Chapter 2
Work Design, Anxiety and Depression, Call centre.

Introduction

Since 1960, work has evolved dramatically (Oldham, Hackman, and Pearce, 1976). Numerous factors have contributed to this evolution: the tremendous development of technologies, the elevation of general education levels, changes in the values and expectations of the workforce, workplace diversity, the radical transformation of organisational structures, the globalisation of the economy, etc (Karasek, Theirry and Stanback, 1981). The nature and character of work have changed significantly. In the last century, the work that people undertook within the organisations typically involved direct, hands-on experience of objects of work whether digging potatoes on the farm, assembling product in the factory or selling garments to a customer in a shop. The process of work basically involved face-to-face engagement with other human beings such as colleagues, customers or supporters. For many people those are now characteristics of work in the past (Callagham and Thompson, 2001). The work which people now undertake is increasingly ‘virtual’ characterised not by direct interaction with the objects of work but by indirect contact mediated by computers and the new forms of telecommunication.

As a result work life is undergoing major changes and so are many organisations. These changes in the world of work affect many aspects of the psychological relation between people and work (Eason, 1987) and what about the factors that gives meaning to work? Have they changed as well? According, to Baumeister (1986) there are four factors that give meaning to work and they include: purpose of work (the need to find the purpose of one’s life), self-efficacy and control (the need to feel in control and efficient), self-justification (the need to feel that one’s actions are moral), and self worth (the need to feel esteemed and valued).
Szilagyi, Keller and Sims (1976) also describes six dimensions which are important in describing or giving meaning to work, these include: 

Variety- the degree to which a job requires employees to perform a wide range of operations in their work and/or the degree to which employees must use a variety of equipment and procedures in their work.

Autonomy- the extent to which employees have a major say in scheduling their work, selecting the equipment which they will use and deciding on the procedures to be followed.

Task identity- the extent to which employees do an entire or whole piece of work and can clearly identify the result of their efforts.

Feedback- the degree to which employees receive information as they work which reveals how well they are performing on the job.

Dealing with others- the degree to which the job requires employees to deal with other people to complete the work.

Friendship Opportunities- the degree to which a job allows the employees to talk with one another on the job and to establish informal relationships with other employees at work.

In occupational medicine, it is recognised that the organisation of work has numerous effects on the physical and mental health. Warr (1987) even qualified the effects of work as being like a vitamin or stimuli for the psychological well-being of people, meaning that the effects of work are essential for the health of employees. In his study it was found that indeed the characteristics of employment (meaning requirements of work, the degree of autonomy and the social support) are connected to the psychological well-being of the employees.

Many researchers argue that both the design of work (e.g., having job control) and individual characteristics (e.g., negative affectivity) contribute to people’s mental health and work performance (e.g., Cooper and Marshall, 1976; Hurrell and Murphy, 1992; Katz and Kahn, 1978; Quick, Quick, Nelson, and Hurrell, 1997).
A call centre is a centralised office used for the purpose of receiving and transmitting a large volume of requests by telephone and they are a clear example of a new form of work. Call centres clearly illustrate these emerging work practices, where technology is seen as presaging high organisational control of the pace and structure of work and thus excluding people from meaningful human relationships at work (Eason, 1987). Call centres have rapidly increased in number over the last ten to fifteen years. From being relatively rare, they are now present in almost every economic sector (Datamonitor, 1998).

Call centres are now a significant part of the global economy. The growth in call centres is attributable to the benefits they offer organisations. Call centres can reduce the cost of existing functions, they can improve customer service facilities and they can also offer new avenues of revenue generation (e.g. exploiting customer data-bases for direct selling).

Despite these benefits, call centres have been labelled as “electronic sweatshops”, “electronic panopticians” and the “dark satanic mills of the twenty-first century” (Fernie and Metcalf, 1997; Garson, 1998). These gloomy pronouncements were often based on the perception that work in call centres was boring, monotonous, demanding and stressful – but it must be stated that these perceptions are not based on the results of any empirical research. In order to address this, a series of studies were undertaken to examine the extent and causes of employee stress in call centres (e.g. Holman, 2002, 2003; Holman et al., 2002; Holman and Wall; 2002; Holman and Wood, 2002; Totterdell, Chissick and Holman, 2002). Whilst it was noted that most of the call centre research focused on stress, performance, job satisfaction and high turn over in call centres (e.g. Datamonitor, 1998; Deloitte Touche Consulting Group, 1999; Kinnie Purcell and Hutchinson, 2000), no study was found on the work design and its relation to employee anxiety and depression levels.
The purpose of this study is to enhance an understanding of the work design of call centres and how it relates to the psychological well-being (mainly the anxiety and depression) of the employees by examining two different call centres, one inbound and one outbound. Hence it is important to begin this research report by taking a closer look at the research evidence regarding work design of call centres followed by research on anxiety and depression levels in call centres. A review of literature on these topics follows in the next sections.

**The work design of call centres**

The term ‘work design’ refers to the main characteristics of a particular job (Hackman and Oldman, 1995). Advances in technology result in changes to working methods and patterns basically how work are designed. These are compounded by the need to be competitive in a global economy. Particular changes are seen in many developing countries, which are attempting to compete with the more sophisticated and advanced nations. Employees in such countries may find it difficult to adapt to the new working regimes.

Thus workstations need to be designed to fit for the local people, ergonomics, engineering in the context. The need for adjusting machines to the working conditions of the local people is particularly acute in the current conditions of rapid technology transfer. This should be reflected in work re-design and ergonomic workstation design. Thus the following section focuses on exploring the design of call centre work.

Performance monitoring is one of the most prominent and pervasive characteristics of all call centre practices (Holman, 2002). It has also attracted attention due to its perceived effects on employee psychological well-being. In call centres, performance monitoring is achieved in two main ways. Firstly, through “electronic” call monitoring systems, from which information on a customer service representatives (CSR’s) activity enables supervisors (or others) to examine, for example, an individual’s average call time, the time spent taking calls and the number of calls taken. Secondly, through “traditional” monitoring systems, in which supervisors listen remotely to a CSR’s calls, with or without the person’s knowledge.
Electronic and traditional monitoring systems share two main characteristics, namely “content” and “purpose”. The “content” of performance monitoring covers the more “objective” properties of the monitoring process. It includes: frequency (e.g. is it continuous or episodic, its regularity); feedback (e.g. how data is fed back, how often it is fed back); performance criteria (e.g. qualitative, quantitative, clarity); and, target (e.g. which task is monitored).

The “purpose” of performance monitoring covers the use to which the performance data is put e.g. is the data used for punitive purposes, developmental purposes or to inform reward and payment decisions? A third factor, “monitoring cognitions”, covers employee perceptions of monitoring and includes perceptions of its fairness, its intensity and the degree of trust that a CSR has in the system. Of these, intensity has been highlighted as particularly important with regard to employee psychological well-being (Stanton, 2000).

There are arguments both for and against monitoring. Arguments in favour of monitoring propose that employees benefit as the feedback provided enables employees to develop new skills (Grant and Higgins, 1989), which in turn helps the CSR to cope better with job demands (Aiello and Svec, 1993; Stanton, 2000).

Arguments against monitoring suggest that it is intrinsically threatening to employees because the information gained may affect employees’ remuneration or co-worker relationships (Smith, 1990). Monitoring is also considered as a demand in itself (Smith and Sprigg, 1999). The threat of monitoring and the increased demand are thought to negatively affect employee well-being.

Both arguments have found support. On the one hand, laboratory and field studies have reported that monitored employees (or participants) are generally found to have higher levels of stress and dissatisfaction than non-monitored employees (Aiello and Kolb, 1995; Smith, 1990). On the other hand, in one of the few studies conducted in a call centre, Chalykoff and Kochan (1989) discovered that the performance-related content of the monitoring system (i.e. immediacy of feedback, the use of constructive feedback and the clarity of the rating criteria) was positively related to satisfaction with the monitoring
system, which in turn was related to job satisfaction. Thus, while being monitored is more stressful than not being monitored, there is little evidence to indicate exactly what it is about being monitored that makes it so much more stressful than not being monitored.

The strongest evidence indicates that feedback can have positive effects on well-being. Holman (2002) assessed whether the CSR felt monitoring was too intense and increased the pressure they felt. The relationship of these factors was analysed with regard to three measures of stress, namely, anxiety, depression, and emotional exhaustion (i.e. feeling emotionally drained or used up). Results revealed that the performance-related content of performance monitoring was negatively associated with depression. Additionally, the beneficial purpose of monitoring was negatively associated with depression, anxiety, and emotional exhaustion. The perceived intensity of the monitoring system was found to be positively associated with anxiety, depression, and emotional exhaustion. In addition, this analysis revealed that the perceived intensity of monitoring had a much stronger effect on stress than the other two performance monitoring characteristics.

What is interesting about these findings is that they support both the arguments for and against performance monitoring. They show that, while performance monitoring can reduce stress if it is conducted in a developmental manner and if based on regular feedback and clear criteria, these positive effects can be wiped out if monitoring is perceived to be too intense. Indeed, excessive monitoring may, over the long term, make employees more depressed, less enthusiastic and have the opposite effect of that intended. This particular study will be testing the effect that feedback has on the employee’s anxiety and depression levels.

The growth of electronic monitoring at work (e.g. Call centres) has been tied to increased pressure for organisations to improve productivity, limit labour costs, secure company secrets and improve customer service. Traditional audits provide delayed measures of behaviour and performance, but electronic monitoring allows constant regulation of employee activity. Electronic means can provide a supervisor with immediate covert observation of employees, providing insight into employee behaviours that are unavailable to supervisors who are physically present.
The core process is that customer calls are fed directly to waiting “agents” who talk the customer through a series of structured computer databases so that information or action can be taken or given with immediacy. A rapidly expanding number of organisations are front-ending their delivery chain with a “direct” structure, enabling them to do business over the phone and offer immediate services in a routine and uniform way. This replaces face-to-face, local, or research report-based transactions and frequently stimulates new markets (Taylor and Bain, 1999).

The agents’ schedule, availability and activity are monitored by the IT system. Each agent has a specified target relating to talk time, wrap up, abandon rates and queue time that they must adhere to. On the service side, agents are regularly monitored by their supervisors and customer satisfaction surveys conducted either six-monthly or annually. In these centres, all agents have individual targets that they are constantly required to meet in addition to the other efficiency targets.

The use of technological features such as Automatic Number Identification (ANI) and Dialled Number Identification System (DNIS) in call centres permits the practice of advanced database marketing. That is, when a call comes in to a business they can route it automatically to a customer database that will identify the customer’s purchase history, current needs, inventory levels and other unique information that would be invaluable in building relationships. Telecommunications technology and computer technology can work effectively together (Taylor and Bain, 1999). The approach to selling the product or service is then embedded in the larger strategy of building and maintaining customer relationships. Also, Automatic Call Distributor (ACD) technology now is sufficiently advanced that businesses can manipulate when and how the demand will be met.

Electronic surveillance or monitoring as an internal control can have positive or negative effects on employees depending on how it is used. Inflexible control systems can threaten individual employees and cut productivity by making work too rigid. But if electronic surveillance gives employees information to improve performance as well as remove bias from evaluating work, it may also enhance efficiency. When electronic monitoring includes feedback and training, the impact on employees may be much more positive than if the system were used only for internal control or as a way to punish. From a
manager’s perspective, monitoring is a rational and logical function of performance management, to make sure that agents reach the targets that get set for them, and then re-evaluating targets, noting the training that is needed. Interlinked, these technologies make it possible to routinise, monitor and control performance in far-reaching ways (Kidwell and Kidwell, 1996).

In the context of the efficiency model, significant research has focused on computerised monitoring and control systems (Kidwell and Kidwell, 1996). For example, in a work unit where computer monitoring was used, there were trade-offs that emphasised production quantity over reduced customer service quality (Kidwell and Kidwell, 1996).

In relating monitoring to productivity, stress and satisfaction, researchers found that monitored employees perceived higher stress levels and lower levels of satisfaction, but increased productivity, more accurate performance assessment and greater organisational control (Kidwell and Kidwell, 1996).

Measuring and monitoring are also seen as a sort of live experimental laboratory to constantly modify dialogue scripts, which will be said in the live environment. As currently characterised, the job of the agent is to be the voice of the organisation, interfacing with the client or customer. The organisation rehearses the things it wants said and feeds them through the agent (referred to as scripting). Thus it becomes obvious that managers need to listen into calls, not just for disciplinary reasons, but for quality reasons as well.

Call centre agents are the front-end of business. Indeed, as far as the customers are concerned they are the business. Whatever image the customers have of the agents is probably pieced together from experiences of dealing with the call handlers. Customers have no other way of knowing who the agents really are. All they have to go on is the evidence of their own senses, and the impression that leaves. That is why all those brief encounters between the customers and the staff are often called moments of truth. Like it or not, the call handlers are the most empowered people in the company. On every call, they are making or unmaking the business.
Managers are aware that customers want to feel that they are talking to the right person, which usually means wanting to speak to someone who is able to respond adaptively to their particular wants and concerns, and who treats them as individuals. Thus the use of scripting in call centres provides a degree of management control, and consistency, which employers have over their call agents. However, current research into customers' preferences has confirmed what might have been suspected anyway - that word-for-word scripting is a turn-off for them. Today's customers are well used to buying products and services by phone. They can tell when the call handler is working to a script, because of the forced formality and limited opportunity for interaction. They can hear the difficulty the call handler has in responding to requirements that have not been anticipated in the script and customers do not like that.

Scripts are also unpopular with call handlers, for exactly the same reasons that they are unpopular with the customers. Scripts leave little opportunity for people to be adaptive or flexible in their responses, or to express their own personality. As a result, people tend to abandon the script at the earliest opportunity, and slip into a freestyle approach. Out goes consistency and quality control. The customers do not like scripts. The call handlers do not like them, and tend to subvert them when they can. That leaves only management rooting for them - reluctant to surrender control, even though they know in their hearts that it does not work.

Scripting can be associated with emotional labour. Customer-employee interaction can affect employee well-being. The strongest evidence comes from work on emotional labour, the regulation and expression of emotion in exchange for a wage (Mitial Research, 2001). Central to theories of emotional labour is the idea that organisations implicitly or explicitly specify what and how emotions should be expressed (Raffaeli and Sutton, 1990; Sutton, 1991). An employee can accomplish emotional labour by surface acting or deep acting (Mitial Research, 2001). Surface acting involves displaying the required emotions but there is little attempt to feel those emotions. For example, an employee may “smile down the phone”. Deep acting involves trying to feel and display the required emotions by, for example, re-appraising the situation so that its emotional impact is lessened.
The key concept for this study, however, is that of emotional dissonance, which occurs when there is a discrepancy between what the employees expresses and what he or she feels. Emotional dissonance has been consistently associated with negative consequences for employees, including emotional exhaustion and lower job satisfaction (Zapf, Vogt, Seifert, Mertini and Isic, 1999). However, it is unclear how often employees experience dissonance and how often it occurs in the form of faking as opposed to suppressing positive feelings.

However, a central and inescapable problem with the scripting and codifying approach is that it neglects the organic nature of human communication and interaction (Cameron, 2000), and more than anything else, the inherent unpredictability of call volumes. The production line nature of call centres tends to limit individual initiative and produces a lacklustre approach to taking responsibility. This can be frustrating both for the customer and the employee. Employees need to feel in control of their work and be encouraged to take greater responsibility for their decisions. Rather than rigidly following computer-prompted structures, employees should feel they are in charge of the call and lead the customer through the relationship in a natural and conversational manner.

Seen in this light, the call centre enacts the core-peripheral model (Pollert, 1991) where a large group operates through roles, rules and scripts, and someone else does the thinking and controlling.

Although meaning and impact contribute to the overall feeling of job satisfaction the most significant relationship is with self-determination. Self-determination, or the belief that one has autonomy or control over how one works, is not part of the role of a CSA. The organisational structure, climate, culture and processes seem to limit perceptions of self-determination. The use of performance monitoring, reliance on quantitative statistics and the ensuing negative questioning combine to dictate management practices. Although an indirect relationship was found, previous research suggests that these factors tend to have a major influence on mental and physical health.
The issues arising from organisational emphasis on keeping the call time down and the CSA’s desire to serve the customer well have already been mentioned. Studies have shown that this type of role conflict may result in a reduction in job satisfaction; increases in anxiety levels and may affect physical health (Ivancevich and Matteson, 1980; DiTecco, 1994). Relative to this point are two significant findings. One, that the CSA’s experience less satisfaction with personal relationships as the role becomes more stressful. Second, the CSA’s are more likely to take days off sick the less satisfied they are with personal relationships. Lack of control has been particularly associated with reductions in psychological and physical well-being and a decrease in sickness, absence and turnover rates. (Ivancevich and Matteson, 1980, DiTecco, 1994).

These tensions, though, were not simply confined to the employment strategies, and Hutchinson, Purcell and Kinnie (2000) found evidence that the combination of tight controls and high quality standards leads to employees experiencing tensions and contradictions when carrying out their jobs. They also found that the high-commitment practices were used to “ameliorate a tightly controlled work environment” and to “offset the worst features of call centre working” rather than as a human resource system designed to enable individuals to work most effectively.

The measurement philosophy is based on the reductionism that only what gets measured gets done – which ignores the many crucial things beyond measurement. To be measured by call handling levels ignores the reality that individual team leaders and agents cannot control the level of calls at any particular time. The normative responsibility is to ensure maximum coverage, although this is frequently impossible.

The control model is heavily remedial, sadly reflecting the status quo of many call centres. It is rooted in standard measurement, monitoring, correction and short-term targeting. Painted in this light, the call centre can be characterised as an intensification project. Routines are specific and detailed roles are restricted. Agent time is utilised to the maximum in pursuit of the call coverage and achievement of shifting goals. When each action is prescribed, there is no ambiguity left, and little room for imagination, appropriation and development. When all processes are formalised, there is no space or “slack” in the system. When call service levels are the bottom line, even allocated time of
the phones for meetings, training and coaching is under constant threat and erosion. Yet organisational slack is more than just space for escape, it is space for learning.

Organisational learning is not a goal in itself, but a key factor in sustainability. The fundamental principle of learning is the ability to identify, build and retain organisational knowledge. So how does the call centre meet the sustainability challenge? For most call centres, the predominant operating mode is rather reactive than projective. For agents, learning is constructed at the level of the routine; learning new routines, scripts, system changes, unlearning the old, and becoming accomplished in meeting the changing numerical and behavioural targets. What is the future for an organisation that programmes its employees not to think?

Most work psychologists maintain that both the design of work (e.g., having job control) and individual characteristics (e.g., negative affectivity) contribute to people’s mental health and work performance (e.g., Cooper and Marshall, 1976; Hurrell and Murphy, 1992; Katz and Kahn, 1978; Quick, Quick, Nelson, and Hurrell, 1997).

According Terry and Jimmieson (1999) call centres lack a lot of variety and autonomy. The lack of variety refers to the degree to which a job does not require employees to perform a wide range of operations in their work. The lack of autonomy refers to the extent to which employees have no say in scheduling their work, selecting the equipment which they will use and deciding on the procedures to be followed (Hackman and Lawler, 1971).

Terry (1990) states that call centres are usually associated with highly repetitive working conditions and that this, can be damaging in a number of ways especially psychologically and physiologically. One major symptom experienced by call centre agents is boredom. Call agents begin to find their job unchallenging and boring and therefore begin not to give their entire active attention to their work and this, in turn can increase the risk of poor quality work. Additionally, repetitive work has the tendency to increase risks of exposure to mental strain.
Holman and Wood (2002) argue that only 23% of call centres in their study reported to have a lot or a great deal of job variety, while in 37% there is little or no job variety over daily work tasks. A further 32% have little or no job variety and low job control over daily work tasks but shows to have a moderate to high control over customer interaction.

According to Batt and Moyinihan (2002), variety in call centre work comes from answering different call types, although the actual differences may be small. The level of problem-solving demand is not high in call centres and when problems arise there is a general expectation that these calls should be handed on to supervisors.

Research demonstrates those employees with low task variety report poorer mental health (i.e. greater stress, greater anxiety) and those with higher job control report greater job satisfaction and better mental health (Terry and Jimmieson, 1999).

Research consistently shows that this work organisation variable is associated with occupational health and productivity (e.g., Terry and Jimmieson, 1999). Autonomy is the amount of day-to-day freedom that an organisational member has to make decisions on the job and is an analogue of authority (Dill, 1985).

Hackman and Oldham (1975) show that autonomy (along with other core job dimensions like task significance and feedback) promotes positive motivation, performance, satisfaction, absenteeism and turnover outcomes. Marmot, Bosma, Hemingway, Brunner, and Stansfeld (1997) found that certain strategies, which require high levels of control, produce better results with low rather than high autonomy. In a similar vein, Terry and Jimmieson, (1999) also showed that these strategies are better with centralisation (low autonomy), while strategies, which need innovation and customer orientation, are more effective in decentralised (highly autonomous) contexts.

In support to the following, Stone and Porter (1975, pp 42-43) suggest that autonomy is, a human need, in a sense similar to this in Maslow’s (1954) hierarchy of needs. According to Nielson and Pedersen (2003) study, giving front-line employees more decision-making autonomy has found to help the competitiveness of the firms and to create a more supportive and stimulating environment.
Call centres have lower levels of autonomy since management approves solutions, provides direction, and maintains control over work-related issues. Call centre agents identify primarily with their individual work and secondly with the management. However it is still the management who retains control over system maintenance, team member selection, and reward allocation. Call centre agents are given separate assignments and recognised for individual contributions.

Job control is defined, herein, as a perceived ability to exert some influence over one’s work environment in order to make it more rewarding and less threatening (Ganster, 1989). Theories of occupational health and performance have hypothesised that providing people control over their work serves to improve mental health, job satisfaction, and performance [e.g., the job characteristics model (Hackman and Lawler, 1971), the socio-technical systems approach (e.g., Emery and Trist, 1960), action theory (Frese and Zapf, 1994; Hacker, Skell, and Straub, 1968), and the demands–control model (Karasek, 1979)]. In line with these theories of work control and employee health, Terry and Jimmieson (1999, p. 131) noted, in their research, that there appears to be “consistent evidence” that high levels of worker control are associated with low levels of stress-related outcomes, including anxiety, psychological distress, burnout, irritability, psychosomatic health complaints, and alcohol consumption. In addition, Marmot, Bosma, Hemingway, Brunner, and Stansfeld, (1997) showed that low levels of job control longitudinally predict new reports of coronary heart disease among London-based civil servants. Furthermore, Bond and Bunce (2001) showed, using a longitudinal, quasi-experimental design, that a work reorganisation intervention could improve people’s mental health, absenteeism levels, and self-rated performance by increasing their job control.

Previous research on employee stress in other types of organisations has identified job control, job demands, and social support as significant predictors of employee stress (Karasek and Theorell, 1990). As such, factors from each of these three domains were measured. The degree of job control was assessed by measuring “timing control” (i.e. the extent to which CSR's have control over the timing of their work) and “method control” (i.e. the extent to which a CSR has control over the methods they use and how they speak
to a customer). These measures were considered pertinent as call centre work had been criticised for limiting CSR choice over when to take a call, when to do particular tasks, how to do a task and how to speak to a customer. In addition, the breadth of a CSR’s role was assessed, as call centre work was often thought to lack variety. In the call centre studied, a CSR’s job also involved resolving customer queries and other problems, and required that the individual concentrates on what customers say and what is inputted into the system. These job demands were assessed by measuring “problem-solving demand” (i.e. the level and extent of the problem-solving challenge at work) and “attention demand” (i.e. the extent to which a CSR must concentrate on and attend to the work task) (Holman, 2003).

The results revealed that method control had a strong positive association with stress (i.e. high anxiety and depression, and low intrinsic and extrinsic job satisfaction). Engagement in a wide variety of tasks also had a positive association with intrinsic job satisfaction. These results are in line with earlier job design research (Parker and Wall, 1998) and, although fairly unsurprising, confirm such relationships in call centre setting. However, timing control only exhibited a weak positive relationship with employee stress. This suggests that, while control over the timing of one’s work is important in a call centre environments, other types of control are relatively more important with regard to stress. In other words, the level of control that CSR’s have over how they talk to customers and how they do a work task is more important than the level of control that CSR’s have over the timing of their work (Holman, 2003).

The practical implications of this study with regard to well-being are quite evident. Job control should be maximised and practices that strictly limit what a CSR can say to a customer, such as excessive call scripting, should be resisted. A further advantage of increasing job autonomy is that CSR’s will have greater control over the emotions they can display. This may reduce the dissonance between displayed and experienced emotions, which in turn may lead to better employee well-being. Jobs should also be organised so that they provide a challenging environment and one in which the CSR has a variety of tasks to do.
Holdsworth and Cartwright (2003) argue that compared to traditional office employees the CSA’s feel that their work activity is more likely to conflict with their value system, they experience less freedom and autonomy and are unlikely to believe they are making a difference to the organisation. The sense of belonging to a profession, combined with the autonomy of the job helps to manage the anxieties of belonging and separation (Holdsworth and Cartwright, 2003).

Variety in work offers employees with different skills. Employees in such companies become multi-skilled because of the variety of tasks performed and the complexity of their jobs.

There is a suggestion from psychological literature, though no strong evidence, that too little work pressure could also bring problems of boredom and lack of fulfilment at work (Warr, 1990).

Skill variety is the extent to which a range of different activities is involved in a job. Skills variety is consistently found to be positively related to welfare (Oldham, Hackman, Pearce, 1976). These factors account for part of the role of skills in generating greater enthusiasm. Another reason why more skilled work is associated with greater enthusiasm is that employees in skilled jobs are less likely to report that their skills are being under utilised. It is important, in fact, for employees’ skills to be well matched to their jobs’ requirements. Those with under utilised skills (approximately one in three employees) experience more boredom and depression, less contentment, and less satisfaction than those who do not have under utilised skills. This is a common finding in many studies of well-being that has been confirmed here. However, the researcher has also shown here, for the first time, that those whose skills have not kept up with job requirements (about one in six employees) also experience greater depression, more anxiety and less satisfaction than those in matched job (Oldham, Hackman and Pearce, 1976).

Further interesting findings were the relationships between job demand and well-being, which tended to be non-significant or not in the predicted direction. Thus, although attention demand had the predicted positive association with anxiety, it had an unexpected positive association with intrinsic job satisfaction. This indicates that, in a
call centre, although the requirement to pay constant attention to one’s work may cause feelings of worry and anxiety (e.g. about making a mistake), actively attending to and meeting a customer’s needs may also prove satisfying.

According to the study by Holdsworth and Cartwright (2003) call centres need to design more complex empowerment interventions by providing decision-making autonomy to assist self-determination, offering training and development to boost feelings of competence and by creating a supportive organisational culture and climate. In addition advantages may be gained by designing jobs that are meaningful to employees, allowing employees to have an impact on their work through involvement in decision making and providing open, two-way communication.

However, in the process of creating the conditions for autonomy and delegation of authority, organisations often create fear in employees; first, because managers have difficulty in giving up control, and second, because of employees’ fears of autonomous working. Autonomous work does not offer the protection from anxiety that dependency offers. Autonomous work actually increases anxiety, which increases the desire to look to the bureaucratic structure or leader to provide protection. Thus a vicious circle is set up, in which the leader or manager feels the need to act authoritatively or even in an authoritarian manner, leading to more fear and dependency (Ingham, Kreitman, Miller, Sashidharan, and Surtees, 1987).

Social support may refer to friendship at work, opportunity to form relationships with co-worker. Hackman and Lawler (1971) define social support as the degree to which a job allows the employees to talk with one another on the job and to establish informal relationships with other employees at work. The importance of social support in an organisational setting lies in its advantages that people with great social support tend to be less affected by psychological illness.

The literature on social support that has accumulated over the past two decades suggests that social support can have a direct impact on psychological well-being (e.g. Billings and Moos, 1984; Houlinhan, 2000). It has also been found that social support can buffer the negative effects of stress (e.g. Cohen and Wills, 1985; Shamir, 1986) although such
positive effects have not been identified in some other studies (e.g. Kahn and Byosiere, 1992; Parkes, 1991).

A large amount of knowledge regarding social support comes from occupational stress literature. In this field, several models are proposed to explain the influence of social support on psychological well-being. One of the most well known models is that of Cohen and Wills (1985), where the main and moderating (buffer) effects of social support are discussed. The main effect hypothesis indicates that support is always positive and therefore will always have a beneficial effect on health. On the other hand, the moderating effect hypothesis upholds that support affects health only under stress situations. As observed previously, with the exception of the demand-control-support model studies (Karasek and Theorell, 1990), the greater part of studies in the organisational area focuses on the direct effect of support, while there is considerably less research concerning the moderating effect.

One of the first studies on the influence of social support on work was run by LaRocco, House, and French (1980) who pointed out those employees that feel supported show better psychological well-being, higher job satisfaction and better performance. Furthermore, it has been found unanimously, that support is positively related to job satisfaction (Fenlason and Beehr, 1990; Thomas and Ganster, 1995).

Shire (1998), states that call centre work tends to have low degrees of task interdependence, as a result work is individualised and fewer interactions with other call centre agents are needed to ensure service delivery, although co-employees may interact to offer social support and to help each other learn more about the job.

Although much has been said about the positive effects of social support, little attention has also been paid to the possible adverse consequences associated with the receipt of social support (e.g. Derlega, 1987; Coyne and DeLongis, 1986). For instance, the work of Fisher and Nadler (1982) on why individuals are unwilling to seek help suggests that receipt of help can induce a sense of dependence. Similarly, Shumaker and Brownell (1984) proposed that social support might weaken the recipient's sense of confidence and ability to deal effectively with the problems on one's own. Likewise, Shinn, Lehmann and
Wong (1984) believed that the receipt of support might generate a sense of obligation in the recipient to make effort to pay back the help, which would add stress to the already stressed individuals. These claims and possibly other negative effects associated with the receipt of social support have not yet received much empirical attention. More recently, the extent of social support that individuals experience has been argued to be an important moderator of adverse effects on welfare (Shinn, Lehmann, and Wong, 1984).

Social support for a worker is likely to be associated with whether the individual works in a supportive team. Lack of team support is a particular problem in those jobs where especially hard work is required, that is, jobs which involve high tension, exhaustion, high speeds and so on (Shumaker and Brownell 1984).

A further practical implication is that the monitoring system should involve frequent and positive feedback and be based on clear performance criteria. Moreover, performance monitoring should be recognised by CSR’s as being part of a system that aims to develop skills and performance and be designed so that it is closely linked to other support and development practices such as performance appraisal and coaching. By linking monitoring to these practices, the likelihood of monitoring being accepted, and its positive impact on well-being, should increase. Given that team leaders are integral to the performance monitoring and appraisal process, the need to invest in the training of team leaders is paramount as CSR’s are often promoted to this role from within the organisation. This often means that new team leaders are placed in a situation in which they have to deal with sensitive issues (such as giving feedback on performance) under demanding conditions, yet are relatively inexperienced and ill equipped to cope with such tasks.

Every effort should also be made to reduce the perception that monitoring is intense. It is possible that the perception of intensity is linked to the number and type of performance measures used. Lowering the number and changing the type of performance measures may reduce the perception that every aspect of behaviour is monitored and it might decrease the monitoring system’s pervasiveness. It might be argued, however, that any reduction in the number of criteria may adversely affect the effectiveness of the performance appraisal process. In response, it can be argued that feelings of intensity
may result in the performance appraisal criteria being devalued; and criteria need to be valued if they are to be of use. Thus, removing non-essential performance criteria should reduce intensity and improve the performance appraisal process.

It is the contention of this research report that intended outcomes of call centre organisation, particularly the key characteristics of routinisation, performance monitoring and intense control, could also invoke unexpected, unintended outcomes. As intensified work environments, call centres induce environmental and psychological stress. The evidence from fieldwork suggests that the largest part of the stress is endured and absorbed by the front line. For all the maximisation, efficiency, predictability and motivation that can be possible, there is also the risk and frequent evidence of resistance, disengagement, low motivation, system inflexibility and depression. The question of how call centre employees deal with stress is an important one, particularly in view of evidence that a build-up of stress leads to illness, absenteeism and turnover (Fernie, 1998). The two illnesses that the researcher particularly focused on in this study are depression and anxiety, which will be discussed in the following section.

**Anxiety**

Before discussing the outcomes of the study it is useful to clarify the terminology that is being used. Gallard, (1993) argues that the word stress is used constantly in connection with emotional states; it appears almost as often in discussions of anxiety as does the word "anxiety" itself. The expression seems to be employed in a number of different ways, usually without a specific explanation of the user’s intent. This usage has resulted in a fair amount of confusion and suggests that there is no consensus on its meaning. But the word is so well implanted in the scientific literature on emotion that it cannot be ignored.
Stress was viewed as a generic or collective term to describe a pressure or strain’ (Carr, 1994) on an individual and may be of a physical, emotional, mental or spiritual origin. Anxiety, however, is a specific response to this pressure or strain and “is a feeling of impending dooms and is associated with apprehension” (Carr, 1994, p.139).

Thus anxiety is viewed as a psychological manifestation of stress. From a psychoanalytic perspective, anxiety is the major concept associated with feelings of tension and being under threat or in a danger situation (stressors). The term depression is used to describe the phenomena experienced as a state of helplessness after “disaster” has occurred (Carr, 1994). In this study stress was being investigated as a psychological disorder manifested as anxiety and depression.

Anxiety is an emotion that underpins much of human’s behaviour in organisations. It is a response to what is as yet unknown in oneself or the environment (Rycroft, 1968). Anxiety is experienced as undesirable and ways are devised to avoid it being overwhelming. Overwhelming anxiety is experienced as stress. How individuals and organisations manage anxiety is a crucial part of the capacity of the employee to enter and become a member of the organisational group.

When people enter the workplace, they do not leave their emotions behind. Yet the over-riding assumption in organisations is that they run on the basis of objective data and in a logical mode. However, emotions do influence how people work (Kets de Vries, 1991). Anxiety is an emotion that underpins much behaviour in organisations. There are three levels of anxiety that one experiences (Obholzer and Roberts, 1994).

The tasks people do generate anxiety; the engineer who designs a bridge has a job which if badly done could result in carnage. The fast food assistant who fails to follow hygiene regulations courts an epidemic of food poisoning.

The second level of anxiety derives from personal histories. Each person brings a specific history in relation to elements of the work situation; experience of authority figures, of success and failure, of competition and rivalry, of being valued/undervalued and so on. Any situation that triggers these may re-activate the feelings associated with a past event.
The third level of anxiety comes from a more primitive level that is not just dependent on individual’s particular past, however is universally experienced. This primary anxiety comes with psychological separation from the mother figure and discovery that we are individuals. The baby realises that it is separate, but still helpless and dependent, and experiences anxiety as the caregiver goes away periodically. This is anxiety about one’s very survival (Klein, 1959). Many situations at work evoke these primitive feelings; keeping one’s sense of identity when conformity is required, seeking to be included and accepted by the organisation, competition with peers for success and rewards, relationships with authority figures, are examples of this.

At work there is great scope for anxiety; doing work involves risk of failing at the task and psychological failure to get one’s worth recognised or to find a secure place in the organisation. In times of major change these anxieties increase as uncertainty increases and the survival of the organisation itself appears threatened.

Anxiety levels vary between situations and individuals. However, anxiety is acted out in the organisation. Most people are not conscious of this. Indeed, if anxiety constantly broke through, no engineer would design a bridge and no one would ever get fast food. Some tactics may become so rigid that they eventually get in the way of the task: the maintenance of these defences distances one from the intended task (Menzies, 1960).

Anxiety at work arises on everyone’s part; professionals worry that their own credibility will be undermined if things go wrong (a professional can be struck off if someone they supervise does inadequate work).

The sense of belonging to a profession, combined with the autonomy of the job helps to manage the anxieties of belonging and separation. To avoid the anxiety becoming overwhelming, it is defended against in a variety of ways. The individual employs personal strategies such as denial or repression, leading to more serious illnesses such as depression.
There are numerous issues concerning anxiety, which have generated a fair amount of argument in theoretical literature and remain controversial. Two of these issues which are briefly discussed are bad and good level anxiety, thus the optimal level of anxiety. The optimal level of anxiety is a controversial topic with different theorists conceiving of different levels as optimal. The most familiar standpoint is that high anxiety is understood to be related with healthier behaviour.

**Depression**

According to Coyne (1986) the term depression can be sources of confusion as it refers to a mood state, a set of symptoms and a clinical syndrome. Different viewpoints of depression from advocates of psychoanalytic, cognitive, behavioural, interpersonal and social paradigms generally presuppose that normal depressed mood and clinical depression form two opposite ends of continuum. The core symptoms of depression can be categorised into emotional, cognitive and physical (vegetative) aspects (Coyne and DeLongis, 1986; Strome, 1999).

Emotional symptoms experienced by depressed individuals include: sadness,aloneliness, misery, dejection, hopelessness, anxiousness and irritability. While cognitively depressed people view themselves, they’re future potentials and their situations in negative and pessimistic terms. Loss, defeat, deprivation, failure, self-criticism for shortcomings intellectually, socially and aesthetically, blame for these shortcomings and others at large, as well indecision describe cognitive aspects. Guilt and self-approach are therefore fundamental features of cognitive depression as well as suicide ideation (Brown, Chorpita and Barlow, 1998). Vegetatively depressed individuals display psychomotor retardation, decreased appetite and decreased libidinal desires, sleep disorder and chronic tiredness. In addition certain writers incorporate motivational and interpersonal aspects as part of depressed constellation (Becker, 1974).

Depression takes an enormous toll on business, both in numbers of people affected and costs to organisations. (Shoor, 1994). Depression manifests at work in several areas: low morale, decreased productivity, lack of co-operation, accidents, absenteeism, increased fatigue, health complaints, and alcohol and drug abuse (Ramsey, 1995). This disease robs
Depression is defined as a spell of two or more weeks of sadness and four out of eight other conditions. These include loss or gain of appetite, sleeping disorders, fatigue, slowing of body movements or thoughts, feeling worthless, loss of pleasure in something usually enjoyed, difficulty concentrating, and suicidal thoughts, desires, or attempts (Johnson and Indvik, 1997). Ironically, most depressed people do not recognise at first that they are depressed. By the time depressed employees reach the company’s employee assistance programme (EAP), they are usually in considerable mental pain (Breuer, 1995).

It is pretty common for people to pass off depression as having “the blues” or just being “a bit down in the dumps”. Unfortunately, the result of that is many people end up not getting treated because they think, “this is temporary”, “it is just the blues”, or “I can pull myself out of it” (Pagano, 1995, p.142).

Everyone has felt blue at one time or another. This equal-opportunity illness is so common, in fact, that depression is often referred to as the common cold of mental health (Ramsey, 1995). Depression is not unlike a virus, which can lurk undetected until one finally notices its secondary symptoms and then treats the symptoms instead of the underlying causes. Two trends alone would seem sufficient to make depression disproportionately present on the job: changes in the workforce and changes in the nature of the work itself. Specifically, there are more women in the workforce, and the demands of doing more with less create stress (Krohe, 1994).

Kaplan and Sadock (1998) differentiate between three different categories of depression namely, ‘mild’, ‘moderate’ and ‘severe’. Mild depression is accompanied by negligible functional impairment and a few if any excess symptom. Moderate depression requires at
least six symptoms with functional impairment between mild and severe. While severe is
differentiated into with or without psychotic symptoms and is accompanied by severe
functional impairment. In severe depression with psychotic symptoms either delusion or
hallucinations are present or the presence of a depressive trance, while severe depression
without psychotic symptoms lacks the psycho.

The level of stress has increased, and it is not hard for depression to follow. Conflicting
and ambiguous demands, work overload, lack of power and autonomy and job insecurity
have been linked to various mental health symptoms (Phelan, Slade and Thornicroft,
1995).

In the last ten years, there has been a doubling of work-related mental illness. Job
pressures have been cited in 75 per cent of claims for employees’ compensation in which
mental stressors were the main cause of absenteeism. Of these claims, 94 per cent
resulted from cumulative psychic workplace trauma (Wilson, 1991).

Additional sources of job-related stress include unclear job expectations and descriptions;
short deadlines and frequent “fire drills”; responsibility however no decision-making
authority; routine, monotonous jobs with no room for creativity; and last but not least, the
“isms” - racism, sexism, and ageism (Johnson and Indvik, 1997). Also, the growth of
multinational firms, telecommuting, virtual meetings and such things as e-mail is
depersonalising the workplace. Finally, there are the sources of stress outside work such
as children, spouse, life changes, ageing and unrealistic expectations of yourself and
others.

Depression is seldom traceable to a single cause. Often, it is produced by the interaction
of a person’s biological predisposition, psychological tendency towards pessimism,
feelings of low self-esteem and trauma, or long-term stress (Johnson and Indvik, 1997).
Frequently, the disease first appears when an individual is 20-30 years of age. Some
sufferers experience a single episode, while others may have recurring bouts of
depression (Johnson and Indvik, 1997). All depression probably has in common the
brain’s misregulation of normal stress. Genetics create a predisposition for some
depressive ills, and life-events can trigger all of them. People who have low self-esteem,
who are overly pessimistic, or who, say experts, are easily stressed out, are particularly vulnerable to depression.

Corporate psychologists have coined the term “workplace depression” to characterise the feelings of anger and anxiety which are widespread in today’s workplace. The symptoms range from general lack of enthusiasm and low productivity to high absenteeism coupled with a low rate of voluntary employee turnover (Johnson and Indvik, 1997). The symptomatic profile of the depressed worker includes irritability, sharp mood swings, absenteeism, impaired concentration and change in cognitive functioning.

Employees with clinical depression can be found throughout the workplace, from unskilled hourly employees to highly paid executives (Turner, Pickering and Johnson 1998). On the job depression can be a real problem. It saps energy and reduces effectiveness. The reduced effectiveness then results in ever-constricting patterns of damaged thinking, acting and feeling, all of which undermine and sabotage the depressed person’s relationships with other people and job effectiveness, leading, inevitably, to deeper and deeper depression (Shoor, 1994). In addition, episodes of depression may be triggered by stressful experiences on the job such as hurried deadlines, unrealistic expectations, pressure to do faster, and harassment. When depression strikes, job performances takes a nose-dive (Ramsey, 1995). Depressed people are more irritable, and they cannot concentrate. If their jobs require co-operation with others, the impact can be noticeable (Shoor, 1994).

Several demographic and clinical factors increase the likelihood of depression, including younger age, being female, and having a prior history of depression or alcoholism, or a family history of depression. Thus, the vulnerability to this disease is passed on from parents to children (Phelan, Slade and Thornicroft, 1995).

White people are more likely to be depressed than minorities, and younger people are more likely to be depressed than older people. In addition, women are twice as prone to the illness as men. The literature reveals that in addition to the job stress experienced by most individuals, there also exist stressors unique to women employees, for example, the
role demands of being a wife, mother and professional provoke role conflict (Comish, Daboval, Arnold and Friesen, 1994).

Also, if the typical man takes his work problems home with him, the typical woman brings her home problems to work, a place that historically offered little support. In the 1970’s and 1980’s though, the corporate (EAP) was feminised. Treatment focus shifted from substance and alcohol abuse (a typically male dysfunction) to parenting, past sexual abuse, infertility, marriage, and caring for aged parents (Krohe, 1994). It is because of stress, that today’s employees are ten times more likely to suffer from serious episodes of depression than their grandfathers (Ramsey, 1995).

Depression produces symptoms just as physical illnesses do, and employers must handle depression in the workplace as if it were a physical illness. According to the American Psychiatric Association, major depression is characterised by the following symptoms: depressed mood most of the day, loss of interest or pleasure in all activities, significant weight loss or gain, sleep disturbances, fatigue, diminished ability to think or concentrate, and recurrent thoughts of suicide (Shoor, 1994). Depressed employees who go untreated often complain of vague symptoms, diffuse kinds of gastro-intestinal problems, or sleep disorders. The result of untreated depression is that medical costs for the entire corporation go up (Shoor, 1994).

For some unexplained reason, depression is more prevalent among women. The incidence of the illness among women is twice as high as in men. For women, unique sources of stress arise both on and off the job. Working women frequently are confined to boring, low-power, high-demand jobs, which are inherently stressful. Off the job, women typically maintain major responsibility for the home and family, often spending triple the time on household tasks that their working husbands spend (Johnson and Indvik, 1997). Also, problems that are rare or non-existent in a man’s workday, sexual discrimination, are common for women. Some experts also blame women’s high stress levels at least in part on organisations, which fail to pay men, and women equally for equal work, do not provide formal or informal learning opportunities which can help women advance, and are unresponsive to family issues. Most women in most companies still do the least paid, least interesting, least independent jobs. They thus have traded a life of economic
dependence and menial tasks in the home for one in the workplace (Johnson and Indvik, 1997).

Over time, up to 20 per cent of the population will suffer severe enough symptoms to qualify as having major depression. That is twice as many as are affected by alcoholism and chemical dependence. Depression is a major problem for society, let alone business (Johnson and Indvik, 1997).

Women report more stress on the job and the consequences of the tension are more severe for women than for men. Women are more likely to burn out on the job, think about quitting, and experience frequent stress-related illnesses (Johnson and Indvik, 1997).

Among all major illnesses, depression has to be among the most treatable, with 80 to 90 per cent effectiveness. Considering its massive costs, depression would seem to be worth a major effort to detect and treat at the workplace level. Few companies currently have any mechanism in place for identifying depressed employees. It seems that many companies need to recognise that one way of achieving healthier profits is through healthier people.

**Relationship between Anxiety and depression**

The hierarchical structure of anxiety disorders and the relationships between anxiety disorders and depression have recently been the subject of a great deal of research and theoretical consideration. Research has addressed the possibility that the comorbidity observed between anxiety disorders and depressive disorders occurs because they influence each other in either reciprocal or unidirectional ways (Wetherell, Gatz, and Pedersen, 2001).

Several studies have demonstrated strong comorbidity between various anxiety disorders, and between anxiety and depression constructs (summarised in Mineka, Watson, and Clark, 1998). Additional research has also demonstrated important construct distinctiveness between anxiety and depression, where anxiety factors have been best
modelled as independent from depression factors and other anxiety factors (Brown, Chorpita, and Barlow, 1998). Research has also demonstrated that anxiety is a significant predictor of depression, while depression has not been found to significantly predict anxiety (Wetherell, Gatz, and Pedersen, 2001).

This argues that anxiety is a complex issue that can manifest itself in several patterns of symptoms. As such, different relationships to depression could result. Wetherell, Gatz, and Pedersen (2001) confirmed this idea by finding that worry, not obsessions–compulsions, is a significant predictor of depression.

Similar to the idea of higher-order factors, questions regarding the relation are relevant to this study. One such question involves the degree of symptom overlap between anxiety and depression, and how this may account for their high comorbidity.

The overlap between depression and anxiety has been theorised to be a shared construct called negative affectivity (Murphy and Hurrell, 1992).

Psychometrically speaking, the high correlations observed among anxiety and depressive disorders could be caused by measures that ask too many similar questions. Confirmatory factor analytic studies have shown that the constructs of anxiety and depression are best modelled as independent constructs despite the presence of similar symptoms (Wetherell, Gatz and Pedersen, 2001).

The present study has continued to support this idea. Please note that the instruments used in this study were selected because of their construct specificity. It was an important consideration that no anxiety measure contained items that assessed depressive symptoms and that the generalised anxiety measures did not tap into either obsessions or compulsions. Anxiety and depression share many secondary symptoms, as do different anxiety disorders (e.g., fatigue, concentration difficulty, etc.). However, it is possible that anxiety and depression may produce similar secondary symptoms completely independent of each other. For example, the fatigue caused by anxiety may have nothing to do with the fatigue caused by depression. Most likely, a much higher correlation
between somatic anxiety and somatic depression would have been observed if this was not the case (Rosnow and Rosenthal, 1996).

Depression and anxiety disorders are not the same though, although at first glance they seem very similar. Depression generates emotions such as hopelessness, despair and anger. Energy levels are usually very low, and depressed people often feel overwhelmed by the day-to-day tasks and personal relationships so essential to life.

A person with anxiety disorder, however, experiences fear, panic or anxiety in situations where most people would not feel anxious or threatened. The sufferer may experience sudden panic or anxiety attacks without any recognised trigger, and often lives with a constant nagging worry or anxiousness. Without treatment, such disorders can restrict a person’s ability to work, maintain relationships, or even leave the house.

Both anxiety and depression are frequently treated in much the same manner, which may explain why the two disorders are so often confused. Antidepressant medication is often used for anxiety, while behavioural therapy frequently helps people overcome both conditions.

Although no one knows exactly why, a great number of depressions are also accompanied by anxiety. In one study, 85 percent of those with major depression were also diagnosed with generalised anxiety disorder while 35 percent had symptoms of a panic disorder. Anxiety and depression are considered the fraternal twins of mood disorders they so often go hand in hand.

Call Centres

Tracing the research on call centres over the past decade, the need to recognise and study the prevalence of call centres in South Africa is frequently emphasised. South Africa is becoming the preferred call centre outsource location for many international countries. Parker and Wall (1998) argue that the explosive growth and the use of computers and telecommunication are creating an information revolution. Call centres have rapidly become an established and significant part of the global economy.
Call centres are centralised operations where trained agents communicate with customers via phone by using purpose built information and communication technologies. The normative model of call centre organisations is that tasks are tightly prescribed, routinised, scripted and monitored (Read, 2003 p.3). Call centres can be used for an overwhelming variety of purposes: customer service, dealer location, advertising and promotional campaigns, sales support, customer ordering, etc. This chameleon-like property of a call centre makes it an ideal tool for today’s rapidly changing business environment (Prabhaker, Sheehan and Coppett, 1997 p.225).

Vandevelde (2003) defines a call centre as a work environment in which the main business is mediated by computer and telephone-based technologies that enable an efficient distribution of incoming calls and the allocation of outgoing calls to the available staff. Therefore permitting customer-employee interaction to occur simultaneously with the use of display screen equipment and the instant access to and inputting of the information. A call centre can be used as an interface between customers and an organisation’s systems in order to complete a well-specified transaction, to generate sales or to provide solutions to and advice on complex and technical issues.

The broadest definition in the call centre literature is that provided by Norling (2004), who states that a call centre is any communications platform from which firms deliver services to customers via remote, real–time contact (p. 759). Callaghan and Thompson (2001) apply a similar inclusive definition, stating that call centres may be broadly defined as workplaces that integrate telephone and computer technologies to deliver service to customers (p.14). Taylor and Bain (1999), narrow the definition by specifying the types of technologies used: a call centre is defined as a dedicated operation in which computer utilising employees receive inbound-or make outbound telephone calls with those calls processed & controlled either by an automatic call distribution (ACD) or predictive dialling system (p. 102).

Richardson (1994) states that telephone call centres are specialist technology intensive offices that are established by organisations in order to deliver services to customers over the telephone replacing or complementing face-to-face interaction with the public (p.511)
Houlinhan (2000) also includes the types of operations typically performed in a call centre within her definition. She lists the tasks most effectively performed by call centres. ‘Call centres are centralised, specialised operations for both inbound and outbound communication. Handling call centre operations are especially suite to information delivery, customer services and sales operations (p. 228).

According to McPhail (2000) a call centre is a specialised office where agents remotely provide information, deliver services or conduct sales, using some combination of integrated telephone & information technologies, typically with an aim to enhance customer service while reducing organisational costs.

Call centres are centralised, concentrated, routinised tele-based operations particularly associated with the reengineering of services, communications and sales channels. Typical arenas for call centre organisations are the “commodity” areas such as banking, insurance, reservations, sales and IT helpdesks. While transacting over the phone is not a new phenomenon (operator services, reservations and advice lines have a long history), the mediation of information technology has greatly expanded the speed and variety of work that is possible. At the same time, front line communications have become increasingly central to business, meaning that call centres are acquiring new levels of strategic importance, compared to their historic location as a peripheral or back office function (Houlinhan, 2000, p. 209).

Call centres have their critics as well. Some critics argue that the work atmosphere in such an environment is de-humanising. Others point to the low rates of pay and restrictive working practices of some employers. There has been much controversy over such things as restricting the amount of time that an employee can spend in the calls. Furthermore, call centres have been the subject of complaints by callers who find the staff often does not have enough skill or authority to resolve problems.

Owing to the highly technological nature of the operations in such offices, the close monitoring of staff activities is easy and widespread. This can be argued to be beneficial, to enable the company to better plan the workload and time of its employees. Some
people have argued that such close monitoring breaches human rights to privacy. Yet another argument is that close monitoring and measurement by quantitative metrics can be counter productive in that it can lead to poor customer service and a poor image of the company.

The advantage of call centres is firstly, that the application of the technologies involved in call centre operations can play a key role in accessing more customers, and in providing better quality services especially where additional or extended services become available (Walker, Hecker and Craig-Lees, 2002). This leads to less cost and greater convenience for the customer.

Secondly, the time taken for each transaction is lessened due to less need for travel to office-based services; and, once connected to the call centre, services are provided relatively quickly due to the ability of the newer technologies to stream inquiries to unoccupied staff in different call centres, perhaps even in different parts of the country.

Thirdly, services are more readily provided in the language of the customer’s choice, due to the ability to direct customer calls to specific locations. Moreover, it has been noted that some customers actually rate service quality of call centre contact higher than they rate in-person contact (Taylor and Bain, 1999).

For service organisations, these new technologies should facilitate greater effectiveness and efficiency (Prabhaker, Sheehan and Coppett, 1997). More customers can be serviced at any one point in time, and, with customers taking at least part of the responsibility for the streaming of calls (by selecting a preference from a predetermined menu using the telephone keypad), fewer staff is necessary. Fewer service centres with less space for customers should be needed leading to a reduction in management staff and further cost reduction.

There are great benefits to be acquired from the use of call centres such as the ability to reduce the cost of existing functions, to extend and improve customer service facilities. However although call centres offer organisations a number of clear benefits, the benefits for those employed in them, particularly the line staffs are less clear (Holman, 2002).
This research report focuses on data drawn primarily from inbound call centre in the fields of public services and an outbound call centre in the IT sector. The chief characteristic that differentiates inbound and outbound call centre is that an inbound call centre only receives calls whilst an outbound receives and takes out calls. The outbound capabilities of call centres make them strong marketing vehicles and the inbound capabilities make them effective response vehicles (Prabhaker, Sheehan, Coppett 1997 p.224). However, call centres are centralised specialised operations for both inbound and outbound communication handling.

**Rationale for the Present Research**

Call centres have been described as ‘21st century sweat shops’ and modern day ‘dark satanic mills’ while their employees have been called ‘battery hens’ and ‘gallery slaves’. Call centre jobs are considered to be low quality and heavily repetitive. The work is designed in ways which emphasise speed, service and information with supervisors having the power to keep track of the price operations of every worker, how they take a call, the amount of time spent on the call, the answers provided by the agent and the wrap times. This illustrates that employees have moderate to ‘not very much’ level of control over their own work, daily work tasks, methods of their work and little participation in the design and the use of the new technology (Bain and Taylor, 1999, p.112).

Parkes (1991) in his National Occupational Stress Study, found that one stressor being ‘electronic performance monitoring’, is a major cause and promoter of physical or psychological health complaints. Monitored employees reported more boredom, high tension, extreme anxiety and depression, anger and severe fatigue than non-monitored employees.

The manner in which jobs are designed has important consequences for individual outcomes (such as depression, stress, anxiety, etc.). However literature emphasises the need for technology, work organisation and job content to be designed in such a way that the employee is not subjected to physical or mental strains which may lead to ill health. Closely controlled or restrictive work should be avoided or limited (Parker and Wall, 1998).
However even though the above-mentioned discussions may seem valid it has been confessed that not all have been investigated and that research still needed to be conducted in order to prove all these statements as true. Therefore the present study aims to investigate the work design of call centres and how it may impact on the call centre employee’s well-being (mainly looking at their anxiety and depression levels).