	
		5% Trimmed Mean		98.23	
		Median		95.00	
		Variance		401.504	
		Std. Deviation		20.038	
		Minimum		52	
		Maximum		135	
		Range		83	
		Interquartile Range		29	
		Skewness		.278	.316
		Kurtosis		488	.623

Table 10: Gender and Organisational Commitment Descriptive Statistics

To test for normality, Shapiro-Wilk results are examined as seen in Table 11. The Shapiro-Wilk test examines gender for normality. If a scale has less than 0.05 in significance, it is deemed to be normal whereas if it is over 0.05 in significance, it deviates from normality. In Table 11 it shows that both male and female have tested to deviate from normality (W_{Male} = .942, df =41, p<.037), (W_{Female} = .957, df =57, p<.040).

Tests of Normality

		Kolmogorov-Smirnov ^a			Shapiro-Wilk		
	Gender	Statistic	df	Sig.	Statistic	df	Sig.
CommitmentCompositeS	Male	.137	41	.050	.942	41	.037
core	Female	.133	57	.014	.957	57	.040

a. Lilliefors Significance Correction

Table 11: Gender and Organisational Commitment Test of Normality

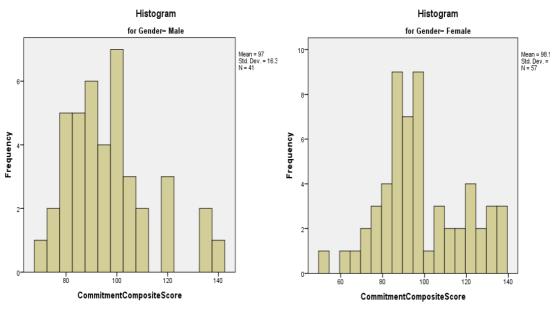


Figure 1: Males and Organisational Commitment Distribution

Figure 2: Females and Organisational
Commitment Distribution

As there were deviations in gender normality, a Mann-Whitney U test was used to determine variations in organisational commitment levels in males and females. The Mann-Whitney U test examines discrepancies in the mean of both males and females. The results of the Mann-Whitney U test as shown in Table 11 and 12 show that there were no significant differences between organisational commitment levels in males (Mdn=49.37) and females (Mdn=49.60), (U=1163.000, p = .968), therefore the null hypothesis was accepted as females did not have higher levels of organisational commitment than males.

Ranks

	Gender	N	Mean Rank	Sum of Ranks
CommitmentCompositeS	Male	41	49.37	2024.00
core	Female	57	49.60	2827.00
	Total	98		

Table 11: The Mann-Whitney U Test Mean

Test Statistics^a

	Commitment CompositeSc ore
Mann-Whitney U	1163.000
Wilcoxon W	2024.000
Z	040
Asymp. Sig. (2-tailed)	.968

a. Grouping Variable: Gender

Table 12: Mann-Whitney U

Grouping Variable

5.6 Age Normality

In this subsection, age normality is tested. There was a total of 98 responses collected and analysed for this research. Of these 98 employees, 28 employees were between the ages of 18 and 24, 28 employees were between the ages of 25 to 34, 23 employees were between the ages of 35 to 44, 10 employees were between the ages of 45 to 54 and 9 employees were between the ages of 55 to 64 years old. This can be seen in Table 13. Histograms in Figures 3,4,5,6 and 7 show these responses. All other descriptive statistics associated with this analysis of age and organisational commitment can be seen in Appendix 4.

Case Processing Summary

		Cases								
		Va	lid	Miss	sing	Total				
	Age	N	Percent	N	Percent	N	Percent			
CommitmentCompositeS	18 to 24 Years	28	100.0%	0	0.0%	28	100.0%			
core	25 to 34 Years	28	100.0%	0	0.0%	28	100.0%			
	35 to 44 Years	23	100.0%	0	0.0%	23	100.0%			
	45 to 54 Years	10	100.0%	0	0.0%	10	100.0%			
	55 to 64 Years	9	100.0%	0	0.0%	9	100.0%			

Table 13: Age and Organisational Commitment Sample Sizes

The results of the normality tests of age and organisational commitment can be seen in Table 15. Shapiro-Wilk was examined to test the age groups for normality. As shown in Table 15, the age groups have significantly deviated from normality ($W_{18 \text{ to } 24 \text{ years}} =$

.974, df = 28, p = .703), ($W_{25 \text{ to } 34 \text{ years}}$ = .918, df = 28, p = .031), ($W_{35 \text{ to } 44 \text{ years}}$ = .971, df = 23, p = .720), ($W_{45 \text{ to } 54 \text{ years}}$ = .904, df = 10, p = .239) ($W_{55 \text{ to } 64 \text{ years}}$ = .842, df = 9, p = .061).

Tests of Normality

		Kolm	ogorov-Smir	nov ^a	Shapiro-Wilk			
	Age	Statistic	df	Sig.	Statistic	df	Sig.	
CommitmentCompositeS	18 to 24 Years	.099	28	.200*	.974	28	.703	
core	25 to 34 Years	.173	28	.032	.918	28	.031	
	35 to 44 Years	.113	23	.200*	.971	23	.720	
	45 to 54 Years	.163	10	.200*	.904	10	.239	
	55 to 64 Years	.277	9	.045	.842	9	.061	

^{*.} This is a lower bound of the true significance.

Table 15: Age and Organisational Commitment Test for Normality

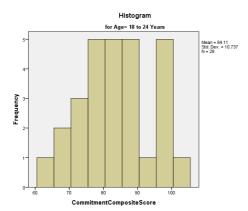


Figure 3: 18-24 Years Organisational Commitment Scale

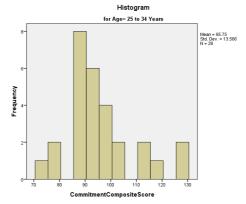


Figure 4: 25-34 Years Organisational Commitment Scale

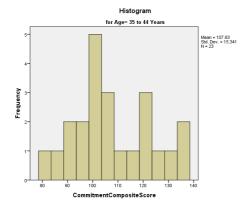


Figure 5: 35-44 Years Organisational Commitment Scale

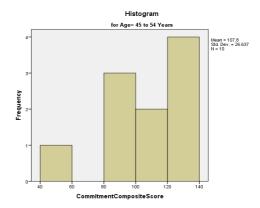


Figure 6: 45-54 Years Organisational Commitment Scale

a. Lilliefors Significance Correction

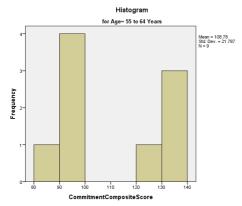


Figure 7: 55-64 Years Organisational

Commitment Scale

5.7 Kruskal Wallis Testing

As there were deviations from normality with age and organisational commitment, a Kruskal Wallis test was used. Similarly to a Mann-Whitney U test, a Kruskal Wallis test compares the mean of ages to determine any significant differences. As shown in Table 16, the mean of each age group differs significantly. In the 18 to 24 years the mean rank is 27.18, in the 25 to 34 years group the mean rank is 47.21, in the 35 to 44 group the mean rank is 67.48, In the 45 to 54 years group the mean rank is 64.95 and in the 55 to 64 years group the mean rank is 62.94. As shown in Table 17, (K=31.618, p = .000), therefore, the alternative hypothesis was accepted and the null hypothesis was rejected as employees who were older did have higher organisational commitment than those employees who were younger within the organisation.

		Test Sta	tistics ^{a,b}		
	Age	N	Mean Rank		Commitment CompositeSc
CommitmentCompositeS	18 to 24 Years	28	27.18		ore
core	25 to 34 Years	28	47.21	Chi-Square	31.618
	35 to 44 Years	23	67.48	df Asymp. Sig.	.000
	45 to 54 Years	10	64.95	a. Kruskal Wa	
	55 to 64 Years	9	62.94	b. Grouping \	
	Total	98			_
				Table 17: Kri	uskal Wallis

Table 16: Kruskal Wallis Test Mean

Group Testing Variable

5.8 Organisational Commitment and Possible Turnover Intentions

In relation to the third hypothesis regarding organisational commitment, a table was made to determine differences in organisational commitment levels and how individuals answered questions regarding how they felt about the company and their feelings on possibly leaving the organisation. The full table can be seen in Appendix 3. It was found basing on this table, that those who had low levels of commitment answered 'agree' to many of the questions relating to leaving the organisation. The questions studied were reverse scored, therefore 1= strongly agree, 2= agree, 3= slightly agree, 4=undecided, 5=slightly disagree, 6= disagree and 7=strongly disagree. Below in Table 18, it can be seen that the individual who had the lowest organisational commitment level answered agree to many of the questions relating to possible turnover.

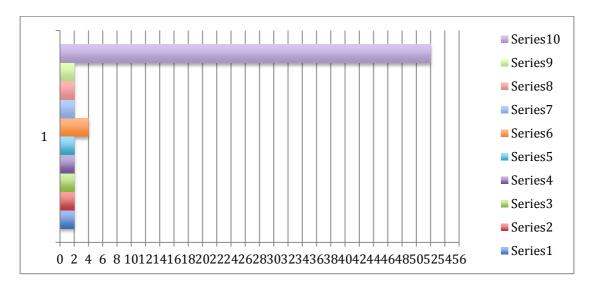


Table 18: Lowest Organisational Commitment Level

The average organisational commitment level was found to be 96.70. In Table 19, those who had an organisational level of 96 and 97 did not answer agree to any questions relating to possible turnover.

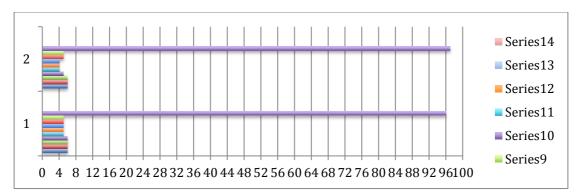


Table 19: Average Organisational Commitment Level

The highest organisational commitment level out of the employees working for the chosen call centre was 138. This individual's responses only included slightly disagree, disagree and strongly disagree towards the questions that were related to possible turnover. This can be seen in Table 20.

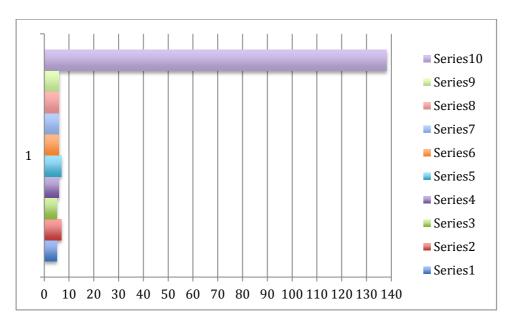


Table 20: Highest Organisational Commitment Level

The alternative hypothesis was accepted, as those who had high levels of organisational commitment did not agree with statements referring to possibly leaving the organisation whereas those with low organisational commitment levels answered agree to the statements referring to possibly leaving the organisation.

Chapter 6: Discussion

6.1 Introduction

In this chapter, the author will discuss their findings and analyse these findings against previous findings mentioned in the literature review. Firstly, the impact of gender on organisational commitment levels will be discussed by examining the findings of this research against findings of previous research conducted relating to gender and organisational commitment. After this, the impact of age on organisational commitment levels will be discussed. Here the author will examine similarities and differences between the findings of this research versus previous findings relating to age and

organisational commitment. Continuing on from age and organisational commitment, the author will discuss the importance of organisational commitment amongst employees based on findings discovered from the data collected from call centre employees and the impact organisational commitment has on possible turnover intentions.

6.2 The Impact of Gender on Organisational Commitment

In this research, gender was examined to determine whether there was a significant difference in organisational commitment levels in males and females. 98 call centre employees participated in this research, 41 of these employees were male and 57 of these employees were female. To examine the hypothesis that females will have higher levels of organisational commitment than males, various tests were conducted on SPSS software. Firstly, a reliability test was conducted on the OCQ (Allen and Meyer, 1990) using Cronbach's Alpha. As the results from each subscale of the questionnaire and of the total questionnaire had a score above the reliability value of 0.7, the questionnaire was deemed reliable. Gender was then tested for normality using a Shapiro-Wilk test. As the Shapiro-Wilk test for gender had a value of over 0.05, gender deviated from normality therefore a Mann-Whitney U test was used to determine the variations in the gender mean of organisational commitment. Results obtained from the Mann-Whitney U test showed that there were no significant differences in organisational commitment levels in males (Mdn=49.37) and females (Mdn=49.60). Initially at the beginning of this research, it was hypothesised that females would have higher levels of organisational commitment. Previous research has shown that women dominate the call centre industry, as they possess traits that are believed to be feminine which would be needed in the call centre industry (Hannif et al., 2014). Although this study yielded results from a larger female sample than a male sample, this does not necessarily mean that this particular call centre was female dominated, as some employees did not partake in this research and this research was conducted in only one department in the chosen call centre. Another study conducted by Walsh and Bartikowski (2013) found that males had lower organisational commitment levels than females when faced with emotional exhaustion from customers. This emotional exhaustion also increased turnover intentions in males, however the females working had lower levels of emotional exhaustion from customers therefore had higher organisational commitment levels and lower turnover intentions than males (Walsh and Bartikowski, 2013).

Although results obtained from this research do not agree with previous research mentioned in the literature review, there are many possible reasons for this. For example, many call centre studies have been conducted in India, as the call centre industry in India is one of the largest in the world (Budhwar et al., 2009). Cultural differences between India and Ireland may contribute to the differences in results obtained. In Ireland, men and women have the same educational opportunities whereas in India, males have more opportunities than women in education (Verma et al., 2013). Education has a big impact in call centres as it can determine the type of call centre labour and job roles as individuals can be either skilled or unskilled in different fields (Jaoua et al., 2013).

6.3 The Impact of Age on Organisational Commitment

In this study, it was hypothesised that age differences would have an influence on organisational commitment. It was believed that employees who were older in age would have higher organisational commitment levels than employees who were younger in age. Out of 98 responses collected, 28 employees were between the ages of 18 to 24, 28 employees were between the ages of 25 to 34, 23 employees were between the ages of 35 to 44, 10 employees were between the ages of 45 to 54 and 9 employees were between the ages of 55 and 64. When examining possible differences between age and organisational commitment, a normality Shapiro-Wilk test was conducted to determine if the age groups deviated from normality by scoring above 0.05 in significance. As age deviated from normality, a Kruskal Wallis test was used to determine the differences in the age group mean. Results from the Kruskal Wallis test confirmed that there were differences in organisational commitment levels based on age. In the 18 to 24 age group, the mean was 27.18, in the 25 to 34 age group the mean was 47.21, in the 35 to 44 age group the mean was 67.48, in the 45 to 54 year olds the mean was found to be 64.95 and in the 55 to 64 year old age group the mean was found to be 62.94. Based on these results, the alternative hypothesis was accepted, as it appears that there is a difference in organisational levels and age. Those who were of an older age within the organisation had higher organisational commitment levels than those in the lower age groups. This hypothesis agrees with findings from Kraemer and Gouthier's (2013) study that found that individuals of an older age who had worked in the organisation for a long period of time had higher commitment levels than those who were younger in age and who hadn't worked in the organisation for a long period of time (Kraemer and Gouthier, 2013). However, this hypothesis disagrees with Masibigiri and Nienaber's (2011) findings that Generation X employees have lower organisational commitment levels due to boredom and a feeling of under appreciation from managers. Reasons to consider for this difference is that there may not be many available jobs in Dublin at the moment as Ireland is coming out of a recession, therefore commitment levels in Generation X employees may be higher due to a lack of available alternatives (Allen and Meyer, 1990). Another possible reason for this difference is that the organisation used for Masibigiri and Nienaber's study may not have been a call centre as the type of organisation used was not mentioned, therefore differences in job specifications could have an influence over these contrasting results (Masibigiri and Nienaber, 2011).

6.4 The Impact of Organisational Commitment on Possible Turnover Intentions

It was hypothesised that those with high levels of organisational commitment will be less likely to leave than those with low levels of organisational commitment. This was analysed by examining how individuals with high commitment levels answered certain questions versus how those with low commitment levels answered the same questions. To examine this, questions 4, 5, 6 and 7 from the affective commitment scale, questions 1 and 4 from the continuance commitment scale, and questions 2, 3 and 4 from the normative commitment scale shown in Appendix 9.3 were analysed in Microsoft Excel. The total commitment levels were also calculated for each individual. It was found that those with low levels of commitment answered agree to the specific questions whereas those with high levels of commitment answered disagree to the specific questions relating to possible turnover intentions. These results can be seen in Appendix 9.5. The alternative hypothesis was accepted as there was a difference found in possible turnover intentions and organisational commitment levels. This coincides with previous studies mentioned in the literature review. According to Mathieu and Zajac (1990), employees with high levels of organisational commitment have lower levels of turnover intentions as well as an increased level in performance and retention (Mathieu and Zajac, 1990). There are major benefits from high organisational commitment levels amongst employees as they have been found to have high organisational citizenship whereby they excel in achieving tasks set by the organisation (Ansari, 2011). Those with low levels of organisational commitment are more likely to leave the organisation,

increasing turnover levels or they change roles within the organisation (Khan et al., 2010). It is important to note that employees with high levels of continuance commitment do not necessarily enjoy working for their organisation, although they could have high levels of organisational commitment as they feel there are no other options other than their current organisation (Allen and Meyer, 1990). Ways of increasing organisational commitment amongst employees has been studied extensively as commitment can decrease employee turnover intentions (Kraemer and Gouthier, 2013). Training and development schemes have been mentioned to increase organisational commitment levels as the employees understand that the organisation are investing in them rather than treating them as another number in the workforce (Dean and Rainnie, 2009). A supportive and welcoming culture in the workforce has been found to increase organisational commitment, primarily affective commitment (Allen and Meyer, 1990) as this gives employees a sense of belonging within their organisation (McGuire and McLaren, 2008).

Chapter 7: Conclusion and Recommendations

7.1 Conclusion

This research was aimed at discovering if there are any significant differences in age and organisational commitment and gender and organisational commitment levels as well as whether organisational commitment has an influence over possible turnover intentions in call centre employees in Dublin. The call centre sector in Ireland is thriving as it allows organisations to assist customers regarding any issue or query relating to the organisation in a cheap and fast-paced manner (Mukherjee and Malhotra, 2009; IDA, 2011). The utilisation of call centres has numerous advantages and disadvantages. Previous research regarding call centres has primarily focused on the negative aspects of call centres to determine the reason for the extremely high turnover

and high stress levels (Choi et al., 2012). From this research, it has been found that factors such as emotional negativity from customers, scripting, lack of promotional opportunities and career advancements as well as high workloads and work pressures add to a low organisational commitment level amongst employees and high levels of intentions to leave (Chew and Chan, 2007; Bozionelos, 2008; Hannif et al., 2014). In this research, 98 call centre employees from one department that handled calls relating to the organisation's website participated it this research. It was found that there was no significant difference between gender and organisational commitment. However there was a significant difference between age and organisational commitment as those who were older in age had higher organisational commitment levels than those who were younger in age. It was also found that those who had low levels of commitment agreed to questions in the OCQ relating to possible turnover intentions and those with high levels of commitment disagreed with the same questions. It is hoped that these results can add to existing knowledge on organisational commitment and retention strategies to improve employee turnover levels and the public image of the call centre sector in Ireland.

7.2 Recommendations and Costings

7.2.1 Introducing a Welcoming Approach Amongst Managers

As stress levels are so high in the call centre sector, it would be recommended that managers adopt a welcoming approach rather than an approach based on bureaucracy and control that have been mentioned to dominate call centres (Hannif et al., 2014). Studies have found that when employees feel a sense of belonging within their organisation where they can approach managers easily, they are happier overall and are therefore less likely to leave the organisation (McGuire and McLaren, 2008). By introducing this approach, employees would be able to discuss their issues and feelings regarding stress or difficult customers and other issues within the call centre sector (Poddar and Madupalli, 2012). By introducing this approach, employees and managers can work together to find ways to handle adverse customer complaints and reduce employee stress levels and turnover intentions, something that is needed within the call centre sector, particularly in the younger age group (Kumar Madupalli and Poddar, 2014).

7.2.2 Training and Development

Training and development in the call centre sector can often be seen as a nice thing to have rather than a necessity (Hannif et al., 2014). Although many would agree with this, employees often feel as though they are not appreciated within the organisation and that they are only seen as another number in the organisation, rather than an individual (Dean and Rainnie, 2009). If an organisation decides to introduce training and development, it does not have to training schemes outside of the organisation. Shadowing, mentoring and internal training days are all affective methods of training and developing employees whilst keeping costs at a minimum. Employee feedback from training and development schemes should also be considered to ensure they are of use to the employees (Jayakumar and Sulthan, 2014). To plan a training and development scheme to suit everyone's needs within the organisation, managers should attempt to remember that each individual's style of work is different to one another's, explain clearly to employees beforehand what is expected from the employees after training, motivate and reward employees for successfully achieving excellent results from training and to ensure managers are present to receive feedback from employees regarding the training and to challenge employees (Dunlap, 2015). If an employee is trained in handling abusive or adverse customers without the need of scripts, this can dramatically decrease stress levels, as well as employee turnover intentions (Sprigg and Jackson, 2006). Studies have shown that training and development is necessary to retain employees as Generation X employees were found to have low commitment levels due to boredom and little recognition from employers (Masibigiri and Nienaber, 2011) and younger, newer employees often leave early as the call centre sector does not suit them (Bozionelos, 2008).

7.2.3 Costings

Costs involved with improving the call centre sector are low as many improvements can begin from within the organisation. Training and development can take many forms such as mentoring, shadowing and in-house training days. If the management wanted to conduct training outside of the organisation, more costs would be involved due to hiring an external body, taking each employee away from their job for the duration of the external training and perhaps management would have to fund travel expenses if the training grounds are outside of Dublin or during unsociable hours. In relation to a welcome approach that has been suggested by the author for managers to adopt, costs

should also be minimal as it is within the organisation. Training can be provided to managers in handling employee issues if managers wish so, which could increase costs although it may not be necessary depending on the managerial attitude towards these changes. Overall, the costs of the author's recommendations can be kept to a minimum although more costs would be involved if organisations decided to utilise external training methods, as more individuals would be involved.

7.2.4 Implications for Future Research and Relevance for Organisations

For future research regarding the call centre sector, factors that influence organisational commitment in call centres as well as the factors that influence employee turnover could be examined. Although there are many studies examining these factors, very few have been conducted in an Irish call centre sector showing a significant gap in the literature. It would be recommended that if conducting a study similar to this, that a quantitative and qualitative approach would be taken to have a full understanding of the impact of these factors in call centre employees as participants cannot elaborate their responses or beliefs in surveys. This study is relevant to employers as it shows that there are differences in age and organisational commitment levels. This is important as organisations can focus on ways to increase organisational commitment amongst their employees in a way that pleases all age groups. By increasing organisational commitment levels amongst all employees, turnover intention levels will be lower saving the organisation both time and costs.

7.3 Personal Learning Statement

The author found this research extremely challenging although she found it interesting conducting the research and analysing the results obtained. The author had very little knowledge about call centres before conducting this research besides the stereotype of call centres being referred to as electronic sweatshops, which was also mentioned by many authors within the literature review. After conducting this research and analysing the results, the author has greater knowledge in the call centre sector in Dublin with regards to organisational commitment within this sector and how this can have an impact over possible employee turnover intentions. With this knowledge, she can further address issues raised in improving the call centre sector and its public image. Although the call centre sector has plenty of negative qualities, it cannot be denied that it is a thriving industry globally, providing many benefits to organisations that utilise call centres either in Ireland or abroad. The OCQ (Allen and Meyer, 1990) was a useful

tool in collecting data from participants, however a qualitative study alongside this questionnaire would have been of interest to the author to determine the key factors that influence organisational commitment within the studied call centre as well as factors that the employees believe would increase their organisational commitment levels within their organisation. Ultimately, the author is pleased with her findings and hopes this can add to further research within the Irish call centre sector.

Chapter 8: Bibliography

Allen, N. J. and Meyer, J. P. (1990) "The Measurement and Antecedents of Affective, Continuance and Normative Commitment to the Organisation". *Journal of Occupational Psychology*. 63(1): pp. 1-18.

Ansari, N. G. (2011) 'Employee Perception of HRM Practices: Impact on Commitment to the Organisation'. *South Asian Journal of Management*. 18(3): pp. 122-149.

Ashill, N. J., Rod, M., Thirkell, P. and Carruthers, J. (2009) 'Job Resourcefulness, Symptoms of Burnout and Service Recovery Performance: An Examination of Call Centre Frontline Employees'. *Journal of Services Marketing*. 23(5): pp. 338-350.

Borst, S., Mandelbaum, A. and Reiman, M. I. (2004) 'Dimensioning Large Call Centres'. *Operations Research*. 52(1): pp. 17-34.

Bozionelos, N. (2008) 'Improving Employee Motivation and Retention in Call Centres: Is Adding Layers the Answer?'. *Academy of Management Perspectives*. 22(3): pp. 114-116.

Brace, N., Kemp, R. and Snelgar, R. (2009) *SPSS for Psychologists*. 4th ed. London: Palgrave Macmillan.

Budhwar, P. S., Varma, A., Malhotra, N. and Mukherjee, A. (2009) 'Insights into the Indian Call Centre Industry: Can Internal Marketing Help Tackle High Employee Turnover?'. *Journal of Services Marketing*. 23(5): pp. 351-362.

Budhwar, P. S., Varma, A., Singh, V. and Dhar, R. (2006) 'HRM Systems of Indian Call Centres: An Exploratory Study'. *International Journal of Human Resource Management*. 17(5): pp. 881-897.

Chew, J. and Chan, C. C. A. (2007) "Human Resource Practices, Organisational Commitment and Intention to Stay". *International Journal of Manpower*. 29(6): pp. 503-522.

Choi, S., Cheong, K. and Feinberg, R. A. (2012) 'Moderating Effects of Supervisor Support, Monetary Rewards, and Career Paths on the Relationship Between Job Burnout and Turnover Intentions in the Context of Call Centres'. *Managing Service Quality*. 22(5): pp. 492-516.

Coolican, H. (2009) *Research Methods and Statistics in Psychology*. 5th ed. London: Hodder Education.

De Grip, A., Sieben, I. and Van Jaarsveld, D. (2006) 'Labour Market Segmentation Revisited: A Study of the Dutch Call Centre Sector'. *Research Centre for Education and the Labour Market:* pp. 1-14.

Dean, A. M. and Rainnie, A. (2009) "Frontline Employees' Views on Organisational Factors that Affect the Delivery of Service Quality in Call Centres". *Journal of Services Marketing*. 23(5): pp. 326-337.

DeTienne, K. B., Agle, B. R., Phillips, J. C. and Ingerson, M. C. (2012) 'The Impact of Moral Stress Compared to Other Stressors on Employee Fatigue, Job Satisfaction, and Turnover: An Empirical Investigation'. *Journal of Business Ethics*. 110(3): pp. 377-391.

Department of Finance (2014) 'Effective Rates of Corporation Tax in Ireland: Technical Paper, April 2014'. [Online]. *Budget.gov.ie*. Available from: http://www.budget.gov.ie/Budgets/2015/Documents/Technical Paper Effective Ratess Corporation Tax Ireland.pdf [Accessed 16th July 2015].

Dunlap, M. (2015) '5 Keys to an Effective Training and Development Program'. *Journal of Financial Planning*. 28(1): pp. 20-21.

Glucksmann, M. A. (2004) 'Call Configurations: Varieties of Call Centre and Divisions of Labour'. *Work, Employment and Society.* 18(4): pp. 795-811.

Grandey, A. A., Dickter, D. N. and Sin, H. (2004) 'The Customer is not Always Right: Customer Aggression and Emotional Regulation of Service Employees'. *Journal of Organisational Behaviour*. 25(1): pp. 397-418.

Hannif, Z., Connell, J., McDonnell, A. and Burgess, J. (2014) 'New Technology and New Workplaces: Call Centre Careers – A Growing Reality?'. *Labour and Industry: A Journal of the Social and Economic Relations of Work.* 24(1): pp. 55-68.

IDA Ireland (2011) 'New Research by the CCMA Highlights the Important Role of the Industry' [Online]. *IDA Ireland*. Available from: http://www.idaireland.com/newsroom/contact-centre-sector/ [Accessed 23rd July 2015].

Jaoua, A., L'Ecuyer, P. and Delorme, L. (2013) 'Call-type Dependence in Multiskill Call Centres'. *Simulation: Transactions of the Society for Modeling and Simulation International*. 89(6): pp. 722-734.

Jayakumar, G. S. D. S. and Sulthan, A. (2014) "Modelling: Employee Perception on Training and Development". *SCMS Journal of Indian Management*. 11(2): pp. 57-70. Jiang, X. (2010) 'How to Motivate People Working in Teams'. *International Journal of Business and Management*. 5(10): pp. 223-229.

Khan, T. I., Jam, F. A., Akbar, A., Khan, M. B., Hijazi, S. T. (2010) 'Job Involvement as Predictor of Employee Commitment: Evidence from Pakistan'. *International Journal of Business and Management*. 6(4): pp. 252-262.

Kraemer, T. and Gouthier, M. H. J. (2014) "How Organisational Pride and Emotional Exhaustion Explain Turnover Intentions in Call Centres: A Multi-Group Analysis with Gender and Organisational Tenure". *Journal of Service Management*. 25(1): pp. 125-148.

Kulchmanov, A. and Kaliannan, M. (2014) "Does Money Motivate Employees? Empirical Study of Private and Public Financial Sector in Kazakhstan". *International Journal of Business and Management*. 9(11): pp. 214-223.

Kumar Madupalli, R. and Poddar, A. (2014) "Problematic Customers and Customer Service Employee Retaliation". *Journal of Services Marketing*. 28(3): pp. 244-255.

Lester, D. (2013) 'Measuring Maslow's Hierarchy of Needs'. *Psychological Reports: Mental & Physical Health.* 113(1): pp. 15-17.

Mahal, P. K. (2012) 'HR Practices as Determinants of Organisational Commitment and Employee Retention'. *IUP Journal of Management Research*. 11(4): pp. 37-53.

Masibigiri, V. and Nienaber, H. (2011) "Factors Affecting the Retention of Generation X Public Servants: An Exploratory Study". *SA Journal of Human Resource Management*. 9(1): pp. 1-11.

Mathieu, J. E. and Zajac, D. M. (1990) "A Review and Meta-Analysis of the Antecedents, Correlates, and Consequences of Organisational Commitment". *Psychological Bulletin.* 108(2): pp. 171-194.

McGuire, D. and McLaren, L. (2008) "The Impact of Physical Environment on Employee Commitment in Call Centres: The Mediating Role of Employee Well-Being". *Team Performance Management*. 15(1/2): pp. 35-48.

Mowday, R. T. (1984) 'Strategies for Adapting to High Rates of Employee Turnover'. *Human Resource Management*. 23(4): pp. 365-380.

Mukherjee, A. and Malhotra, N. (2009) "Call Centre Services: The Good, The Bad, and The Ugly". *Journal of Services Marketing*. 23(5).

Orne, M. T. (1962) 'On The Social Psychology of the Psychological Experiment: With Particular Reference to Demand Characteristics and Their Implications'. *American Psychological Association*. 5(1): pp. 776-783.

Poddar, A. and Madupalli, R. (2012) "Problematic Customers and Turnover Intentions of Customer Service Employees". *Journal of Services Marketing*. 26(7): pp. 551-559. Rhoades, L. and Eisenberger, R. (2002) "Perceived Organisational Support: A Review of the Literature". *Journal of Applied Psychology*. 87(4): pp. 698-714.

Riggio, R. E. (2013) *Introduction to Industrial/Organizational Psychology*. 6th ed. USA: Pearson Education, Inc.

Russell, B. (2008) 'Call Centres: A Decade of Research'. *International Journal of Management Reviews*. 10(3): pp. 195-219.

Saunders, M., Lewis, P. and Thornhill, A. (2009) *Research Methods for Business Students*. 5th Ed. UK: Pearson Education Limited.

Sawyerr, O. O., Srinivas, S. and Wang, S. (2009) 'Call Centre Employee Personality Factors and Service Performance'. *The Journal of Services Marketing*. 23(5): pp. 301-317.

Schalk, R. and Van Rijckevorsel, A. (2007) "Factors Influencing Absenteeism and Intention to Leave in a Call Centre". *New Technology, Work and Employment.* 22(3): pp. 260-274.

Scholarios, D. and Taylor, P. (2010) "Gender, Choice and Constraint in a Call Centre Employment". *New Technology, Work and Employment*. 25(2): pp. 101-116.

Sengupta, S. and Dev, S. (2013) "What Makes Employees Stay? Exploring the Dimensions in Context of Urban-Centric Business Process Outsourcing Industry in India". *Strategic Outsourcing: An International Journal*. 6(3): pp. 258-276.

Simons, J. C. and Buitendach, J. H. (2013) "Psychological Capital, Work Engagement and Organisational Commitment Amongst Call Centre Employees in South Africa". *SA Journal of Industrial Psychology*. 39(2): pp. 1-12.

Sprigg, C. A. and Jackson, P. R. (2006) "Call Centres as Lean Service Environments: Job-Related Strain and the Mediating Role of Work Design". *Journal of Occupational Health Psychology*. 11(2): pp. 197-212.

Verma, M., Bhal, K. T. and Vrat, P. (2013) 'Impact of Gender Sensitive Practices on Job Satisfaction & Stress Levels'. *The Indian Journal of Industrial Relations*. 49(2): pp. 286-297.

Walsh, G. and Bartikowski, B. (2013) "Employee Emotional Labour and Quitting Intentions: Moderating Effects of Gender and Age". *European Journal of Marketing*. 47(8): pp. 1213-1237.

West, M. A. (2008) 'Effective Teams in Organisations' In: Chmiel, N. (ed) *An Introduction to Work and Organization Psychology: A European Perspective*. 2nd ed. UK: Blackwell Publishing Ltd, pp. 305-328.

Winiecki, D. J. (2009) 'The Call Centre and its Many Players'. *Organisation*. 16(5): pp. 705-731.

Zareen, M., Razzaq, K. and Ramzan, M. (2013) 'Impact of Employee Retention on Performance: The Moderating Role of Employee Psychological Perception Towards Retention Plan'. *Interdisciplinary Journal of Contemporary Research in Business*. 4(10): pp. 822-833.

Chapter 9: Appendices

9.1 Appendix 1: Cover Letter Provided with the Survey

Dear Sir/Madame

My name is Fiona Crosby and I am currently studying a full-time post-graduate degree in human resource management in National College of Ireland. I am researching the influence of age and gender on employee commitment levels in relation to employee retention and possible turnover intentions in call centres in Ireland for my dissertation. This is a brief survey and all responses will be anonymous.

Should you have any questions, please send an email to Fiona. Crosby@student.ncirl.ie and I will be happy to answer any queries.

Thank you for your response.

9.2 Appendix 2: The Organisational Commitment Questionnaire (OCQ) (Allen and Meyer, 1990)

1) What is your gender?

Male

Female

2) What is your age?

18 to 24

25 to 34

35 to 44

45 to 54

55 to 64

Commitment Scales

Instructions

Listed below is a series of statements that represent feelings that individuals might have about the company or organization for which they work. With respect to your own feelings about the particular organization for which you are now working, please indicate the degree of your agreement or disagreement with each statement by circling a number from 1 to 7 using the scale below.

1 = strongly disagree

2 = disagree

3 = slightly disagree

4= undecided

5 = slightly agree

6 = agree

7 = strongly agree

Affective Commitment Scale

1) I would be very happy to spend the rest of my career with this organization.

- 2) I enjoy discussing my organization with people outside it.
- 3) I really feel as if this organization's problems are my own.
- 4) I think that I could easily become as attached to another organization as I am to this one. (**R**)
- 5) I do not feel like 'part of the family' at my organization. (R)
- 6) I do not feel 'emotionally attached' to this organization. (R)
- 7) This organization has a great deal of personal meaning for me.
- 8) I do not feel a strong sense of belonging to my organization. (R)

Continuance Commitment Scale

- 1) I am not afraid of what might happen if I quit my job without having another one lined up. (\mathbf{R})
- 2) It would be very hard for me to leave my organization right now, even if I wanted to.
- 3) Too much in my life would be disrupted if I decided I wanted to leave my organization now.
- 4) It wouldn't be too costly for me to leave my organization now. (R)
- 5) Right now, staying with my organization is a matter of necessity as much as desire.
- 6) I feel that I have too few options to consider leaving this organization.
- 7) One of the few serious consequences of leaving this organization would be the scarcity of available alternatives.
- 8) One of the major reasons I continue to work for this organization is that leaving would require considerable personal sacrifice -another organization may not match the overall benefits I have here.

Normative Commitment Scale

- 1) I think that people these days move from company to company too often.
- 2) I do not believe that a person must always be loyal to his or her organization. (R)
- 3) Jumping from organization to organization does not seem at all unethical to me. (R)
- 4) One of the major reasons I continue to work for this organization is that I believe that loyalty is important and therefore feel a sense of moral obligation to remain.
- 5) If I got another offer for a better job elsewhere I would not feel it was right to leave my organization.
- 6) I was taught to believe in the value of remaining loyal to one's organization.
- 7) Things were better in the days when people stayed with one organization for most of their careers.

- 8) I do not think that wanting to be a 'company man' or 'company woman' is sensible anymore. (R)
- * (R) = Reverse Scored

9.3 Appendix 3: Reverse Scoring for the OCQ

- 1 = 7
- 2 = 6
- 3 = 5
- 4 = 4
- 5 = 3
- 6 = 2
- 7 = 1

9.3.1 Affective Commitment Scale – Reverse Scoring Questions

- 4) I think that I could easily become as attached to another organisation as I am to this one.
- 5) I do not feel like 'part of the family' at my organisation.
- 6) I do not feel 'emotionally attached' to this organisation.
- 8) I do not feel a strong sense of belonging to my organisation.

9.3.2 Continuance Commitment Scale – Reverse Scoring Questions

- 1) I am not afraid of what might happen if I quit my job without having another one lined up.
- 4) It wouldn't be too costly for me to leave my organisation now.

9.3.3. Normative Commitment Scale – Reverse Scoring Questions

- 2) I do not believe that a person must always be loyal to his or her organisation.
- 3) Jumping from organisation to organisation does not seem at all unethical to me.
- 8) I do not think that wanting to be a 'company man' or 'company woman' is sensible anymore.

9.4 Appendix 4: Table of Descriptive Statistics

Descriptives

			Ctatistis	Otd Free:
Age	Mann			Std. Error
18 to 24 Years		Laura Barra 1		2.029
			l	
		Opper Bound		
			84.00	
			115.284	
			10.737	
	Minimum		63	
	Maximum		103	
	Range		40	
	Interquartile Range		16	
	Skewness		.013	.441
	Kurtosis		784	.858
25 to 34 Years	Mean		95.75	2.564
	95% Confidence Interval	Lower Bound	90.49	
	for Mean	Upper Bound	101.01	
	5% Trimmed Mean		95.13	
	Median			
	Variance			
	Std. Deviation		-	
			-	
				.441
			-	.858
35 to 44 Years				3.199
			101.19	
		Upper Bound	114.46	
	5% Trimmed Mean		107.64	
	Median		105.00	
	Variance		235.332	
	Std. Deviation		15.341	
	Minimum		81	
	Maximum		138	
	Range		57	
	Interquartile Range		22	
	Skewness		.328	.481
	Kurtosis		542	.935
45 to 54 Years	Mean		107.80	8.423
	95% Confidence Interval	Lower Bound	88.75	
	for Mean	Upper Bound		
	5% Trimmed Mean			
			-	
			-	
			-	
				.687
554- 2432				1.334
ob to 64 Years		1	-	7.262
	95% Confidence Interval for Mean		l	
		Upper Bound	125.53	
			100.06	1
	5% Trimmed Mean		108.86	
	5% Trimmed Mean Median		96.00	
	Median		96.00	
	Median Variance		96.00 474.694	
	Median Variance Std. Deviation		96.00 474.694 21.787	
	Median Variance Std. Deviation Minimum		96.00 474.694 21.787 81	
	Median Variance Std. Deviation Minimum Maximum		96.00 474.694 21.787 81 135	
	Median Variance Std. Deviation Minimum Maximum Range		96.00 474.694 21.787 81 135 54	.717
	25 to 34 Years 35 to 44 Years	18 to 24 Years	Near	Name

9.5 Appendix **5**: Table of Results of Organisational Commitment and Possible Turnover Intentions

AC4	AC5	AC6	AC8	CC1	CC4	NC2	NC3	NC8	TotalCommitment
2	2	2	2	2	4	2	2	2	52
2	2	2	2	5	3	2	4	4	63
4	5	2	2	2	2	2	4	4	67
2	3	2	3	5	5	2	2	4	70
2	5	2	4	5	6	2	2	4	72
2	2	2	2	6	6	3	2	4	73
2	5	3	3	5	5	2	3	3	73
2	2	2	3	6	2	2	2	3	75
3	4	3	4	2	3	2	4	4	76
5	6	6	6	6	6	6	6	6	76
2	3	2	2	5	6	2	2	4	77
2	5	2	5	6	2	2	2	4	78
1	3	2	2	6	6	2	2	2	79
1	3	3	4	6	3	3	2	4	79
4	5	1	5	6	5	3	3	2	80
5	6	5	6	6	5	4	5	6	81
2	2	2	5	7	5	2	2	3	81
2	4	2	4	5	7	2	2	3	82
2	3	3	3	6	6	2	4	2	83
3	4 5	4 6	4	5	4	2	3	2	83
5	4	5	7 5	6	6 5	6 4	5	5	84 85
1	3	2	4	5	6	2	2	4	85
1	4	1	2	4	6	2	2	4	85
1	5	2	3	3	5	4	2	4	86
2	5	2	3	7	5	2	2	4	86
4	5	2	4	6	2	4	4	6	86
6	5	6	7	6	5	4	6	5	87
7	6	5	6	4	4	5	4	5	87
2	4	2	4	7	2	2	2	4	87
4	5	5	5	5	3	3	4	4	87
2	5	5	5	5	5	4	2	3	88
4	3	4	4	4	4	5	3	5	89
1	4	4	5	5	4	4	2	4	89
6	6	5	7	6	4	4	4	6	90
3	6	3	5	6	6	5	4	4	90
2	3	3	4	1	6	3	2	4	90
2	2	2	2	5	3	6	3	4	90
2	5	2	5	6	5	3	2	5	91
6	6	4	5	5	6	4	5	4	91

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