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An investigation into workplace stress and the role of coaching

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Thesis submitted in fulfilment of the requirements for the degree of Doctor of Counselling Psychology

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December 2005
Poor text in the original thesis.
Some text bound close to the spine.
Some images distorted
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Library Declaration

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Abstract

The aim with the current study was to investigate whether coaching could help to reduce perceived stress in the workplace. Part I of the study measured stress before and after coaching comparing a coaching (N=16) and a control group (N=15) in a sample of employees from a UK financial organisation. The results showed that the coaching did not significantly reduce stress. Part II of the study investigated the relationship between coaching and stress. Employees from the UK finance organisation and from a Scandinavian telecommunications organisation participated (N=103). Stress levels were measured after coaching in a coaching and control group. Multiple regression analyses showed that participation in coaching did not have a relationship with lower stress levels. Nevertheless, high levels of coaching effectiveness were reported by the participants in both Part I and II of the study. Thus, the coaching appeared to be effective at tackling the specific issues targeted in coaching while failing to significantly reduce levels of stress. Part III of the study used a qualitative methodology. Employees from the participating organisations were interviewed about their experiences of coaching (N=9). The interviews were analysed by using Interpretative Phenomenological Analysis and four main themes emerged: management of stress – coaching helped to reduce stress indirectly; the coaching relationship – this relationship was found to be very important; confidence – coaching helped to increase confidence; and coaching = investment in staff – the provision of coaching was viewed as a sign that the employer cared for and valued their employees.

The purpose of the case study was to outline the therapeutic intervention with a client suffering from workplace stress in a primary care setting. A cognitive behavioural approach (Beck, 1976; Beck, 1995) was used, and, accordingly, the therapeutic interventions focused on the client’s cognitions, moods, behaviour and physiology. In addition, the client’s work situation was explored and organisational stressors were identified.

The critical literature review investigated literature relating to the impact of gender on the level of workplace stress. Many of the studies indicate that women report higher levels of stress, however, several studies report no difference between the genders. Furthermore, research and theory concerning working women and the stressors ‘multiple roles’, ‘lack of career progress’, and ‘discrimination and stereotyping’ were also reviewed. The evidence for the adverse effects of these stressors is inconsistent. Gaps and limitations of the research are discussed.
Section A: Introduction to the portfolio

Overview

The global theme of this portfolio is stress in the workplace. Workplace stress is a serious problem that is related to a number of negative psychological, physiological, and economical outcomes (HSE, 2001). It is important that stress is tackled and organisations employ many different interventions in order to prevent and manage stress in the workplace, including counselling. Coaching is an intervention that is not commonly associated with stress reduction, nevertheless, it has been suggested that coaching can be useful in tackling stress by helping to identify factors that are causing stress, develop effective strategies for change, and maintain these changes (Hearn, 2001). Unfortunately, there is a lack of research investigating coaching in general (Grant 2001a) and there is a lack of research investigating the impact of coaching on stress specifically.

The research component of the thesis aims to address the lack of research in coaching and stress and uses both qualitative and quantitative approaches. The client study describes the therapeutic work in a primary care setting, with a client suffering from workplace stress. The critical literature review aims to critically evaluate the literature relating to the role of gender in perceived workplace stress.

The research component (Section B)

The research study aims to investigate stress and workplace coaching and consisted of three parts. Part I of the study uses a quantitative methodology and aims to investigate whether participation in coaching reduce stress. Part II of the study also uses a quantitative methodology and aims to investigate whether there is a relationship between participation in coaching and lower levels of stress. Part III uses qualitative methodology and aims to investigate coachees' experiences of coaching, and coaching and perceived stress.
Part I and Part II

Part I and Part II

Part I of the study uses a quasi-experimental methodology and measures stress before and after coaching in a coaching group and control group. Part II uses a correlational methodology and measures stress after coaching in a coaching group and control group. In the event that reported stress levels were significantly reduced following coaching, and there was a significant relationship between participation in coaching and stress, then this could have implications for the use of coaching within organisations. Coaching is suitable for non-clinical populations (Grant, 2001a) and if coaching does reduce workplace stress it is possible that it could help to prevent stress from developing into a serious clinical problem, as individuals may seek coaching at an early stage. Individuals may also learn and improve skills in coaching that can help to reduce or manage stress. In addition, within organisational settings coaching appears to carry less of a stigma than, for example, counselling (Peltier, 2001). Therefore, coaching has the potential to help those individuals who would not seek help from a counsellor.

Part III

In Part III a qualitative methodology is used to investigate the participants’ experiences of coaching, and coaching and perceived stress. The semi-structured interviews are analysed using Interpretative Phenomenological Analysis (IPA). IPA attempts to explore the participant’s perceptions and experiences of events (Smith & Osborn, 2003). A qualitative methodology contributes to the quantitative findings as it allows more flexibility in the data collection and enables the collection of rich data about the coaching experience. The interviews provide a more in-depth understanding of coaching and can help to explain whether coaching is/is not beneficial and effective.

The client study (Section C)

In the client study the therapeutic work in a primary care setting, with a client suffering from work stress, is described. A cognitive behavioural approach (A. Beck, 1976; J. Beck, 1995) is used and the report describes the therapeutic work relating to the client’s thoughts, behaviour, emotions, and physiological symptoms. This case was chosen as it highlights a number of issues relating to working with clients.

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suffering from stress problems. It was also chosen as it describes counselling for workplace stress in a setting (primary care) that is not connected to the workplace. Some clients may prefer seeking help outside the workplace and counselling psychologists are likely to meet individuals suffering from work stress in many different settings.

The critical literature review (Section D)
In the critical literature review, research relating to the role of gender in the level of workplace stress is evaluated. In addition, the literature relating to stressors particularly relevant to women is reviewed. This topic is important because if women are experiencing different levels of stress compared to men, and are also experiencing unique stressors, then this would have implications for counselling practice. Counselling psychologists working with females suffering from stress could benefit from an awareness of the evidence relating to women’s level of work stress and experience of specific stressors.

Personal statement
This portfolio reflects my academic, professional, and research background as a chartered counselling psychologist. My motivation for focusing on the area of workplace stress derives from my personal interest in the topic and experiences of working with clients suffering from stress. My previous research on stress within organisations has also motivated me to continue researching this area. Stress is a serious problem and further research on the topic of stress and stress interventions contributes to existing knowledge and can help to raise awareness. Ultimately this can hopefully help to tackle stress. I have also been interested in reading about the growing area of coaching and the claims of its various benefits. However, I quickly realised that there is a lack of research evaluating coaching. It is this lack of research, together with my background in counselling psychology that promoted empirical research, that motivated me to investigate whether coaching is effective in reducing stress. It is my hope that the research, together with the client study and critical literature review, will contribute to the fields of coaching psychology and counselling psychology.
Publications

The publication and sharing of research is crucial to the development of the discipline of counselling psychology. Indeed, the author, together with the main supervisor, has made a considerable effort in writing up various parts of the thesis and in presenting the findings at relevant conferences. This has enabled colleagues in the field to take part of the findings at a relatively early stage. The sharing of the findings from the thesis was an important aim for the researcher. It has been suggested that research that never reaches an audience – because it is not published or presented, or once disseminated is not read or understood by anyone – can not be viewed as research (Salmon, 2003).

To date, the following sections of the thesis have been published: a rationale for the research study (Gyllensten & Palmer, 2005a); the findings from Part I of the study (Gyllensten & Palmer, 2005b); the findings from Part II of the study (Gyllensten & Palmer, 2005c); a summary of the overall study (Gyllensten & Palmer, 2005d); the critical literature review (Gyllensten & Palmer, 2005e); and the client study (Gyllensten & Palmer, 2005f).

The findings from the study have also been presented at a coaching research conference arranged by Sheffield University and at a coaching psychology conference arranged by the British Psychological Society’s special group in coaching psychology. See Appendix P for copies of the articles, conference abstracts, and a copy of a poster presentation.
Can coaching reduce workplace stress?

Chapter 1: Literature review

1.1 Counselling psychology in the workplace

Work is a main part of life and much time is spent in the workplace. This area of clients’ lives is therefore a relevant topic for counselling psychologists (Hesketh, 2000). Within the British Psychological Society’s (BPS) (2001) statement regarding counselling psychologists’ areas of competence, it is stated that counselling psychologists work in both Employment Assistance Programmes (EAPs) and Occupational Health Departments. Furthermore, the BPS (2004) explains in ‘The regulations and syllabus for the qualification in Counselling Psychology 2004’ that counselling psychologists in training should work in a wide range of modalities, one suggestion is that they work within organisations.

Orlans (2003) explains that there is an increasing number of counselling psychologists practicing within the workplace. According to Orlans (2003) the bridging nature of counselling psychology, referring to the demand to consider different traditions and values, is a reason for why it can be valuable in work settings. Similarly, Carroll (1996) states that although counselling psychologists have not historically been involved in the workplace there is evidence that the involvement is greatly increasing. According to Orlans (2003) counselling psychologists are involved in organisations both as researchers, evaluating various provisions, and as practitioners providing counselling to employees. Counselling psychologists can also be involved in stress management programmes (Palmer, 2003). In addition, because of the increasing popularity of workplace coaching and career development interventions, an increasing amount of counselling psychologists are working in organisational settings.
Counselling psychologists are now working within almost all forms of organisations as consultants, psychologists (Shullman, 2002), and as coaches.

1.2 Workplace stress

Introduction to stress
Stress causes great concern for both employers and employees (Levi, 1999). Work-related stress has recently received increased attention both from academic journals and the popular press (Arthur, 2004; Palmer & Laungani, 2003). Research has consistently identified stress as an important factor causing both psychological and physiological ill health (Cooper, Dewe & O'Driscoll, 2001). Moreover, a number of surveys have found that work-related stress has a negative impact upon organisational productivity as well as individuals' health (Cartwright & Cooper, 2005).

Prevalence of stress in the workplace
The survey ‘Self-reported work-related illness in 2003/2004’ (SWI03/04), commissioned by the Health and Safety Executive (HSE) (Jones, Huxtable & Hodgson, 2004) reported that stress, depression, and anxiety was the second most prevalent type of work-related health problem in the UK. However, for health problems with onset in the previous 12 months (incident cases) stress, depression, and anxiety were the most commonly cited problem. Similarly the HSE (2004a) reported that all five SWI surveys (from 1990 to 2003/2004) indicated that, after musculoskeletal disorders, work-related stress and related conditions was the most common type of work-related health problem. Moreover, estimates from SWI03/04 indicated that half a million people in the UK believed that they were suffering from stress, anxiety, or depression that was related to their work. It was further estimated that 12.8 million days were lost due to work-related stress, anxiety, or depression (Jones et al., 2004). The HSE (2000a) conducted the ‘Bristol Stress and Health at Work Study’ in which 17,000 randomly selected people from Bristol electoral register participated. It was found that approximately 20 per cent of the participants reported high or extremely high levels of work stress. The CIPD (Guest & Conway, 2004) conducted a survey of employee well-being. A stratified random sample of 1,000 UK
employees were interviewed and workplace stress was one of the topics. The survey found that 26 per cent of the participants reported that their job was stressful most of the time and 64 per cent reported that it was rarely or never relaxing. Moreover, 21 per cent of the respondents reported that they were very or extremely stressed at work. Moreover, a survey of 147 million workers in Europe found that over 50 per cent reported working to tight deadlines (Levi, 1999).

Definitions of stress
There are many different definitions of stress. According to the HSE (2001) stress is defined as 'the adverse reaction people have to excessive pressures or other types of demand placed on them'. The American National Institute for Occupational Safety and Health (NIOSH, 1999) defines work stress as 'the harmful physical and emotional responses that occur when the requirements of the job do not match the capabilities, resources or needs of the worker'. A definition of stress that originates from the Occupational Safety and Health Service in New Zealand is 'Workplace stress is the result of the interaction between a person and their work environment. For the person it is the awareness of not being able to cope with the demands of their work environment, with an associated negative emotional response' (Occupational Safety and Health Service, 2003, p. 4). Within cognitive definitions of stress there is more focus on the perceptions of the individual. Palmer, Cooper & Thomas (2003, p. 2) propose the following definition 'stress occurs when the perceived pressure exceeds your perceived ability to cope'.

The transactional stress theory
Although there is much research focusing on work-related stress there is still controversy and debate regarding the processes in which hazards affect outcomes such as psychological well-being and physical health (HSE, 2002a). The current report will only briefly discuss one influential theory of stress – the transactional theory of stress (Lazarus & Folkman, 1984). According to Cooper et al (2001) contemporary definitions of stress suggest that stress is a transaction and Vollrath (2001) suggests that the transactional theory of stress is the leading model of stress in the psychological literature. This particular approach to stress proposes that stress is the result of the transaction between the individual and the environment. Stress occurs when there is an imbalance between the demands made on the individual and
the resources of the individual (Cartwright & Cooper, 2005). Within this approach it is recognised that stress does not exist exclusively in the individual or exclusively in the environment. Rather, it arises in the transaction between the two. Thus, no one component can be said to be stress because each part can only be understood in the context of a process. Stress refers to the whole process involving stressors, strain, and coping (Cooper et al., 2001).

**Stress and strain**

Cooper et al. (2001) suggest that environmental factors that may function as sources of stress are called stressors and the individual’s reaction to the stressors is called strain. Similarly, Decker & Borgen (1993) define strain as an outcome resulting from perceived stress (stressors), and coping is the resources the person has to handle the stress. Decker & Borgen (1993) conducted a study investigating the relationship between stress (stressors), strain, coping, and job satisfaction. Participants from different occupational settings took part in the study. It was found that higher stress predicted higher strain, and lower stress predicted better coping. Hierarchical regression analyses showed strong relationships between stress and strain.

**Outcomes of stress**

There is evidence suggesting that the work environment has an effect on employee health. In a report for the HSE, Mackay, Cousins, Kelly, Lee & McCaig (2004) state that there are a great number of studies that demonstrate a relationship between work factors and ill health. Similarly, the Whitehall II study (Stansfeld, Head & Marmot, 2000), in which over 10,000 civil servants participated, found that the psychosocial work environment appeared to affect mental and physical health. Devereux, Rydstedt, Kelly, Weston & Buckle (2004) conducted a study commissioned by the HSE in order to investigate the role of stress in musculoskeletal disorders. Employees from 11 industrial sectors in the UK participated in the study. It was found that high exposure to both physical and psychosocial risk factors (extrinsic and intrinsic effort, role conflict, threats and verbal abuse, job future ambiguity, low support, low reward, and low control) was associated with musculoskeletal complaints. The participants’ stress reactions (depression and psychosomatic symptoms) increased the risk of developing musculoskeletal complaints. A large scale study, involving people from 52 countries, investigated the association of a number of risk factors with risk of acute
myocardial infarction (Yusuf, Hawken, Ôunpuu, Dans, Avezum, Lanas. McQueen, Budaj, Paris, Varigos, & Lisheng, 2004). Psychosocial factors were one of the risk factors investigated and this involved multiple elements of stress (depression, locus of control, perceived stress, and life events). It was found that presence of psychosocial factors were significantly associated with increased risk of acute myocardial infarction. Indeed, psychosocial factors were among the second most important risk factors after smoking and abnormal lipids.

**Model of demands/control and support**

A very influential model of work stress is Karasek & Theorell’s model of demands/control and support (Karasek, 1979; Karasek & Theorell, 1990). This model consists of three factors: demands, control, and support. The factor of demands includes quantitative demands referring to, for example, amount of work and deadlines and qualitative demands referring to concentration and role conflict. The factor of control includes decision latitude, job autonomy, and skill use. Support refers to the support individuals receive from managers and colleagues. These three factors can be combined in a number of ways describing different work characteristics. For example, jobs can involve high demands and low control, high demands and high control, low demands and high control, and low demands and low control. Social support can be either present or absent in each combination and can act as a potential buffer and weaken the connection between demands and control (Karasek & Theorell, 1990). Karasek (1979) found that low control and high demands at work was associated with psychological strain. Moreover, Karasek & Theorell (1990) found that a combination of high demands and high control can be favourable. Karasek, Triantis & Chaudry (1982) found that high levels of social support were predictive of better mental health. See Van der Doef and Maes (1999) for a review of the literature on the demands/control and support model.

**The Management Standards**

The Health and Safety Commission has developed a strategy in order to tackle work-related stress. One of the key elements of this strategy was to work with stakeholders to develop standards of good management practice for work-related stressors (HSE, 2001). The Management Standards that were developed involve good practice in six key stressor areas: demands, control, support, role, relationships, and change. The
stressors were derived from research commissioned by the HSE (Mackay et al., 2004). The ‘Model of Work Stress’ (Palmer, Cooper & Thomas, 2004) highlights the potential causes of stress for employees. The hazards may affect employees differently (HSE, 2001). Symptoms of stress are manifested in the individual and in the organisation, and this leads to negative outcomes and financial costs.

Figure 1.1

Model of Work Stress © Palmer, Cooper & Thomas 2004

The six HSE stressors
There are many models and theories of work stress. However, the following section will focus on HSE’s theory of work stress and briefly outline research relating to the six stressors presented by the HSE. The reason for focussing upon this particular theory is that it is based on extensive research of working conditions in the UK. It is also relevant to note that while developing this model of stress the HSE has taken into account previous influential stress theories, including Karasek and Theorell’s theory (Mackay et al., 2004). Thus, the HSE model can be viewed as a development of previous models of stress. Moreover, the present study is using the HSE’s Indicator Tool which is based on the HSE’s research and it is therefore useful to outline some of the relevant research. It is noteworthy that some of the stressors appear to have
received more attention in the literature, such as demands and control, compared to others, including relationships and change.

Demands

Demands refer to workload, work patterns, and the working environment (HSE, 2004b). This stressor is one of the HSE stressors that has received a lot of attention and both cross-sectional and longitudinal methodologies have been used. Typically, large sample sizes have been employed in the studies. Many studies have investigated the association between high job demands and strain. For example, the longitudinal Whitehall II study (Stansfeld et al., 2000) found that high reported job demands (demands was defined as pace of work and conflict between competing tasks) were related to poor mental health and poor health functioning. A subsequent study of the Whitehall II data, investigating ill-health, found that high reported job demands were related to increased incidence of coronary heart disease (Head, Martikainen, Kumari, Kuper & Marmot, 2002). Moreover, stress in call centres was investigated in a study by the HSE (2003a). It was found that the risk of mental health problems were higher for call handlers compared to other occupational groups. High reported workload was one of the demands that made the job particularly stressful. In 2004 the HSE (2004b) commissioned a number of questions, relating to the Management Standards, in the Omnibus surveys where random sampling was used. As with the previously mentioned studies, it was found that reported higher demands (demands was defined as workload, work patterns, working environment) were related to higher job strain.

Rick, Thomson, Briner, O’Regan & Daniels (2002) conducted a review of the literature on stressors. There were mixed results regarding the impact of the stressor of workload. Some studies reported that increased workload had negative effects whereas other studies found that a low work pace had a negative impact. However, some studies did not find any relationship between workload and negative impact. Moreover, general job demands were found to have negative effects. The most common stressors were high work intensity, high work pace, and low variety (Rick et al., 2002). Overall, the research appears to indicate that reported high demands have a relationship with reported high strain. Nevertheless, the relationship between these factors is not always present as indicated in the review by Rick et al. (2002).
Control

Control refers to whether a person has a say in their work (HSE, 2004b). The importance of control in the stress process has long been recognised (Cooper et al., 2001). It is often suggested that a lack of control is associated with higher levels of strain (Henry, 2003; Karasek & Theorell, 1990). Control has often been investigated in the same studies that investigate demands. In the Whitehall II study (Stansfeld et al., 2000) low reported control (control was defined as control over work, skills use, variety in work) at work was related to higher risk of poor mental health, poor reported health functioning, increased sickness absence, and alcohol dependence. Similarly, the subsequent study of the Whitehall II data found that little reported control was associated with increased incidence of coronary heart disease (Head et al., 2002). Nevertheless, in the HSE’s (2004b) Omnibus surveys no relationship was found between the control scale and job strain. Rick et al. (2002) found, in their review, that low reported job control had a negative effect on work-related outcomes. However, the effects on health outcomes were mixed with some studies reporting that low control had a negative impact and other studies reporting that it had no impact. The results regarding the impact of control are mixed with some studies finding a relationship with negative outcomes while others fail to find such as link.

Support

Support refers to the encouragement, sponsorship, and resources a person is receiving from the organisation and colleagues (HSE, 2004b). This stressor has also received attention in many of the studies investigating demands and control. A lack of support is generally assumed to be associated with higher levels of strain. This was substantiated by the findings from the Whitehall II study (Stansfeld et al., 2000). Low levels of reported support from supervisor and colleagues were related to poor mental health, poor reported health functioning, and increased sickness and absence. Similarly, Head et al. (2002) found that adverse changes in levels of reported social support were related to worsening mental health. The effects on rates of coronary heart disease were modest. In the Omnibus surveys (HSE, 2004b) it was found that lower reported levels of support were related to higher reported job strain. Rick et al.’s. (2002) review found that low reported support had negative effects on work-related and health-related measures. According to Mackay et al. (2004) several studies have found that social support has positive effects on employees’ well-being.
and is, in some conceptualisations, suggested to buffer the effects of stress on an individuals’ health. The research appears to support the notion that support is an important factor in work stress and that there is an association with lack of reported support and lower well being.

**Relationships**

Relationships refer to the promotion of positive practices at work and management of unacceptable behaviour (HSE, 2004b). This stressor appears to have received less attention in research studies compared to previously mentioned stressors. Relationship variables, including bullying, may be principal sources of stress and support (Mackay et al., 2004). In the CIPD survey (Guest & Conway, 2004) only two per cent of the participants believed that their relationship with their colleagues was not good. However, 13 per cent reported that they had experienced bullying or harassment in the past year. Indeed, bullying is an example of unacceptable behaviour at work that may generate strain (HSE, 2001). In The Chartered Management Institute (2005) survey a nationally representative sample of Institute members (512 responses, 7.3 per cent response rate) it was found that workplace bullying was viewed as increasingly common by 60 per cent of the respondents. Moreover, 39 per cent of the respondents reported being bullied in the past three years. Studies have investigated the relationship between negative relationships and strain. As an example, reported negative work relationships (negative relationships was defined as conflicts and unacceptable behaviour) were related to higher job strain in the Omnibus surveys (HSE, 2004b). Similarly, negative relationships and conflicts at work were found to have a negative impact on both work-related and health related outcomes in Rick et al.’s. (2002) review. The presented studies indicate that negative relationships at work can be related to strain, and that unacceptable behaviour is present and is increasing in certain workplaces.

**Role**

Role refers to how much a person understands their role within the workplace and whether the individual has conflicting roles (HSE, 2004b). Role conflict and ambiguity are potential causes of strain (HSE, 2001). The CIPD survey (Guest & Conway, 2004) found that four per cent of the respondents were unclear about their duties and responsibilities at work. This indicates a low level of role conflict. Studies
have investigated the relationship between role and strain. For example, O'Driscoll & Beehr (1994) found that reported role stressors predicted psychological strain. The HSE's (2003a) study, of stress in call centres, identified that reported conflicting role demands and being unclear about work role were factors making the job particularly stressful. Thus, implying a relationship between role conflict and ambiguity, and strain. Moreover, the Omnibus surveys (HSE; 2004b) investigated whether there was a relationship between role conflict and strain. It was found that higher levels of role stressors were related to higher reported job strain. Similarly, Mackay et al. (2004) state that a number of studies have found an association between role ambiguity at work and psychological strain. It is further stated that role conflict has been found to have negative effects on strain. Role conflict appears to be associated with strain, according to the research outlined.

*Change*

Change refers to the way organisational change is managed and communicated (HSE, 2004b). According to the HSE (2001) well managed change involves the organisation explaining the rationale, plan, and timetable for the change, open communication, and involvement and support of the staff. During the 1990s, change in the workplace was one of the most highly rated and frequently reported organisational stressors (International Labour Office, 2000). The CIPD survey (Guest & Conway, 2004) found that there was a lot of change occurring in the workplace for 75 per cent of the participants. Nevertheless, only 17 per cent of the participants reported that they were unable to participate in or contribute to changes at work. Organisational change may lead to stress if it is not managed appropriately (Mackay et al., 2004). Indeed, reported poorly managed change at work was related to higher reported job strain in the Omnibus surveys (HSE, 2004b). This indicates that change is a common occurrence in the workplaces involved in the study and that a number of employees felt unable to be involved in this process. In summary, the research supports the claim that reported poorly managed change can be related to strain.

*Gender and stress*

After reviewing the literature on gender and workplace stress, Hobfoll, Geller & Dunahoo (2003) report that women tend to experience stressors unique to their gender as well as stressors shared by men. A meta-analysis of studies investigating gender
and work stress was conducted by Martocchio & O’Leary (1989). It was found that there were no gender differences in occupational stress. In the Whitehall II study (Stansfeld et al., 2000) The General Health Questionnaire (GHQ) was used to measure level of psychiatric disorder. It was found that women reported higher levels than men in five out of the six occupational groups measured. The subsequent analysis of the data from the ‘Bristol Stress and Health at Work Study’ (HSE, 2000b) found no overall significant differences in stress levels between the genders. The survey ‘SWI03/04’ (Jones et al., 2004) found that prevalence rates of work-related stress, depression, and anxiety was similar for both genders. However, rates of cases with onset in the previous twelve months and days lost were higher for women. Significantly more males than females reported that they were suffering from a work-related illness. Jenkins & Palmer (2004) conducted a qualitative study investing job stress in twelve managers in the English National Health Service. It was found that female managers were more at risk from managerial stressors compared to male managers.

**Age and stress**

An individual’s stress response may be influenced by age. The HSE (2001) highlights that age (for example younger ages) may be a risk factor in work-related stress for some individuals. The same event may lead to different reactions depending on the individual’s stage in life (Palmer, 2003). In the subsequent analysis of the data from the Bristol Stress and Health at Work Study (HSE, 2000b) it was found that the two middle age groups (33-40 and 41-50 years) generally had a higher proportion of participants in the high reported stress category compared to the other age groups. The HSE collects reports of occupational stress, by occupational physicians and psychiatrists, through their occupational disease surveillance schemes (THOR). The HSE (2004a) stated that the highest proportion of cases of work-related mental ill health, reported through THOR, was in the age groups 35-44 and 45-54 years. Age was a factor investigated in SWI03/04 (Jones et al., 2004). For males it was found that the 35-44 and 45-54 year age groups reported significantly higher rates of work-related stress, depression, or anxiety than the other age groups. Similarly, for females the 45-54 years age group reported significantly higher rates compared to all other age groups. The research indicates that there is not a linear relationship between stress and age.
Job-satisfaction and stress

Job-satisfaction has often been researched in conjunction with occupational stress. This is not surprising considering that the definitions of occupational strain and job-satisfaction or dissatisfaction overlap (Decker & Borgen, 1993).

Levels of job-satisfaction

In Britain, job-satisfaction levels are quite high. However, data from the British Household Panel Survey (BHPS), showed that levels of job-satisfaction decreased during the 1990’s, while stress, as measured by the GHQ, increased (Oswald & Gardner, 2001). In a report for the Economical and Social Research Council, Taylor (2002) states that a range of empirical evidence shows that over the past 10 years jobs in Britain are becoming more time-consuming and stressful and thereby less satisfying. Taylor (2002) further states that employment surveys have shown that there was a significant decline in levels of work-satisfaction in the period between the years of 1992-2000. The CIPD (Guest & Conway, 2004) survey of employee well-being measured work-satisfaction with a single item. It was found that 38 per cent of the participants reported high levels, 54 per cent reported medium levels, and 8 per cent reported low levels of work-satisfaction.

The relationship between job-satisfaction and stress

As stated previously Decker & Borgen (1993) conducted a study investigating stress (stressors), strain, coping, and job-satisfaction. It was found that higher stress predicted lower levels of job-satisfaction and that the relationship between stress and job-satisfaction was strong. Faragher, Cass & Cooper, (2005) found, in a recent meta-analysis of 485 studies, that dissatisfaction at work was strongly related to mental health problems. Faragher et al. (2005) conclude that employees’ health is influenced by job-satisfaction levels. Moreover, the authors suggested that organisations should identify and tackle work practices leading to job-dissatisfaction as these are also likely to cause increased stress levels.

Interventions and job-satisfaction

Murphy (1988) conducted a review of studies that evaluated stress management in work settings. Following stress management training five of nine studies reported a significant increase in job-satisfaction, three of the studies reported no effect, and one
reported decreased job-satisfaction. Murphy (1988) suggests that the effects of stress management on job-satisfaction are dependent on the stress education given to the employees, and the stressors and levels of stress in the organisation. Decreases in job-satisfaction may be due to increased awareness of stress among the participants, thus they may realise that they face significant work related stressors that are not tackled by the intervention. Firth-Cozens & Hardy (1992) conducted an investigation into the changes in job perception and symptoms during the course of therapy for work stress. Clients showed reductions in symptomatology and anxiety and perceived their jobs more positively after the 16 week therapy. It was found that as symptoms levels were reduced attitudes towards work become more positive. However, the causality of this relationship could not be determined. Reductions in symptoms also related to increases in job-satisfaction, especially factors relating to intrinsic job-satisfaction. Both intrinsic and extrinsic aspects of job-satisfaction were significantly higher at post treatment compared to pre-treatment.

**Job-satisfaction and coaching**

CIPD (2004a) state that increased employee satisfaction and commitment is one of the common benefits of coaching. This can lead to improved employee retention. The Executive Coaching Project (Compasspoint Nonprofit Services, 2003) investigated the effects of coaching in a group of participants that were recently appointed Executive Directors. Both qualitative (interviews) and quantitative (survey) approaches were used and the study investigated the impact of coaching in several areas. In the interviews it was reported that overall job satisfaction was improved during the coaching. Similarly, it was reported that following the introduction of coaching into a large hotel, employee satisfaction had increased by approximately 22 per cent (The Coaches Training Institute, 2003).

**A conceptual framework for stress preventative interventions**

Because of the adverse effects of stress many organisations are implementing various interventions and strategies in order to reduce stress. In addition, these interventions are also perceived to be effective in showing organisational care and concern. Stress preventative and reducing interventions can take the form of primary, secondary, and tertiary level interventions (Cartwright & Cooper, 2005). Primary interventions are concerned with modifying or eliminating sources of stress inherent in the workplace.
Examples of primary interventions include job redesign, flexible work schedules, and structural changes within the organisation (Cooper & Cartwright, 1997, HSE, 2002b). Many researchers suggest that this approach is likely to be the most effective as it is the most proactive and preventative of the three (Cartwright & Cooper, 2005). Secondary interventions are concerned with extending individuals' resources in dealing with stress. Interventions include stress management programmes, relaxation techniques, educational activities, and health promotion activities. Tertiary interventions are concerned with the treatment and rehabilitation of individuals suffering from serious health problems caused by stress. Counselling and employee assistance programmes (EAPs) are examples of tertiary interventions (Cooper & Cartwright, 1997). See table 1.1 for a summary of the conceptual framework.

Table 1.1 A conceptual framework for stress preventative interventions

<table>
<thead>
<tr>
<th>Level of intervention</th>
<th>Examples of activities</th>
</tr>
</thead>
<tbody>
<tr>
<td>Primary</td>
<td>job redesign</td>
</tr>
<tr>
<td></td>
<td>flexible work schedules</td>
</tr>
<tr>
<td></td>
<td>structural changes</td>
</tr>
<tr>
<td>Secondary</td>
<td>stress management programmes</td>
</tr>
<tr>
<td></td>
<td>relaxation techniques</td>
</tr>
<tr>
<td></td>
<td>education</td>
</tr>
<tr>
<td></td>
<td>health promotion</td>
</tr>
<tr>
<td>Tertiary</td>
<td>counselling</td>
</tr>
<tr>
<td></td>
<td>rehabilitation</td>
</tr>
</tbody>
</table>

Most activities appear to concentrate on secondary and tertiary level whereas primary interventions are relatively rare (Cooper & Cartwright, 1997: Levi, 1999). Although, secondary and tertiary interventions are important parts of stress prevention they are likely to be insufficient unless the primary/stressor reduction initiatives are introduced. For example, counselling has been criticised on the basis that it is not sufficient in maintaining employee health, without the support of primary level interventions (Cooper & Cartwright, 1997). Moreover, benefits gained from treatment for stress are likely to be short-term if employees return to exactly the same
work environment with its intrinsic stressors (Firth-Cozens & Hardy, 1992). Research has been conducted with interventions from all three levels, however, due to the word limitation this research will not be presented in the current report. For reviews of research see HSE (2003b), Cooper & Cartwright (1997), Cartwright & Cooper (2005), and Rick et al. (2002).

1.3 Coaching

Introduction to coaching
Coaching is gaining increasing attention (Kampa-Kokesch & Anderson, 2001) and the practice of life/personal and executive coaching has greatly increased during the last decade (Palmer & Whybrow, 2005; Passmore, 2003). According to a report by the Chartered Institute of Personnel and Development (CIPD) (2004a) there has been a growth in the use of coaching in organisations in the last few years. The increased use of coaching in organisations has been influenced by factors such as the need to adapt to a rapidly changing business environment, recognition of learning and development needs, and financial costs of poor performance (CIPD, 2004b). Many different professionals may seek coaching including company leaders, politicians, media moderators, lower level managers, freelancers, and scientific institutions (Holm-Hadulla, 2002). As coaching is becoming increasingly popular the range of coaching approaches is also growing. Coaches have different theoretical underpinnings and come from a variety of backgrounds including psychology, psychotherapy, and the business world (Gillie, 2004; Leimon, 2004).

Definitions of coaching
Many different definitions of coaching have been proposed. Some definitions clearly emphasise the role of direct instruction in coaching. Parsloe (1995, p. 18) suggests that coaching is 'directly concerned with the immediate improvement of performance and development of skills by a form of tutoring or instruction'. Similarly, Druckman and Bjork (1991, p. 61) highlight the role of instruction, stating that 'coaching consists of observing students and offering hints, feedback, reminders, new tasks, or redirecting a student's attention to a salient feature — all with the goal of making the student's performance approximate the expert's performance as closely as possible'.
Whitmore (1992, p.8), on the other hand, emphasises the role of facilitation, suggesting that 'coaching is unlocking a person's potential to maximise their own performance. It is helping them to learn rather than teaching them.'

Different definitions of coaching have been proposed for different client groups. Kilburg (1996b) proposes that 'executive coaching is defined as a helping relationship formed between a client who has managerial authority and responsibility in an organization and a consultant who uses a wide variety of behavioural techniques and methods to help the client achieve a mutually identified set of goals to improve his or her professional performance and personal satisfaction, and consequently, to improve the effectiveness of the client's organization within a formally defined coaching agreement.' As Grant (2001a) points out this definition excludes all coaching with non-executive staff and life coaching. Grant (2001a p. 8) defines coaching in the workplace, for executives and non-executives, as 'a solution-focused, result-oriented systematic process in which the coach facilitates the enhancement of work performance and the self-directed learning and personal growth of the coachee'. Moreover, Grant (2003a p. 254) defines life coaching as 'a collaborative solution-focused, results oriented and systematic process in which the coach facilitates the enhancement of life experience and goal attainment in the personal and/or professional life of normal, nonclinical clients'.

Theory of coaching
According to Kilburg (1996a) the practice of executive coaching is currently based on a mix of concepts and methods including traditional organisation development methods, adult education, management training, industrial/organisational psychology, and generic consultation skills. There are several coaching models/theories and the GROW (goal, reality, options, and what will be done) model, popularised by Sir John Whitmore is one of the most widely known models for coaching (Edgerton & Palmer, 2005).

Coaching is not necessarily based on psychological theory, although it has been argued that the field of psychology is specifically suited in developing a theoretical grounding for coaching (Grant, 2001a). Nevertheless, examples of coaching, based on various psychological theories, have been outlined in the literature. Coaching
based on psychodynamic/analytic theory and practice is described by Orenstein (2002), and Saportio (1996). Coaching using a Transactional Analysis approach has been highlighted by Krausz (1986) and a systems-oriented approach for executive coaching has been described by Kiel, Rimmer, Williams & Doyle (1996). Grant (2001a) presents a model of coaching based on cognitive behavioural theory (CBT) and solution focused theory. Similarly, coaching based on cognitive-behavioural theory and practice is described by Neenan & Palmer, (2001). A model of executive coaching based on multimodal therapy (Lazarus, 1981) was put forward by Richard (1999) and multimodal stress management coaching was highlighted by Palmer et al. (2003).

Coaching psychology
Coaching is a psychological process and knowledge and understanding of psychological principles, approaches, and techniques will have a positive impact upon coaching practice (Leimon, 2004). Similarly, Grant (2001a) proposes that the discipline of psychology has the potential to greatly contribute to the field of coaching by establishing a theoretical grounding and carrying out scientific research. Furthermore, Leimon (2004, p.3) even states that ‘It would be intellectual snobbery to imply that all coaches should have psychology qualifications but it certainly could help’. The area of coaching psychology is becoming established in Britain and a special group in coaching psychology was formed within the BPS in 2004 (Palmer & Whybrow, 2005). Coaching psychology is embedded in the discipline of psychology as well as incorporating other skills, models, and approaches that have a positive impact on individuals’ well-being. Coaching psychology integrates a range of theory and research in order to promote individual, group, and organisational performance (Palmer & Whybrow, 2005). Coaching psychology has been defined as ‘enhancing well-being and performance in personal life and work domains underpinned by models of coaching grounded in established adult learning or psychological approaches’ (adapted Grant & Palmer, 2002).

Counselling psychology and coaching
As suggested previously psychological principles can contribute greatly to the area of coaching. In particular it could be suggested that counselling psychology could have
a lot to offer to the area of coaching. According to Hesketh (2000) coaches draw skills and approaches from counselling psychology. Furthermore, according to Smither, London, Flautt, Vargas and Kunice (2003) many recent articles on the subject of coaching have a counselling or clinical psychology perspective. Similarly, articles in counselling psychology journals have mentioned (Cooper & Quick, 2003; Gyllensten, Palmer & Farrants, 2005) or even focused on coaching (Ahern, 2003).

According to Holm-Hadulla (2002) coaching may benefit from three evidence-based fundamentals from psychotherapy - cognitive behavioural training, psychodynamic understanding, and the helping alliance. Similarly, Bachkirova and Cox (2004) suggest that an understanding of the main counselling theories is important in coaching in order to work with blocks to development within the client. Indeed, these fundamentals are also important parts of the training in counselling psychology. Grant (2003a) suggests that psychologists and therapists can make an important contribution by adapting and validating therapeutic models for use with non-clinical populations. Counselling psychologists have, together with clinical psychologists and CBT therapists, developed CBT techniques that can be useful in coaching settings (Grant, 2001a).

It has further been suggested that counselling psychologists are suitable candidates to practice coaching. Richard (1999) states that counselling/clinical psychologists could easily use the model of coaching based on multimodal therapy. It is further stated that by learning executive coaching clinical/counselling psychologists can broaden the scope of their practice. Peltier (2001) suggests that coaching is an option to consider for psychologists and counsellors seeking new ways to apply their skills. Although psychotherapy has negative implications in the corporate world, the literature of psychotherapy is relevant to workplace coaching, and the main ideas from therapy models are useful for coaches (Peltier, 2001). However, not all counselling/clinical psychologists may be suitable coaches. For example, they may lack the knowledge and experience of organisational settings, important for the practice of workplace coaching. As Bachkirova and Cox (2004) point out, counsellors therapists tend to under-emphasise the difference between counselling and coaching although important differences do exist (see next paragraph).
Coaching versus therapy/counselling

There are both similarities and differences between counselling and coaching. A main difference between coaching and counselling appears to be its image. Several authors have highlighted the fact that coaching has a more positive connotation than counselling. According to Peltier (2001) therapy still carries a stigma in the corporate world, and by many it is viewed as slow, expensive and ineffective. Coaching on the other hand is viewed very differently. ‘Counselling is personal and it is aimed at personal problems. Coaching carries a much more positive implication in the corporate world. High performance athletes are coached; sick, weak, or crazy people get therapy (Peltier, 2001, p XIX)’. Similarly, Whitworth, Kimsley-House & Sandahl (1998) state that while counselling/psychotherapy can carry the stigma of mental illness, the personal coach does not carry this stigma. Berglas (2002) also reports that executive coaching is sometimes seen as an acceptable form of therapy. It is still difficult for many to admit that they are seeing a therapist, and whereas it is fine to say one is seeing a coach. Likewise, Richard (1999) believes that the term ‘executive coaching’ is viewed as more acceptable than the labels ‘therapy’ and ‘counselling’ as coaching carries more positive connotations and is concerned with outcomes. Hart, Blattner and Leipsic (2001) conducted a study investigating professionals’ views of therapy and coaching. The 30 participants, were either currently, or had previously worked as both coaches and therapists. It was reported that coaching carried less of a stigma compared to therapy. Indeed, coaching clients tended to publicise that they were receiving coaching.

It has been suggested that client groups differ between the two interventions. According to Grant (2001a) clinical psychotherapy is mainly concerned with treating psychopathology whereas coaching is concerned with improving performance or life-experience. The client group attending coaching has generally a low psychopathology and high functionality, whereas the client group attending therapy has generally a high psychopathology and low functionality (Grant, 2001a). In addition, both Richard (1999) and Peltier (2001) state that the focus in therapy is on diagnosis-bound behaviour whereas coaching focuses on growth or skill development orientation. Similarly, it has been stated that coaching is a type of psychotherapy for healthy individuals (Holm-Hadulla, 2002).
In terms of the focus of the sessions there are both similarities and differences. According to Summerfield (2002) a good coach may be shifting between counselling and coaching during a coaching session. Certain skills used in counselling and coaching are also similar, including open and reflective questioning, active listening, and at times silence. Summerfield (2002) further highlights that similarities within the relationship include the importance of trust, and the use of honest, clear and sometimes challenging feedback. Richard (1999) and Peltier (2002) state that therapy can be mainly process oriented, focused on the past, and client centred, while coaching is focused on the present and future, and is action oriented.

A further difference between counselling and coaching is how success is measured. In coaching success is measured by outcomes whereas in counselling success is related to doing what is right for the client (Summerfield, 2002). Therapy is often evaluated by client self-reports and coaching is measured in more concrete terms (Richard, 1999, Peltier, 2001). Moreover, Richard (1999) and Peltier (2001) highlights that the client is the person the therapist works with, in therapy, whereas in coaching the client may be the organisation the coachee works with.

Boundaries, related to confidentiality, length and location, are more strict in therapy and less rigid in coaching (Richard, 1999, Peltier, 2001). Counselling generally involves less feedback to the organisation compared to coaching (Summerfield, 2002). According to Judge and Cowell (1997) a difference between the two is length of contracts, coaching is often short-term. Similarly, Levinson (1996) explains that coaching is different from therapy because in coaching there is not time to deal with transference issues, develop a therapeutic alliance and dealing with issues of dependence. However, it is useful to note that coaching can be more long-term. Some literature also suggests that the alliance and the relationship are important in coaching (for a review of the literature on the coaching relationship see O’Broin & Palmer, in press).

Bachkirova and Cox (2004) suggest that coaches emphasise differences to counselling in order to distinguish themselves from counsellors and thereby make coaching sound more attractive. Contrary to this, counsellors/therapists tend to argue that the difference is only superficial and coaches are viewed as competitors without extensive
training. According to Bachkirova and Cox (2004) both groups tend to have an agenda and over and under-emphasise some factors. For example, some coaches suggest that a difference between counselling and coaching is that counselling focuses on the past and coaching on the future. However, there are several approaches that focus on the present (cognitive behavioural therapy and solution focused therapy). Counsellors may fail to highlight important differences including the context of coaching and accountability. The coaching field could be enriched and gain important understanding by examining and learning from certain issues in the counselling field including theoretical grounding, evaluation research, and understanding of the dynamics of the relationship. Moreover, coaching is attracting individuals who may not use counselling/therapy.

Research on effectiveness of coaching
There is currently a lack of empirical research investigating the effects of executive coaching, workplace coaching, and life coaching (Chapman, 2004, Grant, 2001a; Grant 2001b; Grant, 2003a; Grant, 2003b; Gray, 2004; Kampa-Kokesh & Anderson, 2001; Leedham, 2005; Wasylyshyn, 2003). Research of coaching effectiveness needs to be conducted in order to ensure that coaching is benefiting the individual and the organisation (Centre for Diversity & Work Psychology, 2004). Smither, London, Flautt, Vargas & Kucine (2003) argue that organisations are becoming more concerned about the cost of coaching, and if the impact of executive coaching cannot be demonstrated, organisations are likely to view coaching as too expensive. Similarly, Wasylyshyn (2003) urges psychologists to conduct further outcome research on executive coaching. Failure to do so can lead to a big decrease in the use of coaching, and this would mean that psychologists would lose the chance to improve thousands of lives in workplaces. Kampa-Kokesh & Anderson (2001) also argue that psychologists have got the responsibility to research the effects of executive coaching. Gray (2004) suggests that any new development initiative should be evaluated in order to identify weaknesses. It is particularly important that coaching is evaluated as it is practiced by individuals with different backgrounds and has no, one, unified professional structure.
Nevertheless, there has been some research conducted on the effectiveness of coaching using non-clinical adult populations. There is no universal methodology for evaluating the benefits of coaching and different approaches have been used (Leedham, 2005). The current report will outline both case studies and group-based and survey studies.

Coaching case studies

There have been a number of published case studies outlining the effectiveness of coaching (Coe, 2004; Fengler, 2001; Haverkamp and Moore, 1993; Saportio, 1996; Witherspoon & White, 1996). Different theoretical perspectives have been used in the case studies including a systems-oriented approach (Kiel et al., 1996; Tobias, 1996), cognitive frameworks (Katz, & Miller, 1996), a multimodal perspective (Richard, 1999), eye movement desensitisation and reprocessing (Foster & Lendl, 1996) a psychodynamic perspective (Kilburg, 1997); and a psychoanalytic approach with emphasis on psychological and organisational diagnosis (Levinson, 1996). Due to word limitations the following section will only outline one published case study on coaching effectiveness (see Grant, 2001a for a further review).

A case-study of a hard working, technically skilled manager in a Fortune 100 company was presented by Tobias (1996). Despite being technically brilliant the manager was perceived as being too controlling, lacking in appreciation for the creative process, and insensitive towards staff. A psychological assessment was conducted and this helped the manager to increase insight into some of the problem behaviours. Coaching strategies focused on improving communication, personal, and leadership skills, and becoming more open and expressive. Following the coaching the manager made considerable improvements in terms of management style. The manager was more relaxed, engaged in small talk, delegated to a greater extent, more open towards employees ideas, and encouraged creativity. In addition, the manager’s direct superior, who had been keep informed about the coaching process, reported that the manager’s team was functioning more effectively and that the manager’s interpersonal skills were improved.
Group-based and survey studies

Despite the fact that case studies appear to be the most common form of research on coaching effectiveness, group-based and survey studies have been conducted (Grant, 2001a). Leedham (2005) conducted a study where 180-degree feedback questionnaires completed by coaching clients were analysed. The clients of 224 coaches, on professional development courses with the Oxford School of Coaching and Mentoring, completed the questionnaires. The comments were categorised and the most commonly mentioned benefit was ‘increased confidence, feeling good, believe in myself, higher morale, growth’. The second most common benefit was receiving support and feeling valued in the coaching and the third was improved career.

The Association for Coaching (2004) recently conducted a web based survey investigating the return on investment (ROI) from corporate coaching with participants (coachees and purchasers of coaching) from various business sectors in the UK. Most participants reported that coaching occurred on a small scale within their organisation. The primary objective of most of the coaching was to improve performance. Participants reported that benefits of coaching included improved productivity, job motivation, people management skills, and work life balance. Coaching was viewed as an effective development intervention by a majority of the participants.

A small scale study evaluating the effectiveness of coaching within a finance organisation was reported by Sherwood (2004). The basis for the study was a selling skills training course attended by a number of the organisation’s financial planning managers. Following the training course a half of the employees were assigned a coach for three months and the other half employees did not receive any coaching but only normal follow-up support from their managers. A group of financial planning managers, who did not attend the training or receive any coaching, acted as a control group. Sales figures from the three months prior to the training were compared to the figures three months after training. The results showed that sales increased by 4 per cent in the control group, 8 per cent in the training only group, and 27 per cent in the coaching and training group.
The CIPD (2004a) conducted a postal survey on current practice in training and development. A random sample of training managers listed on their website was sent a survey and overall 531 usable surveys were returned. It was found that 78 per cent used coaching in order to improve individual performance and 99 per cent believed that coaching could deliver tangible benefits for the individual and the organisation. Moreover, 67 per cent of the respondents regarded coaching as ‘effective’ or very ‘effective’.

Another study investigated the effects of executive coaching on multisource feedback over time (Smither et al., 2003). All participants, 1361 senior managers, received multisource feedback, and 404 of the participants worked with an executive coach to review the feedback and set goals. One year later the participants received multisource feedback from another survey. It was found that managers who worked with coaches where more likely to set specific goals, to ask for ideas for improvement among their supervisors, and improved more in terms of direct report and supervisor ratings compared to those who did not work with coaches.

Wasylyshyn (2003) conducted as a study with executives investigating several aspects of coaching. Overall 87 executives (out of 106) responded to a survey and key findings were: Personal characteristics of an effective coach included, ability to form a strong connection with client (86 per cent), professionalism (82 per cent), and a clear coaching methodology (35 per cent). Using a rating scale from 1-10, the highest rated coaching tools included coaching sessions (9.2), 360 feedback (9.0), relationship with coach (8.3), testing (7.7), and readings on leadership (7.0). Wasylyshyn (2003) suggested that the high ratings of the coaching sessions and relationship indicated that face-to-face contact and frequency are important for successful coaching. Indicators of successful coaching were sustained behaviour change (63 per cent), increased self-awareness (48 per cent), and more effective leadership (45 per cent). Finally, it was reported that over 75 per cent of the participants reacted positively to working with a coach.

The Chartered Management Institute in the UK (2002) conducted a survey focused on workplace coaching. Out of the 3000 managers who were approached 280 responded to the survey. The majority of organisations had some form of coaching programme at the workplace but only 18 per cent had a coaching programme available to all
employees. Over a third of the respondents reported that organisational change and restructuring was the motivation for introducing the coaching programme. Eighty percent of the managers reported that they would benefit from more coaching at work and 93 percent reported that they wanted coaching to be available to all employees. Overall, the managers were very positive regarding the benefits of coaching and many believed that that coaching enhances team morale, increases motivation, and helps to keep staff.

One study investigated the impact of executive coaching by interviewing 100 executives who had received coaching (McGovern, Lindemann, Vergara, Murphy, Barker & Warrenfeltz, 2001). The participants were recruited from 56 organisations. The impact was examined on five levels: reactions to the programme and planned action, learning, behavioural change, business results, and return on investment. It was reported that 86 percent of the participants were very satisfied or extremely satisfied with the coaching. The top development priorities in the coaching included enhancing interpersonal skills, enhancing leadership and management skills, fostering personal growth, and enhancing business agility. The executives reported that 73 percent of their goals in coaching had been achieved very or extremely effectively. Effects upon business included increases in organisational strength, productivity, quality, and customer service. Finally, return on investment (for the 43 participants that estimated it) had an average of $100.00 or 5.7 times the cost of the coaching per participant.

Wagerman (2001) examined the effects of how leaders design their teams and their use of coaching, on self-managing teams. Investigating the experiences of the team leaders it was found that both design choices and coaching influenced quality of member relationships, member satisfaction, and self-management. However, the teams' task performance was only influenced by how leaders design their teams. Moreover, well-designed teams were helped more by good coaching than poorly designed teams and well-designed teams were less influenced by ineffective coaching than poorly designed teams.

Hall, Otazo & Hollenbeck (1999) conducted a research study in which executives from six Fortune 100 companies and executive coaches were interviewed. The study explored the application of coaching, the effectiveness of coaching, and what lessons
can be learned from coaching practice. However, as Kampa-Kokesh & Anderson (2001) points out, no further detailed information about the methodology or analysis was outlined. Therefore, the conclusions that can be drawn from this study are limited. Regarding the effectiveness of coaching, Hall et al. (1999) reported that the best coaching was results oriented, and examples of good coaching included honesty, challenging feedback and helpful suggestions. The overall effectiveness of coaching was rated to be ‘very satisfying’. The coaches agreed with the executives on what characterised good coaching although the coaches were more likely to also focus on the coaching relationship and process.

The effectiveness of executive coaching in a public sector municipal agency was investigated by Olivero, Bane & Kopelman (1997). The participants, 31 managers in a public health agency, completed conventional managerial training and eight weeks of coaching. The coaching consisted of goal setting, problem solving, practice feedback, supervisor involvement, evaluation of end results, and a public presentation. Productivity was measured on work tasks completed fully and on time. It was reported that the training increased productivity by 22 per cent and training, when amplified with coaching, increased productivity by 88 per cent. It was suggested that the study demonstrated the beneficial effects of coaching as a transfer of training tool. However, it could be argued that the coaching phase provided the opportunity for more training (Olivero et al., 1997) and it is noteworthy that the coaching consisted of elements of good practice in terms of transfer of training. Thus, the study demonstrates a good learning and development process where the contribution of the coaching is uncertain.

A study investigating the effects of a coaching programme on sales performance, within a real estate corporation, was reported by Strayer and Rossett (1994). Following poor sales performance it was identified that new staff needed an in-office support system to learn how to deal with difficult aspects of the job. Brokers within the company were carefully selected and trained to become coaches. The structured coaching lasted for 20 sessions, was based on a cognitive approach, and dealt with issues such as building confidence, positive thinking, and fortifying against fears. An evaluation of the programme found that coaches rated the programme 9.1 (out of 10)
and sales associates (the coachees) rated it 8.31. The sales-associates reported that the greatest benefit of the coaching was an increase in self-confidence. This was an important benefit as lack of self-confidence was identified as a major negative factor affecting staff's motivation to sell houses. Moreover, it was reported that the average time for new sale associates to get their first property listing fell to 3.53 weeks compared to the industry average of ten weeks. Translating this measure into money it meant that the average participating associate would generate $2430 commission the first month compared to $871 for the average non-participating associate.

A quasi-experimental study investigated the efficiency of coaching in enhancing transfer of training (Miller, 1990). One control group and one experimental group, the latter receiving coaching on the trained skills, were compared in terms of performance. No significant differences were found between the groups on the post test measures, and no pre-post intervention gains were found for the experimental group. However, participant's comments were very positive towards coaching (Miller, 1990).

**Coaching and stress**

There is not universal agreement regarding the best way to tackle stress in the workplace. However, there is an increasing interest in interventions that consider employees' emotional functioning (Orlans, 2003). Indeed, many different interventions are used to prevent and manage stress in the workplace. One intervention that is not commonly associated with stress reduction is coaching. Nevertheless, it has been suggested that coaching can be useful in reducing stress (Busch and Steinmetz, 2002; Jones, 1996; Mangell & Neld, 2003; Meyer, 2003; Zeus & Skiffington, 2003). According to Palmer, Tubbs, Whybrow (2003) organisations and individuals are using coaching to improve performance, achieve goals, and manage stress. Willis (ND) suggests that coaching is a cost-effective intervention for the management of workplace stress. Moreover, CIPD (2004a) reports that reduction of stress is one of the common benefits of coaching. Indeed, Duignan (2004) describes how a Managing Director, following an evaluation of a management coaching project, acknowledged that the coaching had generated many new unexpected initiatives that had a positive impact on employee stress and health and safety.
Hearn (2001) suggests that stress can be tackled directly in coaching by helping to identify factors that are causing stress, develop effective strategies for change, and uncover lasting solutions. As well as tackling stress directly, coaching could reduce stress indirectly by helping an individual to reach their personal goals (e.g. improve performance, efficiency, or communication), and thereby decrease any stress caused by the perceived deficiency in the area targeted in coaching (Gyllensten & Palmer, 2005).

In the HSE’s (2003) report ‘Beacons of Excellence’ stress coaching was reported as a secondary level stress intervention. In relation to stress interventions the HSE (2003) further distinguished between narrow target stress interventions, activities that are dealing specifically with stress, and wide target stress interventions, activities that improve general management practice. Counselling and stress coaching were given as examples of narrow target interventions and management development training was an example of a wide target stress intervention. The HSE (2003) concluded that organisations that used a combination of narrow and wide target interventions to tackle stress were more likely to achieve excellence. However, the HSE (2003) was only referring to stress coaching and it could be suggested that coaching can also be a wide target intervention as it can be focused on improving general management practice.

_Coaching as an alternative to counselling for stress_

One widespread stress-management intervention employed by organisations is counselling (HSE, 2003). Counselling can be classified as a tertiary level intervention that aims to assist individuals who are experiencing problems (work or home related) and high levels of distress (Briner, 1997). Although counselling is commonly used to tackle stress, it has been reported that in some organisations employees may be concerned that going for counselling will be viewed as a weakness and will have a negative effect upon career progress (Carroll, 1996). A qualitative study of finance organisations’ perceptions of stress found that some organisations have negative views of counselling and are therefore reluctant to use it in order to tackle stress (Gyllensten et al., 2005). The study also found that coaching could be a useful alternative to counselling when dealing with stress. Furthermore, as highlighted
previously, Peltier (2001) states that coaching does not carry the same stigma as counselling in the corporate arena.

Research studies on coaching and stress

Only a limited amount of research relating to coaching and stress has been published (Gyllensten & Palmer, 2005a), nonetheless, a number of case studies have reported that coaching helped to reduce the clients' stress (Hearn, 2001; Marotta, 1999; Palmer et al., 2003; Richard, 1999). Ascentia (2005) reported a number of benefits of coaching in a case study involving a Regional Drug Strategy manager who attended coaching for a period of six months. After the coaching the manager felt more confident, energetic, productive, and less stressed (stress reduction was not a goal in the coaching) despite experiencing demanding periods of change. Interestingly, the stress levels in the manager’s team had also been reduced and levels of sickness leave were low. A case-study describing executive coaching with a female senior executive using a multimodal approach is presented by Richard (1999). The coaching took place over ten months during which the executive was responsible for major changes within the organisation. Problems were assessed and discussed within the modalities of behaviour, affect, sensation, imagery, cognition, interpersonal and drug/biology domains. According to the client the coaching helped her to cope with the stress and demands at work, and in her personal life she reported improved relationships.

A study by Grant (2001b) investigated the effects of cognitive, behavioural, and cognitive behavioural coaching approaches in a sample of students. It was found that all three coaching approaches significantly reduced test anxiety. Nonstudy-related mental health (as measured by the Depression, Anxiety and Stress Scales-21) was also measured. Only the cognitive coaching was found to significantly reduce depression and anxiety. The behavioural and cognitive behavioural coaching did not significantly reduce depression, anxiety or stress. In addition, Grant (2003a) conducted a study that evaluated the effect of life coaching upon goal attainment, metacognition and mental health (as measured by the Depression, Anxiety and Stress Scales-21). Adult post-graduate students participated in the coaching programme that was based on CBT and solution-focused principles, and involved attending 10 group coaching sessions. Despite the fact that mental health was not specifically targeted in the programme it was found that levels of depression, anxiety and stress were
significantly reduced in the post coaching test. In addition, it was found that the coaching was associated with improved quality of life and goal attainment. In view of these results Grant (2003a) suggests that future research should investigate the usefulness of life coaching in the enhancement of well-being.

A study combining quantitative and qualitative methods investigated the effects of coaching in a group of Executive Directors (Compasspoint Nonprofit Services, 2003). The most common personal goal for the participants was improving their effectiveness in dealing with work life balance and the fourth most common goal was reducing stress. Three survey items related to perceived levels of work stress and burnout but there were no significant changes, to any of these items, between the baseline-test and the final post-coaching test. The authors pointed out that work-related stress and burnout are complex processes affected by many different factors. Despite the lack of significant differences in the survey it was reported, in the qualitative part of the study, that coaching in fact helped several of the participants to reduce stress and burnout. Coaching had helped participants to reduce stress by encouraging the coachees to take time for themselves regularly and by highlighting the importance of self care. Furthermore, the participants reported that they felt better equipped to cope with any future feelings of burnout as a result of the coaching. Overall, the participants reported being very satisfied with their coaching experience with a mean of 4.6 on a five-point Likert-scale (Compasspoint Nonprofit Services, 2003). Wales (2003) conducted a qualitative study exploring managers' experiences of coaching. The data was analysed using a phenomenological approach and two of the themes that emerged were stress management and work/life balance. Many of the participants reported that they were experiencing high levels of stress at the start of the coaching. However, after the coaching the managers reported feeling calmer, more tolerant, less angry and more able to deal with pressures from work and their personal lives. Regarding work/life balance the managers reported that the coaching had helped them to be more proactive in the management of the different roles in their lives.
1.4 Aims of the study

Why would coaching reduce work related stress?
Coaching may help to reduce stress directly if an individual is seeking coaching in order to deal with stress (Hearn, 2001). However, coaching could also help to reduce stress indirectly. In this scenario an individual may seek coaching for a variety of reasons, for example to improve performance, increase efficiency, achieve work related goals, or improve communication skills. When the coachee improves in the area targeted by coaching intervention, it is possible that they will become less stressed or pressured.

Part I of the study
The main objective of Part I of the study was to investigate the effectiveness of workplace coaching, as it is practiced in the actual workplace, in reducing stress. The study also aimed to investigate the effect of workplace coaching on job-satisfaction. A further objective was to explore the coaching data relating to number of coaching sessions and coaching effectiveness. A quasi-experimental design was used.

Research Questions
- are levels of strain (depression, anxiety and stress) lower after coaching compared to before coaching in individuals receiving coaching?
- does the coaching group report lower levels of strain compared to the control group after coaching?
- are the self reported levels of the seven HSE stressors (the stressor of support is divided into two factors: support/manager and support/colleague) different after coaching compared to before coaching?
- are levels of job-satisfaction higher after coaching compared to before coaching in individuals receiving coaching?
- does the coaching group report higher levels of job-satisfaction compared to the control group after coaching?
- how many coaching sessions did the participants attend?
- what levels of coaching effectiveness are reported?
Hypotheses

- Strain

The main hypothesis states that workplace coaching will reduce stress. More specifically it was predicted that:
- individuals in the coaching group will report significantly lower levels of strain after coaching compared to before coaching.
- individuals in the coaching group will report significantly lower levels of strain after coaching compared to the participants in the control group.

The null hypothesis states that workplace coaching will not reduce stress.

- Job-satisfaction

The hypothesis states that workplace coaching will improve global job-satisfaction. More specifically it was predicted that:
- individuals in the coaching group will report significantly higher levels of job-satisfaction after coaching compared to before coaching.
- individuals in the coaching group will report significantly higher levels of job-satisfaction compared to the control group, after coaching.

The null hypothesis states that workplace coaching will not improve job-satisfaction.

Hypothesis

- Stressors

No hypothesis is offered for the stressors because there are many possible scenarios. If coaching is found to reduce levels of strain:
- the reported levels of the stressors may not be reduced as coaching may only help the individual to reduce strain but not the reported stressors.
- the reported levels of the stressors may be reduced as coaching could have helped the participants to take action to reduce stressors or change their perception of stressors.
- the reported level of the stressors may increase if the participants change their views of the stressors.
Part II of the study

Part II of the study aimed to investigate whether participation in coaching predicted levels of strain. It also aimed to investigate whether a number of additional variables were predictors of levels of strain. A cross-sectional survey design was used and multiple regression procedures were used to analyse the data.

Research questions
- does participation in coaching predict lower levels of strain?
- do the seven HSE stressors predict levels of strain?

Hypothesis
- Coaching
The main hypothesis states that participation in coaching will be a significant predictor of levels of strain.
The direction of the relationship would be as follows:
- individuals who have participated in coaching will report lower levels of strain and individuals who have not participated in coaching will report higher levels of strain.

The null hypothesis states that participation in coaching will not be a significant predictor of levels of strain.

Part III of the study

Part III of the study aimed to investigate, in depth and detail, a small number of individuals’ experiences and views of coaching, and coaching and stress. It involved a qualitative design in which semi-structured interviews and Interpretative Phenomenological Analysis were used.

Qualitative research topics
- The coaching process
- Evaluation of coaching
- Coaching and stress
Overview of the study

The overall result is a three-part study using both quantitative and qualitative methods to explore coaching and stress. It has been suggested that a combination of qualitative and quantitative approaches can be useful in addressing various research questions and that the two methodologies often compliment each other (Baker, Pistrang & Elliot, 2002). Cooper et al. (2001) propose that a combination of qualitative and quantitative research approaches can contribute to stress research. Furthermore, both quantitative and qualitative approaches have the potential to be valid and fruitful measures of the effects of coaching (Duignan, 2004).
Chapter 2: Method

Rationale for combining qualitative and quantitative methods

'Both qualitative and quantitative indicators can serve as valid and fruitful measures of the impact of coaching' (Duignan, 2004, p. 14). The rationale for adopting a combination of methods in the present study was influenced by several factors. Research methods should be tailored to the research question and qualitative methods are suitable for descriptive questions whereas quantitative methods are suitable for questions of comparisons (Baker et al., 2002). Both the quantitative and qualitative approaches used in the study were beneficial considering the research questions, and the combination of the methodologies allowed the researcher to gain more varied information about the topic than if only one method had been used.

In Part I and II of the present study the use of quantitative methods was suitable as it was of value to compare numerical data in order to investigate changes within and between groups and relationships between variables. The relevant statistical tests enabled the researcher to investigate whether coaching reduced work stress. The choice of using a quantitative approach and collect data by the means of a questionnaire was also influenced by practical reasons, as it enabled the researcher to assess stressors and strain in a group of employees quickly and efficiently without impacting upon the participants’ working time for more than ten minutes. This was very important as the organisations requested a brief questionnaire that did not greatly impact upon the participants’ working time. Moreover, employees may not have been willing to complete a long questionnaire.

The choice to use a qualitative approach in Part III of the study to investigate the same topic was influenced by the fact that it enabled the researcher to gain rich descriptions of coaching and stress and to explore the phenomenon in a greater depth (Baker et al., 2002). The semi-structured interviews enabled flexible data-collection where the participants’ own accounts of coaching were highlighted. The consequent exploration of the participants’ personal and individual experiences of coaching and stress was valuable as it gave the researcher further knowledge and insight into the experience of
coaching and the relationship between coaching and stress. Moreover, qualitative research is particularly suitable in the investigation of novel topics (Baker et al., 2002), and there have been little research investigating the effectiveness of coaching (Grant, 2001a).

Combining qualitative and quantitative research methods can be more beneficial than relying on a single method as qualitative and quantitative approaches have the potential to compliment each other (Baker et al., 2002; McLeod, 2001; Tashakkori, & Teddlie, 1998). In addition, the literature suggests that a combination of qualitative and quantitative research have the potential to increase the insight into: work stress research (Cooper et al. 2001); workplace counselling research (Highley-Marchington & Cooper, 1997); and organisational research (Griffiths, 1999; Miller, Dingwall & Murphy, 2004).
Part I

2.1 Introduction
The main aim with Part I of the study was to investigate whether coaching could help to reduce strain in individuals, employed in a large UK based finance organisation. This was investigated by measuring strain before and after coaching in a coaching group and in a control group. In addition, the study aimed to investigate whether coaching had an influence on the perception of a number of stressors and if it improved job-satisfaction.

2.2 Design
Part I of the study used a non-equivalent groups pretest – posttest design (Baker et al., 2002). See Figure 2 for a visual representation of the design.

Figure 2: Visual Representation of the pretest – posttest design (adapted from Baker et al., 2002).

<table>
<thead>
<tr>
<th></th>
<th>Pre-test</th>
<th>coaching</th>
<th>Post-test</th>
</tr>
</thead>
<tbody>
<tr>
<td>Group 1 NR</td>
<td>O</td>
<td>X</td>
<td>O</td>
</tr>
<tr>
<td>Group 2 NR</td>
<td>O</td>
<td></td>
<td>O</td>
</tr>
</tbody>
</table>

Key:
O = outcome measure
X = treatment
NR = non randomization

Type of group was the between-groups factor and the two levels of this factor were the coaching group and a no-treatment control group. Time of test was the within-subject factor and the two levels of this factor were pre coaching and post coaching. The design had three dependent variables as measured by a questionnaire and these were depression, anxiety, and stress. As this was a quasi-experimental study the groups were not randomised into the two conditions but self-selected (coaching group) and selected by contact person (control group). The two groups were not strictly matched but were located at the same site.
Rationale for design

Randomised controlled trials (RCTs) are often viewed as the highest standard in the evaluation of interventions within psychology, medicine, and health care. However, the conditions of RCTs cannot always be achieved outside laboratory settings and may involve ethical problems (Clark-Carter & Marks, 2004). It has been suggested that there are many challenges using experimental designs in the evaluation of coaching in organisational settings (Gray, 2004). In addition, randomisation is very difficult to use within organisations (Griffiths, 1999) and the controlled conditions of the RCTs (randomisation, setting, treatment, and population) have limited similarity with real practice (Bower, 2003).

Quasi-experimental/naturalistic procedures in 'real' settings are an alternative to RCT's and they are suitable when investigating whether interventions work in practice (Howard, Moras, Brill, Martinovich & Lutz, 1996). In quasi-experiments the conditions of true experiments are approximated (Cook & Campbell, 1979), indeed it has been stated that 'the art of outcome-research is the art of compromise' (Waskow, 1979, in Shapiro & Firth, 1987, p. 790). Nevertheless, valid inferences can be drawn from quasi-experimental studies (Kazdin, 1994). A quasi-experimental design was suitable for Part I of the study for several reasons. On both practical and ethical grounds it was not possible to randomise individuals into coaching and control groups. Moreover, it was not possible to have the level of control needed in RCTs regarding timing of measures and number of sessions. More importantly the current the study aimed to investigate whether coaching produce beneficial results as it is administrated in actual workplace settings (with varying number of sessions and self-selection). The preferred method for addressing this type of question is the quasi-experimental naturalistic approach that emphasises external validity of the study and aims to ensure that the findings are generalisable to similar settings and participants (Howard et al., 1996).

2.3 Participants

Organisation

The researcher aimed to recruit one or several large organisations* that provided coaching. Organisations listed on the Financial Times Stock Exchange-100 (FTSE-
100) list 17 February 2004 were contacted. Organisations were contacted via a letter addressed to the HR manager (Appendix A). From this recruitment strategy one organisation agreed to participate. The participating organisation was a large UK finance company with an excess of 3000 employees across four sites in the UK. A major part of the business in the participating organisation was telephone based. The organisation provided coaching at one of their sites (the site where the research was carried out) and employed three internal coaches. All employees working at the site where coaching was provided had access to the coaching. No stress management training or counselling was provided by the organisation. However, a number of the participants from both the coaching group and control group took part in stress management activities (see table 3.1). Activities included: relaxation, stress management training, counselling, and other. It should be noted that this may have had an impact on the participants' wellbeing. One of the internal coaches acted as the contact person for the researcher.

**Individual participants**

All individuals that booked an initial coaching session during the time period of the study were asked by a coach if they would like to participate in the study. Coaching was voluntary so all participants was actively seeking it in order to deal with workplace issues. A limitation with self selection is that is increases the likelihood that the groups will differ. The participants in the control group were selected from lists of employees working at the participating site. The selection of the control group was conducted by the contact person at the organisation and individuals who had never received any coaching were selected. All participants that completed the questionnaires took part in a prize draw, with one £20 and one £50 Selfridges vouchers as prizes.

Overall 30 pre-coaching questionnaires were administrated for individuals in the coaching group and 40 for the individuals in the control group. To complete Part 1 of the study the participants were required to complete and return the same questionnaire twice. Eleven individuals did not complete the whole study and only returned the first questionnaire, five in the coaching group and six in the control group.

* The HSE defines large workplaces as those employing more than 250 employees. (Jones et al., 2004)
Three questionnaires were discounted as they stated that they had received many coaching sessions before the study. Overall, 31 participants completed the questionnaire twice, 16 in the coaching group and 15 in the control group. Seventeen males and 14 females completed Part I of the study, the mean age was 32 and the age range was 22-51 years. See Table 3.1 in ‘Results’ for further demographic information.

2.4 Procedure

Data collection

The data collection took place over an eight months time period. In the coaching group the individuals who agreed to take part in the study received the questionnaire from the coaches and were asked to complete it before they started coaching. At the last coaching session they were given the second questionnaire to be completed after the last session. Thus, the completion of questionnaires in this group was flexible depending on when the participants started and finished coaching within the eight months period. The number of coaching sessions was also flexible as it was up to each participant and coach to decide the number of sessions needed. The control group completed the questionnaire at the beginning of the study and once again at the end of the study. The questionnaires were administrated by the coaches at the worksite and it was important that the two questionnaires completed by the same individual could be matched. Consequently, the coaches allocated a number to each individual and this number was written on the first questionnaire, and the same number was also written on the second questionnaire. The coaches held the list of identifying code numbers in the strictest of confidence.

Once the participants had agreed to take part in the study they were required to read and sign the information/consent form (Appendix B and C) before completing the questionnaire. Envelopes were provided with all questionnaires and the participants were encouraged to seal the envelopes after the questionnaires were completed to ensure confidentiality. Two different options for returning the questionnaires were provided: the participants could either return the questionnaire in one of the collection boxes located at the worksite; or send it direct to the researcher at the City University address.
Data analysis

SPSS-12.0 was used for the statistical analysis. As Part I of the study aimed to investigate differences in strain between the two groups and between pre and post coaching 2*2 mixed ANOVAS were used to test the main hypothesis.

The coaching intervention

The coaching intervention did not follow a specific protocol and was focused on the issues the coachees wanted to focus on. Reflective listening was an important part of the coaching. The GROW model (Whitmore, 1992) was used (see page 21 for further information) and the coaches did also use NLP (neuro linguistic programming) theory and techniques. A number of techniques were used including affirmation cards, imagery exercises, cognitive restructuring, and assertiveness training.

2.5 The questionnaire

A stress and coaching questionnaire consisting of 65 items was used in Part I and II of the study (Appendix D). The first three items of the questionnaire related to demographic variables - age, gender, and job-title. Item four covered other stress management activities. Items five to eight related to participation in coaching, number of coaching sessions, period of coaching, and effectiveness of coaching and were developed for this study. Global job satisfaction was measured by item nine and item 10 to 44 measured perceived stressors. Finally, item 45 to 65 measured stress/psychological strain.

Measure of global job-satisfaction

The current study used a single item question to measure global job-satisfaction. The question used was a Likert-scale question with a standard numerical scale ranging from 1 to 7. This item has been used to test the British population’s job satisfaction in the British Household Panel Survey (The BHPS Panel:1991-1998; in Oswald & Gardner, 2001). It has been stated that a single measure of job-satisfaction is an acceptable substitute to a set of items (Guest & Conway, 2004). Wanous, Reichers & Hudy, (1997) conducted a meta-analysis of research in which single-item measures of overall job-satisfaction were correlated with scales measuring overall job-satisfaction. It was suggested that single item measures of overall job-satisfaction are more robust
than the scale measures of overall job-satisfaction, and that two advantages of a single job-satisfaction item include the fact that they are quick to complete has high face-validity. However, Wanous et al. (1997) state that their findings supported the acceptability of single-item measures when situational constrains prevents the use of scales. These were the reasons it was used in the current study. The main criticism of using one item to measure job-satisfaction has been criticised because it leaves a great deal of room for individual interpretation of the question, and this raises questions regarding reliability and content and construct validity (Jewell & Siegull, 1990).

Measure of work stressors – The Indictor Tool
The Indictor Tool was used in the current study as it is a reliable and valid risk assessment tool of workplace stressors in the UK (Cousins, Mackay, Clarke, Kelly, Kelly & McCaig, 2004). Moreover, the HSE were interested in the researcher using this questionnaire as it was recently developed (P. Kelly, personal communication, 27 June, 2004). There is evidence that the particular stressors measured by the tool have a negative effect on employee well-being in the UK (Cousins et al., 2004).

The Indicator Tool consists of 35 items and seven sub-scales. The seven scales are: demands, control, support-management, support-colleague, role, relationships, and change. The items used one of two Likert response scales. One response scale was a 5-point scale ranging from ‘Never’ to ‘Always’ and the other response scale was a 5-point scale ranging from ‘Strongly disagree’ to ‘Strongly agree’. On the questionnaire each response is coded from 1 to 5 and the questions were scored so that a higher score indicated more unfavourable working conditions. Considering the codes allocated to each response the following scales were scored in reverse: control; support-managerial; support-colleague; role; and change.

The factors/subscales and the scale reliabilities as measured by Cronbach’s alpha were divided as follows: demands consisting of eight items with a reliability of 0.89; control consisting of six items with a reliability of 0.78; relationships consisting of four items with a reliability of 0.78; role consisting of five items with a reliability of 0.83; change consisting of three items with a reliability of 0.83; managerial support consisting of five items with a reliability of 0.87; and peer support consisting of four items with a reliability of 0.81 (Cousins et al., 2004).
Measure of strain - DASS-21

Strain was measured using the Depression, Anxiety and Stress Scales-21 (DASS-21) (Lovibond & Lovibond, 1995). DASS-21 is a self-report measure of depression, anxiety and stress and can be used both clinically and in research. DASS assesses the severity of the core symptoms of stress, anxiety, and depression. However, DASS carries no direct implications for allocating individuals into discrete diagnostic categories used in classificatory systems such as the ICD and DSM (Lovibond & Lovibond, 1995). The rationale for using DASS-21 in the current study was based on several reasons: it has been found to be a valid and reliable measure of the concepts it is intended to measure (Anthony, Bieling, Cox, Enns & Swinson, 1998); it has been tested with a non-clinical representative sample of a the British population and found to have adequate construct validity (Henry & Crawford, 2005); and it is short and user friendly. DASS-21 consists of twenty-one items, and is a shorter version of DASS-42. It has been suggested that advantages of DASS-21 compared to DASS-42 include fewer items, lacks the problematic items included in the longer version, a cleaner factor structure and therefore smaller interfactor correlations (Anthony et al., 1998; Henry & Crawford, 2005).

In DASS-21 each scale consists of seven items and the items are statements relating to one of the constructs measured. The respondents are asked to indicate to what extent each statement applied to them during the last week (emphasising states rather than traits) using a 0-3 scale, where 0 = did not apply at all, and 3 = applied very much, or most of the time. The scores for each scale are calculated by summing the scores for the appropriate items. In the scoring for the DASS-21 totals for each scale are doubled to make the scores are compatible to the DASS- 42 (Lovibond & Lovibond, 1995). Cronbach’s alpha for DASS-21 has been reported to be, 0.88 for the depression scale 0.82 for the anxiety scale, and 0. 90 for the stress scale (Henry & Crawford, 2005).

Pilot study of the questionnaire

A pilot study was conducted with the full questionnaire as it consisted of several scales and single item questions that had not been previously combined. The pilot participants were informed that it was a pilot questionnaire and were invited to provide feedback on the completion time, user-friendliness, clarity of questions.
structure, graphics and general issues relating to the questionnaire. Thirteen colleagues and friends in full-time occupation completed the questionnaire and the feedback suggested that the questionnaire was easy to understand and complete, and the questions were relevant for working individuals. Thus, no amendments were made to the questionnaire following the pilot study.

2.6 Ethics

The study was carried out in accordance with the BPS’ ‘Code of Conduct, Ethical Principles & Guidelines’ (2005) and ethical consent for the study was obtained from City University. An Ethics Release Form was completed, and signed by the internal and external supervisors and by a further member of the Psychology Department at City University, prior to the investigation commencing (see Appendix E for Ethics Release form).

Informed consent

It was important that both the participating organisation and individual participants could give informed consent to participate in the study. The organisation (represented by a senior manager and all coaches) was informed about the aim of the research and confirmed its consent via a letter (the letter has not been included in Appendix due to the organisations’ right to confidentiality).

Individual participants were required to read a consent form and subsequently sign it to confirm that they had understood the information and consented to take part in the study. The consent form (Appendix B & C) informed the participants about the aim of the research, procedure of the study, confidentiality/anonymity of participants, and the right to withdrawal. It clearly stated that participation was voluntary and choosing not to participate would not effect any subsequent coaching. The researcher’s contact address was provided on the consent form and the participants were made aware that they could contact the researcher regarding any questions or issues relating to the research.
Confidentiality/anonymity

The organisation’s anonymity was protected, the name, location and specific area of business was/will not be mentioned. The participants’ confidentiality was also protected during the study. Each participant was given a code that was written on the questionnaire. Only the coaches had the list containing names and accompanying codes of participants and only the researcher had access to the questionnaires. The questionnaires were stored safely and the consent forms were not stored together with the questionnaires. It was also important that the participants could return the questionnaires either in the boxes at the organisation’s building or send it by post to the researcher.
Part II of the study

2.7 Introduction
Part II of the study aimed to investigate whether participation in coaching would predict levels of stress (strain). As well as investigating the relationship between coaching and stress the study also investigated the relationship between strain, the seven HSE stressors, age and sex.

2.8 Design
A cross-sectional, correlational design was used, and multiple regression analyses were used to investigate whether participation in coaching was a strong predictor of employees' levels of strain. Multiple regression design was suitable in Part II of the current study as the researcher aimed to investigate the relationship between the criterion variable (stress) and several predictor variables (coaching, stressors, etc). Depression, anxiety and stress were the criterion variables and there were ten predictor variables. The data were collected from two groups of participants, individuals who had participated in workplace coaching regarded as having completed their coaching (coaching group) and individuals who had never attended workplace coaching (control group).

2.9 Participants
Organisations
One UK and one Scandinavian organisation participated in Part II of the study. The UK organisation also participated in Part I of the study so see 'Methods' in Part I for more detailed information about the organisation and the recruitment.

The Scandinavian organisation employed over 3000 individuals and belonged to the telecommunications sector. Most of the work within in organisation was telephone based. This organisation was recruited via personal contacts. Coaching was available to all staff within the organisation. Coaching was provided by trained coaches employed within the organisation. Most coaches also worked as HR consultants.
counselling service or stress management training was offered within the organisation.

**Individual participants from the UK organisation**

Overall 36 individuals participated in Part II of the study from the UK organisation, 21 participants who had received coaching and 15 who had not. Thirty-one of these participants were the same individuals that completed Part I of the study. Thus, the data from the post-test in Part I was also used for Part II. For further information regarding recruitment of these participants see 'participants' in Part I. Employees who had started coaching before Part I began could not take part in this part of the study as the questionnaire should be completed before and after coaching. However, if they completed their coaching during the time the study took place they were invited to participate in Part II of the study which involved completing the questionnaire after coaching. This questionnaire was internet based and overall fifteen individuals (individuals who had completed coaching when the study took place) were approached to complete questionnaires after coaching and five of these participants completed the questionnaire.

**Individual participants from the Scandinavian organisation**

All participants from the Scandinavian organisation completed the questionnaire on the internet. The contact person at the HR department provided a contact list with email addresses of employees who were regarded as having completed workplace coaching recently and employees who had never attended coaching within the organisation. The individuals in the two groups held the same or similar job positions and worked full-time. All individuals provided on the list were contacted with an initial email (Appendix F) from the researcher explaining the aim and procedure of the study and providing the web-link where the questionnaire could be completed. Overall one 115 individuals received the email inviting them to complete the questionnaire and 67 participants completed it, 41 who had completed their coaching and 26 who had never attended coaching.

**Overall sample**

Overall 103 participants completed the questionnaire, 62 who had completed coaching and 41 who had never participated in coaching. All individuals in the
coaching group had sought coaching for workplace issues. The mean age was 34 years, and 46 women and 57 men participated. See Table 3.10 in ‘Results’ for more detailed information of all the participants in Part II.

**Sample size**

It has been suggested that a multiple regression requires a minimum of five times as many participants as predictor variables but that a more acceptable ratio is ten times as many participants (Brace, Kemp & Snelgar, 2003). In the present study ten predictor variables were included and N=103.

**Rationale for including both the UK and Scandinavian organisations**

The sample for Part II of the study comprised of participants from both the UK organisation and participants from the Scandinavian organisation. They were sampled on the basis that they were working full-time within a large organisation, in excess of 3000 employees, and that they had participated or not participated in workplace coaching. Despite the fact that the work within both organisations was mainly phone based, the characteristics of the participants, the work environment and the coaching may have differed between the organisations. Moreover, all participants from the Scandinavian organisation were managers whereas only a small number of the UK participants were managers. However, no statistical differences were found between the UK and Scandinavian organisations on levels of depression anxiety, and stress and no significant differences were found between manager and non-managers on the same variables. In addition, organisation (UK or Scandinavian) was not a significant predictor of stress in initial Multiple Regression analyses (this variable was not included in the final analyses). Consequently, it was concluded that these organisations could be treated as one sample although it is recognised that there may have been some differences between the participants.

**2.10 Procedure**

**UK organisation**

As stated above, the data from the questionnaires completed by 31 participants after coaching in Part I was also used in Part II. For information about the procedure for these individuals see ‘Procedure’ in Part I of the study. The five individuals from the UK organisation who only participated in Part II completed the questionnaire on the
internet. These individuals were given an information sheet explaining the aim of the study and providing the web-link with the questionnaire (see Appendix G). The rationale for using an internet based questionnaire for these participants was based on the fact that the contact person believed that the response rate would be higher (see below for further information regarding the internet based questionnaire).

**Scandinavian organisation**

All data within the Scandinavian organisation was collected via an internet based questionnaire (see Appendix H). Studies have found that internet based questionnaires have similar psychometric properties as non-internet based questionnaires (Buchanan & Smith, 1999; Stanton, 1998). The items in the internet based questionnaire were exactly the same as the paper based questionnaire used in Part I and II of the current study. The rationale for using an internet based questionnaire was based on advice from the contact person at the Scandinavian organisation. Generally surveys within the organisation were internet based as they had been found to have a higher response rate compared to paper-based questionnaire. Potential participants received an email inviting them to take part in the study (see Appendix F). This mail explained the aim of the research, confidentiality and anonymity issues and if the participants consented to the conditions of the study they were invited to complete the questionnaire on an attached web-link to the questionnaire. The data collection took place over one month.

**The coaching intervention**

For information about the UK organisation see ‘Methods Part I’. The coaching intervention in the Scandinavian organisation was focused on the issues the coachees wanted to focus on and reflective listening was an important part of the coaching. The coaching intervention did not follow a specific protocol. A problem solving model similar to the GROW model was used. This model consisted of four steps: (1) what do we know about the problem; (2) how can we solve the problem; (3) what option will we choose; (4) how do we carry out the plan of action. The coaches also used cognitive theories and techniques.
Data analysis
The statistical analysis was carried out using SPSS-12.0. As Part II of the study aimed to investigate if participation on coaching was a predictor of levels of strain linear multiple regression analyses were used.

2.11 The questionnaire
Part II of the study used the same sixty-five item questionnaire (see Appendix D) as used in Part I. See ‘Methods’ in Part I for further information regarding the questionnaire.

2.12 Ethics
The research was conducted in accordance with the BPS’ Code of Conduct (2005) and ethical consent for the study was obtained from City University (see Appendix E).

Informed consent and confidentiality
As stated previously the UK organisation consented to take part and the consent was confirmed by an official letter. The Scandinavian organisation also confirmed their consent in a letter, after having reviewed an outline of the research. The organisations’ confidentiality was protected, the names of the organisations and the specific area of business was not/will not be disclosed.

Informed consent and security of data are important ethical issues to consider in relation to internet research (Hewson, 2003; Hewson, Yule, Laurent & Vogel, 2003). The current study dealt with the issue of informed consent in the following manner: the initial email that outlined the aim of the study contained a weblink to the start-page for the questionnaire (see Appendix I). This start-page did not automatically open the questionnaire but instead provided further information about the study and informed the participants about their rights to confidentiality, anonymity, and withdrawal. It also clearly stated that the participants should only open the attached weblink containing the questionnaire if they had understood the information and fully consented to take part in the study. Once the questionnaire was completed the participants were required to choose to submit the data. The data was password
protected and was completely anonymous, and could not be linked to individual email accounts. Finally, a contact address was given on the initial webpage to ensure that the participants could contact the researcher if they had any questions or concerns.
Part III

2.13 Introduction
Part III of the study aimed to explore a small number of participants’ (N = 9) experiences and perceptions of coaching and stress. A qualitative design was used and semi-structured interviews were used to collect rich descriptions of the participants’ experiences of coaching. Interpretative Phenomenological Analysis was used to analyse the data.

2.14 Design

Qualitative research
Qualitative research locates the study within a specific social setting and is interested in rich descriptions of the topic under investigation (Denzin & Lincoln, 2000). The research process is flexible, and it enables the discovery of novel and uncommon themes and new insights into the topic under investigation (Holliday, 2002). When evaluating intervention effectiveness, quantitative outcome research, although useful, can miss the subtleties of the process that form the outcome (McLeod, 2001). Indeed, McLeod (2001) urge researchers to conduct qualitative outcome studies in the evaluation of therapy effectiveness. For example in psychotherapy research quantitative data assessing the client’s changes can be complemented by qualitative data investigating how the change transpired.

Coe (2004) suggests qualitative approaches can be valuable in the evaluation of, the complex human process of, coaching. It has been suggested that qualitative methods can contribute to stress and stress management research. Cooper et al. (2001) report that a growing number of stress researchers utilise qualitative research methods when investigating stress as these methods have the potential to capture the contextual richness of the process of stress. Similarly, Briner (1997) conducted a critical review of the research of the effectiveness of stress management interventions, and suggested that stress research would benefit from more qualitative methods. In addition, the HSE (1998) states that qualitative methods have the potential to make important contributions to research evaluating the effectiveness of stress interventions. In
addition, qualitative research is a useful, if underutilised, method to explore issues within organisations (Griffiths, 1999; Miller et al., 2004). Qualitative research can focus on the complex and contextual nature of organisational settings, and it can be useful in exploring how outcomes are achieved and related processes (Miller et al., 2004). Similarly, Griffiths (1999) suggest that qualitative methods are useful within the evaluation of organisational interventions as they have the potential to capture the richness and meaning of individuals’ experiences. This richness is not captured by quantitative methods.

Interpretative Phenomenological Analysis

The present study used Interpretative Phenomenological Analysis (IPA) to analyse the data from the semi-structured interviews. IPA is a qualitative methodology developed for psychology in particular. The main aim of IPA is to explore and understand meanings of experiences of the participants (Smith & Osborn, 2004), and it is a practical and systematic approach to analysing rich data (Baker et al., 2002). IPA has been used extensively in health psychology research but according to Smith and Osborn (2004) IPA is appropriate for a range of psychological research questions where the aim is to investigate the meaning of the participants’ experiences. However, Smith & Osborn (2004) suggest that IPA is particularly useful if the area of investigation is under-researched or new. This was in accordance with the present study that aimed to investigate individuals experiences of coaching - an under-researched area. A further advantage of IPA in relation to the present study is that it has been suggested that a combination of quantitative and qualitative (IPA) research can contribute to a research project (Smith, 1996). Smith (1996) argues that although quantitative researchers and qualitative (IPA) researchers use different methods and are influenced by different theories, the shared emphasis on cognitions and the mind makes it possible for qualitative and quantitative studies to enrich each other. Thus, it was assumed that IPA would also enrich the current project that used a combined methodology.

Phenomenology relates to the person’s individual view of an event rather than an objective statement about the event (Smith, 1996). Consequently, IPA attempts to explore the participant’s perceptions and insider views of an event. It also recognises that the research process is dynamic, and the researcher takes an active role in
attempting to get an insider’s perspective of the participant’s experience. However, this cannot be done directly or fully, but rather via a process of interpretation (Smith & Osborn, 2003). IPA assumes that there is a relationship between individual’s verbal accounts and their cognitions and emotions. Nevertheless, it is recognised that the relationship is complicated and individuals may have difficulties reporting what they are thinking or/and they may not want to self-disclose (Smith & Osborn, 2003).

2.15 Participants

Studies using IPA often involve small numbers of participants as the goal is to present a detailed picture of the participants’ individual experiences (Smith & Osborn, 2004). IPA studies do not attempt to obtain a random sample of participants rather, IPA researchers aim to find a homogenous sample of participants that are suitable for the research question (Smith & Osborn, 2004). Consequently, the participants in part III of the study were selected on the basis of having participated in workplace coaching and thereby being able to contribute to the research question. Within both organisations the participants were initially approached by the contact person and asked if they were interested in participating in the study. If they expressed an interest in taking part in the study the interview was set up by the contact person (in the UK organisation) or their contact details were given to the researcher in order to set up the interview (the Scandinavian organisation).

Overall nine participants were interviewed, six were employees of the UK organisation and three were employees of the Scandinavian organisation (for further information of the organisations see Part I and II of the study). Six females and three males participated and the mean age of the interviewees was 33 years with a range of 23-52. Four of the participants held management positions and all nine worked full-time. The coaching did of course differ between the organisations. Problem solving models were important in both approaches although different theories were used. Moreover, two individuals from the Scandinavian organisation had experienced group coaching as well as individual coaching.
2.16 Data collection

**Semi-structured interviews**

The data was collected with semi-structured interviews as this method is flexible and enables the collection of rich data. Indeed, it has been suggested that the best and most common data collection method for IPA studies is the semi-structured interview (Smith & Osborn, 2003). The advantages of using semi-structured interviews include: it facilitates a rapport with the interviewee; it is flexible; it enables exploration of novel areas; and it produces rich data (Smith, 1995). The researcher worked to adopt a comfortable and non-judgemental atmosphere during the interviews. The interviews took between 30-45 minutes and were tape recorded and transcribed in their entirety. During transcription the researcher wrote memos regarding possible themes and reflections relevant to the data. No computer programme was used to analyse the data.

**Interview schedule**

According to Smith & Osborn (2003) it is important to prepare and interview schedule prior to the interviews as it forces the researcher to consider what he/she hopes to cover in the interview. The interview schedule (see Appendix J) was developed on the basis of the main research questions and previous research. Apart from biographical details the main topics that were covered included details of coaching, the coaching process, evaluation of coaching, and coaching and stress. Several prompts that were more explicit than the main topics were included. The questions were piloted with an individual who had received coaching, no changes were made following the pilot.

**2.17 Materials**

A standard dictaphone was used to record the interviews with the participants. In order to be able to record interviews over the telephone a telephone-recorder-adapter was used.
2.18 Procedure

UK organisation

The interviews with the employees from the UK organisation took place in a conference room located at one of the organisation’s sites. Prior to the interview the participants were asked to read the consent form (see Appendix K) and sign it if they agreed to take part in the study. The participants were also invited to ask any questions regarding the research. After this procedure the interviewer asked for the participants’ permission to switch the tape recorder on, subsequently the interview commenced in accordance with the interview schedule. At the end of the study the participants were once again invited to ask questions and were informed that they were welcome to contact the researcher if they had any further questions or concerns regarding the research.

Scandinavian organisation

All interviews with the employees from the Scandinavian organisation took place over the telephone. Once the employee had agreed to participate the researcher contacted them via email in order to set up the interview. This initial email (Appendix L) outlined the aim of the research, the confidentiality of the study and the right to withdrawal. Prior to the interview the researcher asked for a verbal consent to switching the tape recorder on and then the researcher asked for a verbal consent to taking part in the study. Once this process was completed the interview was conducted in accordance with the interview schedule.

2.19 Analysis

The analysis was conducted in accordance with Smith & Osborn’s (2003) step-by step approach to doing IPA. As suggested by Smith & Osborn (2003) an ideographic approach to analysis was used, where the analysis begins with a detailed investigation of a specific case before the other cases are incorporated and a more general categorisation emerges. In accordance with this approach one transcript of one of the cases was read a number of times and notes of anything significant or interesting were made in the left-hand margin. The next step of the analysis involved reading the transcript again and record possible theme titles in the right-hand margin. Smith & Osborn (2003) point out that a higher level of abstraction and psychological
terminology are introduced in the analysis at this stage. The themes were listed and connections between themes and superordinate concepts were noted. Clusters of themes that represented, most strongly, the participant's views of a particular topic were given names and represented the superordinate themes. Identifiers, page number of transcript and keyword, of each theme were recorded indicating where examples of the theme could be found in the transcript. Finally, the themes were ordered coherently and a table of themes was produced. This process of analysis was repeated for the remaining transcripts, thus a table of themes were produced for each participant. From the tables of themes a final table of superordinate themes for the whole group was constructed. This process involves reduction and prioritising of the data and Smith & Osborn (2003) note that this stage can be challenging. Prevalence within the data is not the only important factor when themes are selected, richness of text passages and ability to explain other aspects of the interview are also important factors (Smith, Jaraman & Osborn, 1999). Four main themes with related sub-themes were identified in the study. The list of main themes was consequently translated into a narrative account.

**Generalisability**

According to Smith & Osborn (2004) claims to generalisability are determined by the group of participants in IPA research. It should be possible to say a great deal about the actual group of participants and it should be possible to say something about the wider group represented by the participants. Morse (1999) states that if the theory generated from qualitative research is comprehensive, complete, and accounts for negative cases it is not only applicable to the immediate group. Rather, the theory is also applicable to similar situations, questions and problems regardless of the similarity of the demographics of the groups. Thus, the main concern for generalisability is the comparability of the topic or problem and not the demographics of the group (Morse, 1999).

**Evaluating the analysis**

The qualitative analysis is a subjective process and different researchers may have arrived at different conclusions. In IPA the researcher's personal frame of reference inevitably influences the analysis (Golsworthy & Coyle, 2001). It had been suggested that good qualitative practice involves researchers specifying their personal
perspective relevant to the study to enable readers to interpret the researcher's analysis (Elliot, Fisher, Rennie, 1999). In this study the researcher's interpretative framework has been influenced by: training and practice in counselling psychology – particularly in working with issues of work stress; previous research on stress, including stress in an organisational setting; previous experience of quantitative and qualitative research; training in coaching psychology and cognitive behavioural therapy; and Swedish cultural background. As the researcher was aware of these factors from the beginning of the study much effort was made to 'bracket' (Baker et al., 2002) preconceived ideas and expectations in order to minimise unwarranted idiosyncratic interpretations or unwarranted selective attention in the interviews.

Various criteria have been suggested for the evaluation of qualitative studies, and the following is a summary list of published guidelines: openness of theoretical framework by researchers (Baker et al., 2002; Elliot et al., 1999); situating the sample (Elliot et al., 1999); methods described in detail to allow replication (Baker, et al., 2002); grounding the data and presentation of evidence (Baker et al., 2002; Elliot et al., 1999; Popay, Rogers, & Williams, 1998; Smith, 1996); providing credibility checks by the use of an independent audit or member checks (Baker et al., 2002; Elliot et al., 1999; Smith, 1996); internal coherence of the data-based story/narrative (Elliot et al., 1999; Popay et al., 1998; Smith, 1996); uncovering the phenomenon under study and resonating with readers (Baker, et al., 2002; Elliot, et al., 1999; Popay et al., 1998); limitations of the extension of the findings are specified (Elliot, et al. 1999; Popay et al., 1998).

The present study has attempted to address these guidelines in the following manner. The researcher's personal perspective has been highlighted and basic descriptive data about the participants have been presented. The data collection method and the interview schedule are described in detail to allow replication. Examples of the data have been provided to illustrate and support each theme. The data was presented in a narrative that aimed to highlight the phenomenon under study in a coherent manner. The researcher attempted to present a narrative that accurately represents the participants' experiences of coaching and expands the reader's understanding of the subject matter. In addition, it is made clear that the findings cannot be generalised to all coaching situations but only to the groups studied and possibly similar groups.
2.20 Ethics

The study followed the ethical guidelines as outlined by the BPS (2005). As stated in Part I and II of the study both the UK and the Scandinavian organisation confirmed their consent to taking part in the study by a letter.

Informed consent and confidentiality

Each participant from the UK organisation signed a consent form that outlined the aim of the research and highlighted that the study was voluntary and their right to confidentiality, anonymity, and withdrawal. The fact that the interview would be tape recorded was stated and it was emphasised that the tapes would be stored securely and be destroyed at the end of the study. The participants were given a duplicate copy of the consent form. At the end of the interview the researcher asked if the participant had any concerns regarding the study and they were invited to contact the researcher if they had any questions or experienced any issues related to the interview.

The individuals in the Scandinavian organisation were interviewed over the phone and they consented to the study two times before the interview. The participants’ reply to the initial email, that outlined the aim and conditions of the research, was kept as a proof of their consent (all participants allowed the researcher to print and keep the email). At the beginning of the telephone conversation the researcher asked for the participants’ consent to switch the tape recorder on. After this the researcher asked whether they had read the consent form and if they still wanted to take part in the study. Once this was discussed the interview commenced. At the end of the interview the participants were invited to talk about any issues or ask questions related to the topic. Participants were also informed that they could contact the researcher if they wanted to discuss any questions or issues related to the interview.

Confidentiality and storage

In the transcript each participant was assigned a letter in the alphabet, not related to their names. The nine first letters in the alphabet were used (excluding the letter I as this was assigned for the interviewer throughout all interviews). Names of individuals, organisations, and locations have been deleted in the transcript and replaced with XX. The tapes were labelled with the letter of the alphabet linked to the
participant, and were stored in a secure locked cupboard. The tapes were destroyed after the examination of the thesis. The consent forms and consent emails were not stored together with the tapes.
Chapter 3: Results Part I and II

Part I

3.1 Introduction
The main aim of Part I of the study was to investigate whether coaching reduced strain as measured by DASS-21. However, it also aimed to investigate whether coaching had an effect on perceived stressors as measured by the Indicator Tool, and if it increased global job-satisfaction as measured by a single job-satisfaction item. The study also aimed to explore the number of coaching sessions attended and coaching effectiveness.

The results section is divided up into two main sections, pre-coaching results and post-coaching results. The pre-coaching section includes the following sub-headings; demographic data, strain, stressors, global job-satisfaction, and summary. Pre-coaching will be referred to as T1 (time 1). The post-coaching section includes the following sub-headings, strain, stressors, global job-satisfaction, coaching data, and summary. Post-coaching will be referred to as T2 (time 2). Finally, a brief discussion of power is included.

3.2 Demographic data
A total number of 31 participants completed Part I of the study. Forty-two individuals started of the study and 11 individuals dropped out at T2 (five in the coaching group and six in the control group), these participants were deleted from all analyses after it was concluded that there was no pattern to the missing data. Unfortunately, the researcher does not have the reasons for the drop out. Due to the confidentiality and the right to withdraw from the study no contact was taken with participants who dropped out. Table 3.1 contains a summary of the demographic details of the 31 participants that completed Part I of the study.
Table 3.1: Summary statistics of the demographic details of the participants that completed Part I of the study

<table>
<thead>
<tr>
<th></th>
<th>Coaching group</th>
<th>Control group</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>N=16</td>
<td>N=15</td>
<td>N=31</td>
</tr>
<tr>
<td><strong>Gender</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Men</td>
<td>8</td>
<td>9</td>
<td>17</td>
</tr>
<tr>
<td>Women</td>
<td>8</td>
<td>6</td>
<td>14</td>
</tr>
<tr>
<td><strong>Age in years</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mean (S.D)</td>
<td>29 (4.53)</td>
<td>34 (6.17)</td>
<td>32 (5.99)</td>
</tr>
<tr>
<td>Range</td>
<td>23-37</td>
<td>25-50</td>
<td>22-51</td>
</tr>
<tr>
<td><strong>Job title</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Employee</td>
<td>15</td>
<td>12</td>
<td>27</td>
</tr>
<tr>
<td>Management</td>
<td>1</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td><strong>Mode of work</strong></td>
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<td></td>
</tr>
<tr>
<td>Full-time</td>
<td>16</td>
<td>15</td>
<td>31</td>
</tr>
<tr>
<td>Part-time</td>
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<td>0</td>
<td>0</td>
</tr>
<tr>
<td><strong>Stress-mgm.</strong></td>
<td>Participating</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>activities</td>
<td>Not participating</td>
<td>11</td>
<td>9</td>
</tr>
</tbody>
</table>

3.3 Pre-coaching (T1)

**Strain (DASS-21)**

*Descriptive Statistics*

Table 3.2 contains a summary of the participants' scores on the three DASS-21 scales T1. The coaching group scored slightly lower than the control group on all three scales.
Table 3.2: Summary of participants’ DASS scores (T1)

<table>
<thead>
<tr>
<th></th>
<th>Depression Max = 42</th>
<th>Anxiety Max = 42</th>
<th>Stress Max = 42</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Mean S.D.</td>
<td>Mean S.D.</td>
<td>Mean S.D.</td>
</tr>
<tr>
<td>Coaching group</td>
<td>11.13 6.93</td>
<td>4.38 4.01</td>
<td>12.00 9.00</td>
</tr>
<tr>
<td>N = 16</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Control group</td>
<td>12.00 9.38</td>
<td>4.67 4.51</td>
<td>13.07 8.00</td>
</tr>
<tr>
<td>N = 15</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>11.55 8.08</td>
<td>4.52 4.19</td>
<td>12.52 8.41</td>
</tr>
<tr>
<td>N = 31</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

NB: All values are rounded up to two decimal places

Parametric tests

Normality was assessed, by inspection of the Kolmogrov-Smirnov statistic and Skewness and Kurtosis values, and no serious assumptions were violated. Box plots were generated for each dependent variable to check for univariate outliers, no outliers were detected. Independent t-tests were conducted in order to investigate whether there was a difference between the control group and coaching group on levels of depression, anxiety, and stress. The t-tests, with a Bonferroni adjusted alpha level of 0.017, showed that there was no significant differences between the two groups on depression (t = -0.297, df = 29, p = 0.769, two-tailed), anxiety (t = -0.190, df = 29, p = 0.850, two-tailed), or stress (t = -0.348, df = 29, p = 0.730, two-tailed).

Stressors (the Indicator Tool)

Descriptive statistics

A mean score was calculated for each of the seven sub-scales. The lowest score is 1 and the highest score is 5, and a higher score indicates more perceived unfavourable working conditions. A summary of the participants’ mean scores on the scales can be seen in Table 3.3. As can be seen by the table the scores are similar for the two groups on most scales. However, the coaching group scored lower than the control group on all scales except for on the control scale. The biggest difference between the two groups is on the support-colleague stressor where the control group scores higher.
Table 3.3: Summary of participants’ mean stressor scores (T1)

<table>
<thead>
<tr>
<th></th>
<th>Demands</th>
<th>Control</th>
<th>Support-Mgm.</th>
<th>Support-colleague</th>
<th>Role</th>
<th>Relationship</th>
<th>Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>Coaching Group</td>
<td>2.52</td>
<td>3.10</td>
<td>2.26</td>
<td>1.83</td>
<td>1.93</td>
<td>1.70</td>
<td>2.79</td>
</tr>
<tr>
<td>Control Group</td>
<td>2.76</td>
<td>2.44</td>
<td>2.72</td>
<td>2.60</td>
<td>2.12</td>
<td>1.87</td>
<td>3.22</td>
</tr>
<tr>
<td>Total</td>
<td>2.64</td>
<td>2.79</td>
<td>2.48</td>
<td>2.20</td>
<td>2.02</td>
<td>1.78</td>
<td>3.00</td>
</tr>
</tbody>
</table>

Parametric tests

Seven independent t-tests were performed to investigate whether there were any significant differences between the groups on any of the stressors. However, it is recognised that performing such a large amount of t-tests is not ideal. A Bonferroni adjusted alpha level of 0.007 was used. A significant difference was found between support-colleague (t = 2.992, df = 29, p = 0.006) with the control group reporting a significantly lower level of support. No significant differences were found between the other stressors (see Appendix M for a table of the inferential statistics from the t-tests).

Global job-satisfaction

Global job-satisfaction was measured with one item ranging from a score of 1 (not at all satisfied) – to 7 (completely satisfied). A summary of the participant’s scores on this item can be seen in Table 3.4. Both groups reported high levels of job-satisfaction. Moreover, once again both groups display very similar scores with the mode being exactly the same. The coaching group displayed a slightly higher mean and the control group displayed a slightly higher median.
Table 3.4: Summary of participants' job-satisfaction scores (T1)

<table>
<thead>
<tr>
<th>Mode</th>
<th>Median</th>
<th>Mean</th>
<th>Minimum</th>
<th>Maximum</th>
<th>Stan. Dev</th>
</tr>
</thead>
<tbody>
<tr>
<td>Coaching group</td>
<td>5</td>
<td>4.50</td>
<td>4.44</td>
<td>3</td>
<td>6</td>
</tr>
<tr>
<td>N = 16</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Control group</td>
<td>5</td>
<td>5</td>
<td>4.33</td>
<td>2</td>
<td>6</td>
</tr>
<tr>
<td>N = 15</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>5</td>
<td>5</td>
<td>4.39</td>
<td>2</td>
<td>6</td>
</tr>
<tr>
<td>N = 31</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Nonparametric tests
As this single item produces ordinal data nonparametric tests were used. A Mann-Whitney test was used to investigate if there was a significant difference between the two groups on the job-satisfaction scores, no significant difference was found, between the coaching and control group on job-satisfaction scores \( (U = 119.500, N_1 = 16, N_2 = 15, p = 0.984, \text{two-tailed}). \)

Summary
Strain
- The preliminary results found that there were no significant differences between the coaching group and control group at baseline on levels of depression, anxiety and stress, as measured by DASS-21

Stressors
- There were no significant differences between the two groups on six of the stressor scales from the Indicator Tool
- The only significant difference was found on the support-colleague scale where the control group scored higher, indicating that they were lacking perceived support from colleagues to a greater extent than the coaching group did
**Global job-satisfaction**

- There were no significant differences between the coaching group and control group at baseline on levels of global job-satisfaction.

**Conclusion**

- The lack of differences between the coaching group and control group were important as it has been suggested that it is possible to make claims about treatment effectiveness in non-equivalent control group designs if the groups' base-line scores are similar (Schaughnessy, Zechmeister & Zechmeister, 2000).

---

### 3.4 Post-coaching (T2)

**Strain (DASS-21)**

*Descriptive statistics*

The summaries of the participants DASS-21 scores T2 are presented in Table 3.5. A comparison over time in the coaching group shows that the means for depression, anxiety and stress were lower T2 (Table 3.5) compared to T1 (Table 3.2). A similar comparison between the means in the control group shows that the depression and stress scores are lower post coaching compared to T1, but the anxiety score is slightly higher T2. Comparing the two groups T2 the coaching group displays lower levels of anxiety and stress compared to the control group. However, the control group displays lower levels of depression.
Table 3.5: Summary of participants’ DASS scores (T2)

<table>
<thead>
<tr>
<th></th>
<th>Depression</th>
<th></th>
<th>Anxiety</th>
<th></th>
<th>Stress</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Max = 42</td>
<td>Mean</td>
<td>S.D.</td>
<td>Max = 42</td>
<td>Mean</td>
</tr>
<tr>
<td>Coaching group</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>N = 16</td>
<td></td>
<td>7.50</td>
<td>8.18</td>
<td>2.63</td>
<td>3.63</td>
</tr>
<tr>
<td>Control group</td>
<td></td>
<td>6.80</td>
<td>5.39</td>
<td>4.80</td>
<td>5.44</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>7.16</td>
<td>6.87</td>
<td>3.68</td>
<td>4.64</td>
</tr>
</tbody>
</table>

The change in mean scores between T1 and T2 coaching can be highlighted by the use of change scores. The change score, for each DASS-21 scale, was calculated by subtracting the mean T1 score from the mean T2 score (T2 – T1 = change score). A summary of the change scores for each group and the total sample can be viewed in Table 3.6.

Table 3.6: Summary of the participants’ change scores in DASS

<table>
<thead>
<tr>
<th></th>
<th>Depression</th>
<th></th>
<th>Anxiety</th>
<th></th>
<th>Stress</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Coaching group</td>
<td></td>
<td>- 3.63</td>
<td>- 1.75</td>
<td>- 2.75</td>
<td></td>
</tr>
<tr>
<td>N = 16</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Control group</td>
<td></td>
<td>- 5.20</td>
<td>+ 0.13</td>
<td>- 0.94</td>
<td></td>
</tr>
<tr>
<td>N = 15</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total sample</td>
<td></td>
<td>- 4.39</td>
<td>- 0.84</td>
<td>- 1.87</td>
<td></td>
</tr>
<tr>
<td>N = 31</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Graphs**

The hypothesis predicted that the coaching group would experience lower levels of strain (depression, anxiety and stress) after coaching compared to the control group, thus that there would be a significant interaction between time and group. **Graphs.**
representing both groups’ levels (DASS-21 mean scores) of depression, anxiety, and stress, pre and post coaching, have been included as they effectively highlight the changes in both groups. The graph representing the changes in levels of depression (Figure 3.1) shows that the depression scores have decreased more in the control group compared to the coaching group. Thus, this graph does not show support for the hypothesis. The graphs representing the change in anxiety and stress levels (Figure 3.2 and 3.3) highlight that the anxiety and stress levels have decreased more in the coaching group than in the control group. These graphs show some support for the hypothesis as an interaction can be detected.

Figure 3.1
Figure 3.2

![Graph showing anxiety scores over time]

- Anxiety Scores
- Time

Legend:
- Blue line
- Green line
The hypothesis predicted that the coaching group would be experiencing lower levels of strain (depression, anxiety and stress) after coaching compared to the control group, thus that there would be a significant interaction between time and group. This assumption was tested with 2*2 mixed ANOVAS. The between-subject factor was group (coaching and control) and the within-subject factor was time (pre and post coaching). Overall, three separate ANOVAS were performed, one for depression, one for anxiety, and one for stress, using a Bonferroni adjusted alpha level of 0.017. The ANOVAS did not find any significant interaction between time and group on the dependent variables; depression ($F_{(1,29)} = 0.267, p = 0.609$); anxiety ($F_{(1,29)} = 1.357, p = 0.254$); or stress ($F_{(1,29)} = 0.306, p = 0.584$). Therefore the experimental hypothesis was rejected and the null hypothesis accepted.

Although not directly relevant to the experimental hypothesis the main effects for group and time, reported in the ANOVA, are presented in order to provide an
overview of the data. The ANOVAs did not find a significant effect of group (coaching and control) on depression ($F_{(1,29)} = 0.001$, $p = 0.970$), anxiety ($F_{(1,29)} = 0.807$, $p = 0.376$), or stress ($F_{(1,29)} = 0.538$, $p = 0.469$). In addition, the ANOVA found a significant effect of time on depression ($F_{(1,29)} = 8.374$, $p = 0.007$), thus depression levels decreased post coaching both in the coaching and control group. However, no effect of time was found on anxiety ($F_{(1,29)} = 1.00$, $p = 0.326$) or stress ($F_{(1,29)} = 1.258$, $p = 0.271$).

**Clinical levels of strain**

Each of the three DASS scales has a cut-off score that indicate clinical levels of depression, anxiety and stress. The cut-off scores that indicate that the severity is above normal levels are, 10 for depression, 8 for anxiety and 15 for stress (Lovibond & Lovibond, 1995). Table 3.7 presents the percentage of participants, in the coaching group and control group that scored clinical levels of psychological strain, before and after coaching. The table highlights that percentages of clinical levels of depression, anxiety, and stress were reduced after coaching both in the coaching and control group.

Table 3.7: Percentage of clinical levels of perceived psychological strain identified by DASS-21

<table>
<thead>
<tr>
<th>Group</th>
<th>% above normal depression levels</th>
<th>N</th>
<th>% above normal anxiety levels</th>
<th>N</th>
<th>% above normal stress levels</th>
<th>N</th>
</tr>
</thead>
<tbody>
<tr>
<td>Coaching group pre-coaching</td>
<td>56%</td>
<td>9</td>
<td>31%</td>
<td>5</td>
<td>31%</td>
<td>5</td>
</tr>
<tr>
<td>Coaching group post-coaching</td>
<td>44%</td>
<td>7</td>
<td>19%</td>
<td>3</td>
<td>19%</td>
<td>3</td>
</tr>
<tr>
<td>Control group pre-coaching</td>
<td>53%</td>
<td>8</td>
<td>40%</td>
<td>6</td>
<td>47%</td>
<td>7</td>
</tr>
<tr>
<td>Control group post-coaching</td>
<td>33%</td>
<td>5</td>
<td>27%</td>
<td>4</td>
<td>27%</td>
<td>4</td>
</tr>
</tbody>
</table>
Stressors (the Indicator Tool)

Descriptive statistics

A summary of the participants' scores on the stressor scales can be seen in Table 3.8. The coaching group shows a slightly reduced mean score (compared to T1) for demands, control, support-management, and role. The biggest change is on the perceived stressors support-management (a change of 0.23) followed by perceived control (a change of 0.20). Moreover, the coaching group shows a slightly increased mean score for the stressor support-colleague (a change of 0.05). The stressors of relationship and change have the same mean score after coaching as they did before coaching in the coaching group. The control group scores were reduced on all scales except for relationships. This was unchanged. The biggest change in the control group was on for the stressor change (a change of 0.40) and the second biggest change was in support-management (a change of 0.28).

Table 3.8: Summary of participants' mean stressor scores (T2)

<table>
<thead>
<tr>
<th></th>
<th>Demands</th>
<th>Control</th>
<th>Support-Mgm.</th>
<th>Support-colleague</th>
<th>Role</th>
<th>Relationships</th>
<th>Change</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Coaching</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Group</td>
<td>2.41</td>
<td>2.90</td>
<td>2.03</td>
<td>1.88</td>
<td>1.85</td>
<td>1.70</td>
<td>2.79</td>
</tr>
<tr>
<td><strong>Control</strong></td>
<td>2.68</td>
<td>2.21</td>
<td>2.44</td>
<td>2.38</td>
<td>1.91</td>
<td>1.87</td>
<td>2.82</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>2.54</td>
<td>2.56</td>
<td>2.23</td>
<td>2.12</td>
<td>1.88</td>
<td>1.78</td>
<td>2.81</td>
</tr>
</tbody>
</table>

Graphs

Figures 3.4, 3.5, 3.6, 3.7, 3.8, 3.9, and 3.10 show the changes in the two group's stressors scores. As is illustrated by the figures and Table 3.8 the coaching group displays lower scores post-coaching on all scales except for control where the control group displays a lower score. The biggest difference between the groups was on control. Generally, the control group mean score has decreased more than the coaching group mean score.
Figure: 3.4: Demands
Figure 3.5: Control

![Graph showing control scores over time with two lines representing coaching: one for yes and one for no. The x-axis represents time, with 1 and 2, and the y-axis represents control scores, with values ranging from 2.20 to 3.20.]
Figure 3.6: Support - management

Support - Management

Support-management Score

Time

coaching
yes
no
Figure 3.7: Support-colleagues

![Support - Colleagues graph]

Figure 3.8: Role

![Role graph]
Figure 3.9: Relationships

![Relationships](image-url)
Parametric tests
In order to investigate the differences between the groups, the difference over time, and the interaction between time and group 2*2 mixed ANOVAS were performed. One ANOVA was preformed for each stressor and a Bonferroni adjusted alpha level of 0.007 was used. Once again it is recognised that it is not ideal to perform such a large number of tests. The ANOVAs were not found to be significant, thus there were no significant effects of time or group on the stressors. In addition, there were no significant interactions between time and coaching indicating that the stressor scores did not significantly decrease more in one of the groups. A table of the results from the ANOVAs can be seen in Appendix N.

Global job-satisfaction
Descriptive statistics
Summarises of the participants’ scores on job-satisfaction post-coaching can be viewed in Table 3.9. A comparison of the coaching group’s summary scores obtained
T1 (Table 3.4) with the summary of scores obtained T2 shows that the median and mode values are exactly the same. In the coaching group the job-satisfaction mean had dropped from 4.44 T1 to 4.25 T2. In the control group the median and mode mean was the same for T1 and T2 but the mean had increased from T1 4.33 to 4.87 T2. In view of these scores it was concluded that job-satisfaction had not been improved by coaching, the experimental hypothesis was rejected and the NULL hypothesis was accepted.

It was also of interest to investigate whether there were any differences between the two groups in levels of job-satisfaction T2. As can be seen in Table 3.9 both the groups display the same mode value and the coaching group displays lower median and mean values. It was therefore concluded that the coaching group did not report higher levels of job-satisfaction compared to the coaching group. Consequently, the experimental hypothesis was rejected and the null hypothesis was accepted.

Table 3.9: Summary of participants' job-satisfaction scores (T2)

<table>
<thead>
<tr>
<th></th>
<th>Mode</th>
<th>Median</th>
<th>Mean</th>
<th>Minimum</th>
<th>Maximum</th>
<th>Stan. Dev</th>
</tr>
</thead>
<tbody>
<tr>
<td>Coaching</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>group</td>
<td>5</td>
<td>4.50</td>
<td>4.25</td>
<td>1</td>
<td>7</td>
<td>1.57</td>
</tr>
<tr>
<td>N = 16</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Control</td>
<td>5</td>
<td>5</td>
<td>4.87</td>
<td>2</td>
<td>7</td>
<td>1.60</td>
</tr>
<tr>
<td>group</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>N = 15</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>5</td>
<td>5</td>
<td>4.55</td>
<td>1</td>
<td>7</td>
<td>1.59</td>
</tr>
<tr>
<td>N = 31</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

3.5 Coaching data
This section will present data relating to the number of coaching sessions and coaching effectiveness. Thus, the data presented is only from the coaching group (N = 16). Unfortunately, the question relating to the time period over which the coaching
sessions were spread was discounted in the analyses as most participants did not respond to it. The explanation for this is unclear.

**Number of sessions**

The questionnaire asked the participants to report the number of coaching sessions they had attended. The mean number of sessions was 3.80 (SD 3.12), with a minimum of 1 session and maximum of 10 sessions.

**Coaching effectiveness**

The questionnaire included one Likert-scale question relating to coaching effectiveness, asking overall how effective did you find the coaching? A score of 1 represented not at all effective, a score of 4 represented neutral stance, and a score of 7 represented very effective. Participants reported very high levels of coaching effectiveness, with a mean of 6.43 (SD 0.51). Eight individuals indicated an effectiveness score of 6, and six individuals indicated a score of 7 (data missing from two participants).

**3.6 Summary**

**Strain**

- Levels of depression and stress were reduced in both groups, but level of anxiety was only reduced in the coaching group
- Clinical levels of depression, anxiety and stress were reduced in both groups
- The parametric tests showed that there was no significant interaction between time and coaching on depression, anxiety and stress. Thus, the coaching group was not significantly less stressed T2 compared to the control group. Thus the null hypothesis was supported.

**Stressors**

- The coaching group’s mean scores reduced between T1 and T2 for the stressors demands, control, support-management, and role. This indicated that the perceived level of unfavourable working conditions had reduced in these areas
- However, the coaching group’s mean increased for the stressors support-colleagues indicating that perceived support from colleagues had reduced
- In the coaching group the mean scores on relationship and change stayed the same at T1 and T2
- The control group mean scores were reduced for all stressors except for the stressor relationships that had the same score at T1 and T2
- At T2 the coaching group’s mean stressor score was lower than for the control group for all stressors except control
- No significant main effects were found for the impact of time or group on the level of experienced stressors and there was no significant interaction between time and group on level of stressors experienced

**Global job-satisfaction**
- It was found that reported job-satisfaction did not increase after coaching in the coaching group
- The control group reported a slight increase in levels of job-satisfaction between T1 and T2
- The coaching group did not report higher levels of job-satisfaction post-coaching compared to the coaching group

**Coaching data**
- Exploration of the coaching data found that the mean for number of coaching sessions attended was 3.8
- Coaching effectiveness was found to be high with a mean of 6.43 and with the participants reporting either a 6 or 7 on the 7-point Likert-scale.

**Power**
The current study used a mixed design and only used 31 participants. It is clear that it would have been preferable to include a larger number of participants as this would have increased the power of the statistical tests. Indeed, the researcher intended to include a larger sample size. At the beginning of the study the participating organisation estimated that fifty-sixty participants would participate. However, due to a number of factors (less people attending coaching, questionnaire fatigue etc.) this number was not achieved.
Despite the fact that the study only involved 31 participants it could still be useful to consider the power of the tests used. The main hypothesis was tested by the means of 3 mixed 2*2 ANOVAs. The power calculations were performed in the free programme GPOWER (Buchner, Erdfelder & Faul, 1996). As GPOWER does not include a way of calculating power for mixed ANOVA designs in their programme the power needed to detect differences between the pre and post coaching and between the groups were calculated. It is recognised that this will not give exact answers.

Values entered into GPower
- Alpha level: 0.05 (standard)
- Power: 0.80, this being the minimum level of power recommended (Clark-Carter & Marks, 2004)
- Effect size: large, a large effect size was found in one of the few studies investigating the effectiveness of coaching and using the DASS-21 (Grant, 2003).

A Priori Power Analysis for t-test for repeated measures (called t-test forcorrelations)
- The above values were entered in GPOWER and the program calculated that 21 participants were needed.
- When using the above values but changing the effect size to medium GPOWER calculated a sample size of 64.

A Priori Power Analysis for t-test for independent samples
- The above values were entered in GPOWER and the program calculated that 42 participants were needed.
- When using the above values but changing the effect size to medium GPOWER calculated a sample size of 102

Summary
As the above calculations indicate neither of the tests had a sufficient number of participants in order to have a power of 0.80. Thus, the lack of power is an important limitation of the study.
Part II

3.7 Introduction
The main aim with Part II of the study was to investigate whether levels of strain could be predicted by participation in coaching. It also aimed to investigate whether the seven perceived Indicator Tool stressors were significant predictors of strain. The main method of analysis was multiple linear regression, as this statistical technique offers a way of predicting a score on the criterion variable on the basis of the scores on a number of predictor variables (Brace et al., 2003). The multiple regression also allowed the researcher to investigate whether stress levels were influenced by potentially confounding variables that were outside the researcher’s control, these variables were age and gender. The criterion variable was strain and three separate multiple regression analyses were carried out with each of the three criterion variables, depression, anxiety and stress. Overall, there were ten predictor variables; participation in coaching, the seven HSE stressors, age, and gender. The study also aimed to investigate level of job-satisfaction, the number of coaching sessions attended by the participants, and the level of coaching effectiveness reported by the participants.

3.8 Demographic data
Overall 103 participants completed Part II of the study. Table 3.10 contains a summary of the demographic details of the participants. More men than females participated and a bigger proportion of the sample were from the Scandinavian organisation compared to the UK organisation.
Table 3.10: Summary statistics of the demographic details of the participants in Part II of the study

<table>
<thead>
<tr>
<th></th>
<th>Coaching group N = 62</th>
<th>Control group N = 41</th>
<th>Total N = 103</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Organisation</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>UK</td>
<td>21</td>
<td>15</td>
<td>36</td>
</tr>
<tr>
<td>Scandinavian</td>
<td>41</td>
<td>26</td>
<td>67</td>
</tr>
<tr>
<td><strong>Gender</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Men</td>
<td>32</td>
<td>25</td>
<td>57</td>
</tr>
<tr>
<td>Women</td>
<td>30</td>
<td>16</td>
<td>46</td>
</tr>
<tr>
<td><strong>Age in years</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mean (S.D)</td>
<td>33 (6.45)</td>
<td>36 (6.22)</td>
<td>34 (6.46)</td>
</tr>
<tr>
<td>Range</td>
<td>22-52</td>
<td>25-52</td>
<td>22-52</td>
</tr>
<tr>
<td><strong>Job title</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Employee</td>
<td>19</td>
<td>11</td>
<td>30</td>
</tr>
<tr>
<td>Management</td>
<td>43</td>
<td>30</td>
<td>73</td>
</tr>
<tr>
<td><strong>Mode of work</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Full-time</td>
<td>62</td>
<td>41</td>
<td>103</td>
</tr>
<tr>
<td>Part-time</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td><strong>Stress-mgm. activities</strong></td>
<td></td>
<td>(missing N = 2)</td>
<td>(missing N = 2)</td>
</tr>
<tr>
<td>Participating</td>
<td>26</td>
<td>10</td>
<td>36</td>
</tr>
<tr>
<td>Not participating</td>
<td>36</td>
<td>29</td>
<td>65</td>
</tr>
</tbody>
</table>

The UK and Scandinavian organisation

It was relevant to investigate whether the participants from the UK and Scandinavian organisations were similar in order to treat them as one sample. A number of t-tests were performed in order to investigate if there was a difference between the two organisations on the three dependent variables. Independent groups t-test, with a Bonferroni adjusted alpha of 0.017, did not find a significant difference between the two organisations on depression (t = 1.400, df = 95, p = 0.165, two-tailed), anxiety (t = 0.325, df = 92, p = 0.746, two-tailed) or stress (t = 1.083, df = 92, p = 0.281, two-tailed). One apparent difference between the two organisations was the number of participants that were managers. All participants from the Scandinavian organisation were managers whereas there were only six managers from the UK organisation. Independent groups t-test, with a Bonferroni adjusted alpha of 0.017, did not find a significant difference between managers and non-managers on depression (t = 1.596, df = 95, p = 0.114, two-tailed), anxiety (t = 0.945, df = 92, p = 0.347, two-tailed) or stress (t = 1.146, df = 92, p = 0.255, two-tailed). Organisation was included as a
predictor variable in a few of the initial multiple regression analyses (this variable was not included in the final analysis) and organisation was not a significant predictor of strain. The two organisations were combined on all subsequent analyses.

**Outliers**
Box plot were generated in SPSS for each dependent variable to detect univariate outliers. Two outliers were found within the variable depression, three outliers were found within the variable of anxiety, and two outliers were found within the variable of stress. Once all inferential statistics had been conducted on the data the impact of the outliers were reduced by assigning each outlier a less extreme value, this value was one unit smaller than the last case that fitted the distribution (Tabachnick & Fidell, 1996).

**3.9 Descriptive statistics**
**Strain (DASS-21)**
The summaries of the participants DASS-scores are presented in Table 3.11. Overall, the mean values are very similar for the two groups. The means in the coaching group are lower than the control group on the anxiety and stress scales. However, the mean in the coaching group is slightly higher than in the control group on the depression scale.

<table>
<thead>
<tr>
<th></th>
<th>Depression</th>
<th>Anxiety</th>
<th>Stress</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Max = 42</td>
<td>Max = 42</td>
<td>Max = 42</td>
</tr>
<tr>
<td></td>
<td>Mean</td>
<td>Mean</td>
<td>Mean</td>
</tr>
<tr>
<td>Coaching group</td>
<td>6.14</td>
<td>3.71</td>
<td>11.30</td>
</tr>
<tr>
<td>N = 62</td>
<td>6.83</td>
<td>4.63</td>
<td>8.10</td>
</tr>
<tr>
<td>(missing N = 6)</td>
<td></td>
<td>(missing N = 6)</td>
<td>(missing N = 8)</td>
</tr>
<tr>
<td>Control group</td>
<td>6.00</td>
<td>4.42</td>
<td>11.85</td>
</tr>
<tr>
<td>N = 41</td>
<td>6.83</td>
<td>5.98</td>
<td>8.12</td>
</tr>
<tr>
<td>(missing N = 6)</td>
<td></td>
<td>(missing N = 3)</td>
<td>(missing N = 1)</td>
</tr>
<tr>
<td>Total</td>
<td>6.08</td>
<td>4.00</td>
<td>11.53</td>
</tr>
<tr>
<td>N = 103</td>
<td>6.79</td>
<td>5.20</td>
<td>8.07</td>
</tr>
<tr>
<td>(missing N = 6)</td>
<td></td>
<td>(missing N = 9)</td>
<td>(missing N = 9)</td>
</tr>
</tbody>
</table>
Clinical levels of strain

Each DASS scale has got a cut-off score that indicates clinical levels of depression, anxiety and stress. The cut-off scores, indicating clinical levels, are 10 for depression, 8 for anxiety and 15 for stress (Lovibond & Lovibond, 1995). Table 3.12 presents the percentage of participants, in the coaching group and control group that scored clinical levels of psychological strain. Although, the coaching group displays a slightly lower percentage of individuals experiencing clinical levels of depression and stress both groups these differences are not large. In addition, the groups display exactly the same percentage of clinical levels of anxiety.

Table 3.12: Percentage of clinical levels of psychological strain identified by DASS-21

<table>
<thead>
<tr>
<th>Group</th>
<th>% above normal depress. levels</th>
<th>N</th>
<th>% above normal anxiety levels</th>
<th>N</th>
<th>% above normal stress levels</th>
<th>N</th>
</tr>
</thead>
<tbody>
<tr>
<td>Coaching group</td>
<td>25% (6 missing)</td>
<td>16</td>
<td>17% (6 missing)</td>
<td>11</td>
<td>25% (8 missing)</td>
<td>16</td>
</tr>
<tr>
<td>N = 63</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Control group</td>
<td>27%</td>
<td>11</td>
<td>17% (3 missing)</td>
<td>7</td>
<td>27% (1 missing)</td>
<td>11</td>
</tr>
<tr>
<td>N = 41</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total sample</td>
<td>26% (6 missing)</td>
<td>27</td>
<td>17% (9 missing)</td>
<td>18</td>
<td>26% (9 missing)</td>
<td>27</td>
</tr>
<tr>
<td>N = 103</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Stressors (the Indicator Tool)

The mean for each sub-scale was calculated, with the lowest score being 1 and the highest score being 5. A higher score indicates more perceived unfavourable working conditions. A summary of the participant's scores on the scales can be seen in Table 3.13. As can be seen by the table the two groups display similar scores on most of the stressor scales, with the biggest difference being on the control scale (difference of 0.32) where the control group displays a lower score. The coaching group displays a slightly lower score than the control group on: demands; support-management; support-colleague; role: relationships; and change. See Appendix O for bar graphs.
displaying the coaching and control groups’ mean scores plotted next to each other for each of the stressors.

Table 3.13: Summary of participants’ mean stressor score

<table>
<thead>
<tr>
<th></th>
<th>Demands</th>
<th>Control</th>
<th>Support-Mgm.</th>
<th>Support-colleague</th>
<th>Role</th>
<th>Relationships</th>
<th>Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>Coaching Group</td>
<td>2.87</td>
<td>2.41</td>
<td>2.32</td>
<td>2.07</td>
<td>1.76</td>
<td>1.96</td>
<td>2.59</td>
</tr>
<tr>
<td>Control Group</td>
<td>2.97</td>
<td>2.09</td>
<td>2.47</td>
<td>2.30</td>
<td>1.81</td>
<td>2.02</td>
<td>2.63</td>
</tr>
<tr>
<td>Total</td>
<td>2.91</td>
<td>2.28</td>
<td>2.38</td>
<td>2.16</td>
<td>1.78</td>
<td>1.98</td>
<td>2.61</td>
</tr>
</tbody>
</table>

3.10 Multiple linear regression

Three criterion variables were included in the current study, depression, anxiety, and stress and three separate multiple linear regression analyses (one for each criterion variable) were conducted. The stepwise method was used as it was useful to control the variables of age and gender. In the stepwise method each variable is assessed and variables that contribute to the model are retained and all other variables are removed (Brace, et al., 2003). Deciding the number of predictor variables that should be included is an issue that needs to be considered in multiple regression as only predictors with good theoretical grounding should be included. Moreover, the number of participants needs to greatly exceed the number of predictor variables and it has been suggested that an acceptable ratio is 10:1 (Brace et al. 2003). After several initial analyses and much consideration it was decided that ten predictor variables should be included, participation in coaching, the seven HSE stressors, age, and gender. All these variables are grounded in theory (see ‘Introduction’).

Multiple regression 1: Depression

The criterion variable was depression as measured by the depression scale in DASS-21. The predictor variables were coaching (1 = participating, 2 = not participating), the seven HSE stressors (demands, control, support-management, support-colleague, role, relationship, change), age, and gender (1 = female and 2 = male).
Using the stepwise method a significant model emerged ($F(2,84) = 13.769, p < 0.0005$). The strength of the model was moderate, adjusted R square = 0.247. Participation in coaching was not found to be a significant predictor of depression. Therefore, the experimental hypothesis was accepted and the null hypothesis was accepted.

The variables control and role were found to be significant predictors of depression. The direction of the relationships indicated that participants experiencing perceived lack of control and high perceived role ambiguity were at greater risk of depression. The predictor variables are shown in 3.14. In addition, gender, age, coaching, demands, support-management, support-colleague, relationships, and change were not significant predictors in this model.

Table 3.14: Linear Regression - Predictors of depression

<table>
<thead>
<tr>
<th>Predictor Variable</th>
<th>Beta</th>
<th>Sign.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gender</td>
<td>0.071</td>
<td>0.466</td>
</tr>
<tr>
<td>Age</td>
<td>-0.042</td>
<td>0.671</td>
</tr>
<tr>
<td>Coaching</td>
<td>0.024</td>
<td>0.813</td>
</tr>
<tr>
<td>Demands</td>
<td>0.087</td>
<td>0.359</td>
</tr>
<tr>
<td>Control</td>
<td>0.306</td>
<td>0.002*</td>
</tr>
<tr>
<td>Support-management</td>
<td>0.060</td>
<td>0.551</td>
</tr>
<tr>
<td>Support-colleague</td>
<td>0.166</td>
<td>0.083</td>
</tr>
<tr>
<td>Role</td>
<td>0.355</td>
<td>0.000*</td>
</tr>
<tr>
<td>Relationship</td>
<td>0.034</td>
<td>0.727</td>
</tr>
<tr>
<td>Change</td>
<td>-0.032</td>
<td>0.766</td>
</tr>
</tbody>
</table>

* significant at p<0.05
Multiple regression 2: Anxiety

The criterion variable was anxiety as measured by the anxiety scale in DASS-21. The predictor variables were the same as included in depression (see previous paragraph).

Using the stepwise method a significant model emerged ($F_{(1,84)} = 8.903, p = 0.004$). Moreover, the strength of the model was weak, adjusted $R^2 = 0.085$. Participation in coaching was not found to be a significant predictor of anxiety. Therefore, the experimental hypothesis was accepted and the null hypothesis was accepted.

The variable of support-management was found to be a significant predictor of anxiety. The direction of the relationship indicated that participants experiencing a perceived lack of support from management were at greater risk to be suffering from anxiety. The predictor variables are shown in 3.15. In addition, gender, age, coaching, demands, control, support-colleague, role, relationships, and change were not significant predictors in this model.

Table 3.15: Linear Regression - Predictors of anxiety

<table>
<thead>
<tr>
<th>Predictor Variable</th>
<th>Beta</th>
<th>Sign.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gender</td>
<td>0.117</td>
<td>0.273</td>
</tr>
<tr>
<td>Age</td>
<td>-0.012</td>
<td>0.909</td>
</tr>
<tr>
<td>Coaching</td>
<td>0.053</td>
<td>0.615</td>
</tr>
<tr>
<td>Demands</td>
<td>0.142</td>
<td>0.179</td>
</tr>
<tr>
<td>Control</td>
<td>0.092</td>
<td>0.387</td>
</tr>
<tr>
<td>Support-management</td>
<td>0.310</td>
<td>0.004*</td>
</tr>
<tr>
<td>Support-colleague</td>
<td>0.182</td>
<td>0.119</td>
</tr>
<tr>
<td>Role</td>
<td>0.077</td>
<td>0.482</td>
</tr>
<tr>
<td>Relationship</td>
<td>0.112</td>
<td>0.293</td>
</tr>
<tr>
<td>Change</td>
<td>-0.026</td>
<td>0.813</td>
</tr>
</tbody>
</table>

* significant at $p < 0.05$
Multiple regression 3: Stress
The criterion variable was stress as measured by the stress scale in DASS-21. The predictor variables were the same as included in depression (see previous paragraph).

Using the stepwise method a significant model emerged ($F(3,82) = 9.125$, $p < 0.0005$). The strength of the model was moderate, adjusted $R$ square $= 0.223$. Participation in coaching was not found to be a significant predictor of stress. Therefore, the experimental hypothesis was accepted and the null hypothesis was accepted.

Demands, support-colleague and role were found to be significant predictors of stress. The direction of the relationships indicating that participants experiencing high perceived levels of demands and role ambiguity and low perceived levels of support from colleagues were at greater risk of stress. The predictor variables are shown in 3.16. In addition, gender, age, coaching, control, support-management, relationships, and change were not significant predictors in this model.

Table 3.16: Linear Regression - Predictors of stress

<table>
<thead>
<tr>
<th>Predictor Variable</th>
<th>Beta</th>
<th>Sign.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gender</td>
<td>-0.012</td>
<td>0.909</td>
</tr>
<tr>
<td>Age</td>
<td>-0.143</td>
<td>0.142</td>
</tr>
<tr>
<td>Coaching</td>
<td>-0.004</td>
<td>0.967</td>
</tr>
<tr>
<td>Demands</td>
<td>0.286</td>
<td>0.005*</td>
</tr>
<tr>
<td>Control</td>
<td>0.094</td>
<td>0.334</td>
</tr>
<tr>
<td>Support-management</td>
<td>-0.004</td>
<td>0.975</td>
</tr>
<tr>
<td>Support-colleague</td>
<td>0.228</td>
<td>0.024*</td>
</tr>
<tr>
<td>Role</td>
<td>0.275</td>
<td>0.006*</td>
</tr>
<tr>
<td>Relationship</td>
<td>0.030</td>
<td>0.781</td>
</tr>
<tr>
<td>Change</td>
<td>-0.114</td>
<td>0.262</td>
</tr>
</tbody>
</table>

* significant at $p<0.05$
Multicollinearity.
The tolerance statistics, produced by SPSS, were inspected for the three multiple regression analyses. The tolerance values measure the correlation between the predictor variables and a value close to zero indicates a strong relationship with other predictor variables. Brace et al (2003) suggest that a tolerance value less than 0.01 is unacceptable. Neither of the regression analyses produced values close to zero indicating that the regression was free of the problem of multicollinearity.

3.11 Global job-satisfaction
Global job-satisfaction was measured with one Likert scale item ranging from a score of 1 (not at all satisfied) – to 7 (completely satisfied). Table 3.17 shows the summary statistics for the scores on job-satisfaction. Levels of job-satisfaction are very similar between the coaching group and the control group, with exactly the same mode and median.

Table 3.17: Summary of participants’ job-satisfaction scores

<table>
<thead>
<tr>
<th></th>
<th>Mode</th>
<th>Median</th>
<th>Mean</th>
<th>Minimum</th>
<th>Maximum</th>
<th>Stan. Dev</th>
</tr>
</thead>
<tbody>
<tr>
<td>Coaching group</td>
<td>6</td>
<td>6</td>
<td>5.26</td>
<td>1</td>
<td>7</td>
<td>1.25</td>
</tr>
<tr>
<td>N = 62</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Control group</td>
<td>6</td>
<td>6</td>
<td>5.46</td>
<td>2</td>
<td>7</td>
<td>1.14</td>
</tr>
<tr>
<td>N = 41</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>6</td>
<td>6</td>
<td>5.34</td>
<td>1</td>
<td>7</td>
<td>1.21</td>
</tr>
<tr>
<td>N = 103</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

3.12 Coaching data
This section will present data relating to number of coaching sessions and coaching effectiveness. Thus, the data presented is only from the coaching group (N = 62). As stated in ‘Results’ in Part 1, the item relating to the time period of the coaching sessions was not used in the analyses as most participants did not respond to this item.
Number of sessions
The mean number of coaching sessions attended by the participants was 3.52 (SD 2.47). The lowest number of sessions was 1 and the highest 10 and a high proportion of the participants (78%) attended between one and four sessions.

Coaching effectiveness
The item relating to coaching effectiveness, asked the participants ‘overall how effective did you find the coaching? A score of 1 represented not at all effective, a score of 4 represented neutral stance, and a score of 7 represented very effective. The mode and median were 6, and the mean was 5.64 (SD. 1.18). Figure 3.11 reports the frequencies of each score on the Likert scale. Participants reported high levels of coaching effectiveness, with twenty individuals (32%) indicating an effectiveness score of 5, twenty-two individuals reporting a score of 6 (36%), and fourteen individuals (23%) indicating a score of 7.

Figure 3.11: Coaching effectiveness
3.13 Summary

Strain
- The coaching group reported lower levels of anxiety and stress but higher levels of depression, compared to the control group.
- The coaching group displayed a slightly lower percentage of individuals experiencing clinical levels of depression and stress compared to the control group. However, both groups had the same percentage of individuals experiencing clinical levels of anxiety.

Stressors
- The coaching group had slightly lower scores (a low score indicates more perceived favourable working conditions) than the control group on all stressor scales except for the control scale where the control group displayed a lower score.

Multiple regression
- None of the three multiple regression analyses found that coaching was a significant predictor of strain.
- Control and role were significant predictors of depression, indicating that participants experiencing a perceived lack of control and high role ambiguity were at greater risk of depression.
- Support-management was a significant predictor of anxiety, indicating that participants experiencing a perceived lack of support from management were at greater risk of anxiety.
- Demands, role and support-colleague were significant predictors of stress, indicating that participants experiencing perceived high demands and role ambiguity and a perceived lack of support from colleagues were at greater risk of stress.

Global job-satisfaction
- Levels of job-satisfaction were high for the coaching and the control group.
- Both groups displayed very similar levels of job-satisfaction with the coaching group displaying a slightly lower mean.
Coaching data

- The mean for number of coaching sessions attended was 3.5
- Coaching effectiveness was high with a mean of 5.64 on a 7-point Likert-scale
Chapter 4: Analysis Part III

4.1 Overview of themes

This section will outline the main themes that emerged from the analysis of the interviews. Four principal themes were found, these being: the coaching relationship; confidence; management of stress; and coaching = investment in staff. In addition, the main themes consisted of a number of sub-themes. Each theme will be outlined and examples of verbatim will be presented in order to illustrate and support each theme.

4.2 The coaching relationship

The theme ‘The coaching relationship’ consisted of three sub-themes: trust; transparency; and valuable coaching relationship. Figure 4.1 illustrates how trust and transparency leads to a positive relationship between the coachee and the coach.

Figure 4.1: The Coaching Relationship
Trust

The development of a good relationship between the coach and the coachee was clearly very important (as indicated under 'Valuable coaching relationship') and trust was a very vital part of this relationship according to the participants:

*I think you both need to have that sort of trust.* (E: 470).

It would appear that the confidentiality of the coaching sessions played a vital role in helping to build and maintain the trust between the coach and the coachee. When trust and confidentiality were present it was possible for the coachee to ‘let their guard down’ and share sensitive information with the coach including aspects of themselves perceived as less than perfect:

*I think it is the person. It is complete trust because I know whatever would be said that is it, it is never repeated, even if you are being a little irrational. I feel confident to probably let your guard down in front XXX (name of coach), to know that you aren’t perfect at doing everything.* (F: 232-235)

According to some of the participants the coaches in their organisation had proved to the employees that they were trustworthy and this was viewed as the reason to why they had been successful:

*And I think that is why our guys (referring to the coaches) have been quite successful. It is the fact that they can be trusted, they are confidential.* (F: 311-312)

In some coaching relationships one of the parties may have more power and be more senior in the organisation. However, it was stated that it was indeed possible to get beyond the issue of power and build a good relationship if trust was developed:

*My own personal view is that if you are able to establish trust the issues whether one is the manager or not is not relevant.* (G: 197-98)

Transparency

The coaches in the two participating organisations appeared to have been transparent in their coaching practice and had explained the process and theory supporting the various coaching interventions. This transparency was viewed very positively by the participants as highlighted by the following quote:
And what he did though as well, which was really good, he explained this process. What idea was behind it what theory was behind it so I knew where I was in every stage of everything I was doing. (A: 280-282)

An important positive consequence of the coach being transparent was that the participants felt included in the coaching process:

I was told of every stage and what we were doing and what technique we were adapting to a given situation and I felt included. (A: 785-786)

Because the coach had been open and transparent with the coaching process some participants felt that there was little that could have been improved in the coaching sessions. Thus, some participants clearly viewed transparency as one of the most important aspects of the coaching:

But that again in my experience there is little I feel could have been improved. Because as I said he was very open and kept me well informed in every stage of the process. (A: 800-802)

Valuable coaching relationship

Trust and transparency were two factors that helped to create a good coaching relationship. Indeed, the relationship between the coach and the coachee appeared to be one of the most essential aspects of coaching. The importance of this relationship was highlighted by the participants:

And also, you know, we have got really quite close relationships and it is quite valued actually. (F: 677-678)

The relationship was the basis upon which the coaching was built and without a relationship the coaching would not be effective. The following quote describes how the relationship is the first thing that happens in coaching:

I think you need to get on with your coach, if you don’t get on with him you are not going to sort of achieve what you need to achieve. (E: 468-469) So the relationship is first because that is the first thing that is going to happen isn’t it, you are going to build your relationship. (E: 471-473)

Prior to starting coaching most participants appeared to experience an uncertainty regarding what to expect and for some there had been an initial scepticism. However,
the coaches' approach and manner had helped to make the participants feel comfortable in the coaching situation within a short space of time:

*I was a little bit apprehensive and not sure what to expect and what I found. I am not quite sure if it was a technique, but he kind of put me at easy straight away.* (A: 253-254)

A reason for some of the initial apprehension of coaching was based on uncertainty regarding how the coach would view the presenting problem. However, the coaches had not been patronising regarding the presenting problems but had instead been empathic with the participants' feelings:

*And at no stage did I ever feel patronised, and again I had a problem that was mammoth to me but to a lot of people it is quite insignificant 'you soft bugger why don't you go up and talk to people it is no big deal'. And I think it would be quite easy for somebody in a coaching situation to take that attitude of 'what is up with him he has got an insignificant problem'. But I did not get any of that he was really empathic with the way I felt.* (A: 790-794)

A positive consequence of feeling comfortable with the coach was that the participants were willing to continue with the coaching. This highlights the importance of developing a good relationship, from the beginning, for the development of coaching:

*I suppose it was from my first occasion I thought 'I feel really comfortable with what you are doing'. That is why ...that is a kind of customer isn't it, if you are happy with a service you go back to the same provider.* (A: 242-144)

In addition, the coaches played an important role in being supportive listeners. Indeed having the opportunity to be listened to was quite rare for some participants:

*I think the listening side of things is a massive part of it, because it is not very often that you sit down and actually tell someone exactly how you feel.* (D: 507-508)

Despite the fact that the coaching relationship was viewed as important the participants made clear that the relationship was not the only important aspect of the coaching. Techniques used in the coaching sessions were also essential in order for the coaching to be successful:

*It is the relationship but it also that typical ...what do you call it...from coaching you get something in your bag. A good piece of advice a good way to solve a problem, it gets my eyes to open in another way.* (G: 439-439)
However, neither, the techniques or the listening was sufficient in isolation. For most participants it was the combination of various factors within the coaching that contributed to successful coaching. Important factors included a good coaching relationship, learning skills, and working towards and reaching specific goals:

*On the one side yes they have helped me reach my goals promotion, different skills that they have taught me. But on the other side I do use them as a sounding board. (C: 423-424). So it has benefited me in both ways, they have increased my performance and they have also been someone that I can turn to and discuss issues with. (C: 426-428)*
4.3 Confidence

One of the major benefits of coaching was increased confidence. The participants highlighted benefits related to confidence despite the fact that this had not necessarily been the focus of the coaching. In addition, increased confidence was associated with benefits in several areas. The theme ‘Confidence’ consisted of three sub-themes: improved job performance; more assertive behaviour; and benefits outside work. Figure 4.2 illustrates how improved confidence leads to the various benefits highlighted by the sub-themes. The data mainly supports this top-down direction of the figure but it is also likely that it can move in the other direction where, for instance, more assertive behaviour can improve confidence.

Figure 4.2: Confidence

![Confidence Diagram]

**Improved job performance**

Increased confidence appeared to lead to increased effectiveness among the participants. It was highlighted that sometimes the knowledge needed for a better job performance was already present but that increased confidence was the key that helped to implement the knowledge:

... over the past few months it has just been fantastic because my confidence has increased, which means I can answer more calls. Because a lot of the time it wasn’t that I didn’t know the answer it was that I was not confident enough. So working on
my confidence - that has helped me to answer more calls and to be more assertive. (B: 130-134)

So it has really definitely made me become more effective. Because if I wasn’t concentrating on my confidence then I don’t think I would, the knowledge is there but it is how to put your knowledge into being more effective, rather than not knowing the answers. I do know where they are and how to find them, but it is just how to use it and it was my, it really was my confidence that was coming out as a big gap. (B: 204-208)

Coaching lead to improved confidence which in turn lead to the participants feeling that they performed better in their job roles:

I think I have become more confident, yes I think over this year I have become gradually more and more confident. And I think I see myself as better in the role that I am doing, is performing better in the role that I am doing. and I think that is a lot due the coaching sessions that I had. (D: 222-225)

Improved communication skills was another positive benefit of improved confidence. Being better at communicating with groups lead to a better job-performance among some of the participants:

... the main part of my job is communication as a trainer, and the confidence thing was obviously a big thing of me standing up and communicating to people. So it has had an effect where if I feel more confident standing in front of a group I communicate better because I sound more confident to them. (D: 283-286)

A cause of distress and job-dissatisfaction for some of the participants was being uncertain regarding the suitability of their job and job performance. Coaching, however, helped to improve confidence which in turn improved job-satisfaction:

Hm, I think it has definitely increased in the last six months because when I got back from XXX (location) I just thought ‘I don’t want to be here’, ‘it is really difficult’, ‘I can’t do it’, all that sort of thing. And then in the past, probably about the past three months as my confidence has reached a quite high level I am really enjoying it and I do get job satisfaction. (B: 239-243)

Certain participants reported that they had a tendency not to recognise when they were doing a good job. However, the coaching had helped them change some of the ‘overly’ negative perceptions of themselves and their job performance. Thus, coaching appeared to help the participants to challenge their distorted thinking that was leading to low self-confidence:

I think that was the problem really with me. I was perceiving myself in a negative light when I had loads of feedback to say ‘no you are good at this, you are good at
that'. But I was still, perceiving myself as less than, you know, the feedback that I was getting. So I think it was just overcoming that feeling that I wasn't like good at my job. You know getting me over that. (D: 201-206)

Certain aspects of work were viewed as particularly challenging and were thereby causing distress. For some participants increased confidence helped them to improve their ability to deal with aspects of their work they found difficult:

*And the area that I was really having difficulty with was XXX (part of job). If someone came on the phone and said 'I have got a XXX (product)’ my body language would, even though you are on the phone, just be really tense and nervous. And then my manager recently assessed a call and it was assessed as outstanding which is really really difficult to do so I was so so pleased with that. (B: 146-151)*

Improved confidence and ability to deal with difficulties meant that some participants were able to cope with aspects of their work that they would have forwarded to their managers in the past. This, subsequently, meant reduced work for the participant’s manager:

*So if people come on the line and you know they have obviously got a specific complaint then in the beginning I hated those sort of calls I just, I couldn’t handle them. And again I think confidence has helped because now I don’t put anywhere near as many calls through to my manager, complaints, as I maybe did in the beginning. (B: 262-266).*

Increased confidence also lead to the prospect of facing challenging situations in the future being viewed as less threatening. Thus, it appeared that once the participants had had the experience of coaching had helping them to increase their confidence in one situation they believed it could help them in another situation. This indicates that the benefits of coaching were transferred from one situation to another:

*I mean there are some things that I probably still need to work on, but I talk within a sort of a group situation I am happy about that, but I think getting in front, getting up in front of lots of people and just doing a presentation, it is still quite scary, but I don’t think I would be quite as apprehensive about it but. That is you know another stage, we can start taking that a bit further. (E: 120-125)*
More assertive behaviour

More assertive behaviour was a further positive benefit associated with confidence. One route to increased assertive behaviour was changes in thinking patterns. The following quote describes how the eradication of unhelpful thoughts lead to less worry and more assertive behaviour:

... I just sort of do it rather than going 'oh should I be doing this, should I be doing that'? I used to worry about things whereas now I just get on and do it. (E: 263-264)

Examples of work situations where the new assertive behaviour took place, with positive results, included in meetings and being on the telephone:

I wasn’t that afraid about talking in team meetings but I was afraid of voicing my opinion and I have built on that a lot more saying 'right well I think, you know, I think this', and giving my full input to it rather than just going along with what everyone else was saying. (E: 148-151)

I am a lot more confident on the phone and taking phone calls, and making phone calls out as well and being assertive and go 'right I am ringing from here, this is what I need to know', things like that I just, I don’t think twice about things like that anymore. I just sort of, just get on with it and do it. (E: 176-180)

Volunteering for various organisational activities was another example of a new more assertive behaviour acquired as a consequence of coaching. It appears that becoming more involved in organisational life had positive benefits for the employees. According to one participant organisational involvement improved chances of being noticed within the organisation:

So it is nice just to have the confidence to sort of put myself forward for things because then you get noticed and you are more likely to get promoted and things like that. (E: 220-222)

As mentioned above some participants were able to behave more assertively following increased confidence. Other participants focused specifically on acting more assertively in their coaching sessions and this focus had been beneficial:

But with the work that I have been doing and now I think if I raise my voice just slightly more with nerves but not being rude or shouting at them, just being more assertive then it definitely helps. So that is something else that we have been working on. (B: 281-284)
Benefits outside work

Increased confidence at work also appeared to have a positive effect on the participants' lives outside work. Performing better and feeling more confident that they could cope with their jobs meant that the participants were able to leave their work at the office at the end of the day rather than taking it home (physically or mentally):

Yes, probably because I am not taking it home with me, and I feel more confident that yes I can do that tomorrow, or I have dealt with that as much as I can. So in that way then yes because at the beginning when I got back from XXX (location) I was probably taking it home with me and saying 'I can't do it, what am I going to do, do I need to start looking for another job, I don't think I will be able to get back to how I was before' kind of thing. So it has definitely helped in that respect. (B: 486-491)

Thus, the participants' job-satisfaction and confidence did have an effect on their home life. By being confident in the job the participants felt happier and worried less about work. This also meant that they were able to treat people at home better. Thus, improved confidence appeared to have an impact on relationships outside work:

I suppose yes in the way that if I feel more confident in the job I am doing I am going to be happier. So you take your work home don't you, and if you are not happy or you don't feel good about what you are doing in work you go home and you feel a bit hmm. And you know you do take it out on the people that you love, don't you. So from that point of view yes because if I am happier in my job I treat people better (laughs). (D: 273-277)

Improved confidence at work transferred to specific situations outside work for some participants. This meant that they felt able to behave more in a more confident manner in every day situations. The following account highlights how increased confidence at work lead to increased confidence in a competitive sport situation outside work:

...well I have got a horse so I go to competitions a lot so I have to put myself in the mindset before I go into the competition and I don't get so nervous, and you know lots of different things really outside of work. (E: 107-109)

The same participant explained how improved confidence was measured by various actions in the work situation. However, improvement at work was not the biggest proof of success for the participant. Rather it was a situation at a big horse convention that was the 'icing on the cake' for this participant's improved confidence:
Some of the things that we benchmarked it against was talking in team meetings, voicing my opinion about things, discussing thing. So it was little tiny achievements that I was doing on a monthly basis. And then really I think the icing on the cake was when I went to a big event last year, it was a big horse convention and it was. there was a clinic, somebody, there was a demonstration a famous rider in the arena... So I put my hand up and he asked me and I was really chuffed, so I asked this question, I didn’t stand up, I asked this question and he answered it and there must have been a good over a hundred people there. So I think that was like the goal, I had reached that, because I knew I had reached it because I sort of said that in front of everyone. (E: 129-138, 3)
4.4 Management of Stress

‘Management of stress’ was one of the main themes found in the analysis. It is important to note that this theme does not only highlight the positive impact of coaching in dealing with stress but also the negative aspects including coaching causing stress. Four sub-themes emerged and these included: indirect work on stress; coping with stress; use coaching for stress in the future; and cause of stress. Their relationship is depicted in Figure 4.3.

Figure 4.3: The management of stress

Indirect work on stress

The participants had not sought coaching specifically to reduce stress. However, coaching appeared to help participants to reduce stress by helping them to manage other work-related problems that were causing them stress. Thus, it could be suggested that coaching reduced stress indirectly. One route coaching reduced stress indirectly was by helping participants to become more satisfied with their job role:

*No, it definitely reduced the stress because by working on everything that we have worked on I feel happier in my role so I think it has definitely helped with stress (B: 331-332).*

Another indirect route to reduced stress was improved confidence. Confidence was one of the other main themes found in the analysis and many of the participants had sought coaching in order to increase confidence. Low confidence appeared to have a
negative influence on wellbeing and performance. It was reported that when confidence and job-satisfaction were improved, as a result of the coaching, stress was reduced:

_I didn't necessarily go to do the coaching to reduce stress, but I suppose it has done because I feel happier in what I am doing, and more confident, and organised._ (B: 338-340)

According to some participants improved confidence automatically reduced stress:

_But overall yes it reduced it because by me feeling more confident I think that automatically reduces stress..._ (D: 379-380)

Pressure and high workload were sources of stress for the participants. Once again coaching helped to reduce stress indirectly by helping the participants to become more confident and assertive and decline extra work. Thus, it appeared that the coaching helped the participants to increase awareness of their own limitations regarding work demands and to clearly state these limitations at the workplace:

_I know now when to say 'it is too much we can't take on any more' and I feel that I will say that. Whereas previously I may have just said 'oh yes I will do it' and just end up worrying and getting stressed over it, so yes I do._ (D: 414-417)

_I used to sometimes feel that maybe I was taking on too much and ending up with too much work that I couldn't physically do. So in my mindset I know how much work I can take on and when to start refusing things you know. I will take on as much as I feel I can cope with._ (E: 334-337)

As well as being better at saying no to work some participants also reported being better at delegating work when this was suitable. This may have led to less pressure for the participants and consequently less stress:

..._I think if you feel more confident in yourself, you have that confidence to then say 'you do that', you know to other people. And you have the confidence to say 'no I am not doing that I have got too much to do anyway'. I think I have become a lot better at doing that._

Worrying about situations at work was another source of stress. Improved confidence lead to less worry about these work situations and this lead to reduced stress:

_I would get stressed about worrying about things and you know I would sort of, I would worry about going into team meetings so that would stress me. And because of this coaching and the goal of becoming more confident then that doesn't worry me_
anymore so I don’t let it effect me. So yes from an indirect point of view I am less stressed than I was when I first started. (E: 368-372)

Coaching was also viewed as an opportunity to talk about issues causing stress at work. Talking about these issues in coaching helped the participants to develop a new perspective and this could reduce stress:

_I obviously was stressed getting ready for the promotion, doing the promotion, failing the promotion, so I was quite stressed about that. But talking to XXX (name of coach) has helped to decrease, it has given me a new perspective on the thing and I am not as stressed as I was. But I have not gone to them directly because of stress._ (C: 350-353)

Uncertainty over dealing with problems at work was a major source of stress according to the participants. Discussing problems and problem solving were key activities of the coaching. Highlighting and discussing problems at work and developing new solutions helped to reduce stress:

_Yes when you start talking about things then you start solving things and then it is not that hard or stressful._ (G: 487-87)

_I think because my coaching sessions also made some things easier for me to work with afterwards. Because I found new ways to do things, I found my way out of things that I thought ‘how do I do that’. And then I discussed it... and that kind of clarity takes away the stress feeling._ (J: 389-392)

_You can’t just all of a sudden eliminate all your problems in life but, you got to sit down and plan how you are going to tackle those problems. If you know that then it makes it so much easier to contend with and deal with. I think that has really helped over the last couple of years._ (E: 447-451, 10)

It was also suggested that coaching could play a role in preventing future stress by providing an opportunity to discuss problems and to find solutions, the inability to solve problems being an identified cause of stress:

_Because if you have like things you have to do and you don’t know how to do them I think it is stressful. And coaching can help you to find out how to solve the problems, and in that way I think it can prevent future stress._ (J: 399-401)

_If it is used the right way I think it can prevent work stress. Mostly because that if an employee comes with a problem and they can’t see the way out of it then you can coach them and then you might find other ways out of the problem. I think that if they can find a way out of the problem it can prevent some stress._ (J: 381-384)
Some participants expressed coaching only helped with stress to a certain extent. And when moving on to new more challenging situations the stress would return. This indicates that the benefits from coaching were not transferred to new situations (as indicated under the theme ‘confidence’):

And they (the coaches) have helped, they have helped with taking stress away from some aspects. I am not stressed about taking calls now. I am not stressed about taking ownership of the different problems. But my stress has just gone on to something else, dealing with stroppy people. (C: 369-372)

However, it is important to note that not all participants felt that coaching had helped them to reduce distress. It is therefore important to remember that stress is a complex phenomena that is influenced by a multitude of different factors:

I am not that susceptible to external factors, if I wake up in the morning feeling low that is the way it is regardless of what coaching I have done. (A: 539-540)

Coping with stress

Coaching was not always helpful in eliminating or reducing stress. Nevertheless, coaching helped some participants to cope with situations that were causing them stress:

I never doubted my ability to be competent. The thing that was always undermining me was my nervous reaction it was something I could never ever cope with. I just hated that, and I just didn’t want to feel it. What the coaching has helped me to do is help me deal with that stress. Not to eradicate it. (A: 615-618)

It has not reduced the feeling of pain. It has helped me to cope with it. (A: 660)

In the past some participants had felt unable to remain in distressing situations and had therefore avoided these situations. However, with the help of coaching, the participants were able to remain in and cope with distressing situations that they had been unable to tolerate in the past:

So whereas previously I would have run away and avoided the situation and those feelings, whereas now they are still there but I feel I can cope with them and sort of manage them. That is what coaching has helped me to do. (A: 623-625)

Yes, and I am able to sort of stay in there and live with it. As uncomfortable as it (presentations) is I am finding I can cope with it now, which in previously I just couldn’t have done. (A: 640-641)
Working in a new job role, that was different to the previous one, was identified as a cause of stress. The stress caused by this situation had been so serious for some employees that they had chosen to leave the organisation rather than to continue and face the new work situation. Coaching helped some participants to remain in the organisation and to cope with the new job role. Thus, coaching may have had an important organisational function in reducing staff turnover in a period of organisational change:

The job I applied for has completely changed. And quite a lot of people found that really difficult that change, because it is kind of an uncomfortable zone I suppose. And quite a few people left but coaching has definitely helped with that. So I don’t know maybe if I did not have that support I don’t know whether I would still be here. (B: 431-434)

Although coaching did not always manage to eliminate or even reduce stress some participants expressed hope that continuous work in coaching could help to eliminate the distress:

... I have obviously done loads of presentations in the past and just hated them, and never seeking opportunities and all the rest of it. It has helped me to be able to cope rather than eliminating my stress. So I mean you could ask me this question in twelve months time and I might have totally knocked the stress thing over. (A: 650-654)

Use coaching for stress in the future
As stated previously, the participants had not sought coaching in order to deal with what they perceived to be workplace stress. However, when discussing the usefulness of coaching in dealing with stress the participants any reported that they believed that coaching could be suitable:

I think if I did use coaching for stress and that sort of thing then it would help, but I think it definitely would help but it not something that I have used it for before. (B: 360-362)

But I think that using the tools from the coaching could have some positive effects so I would not be so stressed. (H: 393-394)

Although they had not used coaching for stress in the past, the participants considered going to coaching for stress problems in the future, with one of the participants contemplating booking further coaching sessions in order to deal with worry that was causing stress:
I mean I don’t know whether it would be useful to book more coaching sessions. I might do it actually. I think I still could do with working on the worrying side of things, and worrying about what people think and that type of thing. I think I do put added stress and pressure on myself sometimes because of that. (D: 404-408)

Furthermore, the participants reported that they would recommend coaching to colleagues, as a means of tackling stress. Thus, increasing awareness in the workplace of the potential benefits of coaching:

But I know if any member of my team is suffering from stress I would direct them to go and see a coach. So I imagine that they would be quite good at sorting that out. (C: 395-396)

One explanation to why participants had not yet approached the coaches regarding problems with stress was because the stress problems they were facing were not viewed to be serious enough. There appeared to be a view that in order to seek coaching for stress there should be serious problems with stress:

I know that if I had a problem with it (stress) I would go to them and they would sort it out but I am not stressed above a level that I can work at. (C: 337-338)

When the participants considered where they would like to seek help if they suffered from stress it appeared that that seeing a coach was preferable to seeing a manager. This was principally for reasons of confidentiality, the participants believing a meeting with a coach as being more confidential than one with a manager:

I think most people would rather go to a coach to talk about stress than their team manager. Because once again if you talk to your team manager then it is going to go down on your file. it is just you don’t want it on your paper ‘he suffers from stress bla bla bla’. (C: 390-393)

Similarly, for some participants seeing a coach was viewed as preferable to seeing a counsellor in order to deal with stress. The reason for this was that seeking help from a counsellor made the problem seem more serious. This indicates that employees may be more willing to participate in coaching than in counselling. One possible reason for this is that there may be a stigma associated with counselling:

Yes, because it if you go to a counsellor then that makes it real. If you go to a coach then that is just chatting to one of your friends about it. Do you see what I mean. If I think actually counselling would be the next step along from a coach, but I think most people would rather go to a coach and try and sort it out that way. (C: 400-403)
However, it is important to highlight that this view, that attending coaching implied a less serious problem, was not held by all participants, some believing that coaching was very similar to counselling, and counselling psychology:

*I mean, at university I did do a bit of counselling psychology and that is what coaching is at the end of the day in a way isn’t it. It is like being a counsellor to someone.* (D: 179-181)

**Cause of stress**

As well as being able to reduce stress or help participants to cope with stress it was also reported that coaching could in fact cause stress. It was pointed out that openness to coaching was an important factor in determining its usefulness. For those coachees who considered coaching a ‘waste of time’ it actually became a source of stress. This was based upon the perception that the time taken up by coaching could be used in a more constructive manner. The attitudes of the coachees therefore being vital:

*But you have to get to a point where you can actually see that you get something out of the coaching. Because if you are sitting there and you think it is a waste of time you will just be a bit more stressed knowing that you could have used your time much better at work instead of being coached. So you have to have a coaching set-up that you feel will give you something otherwise it won’t help you.* (H: 435-439)

Nevertheless, the skills and competence of the coach were also viewed as important. If the coach was insufficiently skilled the coaching session could be perceived as a ‘waste of time’:

*Well it depends on the opinion about it. Because if you go there and you feel it is a waste of time and you keep on insisting it is a waste of time, it will be a waste of time. So somehow you have to decide that this is something I will get something good from, so you go into it with a positive mind. But also of course you need to have someone coaching you that knows what they are doing. Because otherwise I guess it could be a waste of time.* (H: 444-449)

Another reason to why coaching could be perceived as unproductive, and thereby cause stress, was if there was an over emphasis on discussion that did not lead to any action. It would appear that the participants sought practical results from the coaching:

*Sometimes there is too little action.* (G: 452) *When it takes too much time or resources. I think it tends to be when we just talk and talk and nothing happens.* (G:
456-457) So there should be the right mix between the talking coaching and the action. (G: 461)

The appreciation and perceived benefits of coaching did not seem to be immediate for all participants. Indeed, although participants reported that there was a risk that coaching could be unproductive, there appeared, however, to be a process in which the participants could learn to appreciate coaching after a period of time:

Well I think the first time I participated in it I was very disappointed, I did not see any meaning in it and I left with the feeling that I had spent a lot of time and didn't get anything with me (H: 119-121) But the following times I think it improved very much. And at the end of it, it was really good. (H: 125-126)

Coaching also caused stress by encouraging the participants to focus on their problem(s). By focusing on the problem(s) at the beginning of the coaching the participant became more aware of the extent of the problem and this, subsequently, could cause distress:

I think my first couple of sessions in a way made me feel worse. Because it was making me focus more on the problem, so I was becoming more conscious that the problem existed and thinking 'god yes I do, do that', and I was focusing on my own behaviour. But once I got over that in the long run it helped definitely. (D: 157-160)

Although the coaching initially caused increased stress it did, however, eventually help to reduce stress. Once again there would appear to be a process in which the participants could derive benefit from coaching after a period of time:

I think like I say in the early stages possibly it makes you feel worse, but then once you really get to grips with everything it makes you feel a lot better. (D: 215-217, 5)

Yes, I think again it increased my stress at the start probably, because I was really focusing on everything. But overall yes it reduced it... (D: 379-380)

Furthermore, participants highlighted the potential risk associated with leaving coaching before these initial feeling of stress had been worked through. Thus, there appeared to be a risk that coachees would leave coaching feeling more distressed than when they entered:

And if they weren't prepared to see it through it could have a negative effect. But as long as people are prepared to see it through to the end I think it definitely has a positive effect. (D: 294-296)
4.5 Coaching = Investment in staff

Coaching = Investment in staff was a further main theme that was found in the analysis. This theme consisted of two sub-themes, scepticism towards coaching and the organisation; and improved perception of organisation.

Figure 4.4: Coaching = Investment in staff

The relationship between the two sub-themes is illustrated in Figure 4.4. Many of the participants reported that initially they had been sceptical of the concept of coaching and were unsure about the organisational role of it. Once they had participated in coaching however, the fact that the employer provided workplace coaching was viewed as a great benefit and it was also viewed as a sign that the employer cared for their staff. This view was of course influenced by the fact that all the participants viewed coaching in a positive light and had found coaching really beneficial:

And personally I endorse coaching, it has helped me. (A: 702, 15)
Yes great advocator of coaching I am indeed. (F: 164, 4)
Yes, yes, excellent it really is. (B: 81, 2)

It is very likely that the view had been very different if the participants had experienced their coaching negatively.

Initial scepticism of coaching

Although coaching was viewed as a positive intervention at the time of the interviews several participants reported that initially they had been sceptical of coaching (this is also highlighted in the theme ‘management of stress’):

At first when the concept first came along I was a little bit sceptical about it. (A: 161, 4)

A reason for the scepticism was that there was a lack of awareness of coaching and an uncertainty regarding what would be expected by the coachee and the coach:
...I was a bit apprehensive and thinking what will they be expecting from me, what will I be getting out from it? (B: 76-77)

One participant who held a management position described how they had viewed coaching as an activity that was only suitable for staff. This participant used to believe that coaching was not relevant for managers as they were supposed to already ‘know the answer’:

* I always had a strong view of coaching from a staff point of view, but I suppose, as I say, my expectation was that as a manager you are supposed to know the answer, provide the proper solution, sort out problems, and didn’t really see the benefits for me or understand that coaching could help me as well. (F: 41-44)

However, the initial scepticism was overcome once the participants had attended coaching:

* So I am probably quite a success for XXX (name of coach), after not advocating, not advocating coaching but just probably not being very interested in it or knowing anything about it, to becoming quite a staunch supporter, a t-shirt wearer as well. (F: 738-740)

It was reported that some members of staff may have been very sceptical of the organisation’s motives for introducing coaching and had viewed the introduction of coaching as a means to monitor and ultimately fire employees:

* In the beginning when you introduce coaching at work and to do it as a part of your job some people, especially older people, might be a little afraid of ‘what is going on now’, and ‘are they just looking for an excuse of getting rid of me’. (G: 400-402)

However, this negative view was not necessarily permanent and could be overcome once the employees realised that coaching could help to improve work performance:

* But when you can get over that you get a... even the best soccer players have coaching. It is another deal but we have to repeat ourselves, train, and carry on. be better than the day before and when people see that they would normally be optimistic. (G: 406-408)

**Improved perception of organisation (Caring organisation)**

Once the scepticism was overcome coaching was viewed as a sign that the organisation was looking after their employees, cared for them, and valued them.
Thus, it appeared that the provision of coaching helped to create a positive image of the organisation among employees:

... it was nice to sort of know that they look after us and care for us enough to have this support behind us to keep us going. So in all situations I think it is a good thing. (E: 505-508)

According to the participants the provision of coaching was one important factor that helped to define the image of the organisation. Coaching demonstrated that the organisation invested in the development of their employees. It was also suggested that the fact that coaching was provided would have a positive effect on new members of staff:

*I think when people, if people join the company see that the company is providing coaches, I think it shows a lot about the company that they are willing to invest money in developing people like that. So yes, I think it is definitely a good thing.* (D: 436-439)

It was emphasised that the provision of coaching was not the norm despite the fact that this may have been the view of some members of staff. The fact that coaching was not the norm appeared to have increased the appreciation of coaching for some participants:

*I will just say that it is a really useful thing. And the fact that I haven’t experienced it before I came here makes a big difference because I think some people come here straight from school and don’t know any different so they just think it is the norm.* (E: 601-603)

*Well coaching is a word that is being used all over, but this kind of coaching sessions is not something I hear from friends working at other places.* (H: 471-472)

Comparisons were made with other organisations not providing coaching and it was clear that organisations providing coaching were viewed more positively. Participants believed that the organisations’ rationale for providing coaching was based on the wish to support and develop the employees and improve their quality of working life. This view once again suggests that coaching helps to create a positive view of the employer:

*Whereas I come from a company that don’t have it (coaching) and it is a refreshing change to get this support behind you to try and improve the people that work here and improve the experience. Because it makes life, it makes working life a lot easier to have somebody to sort of turn to and talk to about certain situations.* (E: 604-607)
In accordance with the suggestion that coaching helps to create a positive view of the employer some participants suggested that it could increase company morale:

So I think providing you, yourself really want to change and you want to get a lot out of the coaching, then I think it is a really useful tool to have. And I think it can increase morale at lot within the company. (D: 68-70)

It was clear that coaching was viewed as an organisational benefit. Participants even reported that the provision of coaching would be a very important factor if they were to look for another job. This indicates that coaching can help organisations to become more attractive employers:

If I was going to another company I would almost demand that they have some kind of coaching involved in the culture. (G: 533)

Both organisations offered coaching to all employees (at the relevant sites) and the fact that coaching existed in all the layers of the organisation was viewed as very positive. This indicated that the organisation invested in all employees and not only in senior management:

They have coaching with me (a manager) and a professional coach. But they also know that I get coaching in my job and that my boss is also getting coaching. (G: 592-593)

So it is going from all the way up that it does not matter what level you are on. It is actually something you are getting. Of course it is different from what level you are sitting in. But you are getting it all the way up. (G: 597-599)
Chapter 5: Discussion Part I and II

5.1 Summary of findings

Part I

The aim with Part I of the study was to investigate whether coaching reduces stress. The coaching group and the control group reported similar levels of strain before coaching. After coaching the mean values showed that levels of depression decreased in both the coaching and control groups but the greatest reduction was reported by the control group. This reduction of depression scores in both groups indicated that external factors, not measured in the study, played a part in the participants’ improved wellbeing. Levels of anxiety and stress decreased more in the coaching group compared to the control group. Post-coaching levels of anxiety and stress were lower in the coaching group compared to the control group. This interaction was clearly highlighted in the graphs (Figure 3.2 and 3.3) presented in the results section. Regardless of the tendencies highlighted by the graphs, the ANOVAs failed to demonstrate a significant interaction between time and group, thus, levels of depression, anxiety, and stress did not decrease significantly more in the coaching group compared to the control group over time. Therefore, the experimental hypothesis was rejected and the null hypothesis accepted. Coaching did not significantly reduce levels of depression, anxiety, and stress.

The percentages of clinical levels of depression, anxiety, and stress cases, as identified by DASS-21, were high before coaching in both groups. The percentages of clinical cases were reduced post-coaching in both the coaching and control group. This reduction was apparent in the depression, anxiety, and stress scales.

Moreover, both groups reported similar levels of the HSE stressors before coaching, with the only significant difference between the groups being on the stressor support-colleague, where the control group reported lower levels of perceived support. After coaching the mean values showed that for the coaching group the mean stressor scores for demands, control, support-management, and role, were reduced indicating that the level of perceived unfavourable working conditions had reduced in these
stressor areas. The mean scores on relationship and change stayed the same as pre-coaching in the coaching group. Furthermore, the coaching group scores increased on the stressor support-colleagues indicating that perceived support from colleagues had reduced.

After coaching the mean values showed that the control group scores reduced on all stressor scales except for the stressor relationships, the score on this scale did not change. This indicates that the perceived levels of unfavourable working conditions had reduced in the control group. Post-coaching the coaching group scored lower than the control group on all stressor scales except on control indicating that the coaching group experienced a lower perceived level of unfavourable working conditions. The ANOVAs did not reveal significant interaction between time and group for any of the seven stressor scales. Thus, the perceived level of unfavourable working conditions did not decrease significantly more in the coaching group compared to the control group over time.

High levels of coaching effectiveness were reported by the participants, with a mean value of 6.43 on a 7 point Likert scale.

Job-satisfaction scores were high in both groups before coaching. Thus, no great increases in job-satisfaction could be expected. Following coaching levels of job-satisfaction were still high. The coaching group did not report significantly higher levels of job-satisfaction post coaching compared to pre coaching. Moreover, post coaching the coaching group did not report significantly higher levels of job-satisfaction compared to the control group. Therefore, the experimental hypothesis was rejected and the null hypothesis was accepted. Coaching did not increase job-satisfaction.

Part II

Part II of the study aimed to investigate whether there was a relationship between participation in coaching and lower levels of strain. The level of strain in the coaching group and control group was measured after coaching. Both groups reported very similar levels of strain and percentage of participants with clinical levels of strain. Moreover, the two groups reported similar scores on most of the stressor
scales. The biggest difference was for the stressor control, where the control group reported a lower score. Both groups reported high levels of job-satisfaction and the levels were very similar for both groups. In addition, high levels of coaching effectiveness were reported by the participants in the coaching group.

The multiple regression analyses found that participation in coaching was not a significant predictor of lower levels of strain, thus the experimental hypothesis was rejected and the null hypothesis was accepted. Control and role were the only stressors that were significant predictors of depression. The direction of the relationships indicated that perceived lack of control and high role ambiguity were associated with higher levels of depression. Support-management was the only stressor that was a significant predictor of anxiety. A perceived lack of support from management was associated with higher levels of anxiety. The stressors of demands, role and support-colleague were significant predictors of stress. The direction of the relationships indicated that perceived high demands and role ambiguity and a perceived lack of support from colleagues were associated with higher levels of stress.

Despite the fact that the regression models included coaching, the seven stressors, and demographic variables, the overall model for depression only accounted for 25 per cent of the variance in depression, the overall model of anxiety accounted for 8 per cent of the variance in anxiety, and the overall model of stress accounted for 22 per cent of the variance in stress. Consequently, important variables accounting for variance in strain were not included in the regression models. Variables that may have accounted for some of the variance in strain include personality factors, health factors, diet, locus of control, career achievement, work/life balance issues, economical factors, and family situation.

5.2 Previous literature - Part I and II

Stress

The findings in Part I of the current study were similar to the findings in Part II of the study. In Part I strain was measured before and after coaching and coaching did not significantly reduce strain and in Part II coaching was not a significant predictor of
strain. As stated in the introduction there is only a limited amount of research on coaching and stress, nevertheless, the results from Part I and II of the current study were similar to the findings in CompassPoint Nonprofit Services (2003) study. CompassPoint Nonprofit Services (2003) found that stress levels were not significantly reduced after coaching. However, the participants reported that coaching reduced stress in the qualitative part of the study. Grant (2001b) investigated the effects of cognitive, behavioural, and cognitive behavioural coaching approaches on depression, anxiety, and stress. Only the cognitive approach was found to significantly reduce depression and anxiety. The behavioural and cognitive behavioural coaching did not significantly reduce depression, anxiety or stress. The findings from Part I and II of the current study were different to the findings in Wales' (2003) qualitative study of Executive Directors. In interviews Wales (2003) found that coaching helped to reduce the participants stress. Similarly, a second study by Grant (2003a) found that levels of anxiety, depression, and stress were reduced by life coaching although mental health was not targeted in the coaching. Indeed, the CIPD (2004a) reports that reduced stress is a common benefit of coaching. The findings in Part I and II of the current study were also different to those case studies that reported that coaching helped to reduce the coachees' stress (for example Ascentia, 2005, Hearn, 2001; Palmer et al., 2003; and Richard, 1999).

**Stressors**

Part II of the current study found that perceived lack of control and perceived high role ambiguity were predictive factors of higher levels of depression and perceived lack of support from colleagues was predictive of higher levels of anxiety. In addition, perceived high demands and role ambiguity and perceived lack of support were predictive factors of higher levels of stress. Similar findings have been reported in previous research. The Whitehall II study (Stansfeld et al., 2000) found that high reported job demands and low decision latitude were associated with poor mental health. It was also found that low reported levels of support were related to poor mental health and increased sickness and absence (Stansfeld et al., 2000). Head et al.'s, 2002 subsequent study of the Whitehall II data found that little reported control and high job demands were associated with increased incidence of coronary heart disease. The same study found that adverse reported changes in levels of social support were related to worsening mental health. Moreover, the effects on rates of
coronary heart disease were found to be modest. In the Omnibus surveys (HSE, 2004b) a relationship was found between high reported demands and job strain, reported role ambiguity and job strain, and reported lack of support and strain. However, no relationship was found between lack of reported control and job strain. The HSE’s (2003a) study, of stress in call centres, identified that high reported demands and being unclear about work role were factors making the job particularly stressful. O’Driscoll & Beehr (1994) found that reported role stressors predicted psychological strain.

Part II of the current study failed to find a relationship between strain and the scales of relationships and change. This was in contrast to the Omnibus surveys (HSE, 2004b) in which relationships were found between job strain and reported poor work relationships and change.

**Coaching effectiveness**

Both Part I and II of the current study found that the participants reported high levels of coaching effectiveness. Similar findings have been reported in previous literature. In the CIPD’s (2004a) postal survey, on current practice in training and development, it was found that 67 per cent of the respondents regarded coaching as ‘effective’ or ‘very effective’. Overall, 99 per cent believed that coaching could deliver tangible benefits for the individual and the organisation and 78 per cent used coaching in order to improve individual performance. The Association for Coaching’s (2004) survey, investigating the return on investment (ROI), found that a majority of the participants viewed coaching as an effective development intervention.

McGovern et al’s (2001) study investigated the impact of executive coaching. It was found that 86 per cent of the participants were very satisfied or extremely satisfied with the coaching. The executives reported that 73 per cent of their goals in coaching had been achieved very or extremely effectively. A further study investigating the impact of executive coaching was conducted by Hall et al. (1999). It was found that the overall effectiveness of coaching was rated as ‘very satisfying’. Strayer and Rossett (1994) conducted a study investigating the effects of a cognitive behavioural coaching programme. It was found that the coaches rated the programme 9.1 (out of 10) and sales associates (the coachees) rated it 8.31. Moreover, a quasi-experimental
study investigated the efficiency of coaching in enhancing transfer of training was conducted by Miller (1990). No significant differences were found between the coaching group and the control group on the post test measures, and no pre-post intervention gains were found for the coaching group. However, participant's comments were very positive towards coaching. These findings were very similar to Part I of the current study as this study also failed to find any significant effects of coaching but found high levels of reported coaching effectiveness. The research suggests that individuals tend to report high levels of perceived coaching effectiveness.

**Job-satisfaction**

Levels of job-satisfaction were high both in Part I and II of the current study with an average of 5.32 on a 7 point Likert-scale. Part I of the current study found that job-satisfaction scores were high in both the coaching and control groups and that coaching did not improve job-satisfaction. However, the high job-satisfaction scores at T1 meant that it was difficult to score higher at T2. It is also important to recognise that the one item measure of job-satisfaction is global and leaves a great deal of room for interpretation. Part II of the current study also found that both groups reported high levels of job-satisfaction. Previous research has also found high levels of job-satisfaction in the UK (Oswald & Gardner, 2001). Some previous studies have investigated job-satisfaction and coaching. The CIPD (2004a) reports that increased employee satisfaction and commitment is one of the common benefits of coaching. Likewise, the qualitative part of CompassPoint Nonprofit Services' (2003) study found that job-satisfaction was improved following coaching. Similarly, it has been reported that following the introduction of coaching into a large hotel, employee satisfaction had increased by approximately 22 per cent (The Coaches Training Institute, 2003).

5.3 Limitations - Part I of the study

**A quasi-experimental study without randomised groups**

It has been stated that it is difficult to use highly controlled research designs, including randomisation, in the evaluation of workplace and stress interventions, considering the complex interrelating factors that exists in this setting (Orlans, 2003;
Beehr & O'Hara, 1987; Highley-Marchington & Cooper, 1997). However, a risk with using non-randomised selection into groups is that there may be differences between the groups that may influence the results (Beehr & O'Hara, 1987). It is also important to recognise that the less control exercised over variables in the study the greater the number of variables may account for the results (Howard et al., 1996). In Part I of the current study all the participants in the coaching group had sought coaching in order to deal with workplace issues. Nevertheless there was a lack of control over the following variables: group assignment, types of coaching issues, types of coaching provided (although all coaches had a similar background), duration of coaching, and timing of measures. Thus, the results in Part I of the study are subject to several interpretations. Indeed, Howard et al. (1996) suggest that findings from such quasi-experimental studies need to be replicated in order for the competing hypotheses to be tested, and this is suggested for the current study.

Participation in other stress management activities

An important limitation in the current study was that some participants in the coaching and control group were participating in other stress management activities. Unfortunately, the statistical analyses employed could not control for this confounding factor. It is likely that this factor had an influence on the outcome of the study.

Selection of control group

It has been suggested that research evaluating coaching and occupational stress programmes in organisations may face practical difficulties in developing and maintaining control and experimental groups (Ahern, 2004; Gray, 2004; Beehr & O'Hara, 1987). However, when a control group is not included in a study any changes over time could be explained by a number of factors including seasonal effects, changes in the work situation, and economic changes (Bower, 2003; HSE, 1998). Employees who had never received coaching were selected for the control group in the current study as it could be suggested that all employees in the organisation were potential wait-list controls. Ahern (2004) has suggested that a control group with individuals not receiving coaching may be an option in the evaluation of workplace coaching. Counselling studies have also used individuals not seeking help as control groups (for example Cooper & Sadri, 1991). Nevertheless, it
is important to recognise that there may have been differences between the two groups. Considering individuals in the coaching group were actively seeking coaching support at work it is possible that these individual were more motivated to make changes to improve their wellbeing compared to individuals in the control group. Such a difference between the groups would influence the study outcome. However, there were no significant differences on levels of strain between the two groups.

**Diffusion**

Workplace research may have problems with diffusion. This term refers to the tendency for the effects of an intervention, provided to one group of employees, to influence employees working closely with this group. Indeed, psychosocial interventions are usually designed to have across-the-board effects within the organisation (HSE, 1998). It is possible that the individuals who had been coached influenced individuals who had not.

**The Hawthorne effect**

The Hawthorne effect refers to when participants improve because they know that they are part of an experiment, and this effect is difficult to escape in most studies (Coolican, 1998). It is possible that this effect influenced the outcomes in current study. However, the effect may have been smaller than in experimental studies as coaching was not a research intervention in the current study but rather a continuous service at the workplace.

**Sample size**

The small sample size was a limitation in Part I of the study. Part I of the current study did not have enough participants to have a power of 0.80 as indicated by the calculations presented in 'Results'.

**Measure of coaching effectiveness**

The item focusing on coaching effectiveness referred to global effectiveness and left room for interpretation. It is therefore not clear in what ways coaching was effective. This is a limitation of the study. However, the qualitative part of the study allowed the participants to develop their views of coaching effectiveness. Moreover, it is
possible that participants reported that coaching was effective because they believed that the researcher/coaches preferred positive reports of coaching.

**The measurement of stress**

The present study could also be criticised for only using a questionnaire to measure stress. Although questionnaires are useful in measuring stress, it has been argued that ideally both psychological and physiological measures should be utilised in stress research (Bogg & Cooper, 1994).

Due to the fact that the questionnaire in the study needed to be as brief as possible no measures of personality was included. The inclusion of a personality measure in the study would have been beneficial as personality factors may affect the stress process (Vollrath, 2001). Indeed, it has been suggested that stress may be affected by personality traits including neuroticism (Eysenck & Eysenck, 1985), the Big Five factors (neuroticism, extraversion, openness, agreeableness, and conscientiousness) (Vollrath, 2001), and constructs such as hardiness (Kobasa, 1979), and the Type A behaviour pattern (Friedman & Rosenman, 1974).

In addition, research on job stressors often uses an additive model of stressors, where items that represent different elements of a stressor are combined, or mean score is calculated, and this score represents the total or average amount of stressors that are being experienced by the respondent. This method may lead to the problematic conclusion that individuals who have the same score for a stressor have a similar experience of that stressor. However, their experience of the stressor may be different (Cooper at al., 2001). Nevertheless, the subjective meaning of stressors and the experience of strain can be explored with qualitative methodologies. As such qualitative and quantitative approaches have the potential to support each other (Cooper et al., 2001).

**5.4 Limitations - Part II of the study**

A number of the limitations discussed under ‘Limitations Part I’ are also relevant for Part II including lack of control over a number of coaching variables; selection of
control group; participation in stress management activities, diffusion effects; the measure of coaching effectiveness and the measure of stressors. The following brief section will only highlight factors unique to Part II of the study.

**Correlation and causation**
A limitation with correlational studies is that they cannot establish causation. Although correlational studies can strongly suggest casual inferences they cannot be used to establish them (Baker et al., 2002).

**5.5 Implications – Part I and II of the study**
Although the descriptive statistics showed some support for the hypothesis that coaching reduces stress, the statistical tests did not find any support for the hypothesis in Part I. Moreover, coaching was not found to predict levels of strain in Part II. These findings suggest that general coaching interventions are not likely to have a significant impact on perceived stress. Consequently, general workplace coaching may not lead to decreased stress levels among employees. However, coaching focusing on reducing the impact of a specific stressor may be effective in reducing individuals’ experiences of stress.

The mean scores showed that levels of depression decreased more in the control group compared to the coaching group. Additionally, the percentages of clinical cases were reduced post coaching in both the coaching and control group. Thus, it is not possible to conclude that coaching was responsible for the reduction. A number of factors may have been responsible for this reduction, including simply the passage of time, or the fact that a number of the participants participated in stress management activities outside work.

The mean score also showed that there was a greater reduction of anxiety and stress in the coaching group compared to the control group. Another possibility is therefore that coaching did have some effect on elements of strain but was not sufficient to significantly reduce perceived stress levels in the current study. A reason for this may be that coaching did not have enough impact on the environmental stressors that existed within the organisation. Perceived high demands and high role ambiguity
were predictive factors of higher levels of stress in Part II of the current study. It may be difficult to change perceptions of certain stressors in a few coaching sessions. Changing perceptions of stressors at work may involve changing aspects outside the coachee and coach's control. For example, perceptions of high demands and work pressure may not change regardless of any coaching interventions. On the other hand, a coaching intervention targeted at reducing the perception of these stressors may reduce the experience of stress by improving coping ability. Coaching could also help the individual to challenge and potentially change perceived stressors by acting differently themselves or by encouraging the organisation to improve specific conditions in the working environment. As an example, perceived high demands may reduce if the actual workload is reduced.

A coaching intervention specifically targeted at reducing the perception of stressors may have been more effective in reducing experience of stress. In addition, primary/organisational interventions aiming to tackle organisational stressors may have been more effective than general coaching in reducing experience of stress. Cooper et al. (2001) report that primary interventions are the most proactive approaches to stress management and that they are generally found to be effective in reducing stress. Likewise, the HSE (2001) suggests that sources of workplace stress should be combated at an organisational level before interventions focusing on the individual, for example counselling and training, are introduced. Neither of the participating organisations reported that they had introduced interventions in order to reduce stress.

In addition, stress is a complex and dynamic phenomenon and many factors, other than coaching, can influence individuals' levels of perceived stress. Factors that may have influenced stress levels, but were not measured in the current study, include: family, economical, health, career, work/life balance, and relationship issues. Considering the complexity of stress two scenarios are possible: coaching did simply not have any effect on strain; or coaching did in fact have some effect on strain (as suggested by Part III of the current study), but these other factors had a stronger influence and coaching was not sufficient in significantly reducing strain.
Nevertheless, the participants in Part I and II of the current study perceived coaching to be highly effective. Thus, it is possible that the coaching was effective at tackling the specific issues targeted in coaching while failing to significantly affect reported stress levels. Consequently, the findings could suggest that coaching can be an effective intervention in the workplace although significant strain reduction was not a secondary gain as predicted by the researcher. As the participants reported that coaching was very effective it is likely that they will seek coaching again when they need help with future problems. This may lead to the employees seeking help at an early stage and thereby prevent future stress caused by a bigger problem. Thus, indirectly coaching may prevent stress. Similarly, coaching may be viewed as a support in the workplace, and support is an important factor in the prevention of workplace stress (HSE, 2001). Moreover, the employees are likely to view the organisation in a more positive light, and perhaps feel more committed when the organisation is providing a service that is viewed as effective.

The current study found that coaching did not improve job-satisfaction. Consequently, one conclusion that could be suggested is that coaching is not effective in improving job-satisfaction. However, it is important to note that high levels of job-satisfaction were reported at the beginning of the study by both the coaching and the control group. It is possible that coaching may help to improve job-satisfaction to a greater extent when levels of job-satisfaction are low at the start of coaching.

5.6 Future research - Part I and II of the study

Future quantitative studies should employ larger sample sizes as this would increase the power of the statistical analyses. In order to further investigate the effectiveness of coaching in general, and in reducing stress specifically, both naturalistic studies, investigating the effectiveness of coaching as it is practiced in the workplace, and randomised controlled trials, are needed. Grant (2003a) found that cognitive-behavioural and solution-focused life-coaching improved mental health and it would be useful to investigate the effectiveness of specific coaching approaches in reducing workplace stress. Moreover, it would be valuable to investigate the effectiveness of coaching in a group of clients that were seeking coaching because of problems with workplace stress. Future studies investigating the relationship between coaching and
stress should consider further variables that may account for stress including personality factors, health factors, career achievement, work/life balance issues, economical factors and family situation. As stress is a complex phenomenon to measure it would be useful to include further measures of stress, such as physiological measures (Bogg & Cooper, 1994). In addition, the introduction highlighted that the findings from qualitative and quantitative research approaches appear to be inconsistent regarding the effects of coaching on stress. Further qualitative research focusing specifically on stress and coaching would be useful in exploring individuals’ experiences of coaching and stress. Indeed, Part III of the current study uses a phenomenological interpretative approach to investigate coaching and stress.

In terms of the duration of coaching it could be interesting to investigate the different effects of short and long coaching relationships. It would also be useful to investigate the long-term effects of coaching by including several follow-ups. Smither et al. (2003) have proposed a few topics for future coaching research including the relationship between the coach’s style and effects of coaching, and the relationship between the background of the coach (e.g. counselling psychology, organisational development) and the coaching process or outcomes. Gray (2004) suggests that the coachee, the coach, the line manager, and the organisation (particularly Human Resources) can all contribute to the coaching evaluation process, as each can give a different perspective. The coachee and the coach may reflect on the personal gains of coaching, the line manager may reflect on the coachee’s performance, and the organisation may reflect on the Return on Investment. Moreover, various data collection methods may be useful for example focus groups and reflective journals.

The participants in the current study reported high levels of job-satisfaction prior to coaching. Future research could investigate the impact of coaching in a group of individuals with low levels of job-satisfaction prior to coaching. This would be valuable as previous research has found that counselling and stress management can have a positive effect on job-satisfaction (Firth-Cozens & Hardy, 1992; Murphy, 1988).
5.7 Conclusion

Part I of the current study found that coaching did not significantly reduce perceived levels of strain. The experimental hypothesis was therefore rejected and the null hypothesis accepted. Nevertheless, the mean values indicated that levels of stress and anxiety decreased more in the coaching group than the control group. It is also important to consider the fact that Part I had a small number of participants and did not have a sufficient number of participants in order to have a power of 0.80. It is possible that the results would have been different if there would have been a larger number of participants.

Part II of the study found that participation in coaching did not predict lower levels of strain. The experimental hypothesis was therefore rejected and the null hypothesis accepted. The stressors lack of control and role ambiguity were predictive factors of levels of depression and high demands and role ambiguity were predictive factors of levels of stress.

It can therefore be concluded that coaching did not significantly reduce levels of strain and participation in coaching did not significantly predict levels of strain. Consequently, a general coaching intervention may not have a significant effect on the experience of stress in the workplace.

However, high levels of coaching effectiveness were reported by the participants. Thus, it is possible that coaching is a useful workplace intervention although it does not significantly reduce levels of strain.
Chapter 6: Discussion Part III

6.1 Summary of findings

The aim with Part III of the study was to investigate the participants' experiences of coaching. Four main themes emerged from the analysis of the interviews: management of stress, the coaching relationship, confidence, and coaching = Investment in staff.

The participants in the current study had not sought coaching in order to tackle stress directly. Nevertheless, the participants expressed that coaching had helped them to reduce stress indirectly, for example, by helping to improve confidence and problem solving skills. It was also found that coaching had helped individuals to cope with stressful situations. Coaching was viewed as a resource that the participants would consider using to tackle workplace stress in the future. However, coaching had the potential to cause stress by increasing the focus on the target problem or by not leading to any action.

It was found that the relationship between the coach and the coachee was viewed as very important and necessary for the coaching to develop. This relationship was dependent on trust and improved by transparency. Coaching also helped to increase the participants' confidence and this lead to other benefits, including improved job performance, assertiveness, and wellbeing outside work. There appeared to be some initial scepticism towards the concept of coaching, however, once the participants had attended coaching it was viewed as a sign that the organisation valued and invested in their staff.

6.2 Previous literature

Coaching and stress

Part III of the current study found that coaching did help the participants to manage stress and indirectly reduce it. These findings, however, were different to those from Part I and Part II. Part I found that coaching did not significantly reduce stress, and Part II found that coaching was not a significant predictor of levels of stress. The
CompassPoint Nonprofit Services' (2003) study of coaching also found that the qualitative and quantitative methodologies produced somewhat different findings. The quantitative part of the study found that stress was not significantly reduced after coaching, while the qualitative part found that coaching helped to reduce stress. A possible reason for this inconsistency in both the current study and previous research is that there may be problems measuring changes in stress using only questionnaires. The stress process may be too complex and hold so many different meanings for individuals that only relying on questionnaires, administrated at one or two points in time, is not sufficient. However, the inconsistencies between the qualitative and quantitative approaches may reflect the fact that the individuals who were interviewed represented a minority of individuals who believed that coaching was helpful for stress. Another possibility is that the participants felt obliged to report positive aspects of coaching in the interviews. Further research would be useful in order to clarify this discrepancy.

The results from the interviews in the current study were similar to the findings in the Wales (2003) qualitative study. Both Part III of the current study and Wales (2003) found that coaching helped to reduce experiences of stress. Wales (2003) reported that the coaching had helped the participants to increase awareness and capability of dealing with both job and personal pressures. In Part III of the current study the participants reported that coaching had helped to indirectly reduce experienced stress by targeting other issues. The coaching also helped the participants to cope with certain aspects that were causing stress. Grant (2001b; 2003a) conducted two quantitative studies and found that cognitive coaching and life coaching significantly improved mental health. Once again, this was similar to the interviews in the current study in which participants reported that coaching indirectly reduced experiences of stress. Moreover, several case studies have reported that coaching helped to reduce stress (Ascentia, 2005; Hearn, 2001; Marotta, 1999; Palmer et al., 2003: Richard, 1999). The CIPD (2004a) reports that reduction of stress and increased ability to solve problems are common benefits of coaching. Likewise, in Part III of the current study it was found that coaching helped to reduce stress indirectly by improving the participants' problem solving skills.
It was found that coaching had the potential to cause stress in Part III of the current study. The participants reported that coaching could be a waste of time and could be unproductive if it did not lead to any action. Indeed, Hall et al. (1999) found that the best coaching was results oriented.

Coaching relationship
In Part III of the current study the coaching relationship was found to be important to the participants, and trust and transparency were key factors within this relationship. Leedham (2005) found that the second most common benefit of coaching was receiving support and feeling valued. After reviewing the literature on the benefits of coaching Leedham (2005) found that the client’s satisfaction with the coaching relationship was a central factor in the evaluation of the coaching. Furthermore, Leedham (2005) outlined a model of coaching benefits in which the coaching environment, a safe and supportive environment where confidential factors can be discussed, was one of the foundation factors.

The findings in the current study were similar to those of the Wales (2003) qualitative study, with regards to the value of the coaching relationship. Wales (2003) found that the coaching relationship was a safe and supportive environment where fears and anxieties could be discussed. It was concluded that the quality of the coaching relationship is vital to the outcome of coaching. The importance of the coaching relationship was also found in Wasylyshyn’s (2003) study using a sample of executives coaching clients. It was found that the top characteristic of an executive coach was the ability to create a strong connection with the coachee. This connection involved empathy, warmth, trust, listening skills, and quick engagements. It was further found that the coaching sessions were rated as highly valuable and Wasylyshyn (2003) suggests that face to face contact and frequency are important for successful coaching. The participants in Compasspoint Nonprofit Services’ (2003) study reported that coaching was a relationship that fosters trust, confidence, and deep dialogue. Wilkins (2000) conducted a qualitative study interviewing 22 coaches. The study aimed to understand the process of coaching, and skills and strategies used in coaching. Grounded theory was used to analyse the data and a model of coaching emerged. According to the model, coaching is an interaction between the coach and
the coachee in which the coaching purpose, process, and relationship function in order to develop the coachee to their highest potential.

As stated previously transparency and trust were important factors in the coaching relationship, in the current study. Likewise, Summerfield (2002) has suggested that coaching is a relationship based on trust. Dembkowski & Eldridge (2003) suggest that transparency increases trust in the coaching relationship and without trust the client shares less information and, consequently, does not gain the full benefits of the relationship. It is further suggested that rapport building is the most critical coaching skill during the assessment stage.

Schmidt (2003) conducted a study of success factors in coaching (study reported by Dembkowski & Eldridge, 2004). Overall, 150 coaches (15% response rate) were sent four questionnaires that they were asked to distribute to coaching clients. Factor analysis was used to identify the main success factors in coaching. One of the main factors identified was involvement of the coach; this involved the coach's ability to develop trust within the coaching. A second factor was clarity of goals; this included clarity of roles, methods, and actions in the coaching. According to Dembkowski & Eldridge (2004) this highlights the importance for coaches to be transparent about the process, roles, and responsibilities, and the importance of establishing a good relationship from the beginning of the coaching. Cooperation was another factor that emerged; this related to the development of a sound relationship and a sense of sharing between the client and the coach. Similarly, trust and quality of the coaching relationship was a further factor; this relates to the importance of the coach being supportive and the development of an open and accepting relationship with the coach.

Likewise, Part III of the current study found that the coaching relationship was important and that trust and transparency played central roles in the development of this relationship. In a study on coaching, from the viewpoint of the coach and coachee, Hall et al. (1999) also found that good coaching included honesty, challenging feedback, and helpful suggestions. The coaches agreed with the executives on what characterised good coaching, although the coaches were more likely to also focus on the coaching relationship and process.
When referring to the coaching relationship is it useful to note that the value and importance of the therapeutic relationship has long been recognised within counselling and therapy practice, research and theory. There is a great amount of focus on the therapeutic relationship within the therapy and counselling literature (for example, Bedi, Davis & Williams, 2005; Horvath & Greenberg, 1994).

**Confidence**

Increased confidence was a main benefit of coaching according to the participants in Part III of the current study, and this lead to improved job performance, increased assertiveness, and benefits outside work. Similarly, the CIPD (2004a) states that increased confidence, improved performance, and more assertive behaviour are some of the common benefits of coaching. In Leedham’s (2005) study it was found that the most frequently mentioned benefit of coaching was increased confidence. Moreover, in a model of coaching Leedham (2005) suggests that coaching can lead to increased confidence and this can lead to raised morale and decreased stress. It is further suggested that a positive perception of self-efficacy could be an important factor in determining whether skills, learned on the job, are effectively applied to the job (Leedham, 2005). Compasspoint Nonprofit Services (2003) reports that many participants increased their confidence in their ability to perform their jobs, following coaching. Job-satisfaction was also increased in this study and this was linked to the increase in confidence that coaching stimulated.

Strayer and Rossett (1994) investigated the effects of a coaching programme on sales performance. The programme was rated highly by the coaches and the sales associates. Increased self-confidence was the greatest benefit of coaching according to the sales-associates. This benefit was particularly important as lack of self-confidence was identified as a major negative factor affecting staff’s motivation to sell houses. Moreover, it was reported that the average time for participating sale associates to get their first property listing fell, and this meant that more money was generated from commission. The participants in Part III of the current study also reported that improved confidence improved job performance. Wales’ (2003) qualitative research study found that increased confidence was a benefit of coaching. Some participants also stated that their managers had noticed their developing confidence. Increased confidence meant that the participants felt able to bring "more
of themselves’ to the workplace. In Part III of the current study the participants reported that improved confidence helped them to behave more assertively in the workplace. In additional, a number of case studies have found that coaching increases confidence (Hearn, 2001; Compasspoint Nonprofit Services, 2003; Palmer et al., 2003).

Coaching = Investment in staff
According to the participants in Part III of the current study, the fact that the employer provided workplace coaching was viewed as a considerable work benefit and was also viewed as a sign that the employer cared for their staff. Indeed, CIPD (2004a) state that one of the common organisational benefits of coaching is that it demonstrates to employees that the organisation is willing to support the development of their staff. A study by the CIPD (2003) investigated how coaching could affect performance. It was found that job performance was dependent on employees’ ability, motivation, and opportunities to develop ideas. Coaching can have a positive impact on these factors by helping to improve motivation and skills, promoting responsibility, and by making the employee feel valued and consequently committed to the organisation. In Wales (2003) study it is concluded that coaching makes the coachees feel valued.

6.3 Limitations of Part III of the study
Issues relating to qualitative research design have been discussed under ‘Evaluating the analysis’ in the methods section. However, there are some further limitations in Part III of the study that need to be highlighted. It is possible that recruitment bias will have an impact on the research when the sample is relatively small (Chapman, 2002). Indeed, it may be the case that only those individuals who considered that their coaching was successful agreed to take part in the current study. Individuals who did not value their coaching experience may have been reluctant to participate. Moreover, the contact persons, based at the organisations, may unintentionally (or intentionally) have put forward individuals who were positive towards coaching.

Three of the participants worked in the Scandinavian organisation and six worked in the UK organisation. All interviews were analysed as one sample as they had all experienced workplace coaching within their organisations and therefore would be
able to inform the researcher about the topic under investigation. However, it is possible that the results were consequently more representative of the experiences of coaching in the UK organisation. It would have been preferable to have an equal number of participants from both organisations. Nevertheless, the participants' experiences of coaching were similar, although each participant of course had a unique experience of coaching. A further limitation was that the coaching differed to some extent between the organisations and this will of course influence their experience of the coaching. Moreover, the participants from the Scandinavian organisation were interviewed over the phone whereas the participants from the UK organisation were interviewed in person. These different interview conditions may have had an impact upon the alliance developed in the interviews. However, it is the researcher's belief that good contact was established in all interviews.

6.4 Implications

Coaching and stress

*Indirect work on stress*

The current study found that coaching was helpful in reducing experienced stress indirectly by improving the participants' confidence, and this lead to an increased ability to decline extra work and delegate work. The participants clearly reported that the extra work was causing stress and coaching helped them to be more realistic about their abilities and to say no when necessary. Indeed, being able to set limits regarding work pressure and working time can be an important step in reducing work stress. In a guide on managing stress the HSE (2001) states that working long hours is not encouraged within a healthy organisational culture. Thus, coaching may be recommended to employees who appear to be suffering from stress and who have problems with clearly stating their limits regarding extra work. Being able to say no when the work pressure becomes too much could prevent future stress and could, in some cases, be the difference between coping and not coping. In addition, it is also possible that by improving confidence in coaching individuals are more able to complain to management when the work pressure is too demanding. This may motivate the organisation to tackle this particular stressor. It is also likely that saying 'no' and standing up for oneself will have a positive effect on self-confidence. This process can be circular, as illustrated in Figure 6.
In the current study, coaching also reduced experienced stress indirectly by helping to improve the participants' problem-solving skills and providing an opportunity to discuss problems. Uncertainty regarding how to deal with work-related problems was a source of stress. Seeking help in coaching can be viewed as a proactive way of dealing with issues associated with problem solving. Moreover, employees may feel more relaxed, in the knowledge, that they can receive help and support in coaching when a problem arises. Having the opportunity to use coaching, together with improved problem solving skills, may prevent future stress.

*Coping with stress*

It was also found that coaching reduced experienced stress in the current study by helping the participants to increase satisfaction with job roles and to cope with stressful situations, such as changing job roles. Being dissatisfied and uncomfortable in one's job role were sources of stress. Coaching acted as a support in periods of change and provided opportunities for the employees to discuss problems and difficult aspects of the job. Thus, coaching may provide particular value to new members of staff, and to staff that are changing their job role. This may subsequently reduce staff turnover in periods of organisational change. Similarly, employees may also feel encouraged to apply for promotions if they are aware that they can receive support from coaching while settling into their new job roles. The coaching also helped participants to cope with the experienced stress caused by certain aspects of the job with which they were not comfortable, such as presentations. Thus, coaching can provide support to employees in a number of different situations.
Use coaching for stress in the future

The participants in the current study were positive towards using coaching for stress in the future, although they had not sought coaching to deal with stress directly. It is positive for both the employees and the organisation that the participants clearly knew where they could seek help when experiencing stress. The participants even stated that they would recommend coaching to colleagues who were suffering from stress. Thus, it appears that the participants considered coaching to be a useful resource for workplace stress. It might therefore, be useful if workplace coaching services were to advertise that coaching can be a way of dealing with workplace stress. Indeed, former coachees' experiences of coaching can also be used in coaching promotion.

Participants in both the current study and in previous research (Gyllensten, et al., 2005) have reported that coaching is viewed as preferable to counselling for workplace stress. The explanation being that counselling implies a more serious problem with stress than coaching, and that counselling may also carry a stigma. Consequently, coaching has the potential to reach the individuals who are not comfortable seeking counselling for stress at their workplace. It may be easier to take the step and seek help for stress if the problem and solution appear less clinical. This may also lead to individuals seeking help with stress at an early stage.

Moreover, according to some participants it was preferable to see a coach to discuss stress related issues compared to a manager. Thus, coaching may also reach individuals who are not comfortable approaching their managers regarding stress. This is particularly relevant when considering the fact that some managers are neither sympathetic to stress related issues, nor trained to deal with them.

Cause of stress

It is important to note that the current study also found that coaching can actually cause stress. According to the participants it is imperative that the coaching leads to some form of action. Thus, action plans and evaluations, where the coach and coachee discuss where the coaching is leading, could be valuable. It is also important that the coach explains what the coachee can expect from coaching and highlights that an excessive focus on the target problem may cause an initial increase in distress. If the coachee is aware of what to expect they can then make an informed choice.
regarding the suitability of coaching and thereby reduce the likelihood of it being perceived as a ‘waste of time’ for both the coachee and coach.

The coaching relationship

*Valuable coaching relationship*

The coaching relationship was viewed as important and valuable in the current study. Participants reported that unless a good enough relationship was developed in the coaching, relevant achievements would not be made. It is therefore important that coaches are aware of, and are working with, the coaching alliance. This appears to be particularly important at the start of the coaching as many of the participants reported that they were feeling sceptical of the coaching in the beginning. There was also fear regarding how the coach would view the presenting problem. Thus, it appears essential that a positive atmosphere is developed between the coach and the coachee from the beginning of the coaching in order for the coachee to feel comfortable to share information about the problem. Moreover, a good relationship makes it more likely that the coachee will continue with the coaching and consequently gain something from it. Nevertheless, the participants highlighted that the relationship was not the only factor that made coaching useful, rather working towards goals and improving performance were also valuable components. It is therefore suggested that coaching may be most beneficial if incorporates a number of components, including a focus on the relationship.

*Trust*

The current study found that trust was an important aspect of a good coaching relationship. Trust enables the coachee to be open, even about personal limitations and difficulties, and this is, of course, vital for the development of coaching. According to the participants, confidentiality helped to build a relationship of trust with the coach. Therefore, in order to develop trust within the relationship, the coach would benefit from clearly stating the terms of the confidentiality at the onset of the coaching. Likewise, it is very important to highlight the limitations of confidentiality as the organisation may demand feedback regarding the coachees’ development.
**Transparency**

Transparency on the behalf of the coach was viewed as very helpful in the current study as this lead the coachee to feel fully included in the coaching process. It is likely that an understanding of the steps taken in coaching, and a feeling of being included in the process, will have a positive effect on the subsequent commitment to the coaching. Thus, by being transparent and open, the coach may help the client to feel more inspired to take part in the process. It could be suggested that when the coach is completely open about the process the client is in a better position to evaluate the coaching and take decisions based on a full knowledge of what the coaching entails (as suggested under ‘Cause of stress’). Consequently, it is reasonable to assume that coaches would benefit from being completely transparent regarding the coaching process with their clients, regardless of their theoretical orientation.

**Confidence**

*Improved job performance*

The current study also found that coaching was effective in improving confidence among employees and this lead to several positive implications, such as improved job performance. For some participants, increased confidence helped them to implement the knowledge they already possessed. Thus, coaching can play an important role in helping the coachee to implement knowledge following, for example, training courses. Indeed, this use for coaching has been investigated in previous research (Olivero et al., 1997). Increased confidence also meant that the participants felt better equipped to deal with difficult aspects of the job. Consequently, departments with a poor performance history may benefit from coaching, in the event that a lack of employee self-confidence is one of the contributing causes. The possibility of improving performance may also act as a powerful motivator for attending coaching.

*More assertive behaviour*

Greater assertiveness was another benefit of increased confidence. This sub-theme overlaps with ‘Reduced stress’ as saying ‘no’ to extra work is an example of increased assertive behaviour. Some participants in the current study also reported that they felt more able to voice their opinions in the workplace following coaching. More assertive behaviour is likely to have a positive influence on wellbeing. Increased confidence lead to increased involvement in organisational life; this could benefit the
employee by helping them to feel more involved in the organisation, thereby increasing satisfaction and the likelihood of being perceived by management in a more positive manner. Increased involvement in organisational life may also benefit the organisation as the employees may feel more committed to the organisation.

Benefits outside work

Increased confidence lead to positive benefits outside work, in the current study. A positive consequence of improved confidence regarding job performance was that the participants were more able to leave the office without bringing work home. This can help to prevent stress as it provides the employee with a break from work. The HSE (2001) states, in a guide on managing stress, that staff are not encouraged to take work home within a healthy organisational culture. Moreover, the participants reported that being confident in the job meant higher wellbeing outside work, including in personal relationships. Increased confidence in work could also transfer to situations outside work and result in more assertive behaviour. Work life influences home life, and vice versa, and the fact that coaching can help to improve employees' lives both inside and outside the office is clearly valuable for both the employees and the organisation.

Coaching = Investment in staff

Scepticism towards coaching and the organisation

There was an initial scepticism towards coaching among the participants in the current study. It might, therefore, be beneficial to provide information to potential coaching clients regarding what coaching entails and the rationale for introducing it in the organisation. As highlighted in the section 'Transparency' it may also be useful to explain what can be expected from the coaching, at the beginning of the coaching, as this may reduce the scepticism.

Improved perception of organisation

The fact that the employer provided coaching was viewed as very positive by participants in the current study. The provision of coaching was seen as proof that the employer cared for their employees and was willing to invest in them. Thus, coaching can help to create a positive view of the employer. It is possible that this will have an
influence on employees' loyalty towards the organisation and this may contribute to improved job-satisfaction and, ultimately, reduce staff turnover.

It is not suggested that coaching should be introduced purely as a 'strategic move' in situations where the job culture is negative and employees express negative views of the employer. However, the fact that the introduction of coaching may be viewed in a positive light among employees could be a bonus for organisations that are having problems with staff morale and commitment. Indeed, Palmer et al. (2003) state that in order to achieve their aims organisations require commitment and loyalty from their employees. The introduction of coaching (on all levels) can be a concrete way for the organisation to show that they value their employees and are willing to invest in them, regardless of title. Feeling valued by the employer is likely to be an important factor in job-satisfaction.

6.5 Future research
The results of the current study highlight the need for additional qualitative and quantitative research on coaching and stress. Further, qualitative studies could investigate the process and outcome of coaching a qualitative approach has the potential to capture the richness of the coaching experience. This research could investigate which aspects of the coaching were useful, and at what points, these aspects were useful.

Questions could include: how did the coach, the coachee, and the key stakeholders conceptualise improvement? What did it mean for them? What changes have other employees noticed among their colleagues receiving coaching? If coaching was not useful: what were the barriers and limitations? What could the coach have done differently? Was there anything different about the individuals who found coaching helpful compared to individuals who did not gain anything from coaching?

In addition, 360 degree feedback could be useful to capture the impact of coaching. 360 degree feedback is a multirater assessment method which involves obtaining feedback about the coachee from the relevant individuals, for example, managers, colleagues and clients (Skiffington & Zeus, 2003).
Finally, future research could also investigate the discrepancy between qualitative and quantitative approaches, found in both the current study and in previous research.

6.6 Conclusion

The aim of Part III of the current study was to investigate nine individuals' experiences of coaching. ‘Management of Stress’ was identified as a main theme which, in turn, comprised of a number of sub-themes. According to these sub-themes coaching had helped the participants to reduce stress indirectly, to cope with stressful situations, and was a resource that the participants would consider using in the future. However, coaching also had the potential to cause stress. Overall, these findings would suggest that coaching could be useful in tackling workplace stress in organisations that are similar to the ones that participated in the current study.

In addition, the study found three further main themes: the coaching relationship, confidence, and coaching = investment in staff. These themes suggested that the coaching relationship was valuable and that trust and transparency were important aspects within the relationship. Increased confidence was a benefit of coaching and this had positive effects on job-performance, assertive behaviour, and life outside the office. Finally, it was found that coaching was viewed as an investment in staff and resulted in a more positive view of the organisation among the employees.
References:


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Section C: The client study

Working with a client suffering from workplace stress in a primary care setting: A cognitive behavioural case study

Introduction

Stress in the workplace

Stress can cause both psychological and physiological problems, including higher blood pressure and cholesterol levels, depression, anxiety, and it can have negative effects on motivation, job satisfaction and self-esteem (Health and Safety Executive, 2003). The Health and Safety Executive (2005) estimates that thirteen million working days per year are lost because of work-related stress, depression, and anxiety. A cognitive definition of stress proposed by Palmer, Cooper & Thomas (2003, p. 2) states that: ‘Stress occurs when the perceived pressure exceeds your ability to cope’. As this conceptualisation of stress emphasises the individual’s perception of the stressful situation, it is particularly suitable within a cognitive behavioural therapy approach.

Counselling psychologists are increasingly practicing in the workplace (Orlans, 2003) and there are several articles describing therapeutic work with clients suffering from stress in occupational settings (Hill, 2000; Jenkins & Palmer, 2003). However, due to the stigma attached to counselling in some organisational settings certain clients may be reluctant to seek help at their workplace (Carroll, 1996). It is therefore likely that counselling psychologists working in primary care are faced with clients suffering from workplace stress.

Cognitive behavioural therapy

Beck’s Cognitive Behavioural Theory (CBT) is based on the rationale that an individual’s feelings and behaviour are determined, to a great extent, by the way they perceive the world (Beck, 1976). The model further proposes that dysfunctional
thinking plays an important role in psychological disturbance (Beck, 1995). According to Greenberger & Padesky (1995) there are three levels of beliefs:

1. Automatic thoughts: are on the surface level and can be linked to current experiences and predictions about the future or the past. Negative automatic thoughts (NAT’s) lead to behavioural, motivational, emotional and physical distress;
2. Assumptions: are deeper level cognitions compared to automatic thoughts and are therefore less obvious, and they function as guidelines for behaviour and expectations.
3. Core beliefs: are the deepest level cognition and are rigid, absolutistic statements about self, other people and the world. The relationship between these different levels of cognitions is illustrated in the following diagram by Greenberger & Padesky (1995):

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Automatic Thoughts

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Assumptions

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Core Beliefs
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The main aims of the therapy are to teach the client to identify and question negative automatic thoughts and dysfunctional behaviour. The treatment is active, time-limited, and it emphasises a collaborative relationship between the client and therapist (Curwen, Palmer & Ruddell, 2000; Hawton, Salkovskis, Kirk, & Clark, 1989).

Case study
The case describes the therapeutic work with a client suffering from workplace stress. In accordance with the area of counselling psychology (British Psychological Society, 2004) the case highlights the importance of the therapeutic relationship. In addition it emphasises how psychological theory and research are relevant to the therapeutic work.

Biographical details
The therapy took place in a GP’s surgery in a deprived area of London. Therapy was provided on a short-term basis, and supervision was provided externally by a
Chartered Counselling Psychologist. The client reported in this study was referred by her GP. The only information given in the referral stated that the client was suffering from anxiety problems. The client, Karen, was 28 years old and working full-time as a middle level manager. Karen was an only child and lived at home with her parents, with whom she had a close relationship. According to Karen she had been spoiled by her parents when she was growing up. During her school years Karen had been an ambitious student, but she had been bullied at school by a group of girls and had felt like an outsider. Karen was very committed to her job and worked hard, and she had been promoted to a more senior position shortly before starting counselling. At the beginning of therapy Karen was engaged to her long-term partner with whom she had been going out with for four years. However, during the therapy the relationship deteriorated and they broke off the engagement. Karen felt that her partner did not understand the pressures she was under from work. During the therapy Karen was not taking any medication.

**Presenting problem and assessment**

During the assessment Karen presented casually dressed, she appeared to be a little tense but was talkative and open. The assessment was based on Kirk's (1989) guidelines for CBT assessments. Karen did not present with one specific presenting problem but rather a combination of various complaints. Jenkins & Palmer (2003) point out that individuals suffering from chronic stress often present with a variety of psychological and physiological symptoms and behaviours. Karen said that her problems started approximately one year ago, and they had slowly been getting worse during the year. Karen decided to seek help at this point because she felt that her anxiety problems had developed into depression.

Symptoms of anxiety included agitation, restlessness, and panic (Wells, 1997). Karen reported that she was constantly feeling worried and that she was afraid that something would happen to her. The physiological symptoms included trembling, twitching, shaking, sweating, and rapid heartbeat. Karen further explained that she had been feeling low recently, and she experienced herself as being over-emotional and often cried. Mood swings were a further problem and Karen had been

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1 All names and identifying information have been changed to ensure client confidentiality.
increasingly snappy with people close to her and she had withdrawn from her friends. In terms of physiological signs of depression, Karen was eating less than normal, her sleep was disturbed and she was feeling tired. Karen reported that that her worst time of the day was after she came home from work. The two main triggers to low mood, anxiety and mood swings were coming home from work and conversations with her boyfriend.

The assessment took place during two sessions. During the first session the therapist experienced some difficulty in formulating the client's problems as the client presented with many different issues. It was therefore explained to the client that the assessment would continue during the next session to ensure that a clearer picture of the problems could be obtained. It has been stated that treatment of a client suffering from stress can be complex because of the absence of a single clear point of intervention and the combination of psychological and psychosocial concerns (Jenkins & Palmer, 2003). During the second session it became apparent that Karen was also suffering from work stress. In the office Karen was on edge, restless, tense and found it impossible to relax, she sometimes found herself crying because of the workload, and she found it difficult to face going to work.

Rationale for the therapeutic approach

The rationale for choosing CBT in this case was based on the client's wish to work with her thinking in the therapy. CBT was also suitable as it was important to include behavioural interventions such as exercise in the therapy. Moreover, the therapy contract was short-term and CBT is as a short-term therapeutic intervention (Beck, 1995).

Research has found that CBT is effective in treating depression (Dobson, 1989) anxiety (Butler, Fennell, Robson, & Gelder, 1991), and stress (Cartwright & Cooper, 2005). In addition, the National Institute for Clinical Excellence (NICE) recommends the use of CBT for depression (NICE, 2004a) and anxiety (NICE, 2004b). However, it is recognised that other cognitive approaches such as Ellis' rational emotive

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2 At the time of the therapy the therapist was a trainee counselling psychologist
behaviour therapy (Ellis, Gordon, Neenan & Palmer, 1997) may have been equally suitable. Other cognitive therapies such as Young’s Schema Therapy (Young, Klosko & Weishaar, 2003) may have been appropriate if the therapy would have taken place over a longer period and if it was considered that focusing on the key schema would be any more effective in helping this client deal with work-related stress.

Cognitive conceptualisation

From the assessment stage to the end of the therapy the therapist and client collaboratively completed a cognitive conceptualisation (see Figure 1). The format of the conceptualisation was based on the diagram presented by Beck (1995). The diagram depicts the relationship between the deeper-level beliefs and the automatic thoughts, and it is a cognitive map that helps to organise the client’s information. As the client and counsellor generally start to work with automatic thoughts, the bottom half of the diagram is often filled in first (Beck, 1995). Completing the conceptualisation together emphasised the collaborative aspect of CBT. Filling in the diagram in the session also reinforced the CBT framework and most importantly it helped to increase our understanding of how Karen’s thinking was influencing her problems (Curwen, et al., 2000).

Starting from the top to the bottom in Karen’s cognitive conceptualisation (see Figure 7) the first box lists the relevant childhood data. Childhood is not generally the main focus in CBT. However, it can be important to consider what life events that could be related to the development of the client’s present problems, in particular intermediate and core beliefs (Curwen, et al., 2000; d’Elia, 2000). Being bullied at school was the childhood event that was linked to Karen’s core belief ‘I am worthless’. There was probably further childhood data but this topic was not prioritised in the therapy.

The assumptions that Karen identified included: ‘If I do not do a perfect job all the time I am worthless’, ‘If I don’t get other people’s praise I am worthless’, ‘I cannot stand it if people think badly of me’, and ‘If my partner does not love me I am worthless’. The behavioural strategies that Karen developed to ameliorate the potential negative effects of the core belief were to work very hard and to look for reassurance that her partner cared for her. Beck (1995) points out that compensatory
strategies are normal behaviours, but that the problem for many psychologically
distressed clients is that they overuse these strategies at the expense of other more
functional strategies. The NAT's presented in the diagram were three 'typical' 
NAT's taken from thought-records Karen had completed as homework. Examples of
NAT's included, 'I have done a bad job', 'he does not care', and 'I must have done
something wrong'.
Cognitive Conceptualisation

Relevant Childhood Data
Bullied

Core Belief
I am worthless

Intermediate Beliefs: Conditional Assumptions/ Beliefs/ Rules
If I do not do a perfect job all the time I am worthless
If I don't get other people’s praise I am worthless
I cannot stand it if people think badly of me/I need their praise and approval
If my boyfriend does not love me I am worthless

Compensatory Strategies
Looking for partner’s reassurance that he cares
Work hard to gain approval/ praise (no breaks & overtime)

Situation 1
A critical colleague at work
Automatic Thought
I have done a bad job
She should not say this to me.
Meaning of The AT
I am worthless
Emotion/ Physiology
Sad difficulty
Anger breathing
Behaviour
Withdrawal from colleague

Situation 2
On the phone with partner
Automatic Thought
He does not love me
Meaning of The AT
I am worthless
Emotion/ Physiology
Sad panic
Behaviour
Asked for reassurance and started argument

Situation 3
All other managers in a meeting
Automatic Thought
They are talking about me, I must have done something wrong
Meaning of The AT
I am worthless
Emotion/ Physiology
Anxiety difficulty breathing
Behaviour
(No behaviour noted)
Workplace stressors

Although, much stress originates from the client’s internal demands (Palmer, 1995) it is important for a therapist, who is working with clients suffering from stress, to consider occupational stressors (Palmer & Dryden, 1995). Workplace stressors that appeared to contribute to Karen’s problems were identified in the therapy. These stressors were - problematic relationships with colleagues, lack of feedback and support from manager, work overload, stressful work environment, and shift work. No formal questionnaire was used in order to further identify stressors although this may have been helpful in order to gain a broader picture of Karen’s problems and work situation. For example an instrument such as the Job Stress Survey (Spielberger, 1994) would have been a useful tool for identifying frequency and severity of stressors.

Questionnaire measure

The Depression Anxiety and Stress Scales-21 (Lovibond & Lovibond, 1995) were used to assess the client’s psychological health and to evaluate the therapy. The Depression Anxiety and Stress Scales-21 (DASS-21) have been found to successfully distinguish levels of depression, anxiety and stress, and have recently been found to be a valid and reliable instrument to use with a British population (Henry & Crawford, 2005). At the beginning of the counselling Karen’s scored 24 (severe) on the depression scale, 10 (moderate) on the anxiety scale, and 24 (moderate) on the stress scale.

Goals, contract, and confidentiality

Goals and contract

CBT is goal oriented and Kirk (1989) suggests that advantages of setting goals include an emphasis the process of change and the structure of treatment. Goals should be decided upon mutually by the client and the counsellor, emphasising the collaborative nature of CBT (Curwen, et al., 2000). The general goals collaboratively generated between the client and the therapist included, reduce anxiety and tension after work, reduce low mood associated with fights with the boyfriend, start regular physical exercise, go out more, and increase relaxation. The anxiety and stress arousal Karen experienced just after work was the most distressing presenting aspect of her problems so it was decided that decreasing this would be the first goal. A
process related goal, based on the cognitive conceptualisation, was to learn to recognise and consequently modify negative automatic thoughts and dysfunctional thinking patterns. It was agreed that Karen should attend therapy for ten sessions and that a review should be conducted after the tenth session. It was decided that Karen should attend therapy every two weeks and that the frequency could be changed if suitable.

Confidentiality

Karen was advised about the confidentiality of the sessions and in which instances the confidentiality would be broken. The therapist informed Karen that other professionals were involved in her professional development and it was assured that they were also bound by professional codes of conduct. Karen was also made aware of the fact that any case material that would be presented would be anonymous and all names or identifying factors would be changed. Finally, Karen signed a consent form stating that she understood and consented to allowing her material being used for this client study.

Content and Development of Counselling

Therapeutic relationship

A warm and empathic therapeutic relationship is important in CBT and Beck and colleagues stated that the efficacy of CBT is dependent, to a great extent, on the therapeutic relationship (in Burns & Auerbach, 1996). Karen and the therapist developed a good alliance from the beginning of the work. The relationship was strengthened by the collaborative aspect of the therapy. The work with the cognitive conceptualisation was particularly important in the development of the therapeutic alliance. Finally, humour was also an important factor that contributed to the therapeutic relationship.

Behavioural and physiological interventions - and progress

According to Palmer & Dryden (1995) it can be useful to inform clients about the physiological stress response. The basic psychological processes involved in the
body’s stress reaction were discussed, and two relaxation techniques were recommended. It has been stated that if relaxation is an appropriate intervention it is useful to introduce it at an early stage of the counselling. This may lead to early therapeutic gains which in turn may increase the client’s sense of control and confidence in the counselling (Palmer & Dryden, 1995). A rapid-relaxation technique, that could be used to tackle the acute stress reaction, was taught to the client. The exercise involves deep breathing and focusing on a square object, and it helps the client to get the benefits of the deep breathing, distracts the client from their stress related cognitions, and focuses the client on the activity and is generally calming (Palm, Andersson, Freeman, Juhela & Palm, 1999). The client was also advised to obtain a CD or tape with progressive muscle relaxation (Palm et al. 1999). This exercise could have been completed and tape recorded in the session, but it was collaboratively decided that due to the limited time it would be preferable for Karen to obtain this outside therapy. Research has found that progressive muscle relaxation is effective in reducing perceived stress (Scheufele, 2000), and that brief relaxation exercises lead to lower levels of cortisol, heart rate, stress, and state anxiety (Pawlow & Jones, 2002). The roles of lifestyle, healthy eating, and general self care in wellbeing were discussed in the beginning of the therapy as suggested by Palmer & Dryden (1995) as health-related behaviours that are relatively easy for clients to undertake could enhance their health locus of control, improve self-efficacy and thereby reduce stress (see Siela and Wieseke, 2000).

As Karen had decided that one of her goals was to increase physical activity we selected this as homework from the first session. Considering that physical exercise can improve both physical and psychological health (Palmer & Dryden, 1995), and that it was a goal that would be relatively easy to achieve, and therefore had the potential to increase motivation, it was useful to start with this goal. Karen reported that she used to enjoy walking and we agreed that brisk walking would be a suitable form of exercise. It was decided that Karen should park her car twenty minutes away from work and this would ensure that she would get two twenty minutes walks per day. Walking after work was also beneficial in terms of working on Karen’s goal of feeling less anxious and tense after work. Indeed exercise, including walking has been found to have antidepressive and anxiolytic effects, and to reduce sensitivity to stress (Salmon, 2001). Moreover, NICE (2004a) recommends the use of exercise for
patients suffering from mild depression. In addition, Karen decided that she wanted to start yoga but she did not feel that she had the energy to start with this until the later part of the therapy.

During the first four sessions Karen appeared to be very motivated to attend therapy, and she carried out the homework sessions with great enthusiasm. During this period Karen made considerable progress in terms of mood and energy. The interventions aimed at the physiological aspects of Karen’s problems appeared successful in providing initial symptom relief. The breathing exercise was very useful in tackling the acute stress reaction but Karen had not found the time to purchase a relaxation CD, thus she had not got into the routine of progressive muscle relaxation. At this point the therapist could have further emphasised the usefulness of progressive muscle relaxation and discussed when/where Karen could obtain a CD. Karen felt that the walking was the most useful intervention and it helped her to relax, and to sleep better. Being less anxious and more relaxed had positive effects on other areas in Karen’s life, and she reported that the number of arguments with her partner and mother had decreased.

On the fifth session Karen’s mood had dropped, and she had been ill during the sessions and she found it difficult to motivate herself to continue with the walking. Her relationship with her partner had deteriorated and this appeared to be at trigger to her low mood. The low mood and lack of motivation lasted for several weeks and the majority of the time in therapy was spent discussing the relationship (see ‘Relationship Problems’). The usefulness of physical exercise was emphasised with reference to Karen’s own experience, and although Karen recognised that she was feeling better while active she found it difficult to actually motivate herself. During the last three sessions her mood had improved and she stared walking regularly again, and once again she experienced the benefits from the exercise. Moreover, she had also started yoga once a week and had finally purchased a relaxation CD that she listened to after work.
Cognitive interventions and progress

Negative Automatic Thoughts

At the beginning of the therapy the therapist introduced the concept of negative automatic thoughts (NAT’s). This concept was presented together with an explanation of CBT showing how the thoughts, feelings, behaviour, body and the environment interacted, using Karen’s own experiences (Greenberger & Padesky, 1995). Karen was taught to recognise and monitor NAT’s by using a thought record adapted from Fennell (1989). The records were discussed in the sessions and Karen and the therapist evaluated the NAT’s collaboratively and formulated alternative responses. It has been suggested that it is important that the client is helped to evaluate their NAT’s in the sessions as the client may find it difficult, at first, to find alternatives to the NAT (Freeman, Pretzer, Flemming & Simon, 1990).

Most of the NAT’s that Karen recorded between the sessions were related to her job. Examples of her ‘typical NAT’s included ‘they talk about me’, ‘I should have done a better job’, ‘this is awful’ (in situations when colleagues were criticising her). Karen learned the process of examining her thoughts quickly and was able to apply this technique between the sessions after a few weeks in therapy. In the work with NAT’s it became apparent that Karen had a tendency to distort her thinking by catastrophising, i.e. expecting the worst case scenario in many situations, by jumping to conclusions and making negative interpretations without definite facts (Powell, 1992). It was helpful for Karen to learn to recognise these specific distortions as it helped her to further challenge her thoughts.

Dysfunctional assumptions

As the therapy was short-term the main focus was on learning to recognise and modify negative automatic thoughts (Curwen, et al., 2000). However, as the work progressed several dysfunctional assumptions were identified and recorded on the conceptualisation map (see Figure 1), but only a few, that appeared to be particularly significant in relation to Karen’s presenting problems, were examined. Beck (1995) suggests that it is important that the therapist consider whether the belief is central and should be worked on. For example Karen held the belief ‘I have to do a perfect job all the time otherwise I am worthless’. As this appeared to be an important belief that was linked to many NAT’s some time was spent on evaluating this belief. Within
CBT once a dysfunctional belief is discovered questioning and behavioural experiments are used to develop a more realistic and helpful belief (Fennell, 1989). In the therapy the concept of beliefs/rules was discussed and advantages and disadvantages of holding this particular belief were examined (Fennell, 1989). Karen identified that this belief had motivated her to work hard and achieve a lot, but she also recognised that holding such an extreme thought caused her much distress and that it was impossible to do a prefect job all the time. Over time Karen developed the more functional belief 'I do the best I can at work' and 'my work is not everything in my life'. Overall, the work with underlying beliefs was very useful as it increased our understanding of Karen's thought processes and helped her to challenge certain dysfunctional assumptions.

Core beliefs
Karen's dysfunctional assumptions appeared to be linked to the activated negative core belief 'I am worthless'. Thus, it was hypothesised this core belief helped to maintain her dysfunctional thinking patterns and her low mood and anxiety. The concept of core beliefs (Beck, 1995) was briefly discussed in the therapy. The core belief was added to the cognitive conceptualisation (see Figure 1) and Karen reported that it was helpful to get a clearer idea of the relationship between the NAT's, assumptions, and the core belief. As the therapy was short-term work with the core-beliefs was not prioritised. It may have been useful to spend some further time specifically focusing on Karen's core belief 'I am worthless' as this appeared to play a significant role in her distress. However, the underlying assumption of which it formed a part was tackled (see previous section).

Work stress
In the middle part of the therapy (session 3-7) some of the stressors in Karen's work life were further explored. It became apparent that Karen was not taking any breaks at work and was constantly working overtime. This behaviour could partly be understood as behavioural compensatory strategies as discussed under the cognitive conceptualisation. Karen felt that unless she was doing a perfect job, and worked very hard she was worthless and had failed. However, it was also important to note that there were organisational aspects of this stressor as Karen worked in an environment that encouraged overtime. Padesky (2004) and Beck (1995) suggest that
behavioural compensatory strategies should be tested using behavioural experiments. It was the therapist’s plan to suggest an experiment involving taking a lunch break or leaving work a bit earlier than normal. However, without any discussions about these specific techniques in therapy Karen reported during the fourth session that she had started taking lunch breaks and leaving work somewhat earlier. She reported that doing this made her feel more relaxed and her anxiety had further decreased, especially when she came home from work. Thus, Karen had successfully changed her compensatory behaviour on her own accord. Other workplace stressors included problematic relationships with colleagues. It has been stated that interpersonal relationship are one of the most common causes of workplace stress (Ellis, Gordon, Neenan & Palmer, 1997). The two main ways Karen dealt with this problem was to change her thinking regarding the importance of gaining approval from others, and to act more assertively with colleagues who she felt had a negative attitude towards her. Further assertiveness training may have been useful at this point, but due to the limited time this was not prioritised. It may also have been useful to explore any additional workplace stressors that had a negative impact on Karen and to consider interventions or solutions that could help to reduce these stressors.

**Relationship problems**

As stated previously during the fifth session Karen reported that she had stopped the walking routine because she felt too tired. During this period Karen cancelled several sessions because she had become ill with the flu. Her illness could be seen to fit in with her stress problems as chronic stress has been found to be associated with a lowered alertness of the immune system (Evans, 1998). One major explanatory factor of the low mood appeared to be the increasing relationship problems Karen and her partner were facing. Most of Karen’s NAT’s were no longer related to work but to situations in which Karen and her partner had arguments. Thought records and discussions revealed that the negative automatic thought ‘he does not love me’ was a regular thought for Karen in conversations and arguments with her partner. This thought was linked to strong feelings of anger and sadness. As this thought appeared particularly significant for Karen it was further explored and it became apparent that Karen held the dysfunctional assumption ‘if he does not love me I am worthless’. In the therapy Karen formulated challenges to both the initial NAT and the dysfunctional assumption. However, Karen reported it was really difficult to challenge both the
NAT’s and the dysfunctional assumption between sessions. At this point some time was spent focusing on why it was difficult to challenge the thoughts linked to her boyfriend. It was hypothesised that they were difficult to challenge because they triggered strong emotions. The therapist encouraged Karen to continue questioning the thoughts and Karen found it easier to challenge them as she got more used to the process of challenging NAT’s.

Ending

Outcome
During the tenth session a review of the therapy was conducted and it was agreed that it was appropriate to end the counselling at this point. The review consisted of assessing Karen’s progress in the different problem areas.

Cognitions
Before the therapy Karen was constantly worrying, and the worry was linked to her negative automatic thought that ‘something bad may happen’. At the end of the therapy Karen had some of these NAT’s but she evaluated their validity and modified them by thinking ‘what is the worst that can happen’, ‘there is no point worrying about what might happen’, ‘it is not the end of the world’. It was apparent that Karen had learned to recognise and challenge NAT’s. Karen had also learned to challenge her negative interpretation of events. For example if her boyfriend did not pick up the phone she used to think ‘he does not love me’. However, she learnt to challenge this, on both a NAT level with ‘the fact that he does not answer the phone does not mean that he does not love me’, and on an underlying negative assumption level with ‘if it would be the case that he stopped loving me I will cope with that, he is not the only meaningful thing in my life’.

Behavioural and physiological changes
Exercise was particularly effective in reducing Karen’s stress and at the end of the therapy Karen had once again had got into the routine of walking. At times she still found it difficult to motivate herself to do the walks but she reminded herself that she
felt better and healthier after the walks. Karen continued to go to yoga classes weekly, and she reported that it helped her to relax. Karen was also more aware of the physiological signs of stress, and this helped her to tackle her stress at an early stage. At work Karen continued to take lunch breaks and cutting down on her overtime. She also reported behaving in a more assertive manner towards her colleagues.

**Self-care**

The importance of self-care had been discussed in therapy and Karen reported that this was another area that she had found helpful. In her own words Karen was 'less selfish but more self caring'. Instead of phoning her partner straight after work when she was feeling tense, she had started taking long relaxing baths. In addition, Karen had started spending time with her family and friends because she enjoyed their company. As well as increasing the level of self-care the increased amount activities also strengthened Karen’s new belief that her partner was not the only valuable thing in her life.

**Relapse prevention**

It has been stated that a major advantage of CBT is that it can reduce the risk of relapse (Fennell, 1989). Curwen and associates (2000) suggest that at the end of the therapy it is useful to discuss warning signs of possible lapse or relapse, and highlighting the techniques the client has learned and discuss how these can be used in future difficult situations. During the last session the factors that were most important in preventing Karen from relapse were highlighted. Continuing to challenge NAT’s and dysfunctional assumptions were identified as important preventative factors. Karen’s improved awareness of the body’s signs of stress was important in reducing stress. The behavioural/physiological strategies that had helped Karen to cope and to feel better were reviewed, including walking, listening to the relaxation tape, yoga, taking breaks at work, and increasing social activity. Early warning signs of deteriorating mental health were also highlighted. Some of the early warning signs were if Karen were to stop walking, stop seeing friends, and if she got a ‘lump of bad feeling in her tummy’.
Follow-up

A booster session some months after the ending of the counselling can be useful as a preventative measure (Curwen, et al., 2000; Palmer & Dryden, 1995). At the follow-up (1 month later) Karen was still feeling well, and she had continued to use the techniques she had learnt. The only problem she reported at this point was that her relationship had deteriorated. At the same time as Karen’s mood improved and she became more active, her boyfriend’s mood dropped and he became less active and more dependent highlighting the possible reciprocity of some relationships. However, this was not explored to a great extent as it was clear that Karen and her partner needed to work on the relationship together. Karen did consider attending couples therapy.

Questionnaire outcome measure

As shown in Table 7, at the end of the therapy Karen’s scores had reduced to 4 on the depression scale, to 0 on the anxiety scale, and to 0 on the stress scale. All three scores had fallen below the psychological ‘caseness’ level. The improvement was sustained at the 1 month follow-up. The questionnaire outcome reflected Karen’s description of the progress she had made.

Table 7 DASS scores

<table>
<thead>
<tr>
<th>DASS Scale</th>
<th>Beginning of Counselling</th>
<th>After Counselling</th>
<th>1 Month Follow-up</th>
<th>Threshold for Psychological ‘Caseness’</th>
</tr>
</thead>
<tbody>
<tr>
<td>Depression</td>
<td>24 (severe)</td>
<td>4</td>
<td>1</td>
<td>10</td>
</tr>
<tr>
<td>Anxiety</td>
<td>10 (moderate)</td>
<td>0</td>
<td>0</td>
<td>8</td>
</tr>
<tr>
<td>Stress</td>
<td>24 (moderate)</td>
<td>0</td>
<td>0</td>
<td>15</td>
</tr>
</tbody>
</table>

Supervision

Supervision was very important in the beginning of the therapy. As the client presented with many different issues it was very useful to discuss ways of focusing the work in the supervision. In addition, techniques uncovering dysfunctional assumptions were highlighted, and the supervisor suggested various behavioural experiments that could be helpful in challenging the assumptions.
Evaluation and conclusion

At the end of the therapy Karen had reached the goals she had set. The combination of cognitive and behavioural techniques appeared to have been very helpful in this process. Exercise appeared to have been particularly effective in reducing Karen's stress symptoms. Reflecting upon the case there are many interventions the therapist could have done differently. At times the therapy was somewhat fragmented as Karen presented with a variety of symptoms and problems, and it took some time to focus and prioritise the work. Setting clearer and more detailed goals would have improved the focus of the therapy. It would also have been helpful to ask the client to rate beliefs on numerical scales as this would have provided a further opportunity to investigate the changes in thinking. Assumptions could have been tested out further by the use of behavioural experiments. The therapy could also have spent more time focusing on Karen's core belief 'I am worthless' as this appeared to be particularly relevant in maintaining her distress.

In addition, it is important to point out that counselling can be viewed as a tertiary level stress intervention that only deals with the consequences of workplace stress rather than eliminating the sources (Briner, 1997). This case only focused on dealing with the consequences of stress and was not involved in reducing sources of stress at Karen's workplace although she could have attempted to address these directly herself if she so wished. It is recognised that it would have been more beneficial to also focus on reducing some of Karen's work stressors. Whereas Employee Assistance Programmes may provide some anonymous feedback on an annual basis to employers regarding general issues raised in the course of telephone counselling, the opportunity for counselling psychologists working in primary care settings to provide feedback about work-related issues to an employer can be extremely limited and raise issues regarding confidentiality. Nevertheless, as Karen reduced her levels of stress, depression, and anxiety she was more able to face, and hopefully challenge, unhealthy aspects of her work environment.
References:


Section D: The critical literature review

The role of gender in workplace stress: A critical literature review

Introduction

Counselling psychology in the workplace

Counselling psychologists are increasingly involved in workplace counselling services (Orlans, 2003), and according to the British Psychological Society (BPS, 2001) counselling psychologists should have the competence to work in organisational settings. One reason to why organisations are providing workplace counselling to their employees is because it is assumed that counselling will help to reduce workplace stress (Briner, 1997). Unfortunately stress in the workplace is a major problem for both organisations and employees, and it has been estimated that approximately 13.4 million working days in Britain is lost per year due to stress, depression or anxiety (Health and Safety Executive (HSE) 2001/2002). Due to the big problems of work stress it is likely that many counselling psychologists will meet clients facing this problem, and it has been argued that counselling psychologists would gain from a broad understanding of workplace stress (Portello & Long, 2001). Portello & Long (2001) also suggested that it is important to consider women’s experiences of stress as they face a number of different stressors compared to their male counterparts.

Definitions of stress

According to the Health and Safety Executive (2001) stress is defined as 'the adverse reaction people have to excessive pressures or other types of demand placed on them'. Approaches to stress have distinguished between the concepts of stressor and strain. Environmental factors that may function as sources of stress are called stressors, and the individual’s reaction to the stressors is called strain (Cooper, Dewe & Driscoll, 2001). Transactional approaches to stress emphasise the transaction between the cognitive and affective aspects of the individual and their environment (Briner, Harris
A cognitive definition of stress has been proposed by Palmer, Cooper & Thomas (2003, p. 2) as 'stress occurs when the perceived pressure exceeds your perceived ability to cope'. The term stress has been conceptualised in a variety of ways and this can lead to confusion regarding the meaning of the term (Fielden & Cooper, 2002). The current review will attempt to clarify whether the literature is discussing strain or stressors.

**Gender and workplace stress**

Research suggests that working is generally related to positive health for women (Baruch, Biener & Barnett, 1987; Malley & Stewart, 1988; Repetti, Matthews & Waldron, 1989), and men (Fielden & Cooper, 2002). However, as noted previously, workplace stress is a major problem, and it has been suggested that gender may be an important demographic characteristic to consider in the experience of stress (Jick & Mitz, 1985). While on the one hand it has been reported that there are no differences between women and men in relation to workplace stress (Martocchio & O'Leary, 1989), it has also been noted that there are differences in both stressors and the severity of stress between the sexes (Nelson, Campbell Quick, Hitt & Moesel, 1990; Nelson & Quick, 1985; Malley & Stewart, 1988; Decker & Borgen, 1993). It has been reported that although women and men are exposed to the same stressors, women are also facing unique stressors (Mcdonald & Korabik, 1991; Nelson, et al., 1990). It is important to consider the stressors that are unique to employed women, as this can increase the understanding of the specific needs of working women (Hofboll, Geller & Dunahoo, 2003). This is particularly important according to Hofboll et al. (2003) as several studies have found that the provision of workplace support was more effective in reducing occupational stress in men than in women (Baruch, et al., 1987; Etzion, 1984). Research has reported that women in particular are exposed to the following stressors: multiple roles (Burke, 2003); lack of career progress (Brass, 1985); and discrimination and stereotyping (American Psychological Association, 1991; Schneider, et al., 1997).

First, this review presents and evaluates research that has investigated the impact of gender on the level of workplace stress experienced. Second, it will present and evaluate research and theory concerning working women and the stressors of ‘multiple roles’, ‘lack of career progress’ and ‘discrimination and stereotyping’. It is
acknowledged that men also experience strain from particular stressors, but these will not be discussed in the present review (for further information see Burke, 2002). There have been several reviews of the literature within this area but most of these were conducted during the 1980's (Baruch et al., 1987; Jick & Mitz, 1985; Martocchio & O'Leary, 1989; Nelson & Quick, 1985). A more recent review of the literature was focused on stress and female managers (Hofball, et al. 2003). The literature in the current review includes evidence from previous reviews, from research studies and from theoretical accounts.

**Limitations with current research**

Prior to the review it is important to consider a number of limitations of the research in this area. There has been a lack of research investigating women and workplace stress, and many studies of occupational stress have only included male participants (Decker & Borgen, 1993; Hofboll, et al., 2003; Kelly-Radford, 1999). Failure to incorporate women in the research has lead to impairment of the accuracy of conceptual models and research findings (Baruch, et al., 1987). Consequently, it is not possible to draw firm conclusions regarding the role of gender in workplace stress as there is not yet enough research (Burke, 2003). In addition, most of the research treats women as a homogenous group, and rarely includes analyses of race or socioeconomic differences. It has been argued that to gain a clear picture of stressors it is important to disaggregate the population of women (Baruch, et al., 1987). Unfortunately, there has also been a lack of research investigating stress among women from ethnic minorities (Mirrashidi, 1999). Most of the studies have used a cross-sectional design and can therefore only provide a snapshot of work stress. Finally, many of the studies have measured stress using self-report questionnaires. Although questionnaires are a useful in measuring stress, it has been argued that it is important to use objective outcome measures as a supplement to self-report measurements (Beehr & O'Hara, 1987).
Level of workplace stress

A number of authors have suggested that women experience more workplace stress than men, whereas others claim that such a difference does not exist. Unfortunately the literature has conceptualised stress differently and some studies are focusing on strain whereas others focus on stressors. This review will clarify whether the studies have investigated strain, stressors, or both. First it will present the studies that have found a difference, in strain or stressors between men and women, second it will present the studies that have reported mixed findings, and finally it will present the studies that did not find any difference.

Difference between men and women
Level of strain is commonly investigated in occupational stress research and a number of studies have found that women experience a higher level of strain compared to men. A very well cited review conducted by Jick & Mitz (1985) investigated the empirical evidence of gender differences in relation to stress. Nineteen studies were reviewed and in these studies women tended to report higher levels of psychological distress (strain) than men. The authors suggest that men and women are likely to be exposed to different stressors, and that gender moderates the relationship between stressors, the appraisal of stressors and coping, and the relationship between coping and strain (Jick & Mitz, 1985). Stressors and coping are further factors investigated in many studies and a quasi-experimental study conducted by Bremer (2003) investigated the role of gender upon strain, stressors, and coping. The study evaluated the effects of a mentoring programme for US magistrate judges. It was found that in both the experimental and control group the female participants reported significantly higher levels of stressors and strain, measured by Osipow’s Occupational Stress Inventory-Revised, and significantly lower levels of coping skills compared to the male participants. Because of the small sample size the results should be treated with caution. Another piece of research which investigated gender differences in occupational stressors and strain was conducted by Bogg & Cooper (1994). The OSI was used to measure job satisfaction, mental health and physical health in British civil servants. It was found that the female participants were significantly more
dissatisfied with their jobs, and had poorer mental and physical health compared to the male participants. Role at work and the work and home interface were significant predictors of mental and physical health for the women. For the male participants level of experienced control and Type A behaviour were significant predictors of mental and physical health (Bogg & Cooper, 1994). This study indicated women experienced higher level of strain and that women and men experienced different stressors. Similar results were found by Davidson, Cooper & Baldini (1995) who studied stress in graduate managers using the OSI. The female participants reported significantly higher scores on the seven subscales relating to sources of pressure (stressors) compared to the male participants. The female managers were also more at risk of physical and mental ill health (strain) and had lower job satisfaction scores. The authors conclude that the female managers are under considerably more pressure than their male counterparts (Davidson et al. 1995). Furthermore, Davidson & Cooper (1984) conducted a study investigating occupational stressors and strain in managers in various work sectors within the UK. Stress was investigated by the means of interviews, a questionnaire based on findings from the interviews and previous research, the GHQ, and job satisfaction. It was found that female managers reported higher levels of strain than male managers, and they also experienced higher pressure levels compared to men from the work, home/social and individual arenas (Davidson & Cooper, 1984). The above mentioned literature suggests that that women experience more strain or a combination of more strain and stressors than men.

A number of studies have investigated the experience of stressors rather than strain. Some of these studies have found that women experience more stressors than men or a higher level of stressors. For example, a review on gender and stress conducted by Nelson & Quick (1985) supports this claim. The review comprised 99 different studies dealing with the issues of research on women and research on workplace stress. It was concluded that women suffer from more workplace stressors than men, because, as well as experiencing stressors common to both genders, women also experience certain unique stressors. The specific stressors faced by women included discrimination, stereotyping, marriage/ work interface, and social isolation (Nelson & Quick, 1985). However, it is important to note that the review was conducted over 20 years ago. These findings differ slightly from those of Jenkins and Palmer (2004)
who investigated job stress in twelve managers in the English National Health
Service. A qualitative design was used and semi-structured interviews were used to
collect the data and two core categories were identified, 'the fit manager' and 'the
unfit manager'. The fit managers were those that used a combination of male and
female coping strategies in order to deal with stress including, assertiveness,
awareness, reciprocal relationships, balance between home and work, and health/
nutrition/ and exercise. The unfit managers were found to lack work/life balance, be
over-committed and under-aware of workplace strain. Women did not experience
more job stressors than men but it was found that gender was a factor in determining
how stressors were perceived. For example, the stressors of interpersonal conflict and
poor supervisory support appeared to lead to more strain in women than in men. The
authors conclude that female managers were more at risk from managerial stressors
compared to male managers (Jenkins & Palmer, 2004). Contrary to all of the previous
studies presented in this paragraph, which reported higher levels of stressors among
women, a study conducted by Swanson, Power & Simpson (1996) found that male
medical doctors experienced higher levels of occupational stressors and less job
satisfaction than their female counterparts. In this study the Occupational Stress
Inventory was completed by Scottish general practitioners and 449-consultant doctors,
during a period when the Scottish Health Service was in the process of structural
changes (Swanson, et al. 1996). A strength of the study was that the sample was
randomly selected from the national register of GP's and consultants, and the
responders were representative of GP's and consultants in Scotland. It should also be
noted, as with all cross-sectional studies, that it only provide a snapshot of levels of
occupational stress and jobs satisfaction. Most of the studies presented in this
paragraph have found that women experienced more stressors, or were more at risk
from stressors compared to men. However, a study found that men experienced
higher levels of occupational stressors.

**Mixed findings**

Most studies found in the literature report mixed findings with regards to the role of
gender in the experience of workplace strain and stressors. For example, a study may
find that women experience more stressors than men but not strain and vice versa.
One such study reporting mixed results was conducted by Miller, Greyling, Cooper,
Lu, Sparks & Spector (2000). The study was cross-cultural and investigated
occupational stress including participants from South Africa, UK, USA and Taiwan. The participants consisted of a large sample of managers and data was collected using the OSI-2. Analysing the sample as a whole it was found that there were differences in the level of strain experienced, with females experiencing significantly lower levels of psychological and physical wellbeing compared to men. It was suggested that this difference could be a function of women being more willing to report or being more aware of symptoms than men. Regarding experience of stressors only one significant difference out of eight was found between the genders, with women experiencing more stress from the organisational climate. The authors point out that a limitation of the findings is that they come from the combination of four different data sets. As almost no differences between men and women were found on work stressors the authors concluded that the research did not find support for gender differences in occupational stress (Miller et al. 2000). Interestingly, the authors conclude that there is no difference in stress between men and women, although they did find a gender difference with regards to strain.

The Whitehall II study (HSE, 2000c) also reported mixed findings. This study is a large scale longitudinal study of work related factors and ill health in civil servants in the UK. Level of psychiatric disorder (strain), as measured by the General Health Questionnaire, was higher in women than in men in five out of the six occupational groups. However, both genders appeared to report similar patterns relating to the relationship between stressors and strain. For example high job demands and receiving low support were related to an increased risk of psychiatric disorder for both genders (HSE, 2000c). Contrary to these findings a study conducted by Gardiner & Tiggeman (1999) found a gender difference in stressors but not in strain. The study was cross-sectional and investigated stress, mental health, and leadership styles, in 60 female and 60 male managers in male and female dominated industries in Australia. Male dominated industries included academia, the automotive industry, IT, accounting consultancies and the timber industry. Female dominated industries included childhood education, nursing and hair dressing. The female and male participants were not matched. Job stressors were measured using three scales from the Survey of Work Pressure developed by Davidson & Cooper (1983) and the GHQ was used to measure strain. Women reported overall higher levels of job stressors than men, but did not experience more strain (Gardiner & Tiggeman, 1999). Female
managers in male-dominated industries reported the greatest level of pressure from discrimination compared to women in women-dominated industries. Moreover, the relationship between mental health and leadership style differed between men and women. Analyses showed that the more interpersonal leadership style women in male-dominated industries used, the worse their mental health. The opposite was found for men working in male-dominated industries who reported better mental health if they utilised an interpersonal leadership style. Gardiner & Tiggeman (1999) conclude that gender and the gender ratio of the industry influence stressors, leadership style, and mental health among managers. The authors highlight that the findings need to be replicated, and due to the small sample size there are limitations as to the ability to generalise to other male and female dominated industries.

Another piece of research which has investigated the experience of stressors was reported by Antoniou, Davidson & Cooper (2003) who conducted a cross-sectional study investigating occupational stressors, job satisfaction and health state in junior doctors in Greece. The participants consisted of males and females, and the data was collected using the Occupational Stress Indicator (OSI) including 46 additional items covering work stressors associated with Greek doctors. No significant differences between men and women were found in relation to their current state of mental and physical health. The three stressors, ‘implications of mistakes’, ‘long working hours’, and ‘conflicting job tasks and demands’, were in the top five for both genders. However, some stressors were only reported by females including ‘covert discrimination and favouritism’ (Antoniou et al. 2003). The results indicate that men and women experienced the same level of strain and the same stressors. However, women also experienced unique stressors.

A further study that investigated the role of gender in the experience of stressors was conducted by Spielberger & Reheiser (1994). The study measured occupational stressors using the Job Stress Survey (JSS) in American university and corporate settings. The JSS is a reliable measure of stressors and it is a useful tool to measure occupational stress as it investigates both the perceived severity and the frequency of thirty stressors. The numbers of men and women surveyed were relatively equal, although, almost twice as many males were in the higher occupational groups, and over twice as many females were in the lower occupational groups. It was found that
there were no significant differences in the overall stressor levels for the two genders, although occupational level had a highly significant impact on stressor levels. Managerial/professional participants reporting more frequency of the stressors compared to clerical/maintenance workers. Interestingly, Spielbeger & Reheiser (1994) reported several differences in the perceived severity and frequency of certain stressors. Differences between men and women were found for approximately half of the severity and frequency items. The authors explain the findings by suggesting that gender-related differences are determined by differences in the perceived severity and frequency of specific stressors. However, when the scores for the different stressors are summarised into one score these differences are cancelled out. Thus, this study highlights the limitations with stressor measurements which summarises the scores from different stressors into one score. It also shows that differences or similarities in the experience of stressors can refer to both severity and frequency.

Severity and frequency of stressors were also investigated in an American exploratory study of gender and perceptions of work related stress by Di Salvo, Lubbers, Rossi, and Lewis (1995). A questionnaire measuring critical incidents of stress was used and 85 females and males, from four professional organisations, completed the questionnaires. The respondents listed a large number of causes of stress in the workplace, i.e. stressors. The data was analysed using content analysis. No gender differences were found in the overall clusters and there were no significant differences between men and women in the ratings of severity. However, the frequency of stressors differed between the genders in four out of the fourteen categories. The results indicate that stressors are perceived similarly by women and men although there can be a difference in frequency of certain stressors. There may be some limitations with the validity of the analysis (Di Salvo et al. 1995), thus it is uncertain to what extent it is possible to generalise from the findings.

The role of gender in the experience of stressors is not straight forward and it is valuable to take the role of occupation into account. The role of occupation is highlighted in a study by Kirkcaldy, Brown, Furnham & Ruediger (2002). Stressors, job satisfaction and organisational climate were investigated in 2,500 medical practitioners and auxiliary personnel in Germany. Job stressors and dissatisfaction were measured using a 12–item questionnaire developed from previous work by the
authors. Participants were randomly selected from national listings. It was reported that female doctors perceived higher levels of work stressors compared to their male counterparts, and that female auxiliary personnel reported lower levels of stressors compared to the male auxiliary personnel. Thus, the study indicated that both gender and occupation had an impact on the experience of stressors. A limitation of the study that had an effect on the generalisability of these findings was a low response rate. Conversely, a great strength of the study was the large randomised national sample that appeared to be relatively representative of the medical profession in Germany (Kirkcaldy et al. 2002).

The Bristol Stress and Health at Work Study (HSE 2000a) is a further study reporting mixed findings regarding the role of gender in workplace stress. This study is particularly important to consider in more detail here, as the findings are likely to be generalisable given the large randomised sample of the UK population surveyed. It was found that approximately 20 per cent of the participants reported high or extremely high levels of work stress (HSE, 2000a). The data on demographic and occupational variables from this study were further analysed by the HSE (2000b). Stress levels were divided up into two groups, high and low stress. The term strain is not used by HSE but considering the measure used it is assumed that the term stress also can be defined as strain in this context. No significant differences were found between men and women overall, and there were no significant effects of gender in the various marital status groups (married/cohabiting, single, widowed/divorced/separated). Indeed, the pattern of stress across all age groups was very similar for males and females. Regarding education, there were significantly more males than females in the high stress group for employees without secondary school academic qualifications, but there were no significant differences in the other educational groups. In addition, there were significantly more females than males in the high stress group for socioeconomic status group I, and the reverse was found in socioeconomic group III.2 (HSE, 2000b). It was also found that there were significantly more males than females in the high stress group for the lowest salary group. For all other salary groups, however, there were significantly more females than males in the high stress group, and this pattern increased with rising salary. Significantly more females than males in full-time employment were in the high stress category. Finally, no significant differences were found between men and women for
any of the various job categories. Example of job categorises included: nursing, teaching, engineering, selling, transport and, clerical. In conclusion whilst there were no overall significant differences between men and women. Nevertheless, differences were found when the role of education, socioeconomic status and salary were further analysed (HSE, 2000b).

All studies presented in this section have reported mixed findings regarding the role of gender in strain and stressors. Some studies reported that there was no difference in strain but in the experience of stressors and vice versa. However, there is no clear pattern to when women experience more stressors or more strain. Studies have also reported differences in severity and frequency of stressors, and the role of occupation in the experience of stressors was also highlighted. Thus, these studies suggest that the measurement of stress is complex and that many different factors need to be considered in the investigation of gender differences.

No difference between men and women
Contrary to the evidence presented in the previous sections several studies have failed to find any difference between men and women in the experience of workplace stress. Indeed, Martocchio & O’Leary (1989) conducted a meta-analysis of fifteen studies that had examined gender differences in work stress. The measures were categorised into psychological and physiological measures of stress, it is therefore assumed here that it was strain rather than stressors that was measured. It was concluded that gender does not impact on the experience of occupational stress. The authors pointed out that the research used in the analysis had several limitations including lack of information on reliability and validity of the stress measures. It is suggested that these methodological shortcomings could have influenced the results of the analysis (Martocchio & O’Leary, 1989). Despite the methodological limitations Martocchio & O’Leary (1989, p500) assert that ‘the burden of proof does, however, now lie with those researchers that suggests that sex differences exist’. A further study that did not find any gender differences in workplace stress was conducted by Etzion (1984). The study was cross-sectional and investigated stressors and burnout in male and female managers and human service professionals in Israel. A self-report questionnaire was used and no differences between males and females were found in levels of
experienced stressors at work. However, women experienced higher levels of stressors and burnout in their general life outside work.

Downsizing can cause stress for employees and a longitudinal cohort study investigated the effects of organisational downsizing on employees in a Finnish town (Kivimaki, Vahtera, Pentti & Ferie, 2000). The main outcome measure was records of sickness absence and data was collected before downsizing, during downsizing and after downsizing. Participants were municipal employees who remained in their jobs after downsizing. One of the main findings was that sickness and absence was 2.17 times higher after major downsizing than after minor downsizing. The relationship between sickness absence and downsizing was not influenced by gender. A strong point of the study was the longitudinal design that allowed the employees to be followed during the downsizing process.

This section presented relatively few studies but the evidence from these suggests that gender did not have an impact on the experience of strain, stressors, and sickness absence.

Summary
This section of the review has presented research investigating the impact of gender on the level of workplace stress experienced. Interestingly, there were more studies in the literature presenting mixed results than those reporting clear gender differences, or no difference. Thus, most studies do not report clear-cut findings regarding the role of gender in level of workplace stress. There may be a number of reasons for these findings. Stress is a complex phenomenon and has been measured in different ways in different studies, and this may be one explanation to the inconclusive results. Women and men may experience the severity and frequency of stressors differently as suggested by some research. It is possible that these differences are cancelled out depending on the instruments and scoring in certain studies. Another possibility is that the role of gender differs between workplaces and countries. However, no clear pattern regarding workplaces and countries emerged. In addition, this review consisted of both large scale and small scale studies and the different designs of the studies may provide some explanation for the findings.
Nevertheless, there are more studies reporting that women experience more strain and stressors compared to men, than studies reporting no differences, or that men experience more stress. Thus, the weight of the evidence does point more towards women experiencing more strain and stressors than men. One reason for this may be that women are more comfortable reporting that they are suffering from stress. Indeed, this is suggested by Gardiner & Tiggeman (1999). Another possibility is that men use different coping strategies compared to women. The literature on coping has been outside the scope of this review. Overall, the evidence regarding the role of gender in the level of workplace stress is inconclusive and it is not possible to pinpoint one factor that can explain this, albeit a number of possibilities have been explored.

Sources of workplace stress – Stressors

It has been reported that women experience unique stressors as well as the stressors experienced by both men and women. The following section will review the literature focusing on these stressors.

Multiple roles

As the numbers of dual-earner households are rising, the potential conflicts between the demands of family and career are also increasing – these conflicts being well documented for both women and men (Wiley & Eskilson, 1988). Work and family conflict, as a stressor, has been related to negative consequences including reduced life satisfaction, lower mental health, and decreased productivity, and it is therefore of great concern for both organisations and individuals (Duxbury & Higgins, 1991; Nelson & Burke, 2002). Although, there have been big changes in family structure and women’s labour force participation, there have been only minor changes in responsibility for domestic chores. Women continue to be responsible for the majority of domestic chores and are therefore experiencing the stress of coping with a double day (Hofboll et al. 2003; Reskin & Padavic, 1994; Vovdanoff, 1988). Women are also more likely to take on other family-related roles such as caring for elderly parents, and finding appropriate childcare (Hofboll et al. 2003; Rodin & Ickovics, 1990).
**Multiple roles as a stressor**

Langan-Fox (1998) proposes that the more roles an individual is involved in, the higher the potential for stress. According to Nelson & Burke (2002) women are particularly likely to suffer from role overload (conflicting demands from different roles). Nelson & Quick (1985) conclude from their review of the literature, on stress and women, that the career-family conflict is one of the main sources of stress for working women. Similarly, Davidson & Cooper (1984) found that female managers reported greater pressure than men from work and home stressors. McDonald & Korabik (1991) investigated stressors and coping in 19 male and 20 female managers in Canada. It was found that work and family interfaces were more often sources of stress among the female participants than among the male. Although both the qualitative (descriptions of stressful experiences) and quantitative methods (work-stressor questionnaire) resulted in similar findings, the authors suggest that the findings should be treated with caution due to the small sample size. In Davidson et al.'s. (1995) study it was found that female managers reported higher levels of stress on the home-work interface compared to the male participants.

Greenglass, Pantony & Burke (1988) conducted a study with 555 teachers investigating the relationship between work stress, social support and role conflict, the latter referring to the conflicting pressures from two or more sources. The role-conflict scales were used and it was found that role conflict was significantly higher in women than in men, and women had more role conflict between their work role and each family role. The results suggested that job stress was related to role conflict more often for women than for men (Greenglass, et al., 1988). An American study compared gender differences in the antecedents and consequences of work-family conflict (Duxbury & Higgins, 1991). The participants consisted of 109 women and 131 men. To be included in the study the participants had to be married with somebody who worked full-time, have children living at home, and be in a managerial or professional job. The data was collected by a survey instrument consisting of various standard scales investigating the following concepts: work and family involvement, work and family expectations, work and family conflict, role-strain, quality of work life, quality of family life, and life satisfaction. Significant differences were noted in eleven out of seventeen gender comparisons. It was found that it was more difficult for women than for men to achieve control over competing
demands generated from the various roles. It was stated that 'professional women are expected to be committed to their work just like men at the same time that they are normatively required to give priority to their family roles' (Duxbury & Higgins, 1991, p. 71).

Multiple roles as a source of wellbeing

The literature presented in the previous section suggests that multiple roles can be a source of stress. However, it has been suggested that multiple roles can be a source of wellbeing. According to Rodin & Ickovics (1990) it has been suggested that being involved in multiple roles expands possible resources and rewards, such as different sources of self-esteem and social support. However, Rodin & Ickovics (1990) point out that not all roles are good for women, and that the nature and the quality of the experience within the roles are important factors to consider in relation to women's wellbeing. Malley & Stewart (1988) assume that work and family roles may be sources of both strength and stress. One advantage of women having multiple roles is that the dissatisfaction in one role is not as important as a more rewarding role can create a balance. However, it is recognised that there may be a problem, when a new role is added, if the woman is not able to relax the level of expected performance in the various roles (Malley & Stewart, 1988). There is still some ambiguity regarding the impact of multiple roles on experience of stress.

Lack of career progress

The 'Glass Ceiling'

The workplace is often portrayed as gender neutral by management, but evidence suggests that gender bias exists, and that this bias contributes to working women's unique stressors (Hofboll, et al. 2003). Lack of career progress has been suggested as a major source of work stress for women and it has been linked to negative health consequences and reduced satisfaction (Nelson, et al., 1990; Nelson & Quick, 1985). Women are still not properly integrated in many organisational systems (Hofboll, et al. 2003), and there is evidence that women face a 'glass ceiling' within the workplace. The glass ceiling refers to a subtle but powerful barrier that limits women's career advancement to top management in organisations (Burke, 2003; Morrison & Glinow, 1990). Studies have found that women are less likely to be promoted than men in professions such as engineering and medicine (Benokraitis,
1997; Tesch, Wood, Helwig, & Nattinger, 1995). In addition, management is male dominated even in traditional female professions (Powell, 1988). Davidson & Cooper's (1984) conducted a study with 940 British managers and it was found that women were more likely to work in lower level management compared to men. Contrary to the male managers the female managers were likely to be the first individual of her gender to hold that position. Cox & Harquail (1991) investigated the relationship between gender, career paths, and career success in 502 female and male MBAs. It was found that the female managers and male managers did not differ on overall promotions and career satisfaction. However, the female managers experienced lower salary increases, fewer management promotions, and lower achieved hierarchical levels in comparison to male managers with similar education, experience, age, performance and career path (Cox & Harquail, 1991). However, not all research has found evidence for a glass ceiling effect. Powell & Butterfield (1994) examined role of gender in the promotion (to top management) decisions for US federal government. In contrast to hypotheses, it was found that gender worked to women's advantage, although the greatest effect upon promotion was an applicant's employment in the hiring department (Powell & Butterfield, 1994).

**The 'Old Boy Network'**

Women are underrepresented in the levels of the organisation where the decisions are made, and the informal networks where many power transactions occur are often closed to women (Fielden & Cooper, 2002). Corporate politics may be specifically stressful for women because of the lack opportunities to gain experience in the exercise of power and the exclusion from the social informal networks (Nelson et al. 1990). Women's difficulty in finding mentors, their social isolation, and lack of career advancement have been linked to the incapability to access the 'old boy network' which included activities important for recognition and advancement in many organisations (Hobfoll et al. 2003; Nelson & Quick, 1985; Bhatnagar, 1988). Brass (1985) conducted a study investigating gender differences in networks, interaction patterns, and influence in organisations. It was found that participants' positions in interaction networks had a strong association with levels of influence. Women were rated as less influential than men, and were not well-integrated into men's networks including the most senior network. In a follow-up it was found that
promotions were significantly related to level of inclusion in the dominant interaction networks (Brass, 1985).

**Discrimination and stereotyping**

In the Supreme Court (in an Amicus Curiae Brief in the case Price Waterhouse v. Ann B Hopkins, 1987) the American Psychological Association stated on the basis of five decades research on sex stereotyping, that evaluation of women's work performance is commonly attributed to factors not relating to ability. This has a vital effect upon women's career progress and organisational rewards. Moreover, it was stated that women tend to be punished when they act in a manner that is viewed as not fitting into gender-related expectations (American Psychological Association, 1991). According to the American Psychological Association (1991, p. 1063) 'research conducted in the past 15 years has systematically revealed the cognitive structures of sex stereotypes and the psychological process by which they influence behaviour, including behaviour in the workplace'.

A study investigated stressors and coping in 19 male and 20 female managers in Canada (McDonald & Korabik, 1991). It was found prejudice and discrimination were more often sources of stress among the female participants than among the male. Similarly, Bhatnagar (1988), states that men and women of comparable competence are not evaluated or rewarded in an equal manner, rather that women tend to be underrated. Further research is however needed in order to investigate the stressful effects of this discrimination (Bhatnagar, 1988). In a study Martell, Parker, Emrich, Crawford & Swerdlin (1998) investigated gender stereotyping among executives. An executive attribute inventory was developed and the participants, 123 male managers, each rated one of four groups - women middle-managers (MMs), men MMs, successful women MMs, and successful men MMs. Gender differences favouring men were reported on all but one of the attributes. The results provided support for gender stereotyping on the attributes related to successful executives. The authors suggested that the findings help to explain why few women executives exist. It was demonstrated that women in MM are perceived to be lacking what is needed to succeed as an executive. This perception may have a negative influence on performance ratings and promotions (Martell et al. 1998). Similarly, Fielden & Cooper (2002) suggest that the belief that women lack what is needed to succeed is
often accountable for the discrimination women managers experience in the workplace. In Davidson et al's (1995) study, described earlier, women scored significantly higher than men on the subscale relating to pressure from discrimination and prejudice. Moreover, when the data was analysed using multiple regression with job satisfaction and current state of health as dependent variables it was found that the 'pressure from organizational structure and climate' was the strongest predictor variable for the female participants. The authors suggest that this finding is in accordance with the problems linked to 'old boy network' culture inherent in many organisations. Hofboll et al. (2003) propose that there are conflicting expectations of women in the workplace. On one hand they gain approval if they convey traditionally female characteristics such as warmth and expressiveness, but on the other hand they must behave in an individualistic power-centred manner if they want to succeed professionally (Hofboll et al., 2003). In addition, there is still a wage gap between men and women with women earning less than men (Economic and Social Research Council, 2005). Predictably, having lower salaries compared to men has been reported to be a stressor for females (Nelson & Quick, 1985).

Sexual harassment in the workplace has been identified as a significant job stressor for women (Kelly-Radford, 1999). Sexual harassment has been defined as 'any behaviour of a sexual nature that an individual perceives to be offensive and unwelcome' (Bowes-Sperry & Tata, 1999, p. 265). Women report more sexual harassment compared to men, and women working in traditionally masculine occupations are particularly likely to experience this stressor (Nelson & Burke, 2002). A study investigated sexual harassment experiences, coping and psychological outcomes of 747 women employed in the private-sector and at universities (Schneider, Swan & Fitzgerald, 1997). Sexual harassment experiences were measured with The Sexual Experiences Questionnaire, and it was found that low-level but frequent experiences of sexual harassment had negative effects on psychological wellbeing. Multiple-group discriminant function analyses indicated women who had experienced low, moderate and high levels of harassment and those who had not experienced any harassment could be ordered on the basis of their psychological (mental health index, PTSD symptoms) and job-related outcomes (job satisfaction measurements). High levels of harassment were related to the worst outcomes, and no harassment was related to least negative outcomes (Schneider, et al., 1997).
Interestingly a majority of the women who had experienced harassing behaviour in the workplace answered no to the question had they experienced sexual harassment at their present workplace. Similarly, Morrow, McElroy & Phillips (1994) found that women who had experienced harassing behaviour at work reported higher levels of stress than women who had not.

Work stress and women from ethnic minorities

There is a lack of research investigating work stress and ethnic minorities (Fielden & Cooper, 2002; Kelly-Radford, 1999). Nevertheless, it has been reported that perceived discrimination is a stressor for individuals from ethnic minorities (James, 1994). Mirrashidi (1999) compared stress and social support between white women and women from ethnic minorities. The study found no significant differences between the two groups in the level of work stress or work-family conflict. Similarly, white women and minority women experienced the same levels of perceived co-worker support. However, minority women experienced significantly lower levels of organisational support (Mirrashidi, 1999). Snapp (1992) interviewed 100 black and 100 white professional women to explore occupational stress, social support and depression. Women were not randomly selected for the study, rather women were recruited in accordance to the objective of the study. The interview instrument included both closed-ended and open-ended questions, and depression was measured with 'the Centre for Epidemiological Studies Depression Scale'. The data was analysed using multiple regression and it was found that there were multifaceted differences in occupational stress levels, social support and depression across race, class, background, supervisory status, marital and parental status. For example it was found that white women reported more support from co-workers than black women (Snapp, 1992).

Implications for practice

Counselling psychologists work in occupational settings (Orlans, 2003), and are therefore likely to meet women and men suffering from stress. However, these clients may also present at other settings, as employees suffering from stress may be reluctant to seek help at work (Carroll, 1996), and may contact their GP or a private counselling psychologist. Orlans (2003) suggested that it is important for counselling
psychologists to be aware of the specific issues faced by employees. Baruch et al. (1987) highlighted that counsellors need to pay attention to differences in the pressures faced by working women. Furthermore, counsellors working with women from ethnic minorities should be sensitive to values and norms that may cause special particular pressures for women employed outside the home. Nelson & Quick (1985) also suggest that it is important to address the unique stressors that women are facing, and they propose various factors that may help to moderate the impact of the stressors. A number of the proposed moderating variables are issues that may be relevant to focus upon within counselling practice, including internal locus of control, good self-confidence, and high level of psychological and physiological awareness of stress reactions.

Conclusion

The current review has presented and evaluated research investigating the role of gender in the level of workplace stress. Moreover, it has reviewed the literature relating to several stressors reported to be particularly relevant for working women – multiple roles, lack of career progress, and stereotyping and discrimination.

It is important to highlight a number of limitations within the current review and the field of occupational stress research. The meaning of the concept ‘stress’ varied between the studies, and this review has clarified whether the study referred to strain or stressors. Moreover, it has been suggested that personality characteristics may contribute to the experience of stress (Fielden & Cooper, 2002) but this aspect of stress was not discussed in this review. Most of the studies used a cross-sectional design and only used questionnaires to measure stress. Bogg & Cooper (1994) suggest that ideally stress research should adopt longitudinal designs involving quantitative (psychological and physiological measures) and qualitative methods. In addition, several of the studies were conducted in different countries and it is uncertain to what extent it is possible to generalise these findings between countries. Another issue that has been highlighted is that there are difficulties making appropriate gender comparisons in work stress research, as males often hold more senior positions than females (Jick & Mitz, 1985). Furthermore, there is an imbalance in the level of attention various groups of working women have received from
researchers; with women from ethnic minorities receiving little attention (Kelly-Radford, 1999), and female managers receiving a lot.

In conclusion some of the studies suggested that gender played an important role in the level of strain and stressors, with women experiencing higher levels of stress than men. Several of the studies and a review suggested that gender was not an important factor in level of workplace stress. However, most studies reported mixed findings where women experienced more strain but not stressors and vice versa. Moreover, the quality of the studies and the ability to generalise from the studies varied greatly on both sides of the argument. The weight of the evidence indicates differences between men and women, at least with regards to either strain or stressors. Nevertheless, there is no clear pattern to when or why women experience more strain in some studies and more stressors in others. A number of possible explanations for the inconsistencies in the literature have been proposed including: the measurement of stress, the role of severity and frequency of stressors, differences between workplaces and countries, women’s willingness to report stress, and different coping strategies. Consequently, considering the evidence presented in the current review, it is possible to draw only tentative conclusions regarding the role of gender in the level of workplace stress.

The literature concerning stressors suggested that multiple roles, lack of career progress, and discrimination and stereotyping were more common for women than for men, and had a negative impact upon women in particular. However, it is important to highlight that the research was not conclusive regarding the negative impact of these stressors. Finally, it may be useful if further variables are considered in future research/reviews examining the role of gender in workplace stress. Variables that may be important to consider include occupation, education, ethnicity, culture, age, socioeconomic group, social support, rank, personality variables, family roles and responsibilities. Counselling psychologists may benefit from an awareness of the potential role of these variables in workplace stress. It may also be useful for counselling psychologists to examine whether their clients, particularly female, are facing any of the stressors highlighted in this review.
References:


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Review Protocol

Author's Objective

The review had two objectives:

1. To evaluate the evidence relating to the role of gender in the level of workplace stress.
2. To evaluate the evidence for stressors specifically influencing women in the workplace. These stressors being multiple roles, lack of career progress, and discrimination and stereotyping.

Types of studies/articles included in the review

Studies and articles assessing or discussing gender and occupational stress, no restriction was made on the basis of occupations, countries or sample sizes.

Participants included in review

Individuals in employment, full-time or part-time, at the time of the study were included in the review.

Outcome assessed in the review

Level of strain as measured by questionnaires, experience of stressors measured by questionnaires, interviews assessing experience of strain stressors, turnover rates, promotions, salary increases.

Study designs of evaluations included in the review

Large randomised survey studies, longitudinal survey studies, cross-sectional studies, mixed design studies (using both qualitative and quantitative design), quasi-experimental studies, and qualitative studies were included.

What sources were searched to identify primary studies/relevant articles

A search using PsychInfo 1872-2004 produced the following results:

- Women and stress 168 abstracts
- Workplace stress 96 abstracts
- Gender and stress 37 abstracts
- Men and stress 35 abstracts
HSE webpage and reference lists of articles were also searched to find further articles.

*Foreign language restrictions*

Due to lack of resources for translation only English-language articles were included.

*Data synthesis*

A qualitative narrative synthesis was used, in which the studies were divided up in sub-categories. The studies’ designs were critically appraised and elements including participants, occupations, countries and outcome measures were explored.
Appendix A:
Letter of invitation to participate in the study
10/03/04

Dear Sir/Madame

I am currently doing a Doctorate in Counselling Psychology with Professor Stephen Palmer as my supervisor. In my research study I will investigate whether coaching prevents/reduces workplace stress.

There are two principal reasons for conducting this research: Firstly, coaching has become increasingly popular with organisations, however, there is little research evaluating the benefits of coaching. Secondly, research into workplace stress has played an important role in improving psychological well-being in the workplace, but there appears to be no research investigating whether coaching has an impact upon workplace stress.

I will compare stress levels between managers who have received coaching with those who have not. I am therefore looking for organisations that have provided coaching in the past, are currently providing coaching, or are about to provide coaching to managers. The participating managers will be asked to complete a brief, anonymous, questionnaire (lasting 5-10 minutes) - nothing else will be required of them.

Confidentiality will be strictly adhered throughout and neither the individual participants nor the organisations’ name will be identified at any time. By participating the organisations would receive a free evaluation of their coaching.

I would be very grateful if your organisation would consider participating in this study, to be arranged as convenient for the organisation. Should you be interested in participating, receiving some additional information, or have any further questions, please contact me at the above address, or at the following numbers:

k.gyllensten@city.ac.uk
07814 790425  020 7033 0116

Kind Regards

Kristina Gyllensten
Appendix B:
Information sheet and consent form - coaching group
Thank you for considering taking part in this research project, an investigation into coaching and stress in the workplace. This study forms part of a Doctorate in Counselling Psychology at City University, and is supervised by Professor Stephen Palmer.

The study involves the completion of a questionnaire assessing coaching and stress in the workplace. At the end of the study a prize draw will be made using all returned questionnaires with a £50 and £20 Selfridges voucher going to the winners.

The questionnaire will be completed twice, once when you start coaching and once when you finish coaching. Completion of the questionnaire requires approximately 7 minutes of your time. I can confirm that participation in this study is completely voluntary. You have the right to refuse to answer any questions in the questionnaire and withdrawal from this study is without implications. Your coaching will not be effected if you decide not to take part in the study or withdraw from the study.

Both you, and your organisation's, anonymity and confidentiality will be protected in this study; your name will not be identified at any time, and the questionnaires will be kept in a secure place. This form will be stored separate from the questionnaires, and no names will be associated with specific questionnaires. The results from this academic study may be published. In the event of publication your anonymity will be protected.

Once you have completed the questionnaire, place it in the envelope together with this form (please remember to sign it), and put it in one of the collection boxes located on the coaches' desks. The envelopes will not be opened at XXX but will be sent SEALED to myself. If you prefer to send it directly to me please use the address below.

If you would like to participate in the prize draw please remove and retain the stapled ticket with your code from the questionnaire. If your number wins you will have to present this card when collecting the voucher. The winning numbers will be posted on notice boards in the building.

I have read and understood the information and I agree to take part in this study.

Participant........................................ Date................

I will be happy to answer any queries that you might have regarding this research.

Yours Sincerely
Kristina Gyllensten
Department of Psychology City University
Northampton Square
London EC1V 0HB
Email: K.Gyllensten@city.ac.uk
Appendix C:
Information sheet and consent form - control group
Information Sheet and Consent Form

Thank you for considering taking part in this research project, an investigation into coaching and stress in the workplace. This study forms part of a Doctorate in Counselling Psychology at City University, and is supervised by Professor Stephen Palmer.

The study involves the completion of a questionnaire assessing coaching and stress in the workplace. At the end of the study a prize draw will be made using all returned questionnaires with a £50 and £20 Selfridges voucher going to the winners.

The questionnaire will be completed twice, once now and once at the end of the year. Completion of the questionnaire requires approximately 7 minutes of your time. I can confirm that participation in this study is completely voluntary. You have the right to refuse to answer any questions in the questionnaire and withdrawal from this study is without implications.

Both you, and your organisation’s, anonymity and confidentiality will be protected in this study; your name will not be identified at any time, and the questionnaires will be kept in a secure place. This form will be stored separate from the questionnaires, and no names will be associated with specific questionnaires. The results from this academic study may be published. In the event of publication your anonymity will be protected.

Once you have completed the questionnaire, place it in the envelope together with this form (please remember to sign it), and put it in one of the collection boxes located on the coaches’ desks. The envelopes will not be opened at XXX but will be sent SEALED to myself. If you prefer to send it directly to me please use the above address.

If you would like to participate in the prize draw please remove and retain the stapled ticket with your code from the questionnaire. If your number wins you will have to present this card when collecting the voucher. The winning numbers will be posted on notice boards in the building.

I have read and understood the information and I agree to take part in this study.

Participant........................................... Date..............

I will be happy to answer any queries that you might have regarding this research.

Yours Sincerely

Kristina Gyllensten
Department of Psychology City University
Northampton Square
London EC1V 0HB
Email: K.Gyllensten@city.ac.uk
Appendix D:
The questionnaire
Appendix E:
Ethics release form
Appendix 7: Ethics Release Form for Psychology Research Projects

All students planning to undertake research in the Department of Psychology for degree or other purposes are required to complete this Ethics Release Form and to submit it to their supervisor prior to commencing the investigation. Please note the following:

- An understanding of ethical considerations is central to planning and conducting research.
- Approval to carry out research does not exempt you from Ethics Committee approval from institutions within which you may be planning to conduct the research, e.g.: Hospitals, NHS Trusts, HM Prisons Service, etc.

Please answer all of the following questions:

1. Has a research proposal been completed and submitted to the supervisor? Yes ☒ No ☐

2. Will the research involve either or both of the following:
   2.1 A survey of human subjects/participants Yes ☒ No ☐
   2.2 An intervention with a cohort of human subjects/participants, and/or an evaluation of outcome of an intervention? Yes ☒ No ☐

3. Is there any risk of physical or psychological harm to participants (in either a control or experimental group)? Yes ☒ No ☐

4. Will all participants receive an information sheet describing the aims, procedure and possible risks involved, in easily understood language? (Attach a copy of the participants information sheet) Yes ☒ No ☐

5. Will any person's treatment or care be in any way prejudiced if they choose not to participate in the study? Yes ☒ No ☒
6. Will all participants be required to sign a consent form, stating that they understand the purpose of the study and possible risks i.e. will informed consent be given?

   Yes [X]  No [ ]

7. Can participants freely withdraw from the study at any stage without risk of harm or prejudice?

   Yes [X]  No [ ]

8. Will the study involve working with or studying minors (i.e. <16 years)?

   If yes, will signed parental consent be obtained?

   Yes [X]  No [ ]

9. Are any questions or procedures likely to be considered in any way offensive or indecent?

   Yes [X]  No [ ]

10. Will all necessary steps be taken to protect the privacy of participants and the need for anonymity?

    Is there provision for the safe-keeping of video/audio recordings of participants?

    Yes [X]  No [ ]

11. If applicable, is there provision for de-briefing participants after the intervention or study?

    Yes [X]  No [ ]

12. If any psychometric instruments are to be employed, will their use be controlled and supervised by a qualified psychologist?

    Yes [X]  No [ ]

If you have placed an X in any of the double boxes, please provide further information below:

2.1 The study will measure stress levels of managers within an organisation.

2.2 The study will compare stress levels between managers who have participated in psychological coaching and managers who have not participated in coaching.
Student's Name: Kristina Gyllensten

Degree Course: D. Psych in Counselling Psychology

Title Of Research Project: An investigation into the effects of psychological coaching upon workplace stress.

Supervisor: Stephen Palmer

Internal Supervisor: Andrew Kuczmiarczyk

Signature of Student:..............................................................

Signature of Supervisor: ......................................................

Signature of a 2nd Psychology Department member:.......................

Date: 23/12/03

Any further comments:

Please attach a copy of the participant’s information sheet and return this form to:

Room W310
Department of Psychology
City University
Witcombe Square
London
EC1V 0HB
Appendix F:
Email invitation to participate in Part II of the study
Dear All

As explained in a recent mail (see below) from X and X, I am conducting research on coaching. The research involves the completion of an internet based questionnaire.

I would be very grateful if you could take 5 minutes from your busy schedule and complete the questionnaire on http://www.beard.se/kristina/

Many thanks

Kristina Gyllensten
Appendix G: Information sheet – internet questionnaire
Information Sheet

Thank you for considering taking part in this research project, an investigation into coaching and stress in the workplace. This study forms part of a Doctorate in Counselling Psychology at City University, and is supervised by Professor Stephen Palmer.

At the end of the study a prize draw will be made using the returned questionnaires with a £50 and £20 Selfridges voucher going to the winners.

The study involves the completion of an internet based questionnaire that can be found on http://www.beard.se/kristina/ Completion of the questionnaire requires approximately 5-7 minutes of your time.

Participation in this study is completely voluntary. You have the right to refuse to answer any questions in the questionnaire and withdrawal from this study is without implications. Both you, and your organisation’s, anonymity and confidentiality will be protected in this study; your name will not be identified at any time.

If you would like to participate in the prize draw please complete the questionnaire, send me an email titled Prize Draw and you will be allocated a prize draw number by return email (please print this mail as proof will be required to claim your prize). The winning numbers will be posted on notice boards in the building.

I will be happy to answer any queries that you might have regarding this research.

Yours Sincerely
Kristina Gyllensten
Department of Psychology City University
Northampton Square
London EC1V 0HB
Email: K.Gyllensten@city.ac.uk
Appendix H:  
Internet questionnaire
Questionnaire

1. Gender:  ☐ Male  ☐ Female

2. Age: 

3. Job title: 

Stress Management

4. Check the activities (if any) that you have participated in, to reduce stress, during the last six months:
   ☐ Relaxation  ☐ Stress management training  ☐ Counselling  ☐ Other

Coaching

5. Have you participated in coaching (if no, go to question 9)?  ☐ Yes  ☐ No

6. During which period did you participate in the coaching?

   From: 

   To: 

7. How many sessions did you attend?

8. Overall how effective did you find the coaching? Please select the number which indicates how effective you found the coaching.

   ☐ 1  ☐ 2  ☐ 3  ☐ 4  ☐ 5  ☐ 6  ☐ 7

   Not at all effective  Neutral  Very effective

Job Satisfaction

9. All things considered, how satisfied or dissatisfied are you with your job overall? Please select the number which indicates how satisfied or dissatisfied you are with your job.

   ☐ 1  ☐ 2  ☐ 3  ☐ 4  ☐ 5  ☐ 6  ☐ 7

   Not at all satisfied  Not satisfied or Dissatisfied  Completely satisfied

Psychosocial Working Conditions Indicator Questionnaire (Health and Safety Executive)
The following questions cover the areas that have been found to be the main sources of stress for people at work. Please select the answer that most accurately reflects how you feel about your job at the moment.

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<td>10. I am pressured to work long hours</td>
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<td>11. I have unachievable deadlines</td>
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<td>12. I have to work very fast</td>
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<td>13. I have to work very intensively</td>
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<td>14. I have to neglect some tasks because I have too much to do</td>
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<td>15. Different groups at work demand things from me that are hard to combine</td>
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<td>16. I am unable to take sufficient breaks</td>
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<td>17. I have unrealistic time pressures</td>
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<td>18. I can decide when to take a break</td>
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<td>19. I have a say in my own work speed</td>
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<td>20. Do you have a choice in deciding what you do at work?</td>
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<td>21. Do you have a choice in deciding how you do your work?</td>
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<th>Strongly disagree</th>
<th>Disagree</th>
<th>Neutral</th>
<th>Agree</th>
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<td>22. I have some say over the way I work</td>
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<td>23. My working time can be flexible</td>
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<td>24. I am given supportive feedback on the work I do</td>
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<td>25. I can rely on my line manager to help me out with a work problem</td>
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<td>26. I can talk to my line manager about something</td>
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<td>27.</td>
<td>I am supported through emotionally demanding work</td>
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<td>28.</td>
<td>My line manager encourages me</td>
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<td>29.</td>
<td>If the work gets difficult, my colleagues will help me</td>
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<td>30.</td>
<td>I get the help and support I need from colleagues</td>
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<td>31.</td>
<td>I receive the respect I deserve from my colleagues</td>
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<td>32.</td>
<td>My colleagues are willing to listen to my work-related problems</td>
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<td>33.</td>
<td>I am clear what is expected of me at work</td>
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<td>34.</td>
<td>I am clear about the goals and objectives for my department</td>
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<td>35.</td>
<td>I know how to go about getting my job done</td>
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<td>36.</td>
<td>I am clear what my duties and responsibilities are</td>
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<td>37.</td>
<td>I understand how my work fits into the overall aim of the organisation</td>
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<td>38.</td>
<td>There is friction or anger between colleagues</td>
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<td>39.</td>
<td>I am subject to personal harassment in the form of unkind words or behaviour</td>
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<td>40.</td>
<td>I am subjected to bullying at work</td>
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<td>41.</td>
<td>Relationships at work are strained</td>
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<td>42.</td>
<td>Staff are consulted about change at work</td>
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<td>43.</td>
<td>I have sufficient opportunities to question managers about change</td>
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<td>44.</td>
<td>When changes are made, I am clear how they ...</td>
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Please read each statement and select the number 0, 1, 2 or 3 which indicates how much the statement applied to you over the past week. There are no right or wrong answers. Do not spend too much time on a statement. The rating scale is as follows:

0. Did not apply to me at all
1. Applied to me to some degree, or some of the time
2. Applied to me to a considerable degree, or a good part of time
3. Applied to me very much, or most of the time

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<td>45. I found it hard to wind down</td>
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<td>46. I was aware of dryness of my mouth</td>
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<td>47. I couldn't seem to experience any positive feeling at all</td>
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<td>48. I experienced breathing difficulty (eg, excessively rapid breathing,</td>
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<td>breathlessness in the absence of physical exertion)</td>
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<td>49. I found it difficult to work up the initiative to do things</td>
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<td>50. I tended to over-react to situations</td>
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<td>51. I experienced trembling (eg, in the hands)</td>
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<td>52. I felt that I was using a lot of nervous energy</td>
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<td>53. I was worried about situations in which I might panic and make a</td>
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<td>fool of myself</td>
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<td>54. I felt that I had nothing to look forward to</td>
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<td>55. I found myself getting agitated</td>
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<td>56. I found it difficult to relax</td>
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<td>57. I felt down-hearted and blue</td>
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<td>58. I was intolerant of anything that kept me from getting on with what</td>
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<td>I was doing</td>
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<td>59. I felt I was close to panic</td>
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<td>60. I was unable to become enthusiastic about anything</td>
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<td>61. I felt I wasn't worth much as a person</td>
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<td>62. I felt that I was rather touchy</td>
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<td>63. I was aware of the action of my heart in the absence of physical</td>
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<td>exertion (e.g., sense of heart rate increase, heart missing a beat)</td>
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<td>64. I felt scared without any good reason</td>
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<td>65. I felt that life was meaningless</td>
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Appendix I:
Information sheet and consent form – internet questionnaire
Information Sheet and Consent Form

Thank you for considering taking part in this research project, an investigation into coaching and stress in the workplace. This study forms part of a Doctorate in Counselling Psychology at City University, London supervised by Professor Stephen Palmer PhD.

The study involves the completion of the internet based questionnaire presented in the next section, a tool designed to measure coaching and stress in the workplace. Completion of the questionnaire requires approximately 7 minutes. I can confirm that participation in this study is completely voluntary. You have the right to answer any questions in the questionnaire and withdrawal from this study is without implications.

You and your organisation’s anonymity and confidentiality will be protected in this study; your identity will not be identified at any time, the questionnaires will be kept secure and access password protected. Please note that I will be the only person with access to the questionnaires. The results from this academic study may be published. In the event of publication your anonymity will be protected.

You are required to complete the internet based questionnaire and submit it if you have read the above information and consent to taking part in this study.

I will be happy to answer any queries that you might have regarding this research.

Yours sincerely

Kristina Gyllensten
Department of Psychology City University
Hampton Square
London EC1V 0HB
Tel. K.Gyllensten@city.ac.uk
Appendix J:
Interview schedule
Interview Schedule

Biographical details
Age
Gender
Job title
Full-time PT
Length of time in company

Details of coaching
When did you go to coaching
How many sessions, how often
What was the initial reason to why you decided to start coaching
Your view of coaching before you attended / your view now
Internal external coaching

The coaching process
How would you describe the coaching, what did it involve
Did you decide on goals for the coaching – what goals
Confidentiality

Evaluation of coaching
Were you satisfied with your coaching
Benefits of coaching:
- did you reach goals, short-term benefits, long-term benefits
- benefits related to work
- benefits related to home life
- self-awareness
- other benefits
What was it about coaching that was beneficial
Could your coaching have been improved – how
Negative effects of coaching
Coaching and stress

Indirect effects on stress
Did you suffer from work stress before you attended coaching – of so in what caused the stress, what symptoms did you experience
Do you suffer from work stress at present – causes, symptoms
Did coaching help to reduce work stress:
if yes - why, in what way
if no - could it have been helpful, why not
Is coaching suitable for workplace stress:
if yes – why, when
if no - why not, what would be more beneficial

Would you recommend coaching
In what situations
Appendix K:
Information sheet and consent form for interviews
Information Sheet and Consent Form

Thank you for considering taking part in this research project, an investigation into coaching and stress in the workplace. This study forms part of a Doctorate in Counselling Psychology at City University, and is supervised by Professor Stephen Palmer.

The study involves a 30-40 minutes tape-recorded interview about coaching and stress. At the end of the study there will be a prize draw with a £50 and £20 Selfridges voucher going to the winners.

I can confirm that participation in this study is completely voluntary. You have the right to refuse to answer any questions in the interview, to terminate the interview and/or withdraw your answers at any time. Withdrawal from this study is without implications. Any future coaching will not be effected if you decide not to take part in the study or withdraw from the study.

Both you, and your organisation’s, anonymity and confidentiality will be protected in this study; your name will not be identified at any time, and the tapes will be kept in a secure place. This form will be stored separate from the tapes and the tapes will be destroyed at the end of the study. The results from this academic study may be published. In the event of publication your anonymity will be protected.

If you would like to participate in the prize draw please remove and retain the stapled ticket with your code from this form. If your number wins you will have to present this card when collecting the voucher. The winning numbers will be posted on notice boards in the building.

I have read and understood the information and I agree to take part in this study.

Participant........................................ Date ...............  
Researcher ........................................ Date .................

I will be happy to answer any queries that you might have regarding this research, and you are welcome to contact me if you experience any negative effects following the interview.

Yours sincerely  
Kristina Gyllensten  
Department of Psychology City University  
Northampton Square  
London EC1V 0HB  
Email: K.Gyllensten@city.ac.uk
Appendix L:
Email invitation to telephone interviews
Dear

Thank you for considering taking part in this research project, an investigation into coaching and stress in the workplace. This study forms part of a Doctorate in Counselling Psychology at City University, and is supervised by Professor Stephen Palmer. The study involves a 25-35 minutes tape-recorded telephone interview about coaching and stress.

Participation in this study is completely voluntary. You have the right to refuse to answer any questions in the interview, to terminate the interview and/or withdraw your answers at any time. Withdrawal from this study is without implications. Any future coaching will not be affected if you decide not to take part in the study or withdraw from the study.

Both you, and your organisation's, anonymity and confidentiality will be protected in this study; your name will not be identified at any time, and the tape will be kept in a secure place. The results from this academic study may be published. In the event of publication your anonymity will be protected.

If you are willing to take part in the study please reply to this email. I will then email you in order to arrange a suitable time for the interview (this will of course be at a time convenient for you).

Only reply to this email if you have read and understood the above information and fully consent to taking part in this study.

I will be happy to answer any queries that you might have regarding this research, and you are welcome to contact me if you experience any negative effects following the interview.

Yours sincerely
Kristina Gyllensten
Department of Psychology City University
Northampton Square
London EC1V 0HB
Appendix M:

Results from the seven independent t-tests performed on the stressor scores pre coaching
<table>
<thead>
<tr>
<th>Stressors</th>
<th>T-tests</th>
</tr>
</thead>
<tbody>
<tr>
<td>Demands</td>
<td>$t = 1.029, \text{df} = 29, p = 0.312$, two-tailed</td>
</tr>
<tr>
<td>Control</td>
<td>$t = 2.122, \text{df} = 29, p = 0.042$, two-tailed</td>
</tr>
<tr>
<td>Support–Management</td>
<td>$t = 1.789, \text{df} = 29, p = 0.084$, two-tailed</td>
</tr>
<tr>
<td>Support – Colleagues</td>
<td>$t = 2.992, \text{df} = 29, p = 0.006$, two-tailed</td>
</tr>
<tr>
<td>Role</td>
<td>$t = 0.862, \text{df} = 29, p = 0.396$, two-tailed</td>
</tr>
<tr>
<td>Relationships</td>
<td>$t = 0.686, \text{df} = 29, p = 0.498$, two-tailed</td>
</tr>
<tr>
<td>Change</td>
<td>$t = 1.554, \text{df} = 29, p = 0.131$, two-tailed</td>
</tr>
</tbody>
</table>
Appendix N:
Results from the seven mixed ANOVAS performed on the stressor scores
<table>
<thead>
<tr>
<th></th>
<th>Time</th>
<th>Coaching</th>
<th>Interaction betw. time and coaching</th>
</tr>
</thead>
<tbody>
<tr>
<td>Demands</td>
<td>( F(1,29) = 1.865, ) ( p = 0.183 )</td>
<td>( F(1,29) = 1.580, ) ( p = 0.219 )</td>
<td>( F(1,29) = 0.090, ) ( p = 0.766 )</td>
</tr>
<tr>
<td>Control</td>
<td>( F(1,29) = 6.721, ) ( p = 0.015 )</td>
<td>( F(1,29) = 5.121, ) ( p = 0.031 )</td>
<td>( F(1,29) = 0.022, ) ( p = 0.884 )</td>
</tr>
<tr>
<td>Support – Management</td>
<td>( F(1,29) = 6.210, ) ( p = 0.019 )</td>
<td>( F(1,29) = 4.341, ) ( p = 0.046 )</td>
<td>( F(1,29) = 0.042, ) ( p = 0.839 )</td>
</tr>
<tr>
<td>Support – Colleagues</td>
<td>( F(1,29) = 0.595, ) ( p = 0.447 )</td>
<td>( F(1,29) = 8.139, ) ( p = 0.008 )</td>
<td>( F(1,29) = 1.432, ) ( p = 0.241 )</td>
</tr>
<tr>
<td>Role</td>
<td>( F(1,29) = 3.181, ) ( p = 0.085 )</td>
<td>( F(1,29) = 0.394, ) ( p = 0.535 )</td>
<td>( F(1,29) = 0.732, ) ( p = 0.399 )</td>
</tr>
<tr>
<td>Relationships</td>
<td>No change between pre and post</td>
<td>( F(1,29) = 0.471, ) ( p = 0.498 )</td>
<td>No change between pre and post</td>
</tr>
<tr>
<td>Change</td>
<td>( F(1,29) = 5.181, ) ( p = 0.030 )</td>
<td>( F(1,29) = 0.841, ) ( p = 0.367 )</td>
<td>( F(1,29) = 5.181, ) ( p = 0.030 )</td>
</tr>
</tbody>
</table>
Appendix O:
Stressor Bar Graphs
Demands

\[ \begin{array}{c|c|c|c}
\text{Mean} & \text{yes} & \text{no} & \text{demands} \\
\hline
0.00 & & & \\
0.50 & & & \\
1.00 & & & \\
1.50 & & & \\
2.00 & & & \\
2.50 & & & \\
3.00 & & & \\
\end{array} \]

coaching
Support management

![Bar graph showing mean comparison for coaching with and without support management. The bars indicate a higher mean for coaching with support management.](image-url)
Support colleague

![Bar chart showing support colleague with coaching options.](chart.png)
Relationship

![Bar chart showing mean values for coaching with 'yes' and 'no' categories.](image-url)
Change

Mean

coaching

yes

no
Appendix P:
Copies of published articles from the thesis, conferences, and a poster presentation