



**Can the *Instinctive Drives System™*
Facilitate the Management of
Occupational Stress?**

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Short Title

Can the *Instinctive Drives System*TM facilitate the management of occupational stress?

Reference

Fitzgerald, J.A., Dadich, A., Chapman, G., & Fitzgerald, J. (2008). *Can the Instinctive Drives System*TM facilitate the management of occupational stress? Sydney, NSW: University of Western Sydney.

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Acknowledgements

This research was undertaken by the *University of Western Sydney (UWS)* for *Link-up International Pty Ltd*. The authors would like to extend their appreciation to all the participants in the project for their devoted time and effort. The authors would also like to acknowledge the contribution of the following individuals:

Associate Professor Deborah Blackman
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Ethical approval received from the University of Western Sydney Human Research Ethics Committee (HREC 04/043)

Executive Summary

This report examines the relationship between the *Instinctive Drives*[™] system (hereafter, the *I.D. System*[™]), as developed by *Link-Up International Pty Ltd*, and occupational stress. *The I.D. System*[™] is said to gauge the innate qualities of individual team members by assessing four key drives; namely, the *Instinctive Drive to Verify*[™], the *Instinctive Drive to Authenticate*[™], the *Instinctive Drive to Complete*[™] and the *Instinctive Drive to Improvise*[™]. It is argued that, through an improved understanding of their own drives as well as those of their team members, individual and team performance can be promptly enhanced by employing specific strategies for communication and management; this, in turn, has a beneficial effect on employee wellbeing. The present report explores this claim. More specifically, the study determined whether the *I.D. System*[™] can facilitate the management of occupational stress.

Chapter three outlines the longitudinal study that was conducted to measure the perceived health status at the time participants learnt their *I.D.*[™] profile (phase one), and again three to six months later, following participation in different interventions with consultants trained by *Link-Up International* (phase two). The quantitative data were triangulated with qualitative research material, collected during semi-structured interviews with 13 employees from 13 different organisations.

Following **phase one** of this research, the research team analysed data from 162 participants to assess their self-reported wellbeing, their general health (via General Health Questionnaire – GHQ12), their perceived levels of stress (via Perceived Stress Scale), and their self-reported ability to function in stride (via a newly developed Stride Scale). Although chapter four provides detailed information, some of the key findings are as follows:

- There was no significant relationship between *Instinctive Drives*[™] and age.
 - Male participants generally scored higher on the *Instinct to Authenticate*[™].
 - Younger participants were driven towards the *Instinct to Improvise*[™].
 - Participants' self-assessed health status was comparable with the national average.
 - Male participants over the age of 40 years reported to be in better health than younger males.
 - According to responses to the Perceived Stress Scale, where a lower score denotes less stress (maximum possible score is 40), participants were not particularly stressed. However, female participants reported slightly higher stress levels (16-18 points) than males (12-18 points).
 - On average, the degree to which the participants perceived an ability to function in stride with their natural tendencies was 33.19. The maximum score on this, yet to be validated scale is 70. The findings suggest that the
-

participants were not particularly in or out of stride. However, females over the age of 40 years perceived a greater ability to function in stride (31-35.4), relative to males (31-34.5).

- An examination of the *Instinctive Drives*TM suggests:
 - Avoid authenticators, high completers and avoid improvisers reported better general health.
 - High completers reported less stress.
 - Low improvisers reported a greater ability to function in stride.
 - The only *statistically* significant difference was found in responses to the GHQ12. Participants driven towards the *Instinct to Complete*TM (2.13) significantly differed from those driven to avoid this instinct (3.16).

Following **phase two** of this research, the research team analysed data from 51 participants who had contact with a consultant. An analysis of this data demonstrates statistically significant improvements in perceived health status, stress levels, and ability to function in stride, following awareness of the *I.D.*TM profile. Although chapter five provides detailed information, some of the key findings are as follows:

- Increased awareness of innate drives among participants affected perceived health over time; mean scores collected using the GHQ12 changed from 3.13 to 1.44.
- Increased awareness of innate drives among participants affected perceived stress levels over time; mean scores collected using the Perceived Stress Survey changed from 22.65 to 20.07.
- Increased awareness of innate drives among participants affected perceived ability to behave in accordance with drives over time; mean scores collected using the Stride Scale changed from 34.00 to 28.13.
- Increased interventions as facilitated by the consultants were associated with improved scores on the GHQ12, the Perceived Stress Survey and Stride Scale.

Whilst recognising a potential responder bias, these significant results in all three areas highlight the potential role of the *I.D. System*TM in facilitating employee wellbeing.

As chapter five indicates, these findings are further validated by the analysis of the qualitative research material. The material suggests that increased awareness of the *I.D.*TM profile, as well as personalised strategies to enhance peak performance, were associated with reduced levels of occupational stress and additional benefits. More specifically:

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- The *I.D.*TM profile enabled participants to understand their responses to workplace demands.
 - The *I.D.*TM profile helped participants to communicate their needs to colleagues, which in turn facilitated collegiality and collaboration.
 - The *I.D.*TM profile helped participants to promptly identify ways to maximise personal peak performance – particularly during times of heightened stress.

However, some research participants noted that having a greater awareness of the *I.D.*TM profile had the potential to be used to (negatively) characterise a person, which could be a source for increased anxiety. Nevertheless, despite this concern, the research participants collectively recognised the value of the *I.D. System*TM and its potential role in the management of occupational stress.

Following from this investigation, it appears that the *I.D. System*TM helps to facilitate the management of occupational stress, and as such, improve employee wellbeing. It provides individuals, and the teams in which they work, with useful insight into personal tendencies and preferred working styles; it provides practical strategies to maximise peak performance; and it provides a platform for clear dialogue – as such, the system serves as an important catalyst for communication. By exposing the essence of individual employees, teams within the workplace are able to engage in effective communication quickly, and thus better manage the internal and external stresses that have the potential to hinder performance.

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1 Introduction

Productivity has long remained an indicator of managerial and organisational success (Moorehead & Griffin, 2001). Greater output relative to input demonstrates efficiency and effectiveness. The quest for increased productivity is often facilitated by strategic management practices, which is typically the domain of senior personnel or managers. As Hefner (1994) explains, “Managers characteristically want to demonstrate performance as quickly as possible and become nervous when they do not see results within established timeframes” (p. 15). To maximise output, practices might include calculated resource allocation and the introduction of innovative technology into the workplace (Wheelen & Hunger, 2006).

In a complex and rapidly changing socio-political climate, the quest for increased productivity can be difficult for organisations and those who manage them (Winefield et al., 2000). To ensure that organisational goals are achieved, they must assess internal organisational practices, gauge the broader, external socio-political context, and identify, in consultation with key stakeholders, appropriate organisational responses that are timely and expend resources economically (Wheelen & Hunger, 2006).

However, the identification and implementation of appropriate organisational responses do not guarantee that they will be effective. There are some factors that largely remain beyond the control of the manager – notably, employee stress (Bonn & Bonn, 2000; Sanders, 2001). While a manager might support employees through training and/or additional resources, he/she has a limited ability to determine whether team members will cope with organisational demands. This is suggested by the wealth of international literature in the field of occupational stress (Hsieh, 2004; Matheny, Gfroerer, & Harris, 2000), and the multimillion dollar industries that have found opportunity in others’ distress, including organisational/industrial psychology, human resources and team management.

When team members struggle with stress, current industrial legislation obliges the manager to attend to the situation. Within Australia, employees are protected from psychological harm as employers have a *de rigueur* duty of care under Federal, State and Territory Occupational Health and Safety legislation (ASCC2005; Government of ACT1989; Government of NSW2000; Government of NT2007; Government of Queensland, 1995; Government of Tasmania, 1995; Government of Victoria, 2004; Government of Western Australia, 1984; SafeWork SA2005). Further to this, various Workers’ Rehabilitation and Compensation Acts allow employees to claim compensation for psychological harm (Government of ACT1951; Government of NSW1987; Government of NT2007; Government of Queensland, 2003). Thus, in addition to the human and social costs associated with stress (Harnois & Gabriel, 2000), this also implicates financial and time costs (Jackson & Clements, 2006) – and to a manager keen on maximising productivity, this is unwelcome news.

In the pursuit of reducing and/or preventing occupational stress, most efforts to date have concentrated on the personal attributes of individual team members (Kenny, 2000), or the organisational factors that contribute to occupational stress (Giga, Cooper, & Faragher, 2003). However, there is growing recognition of the importance of both (Cooper & Williams, 1994; LaMontagne, Louie, Keegel, Ostry, & Shaw,

2006; Murphy & Cooper, 2000; Sauter, Lim, & Murphy, 1996). Appreciating the importance of both internal and external factors supposes that the wellbeing of the employee and the organisation as a whole requires links and communication between all levels of an organisation.

One tool that has proven effective as a communication tool within the workplace is the *I.D. System*TM (Burgess, 2007). Empirical research indicates that the system is a catalyst for greater interaction between co-workers and with clients; it serves as a window for insight, providing users with an improved understanding of themselves and of others; it also initiates personal development as well as team development (Fitzgerald, Dadich, & Fitzgerald, 2006).

Despite its strengths (Fitzgerald, Dadich, Ferres, & Fitzgerald, 2006; Fitzgerald, Dadich, & Fitzgerald, 2006; Fitzgerald, Ferres, Dadich, & Hamilton, 2005; Fitzgerald, Ferres, Hamilton, & Fitzgerald, 2005), empirical research has not yet examined the role of the *I.D. System*TM in managing occupational stress. It is thus the purpose of the present report to determine whether the system can facilitate the management of occupational stress.

1.1 Aim and Objectives of the Study

The overarching *aim* of this report is:

To determine whether the *I.D. System*TM can facilitate the management of occupational stress.

This is achieved through the following *objectives*:

1. An exploration of the relationship between awareness of *I.D.*TM profile, intervention strategies and occupational stress;
2. An exploration of the relationship between the *I.D. System*TM and:
 - a. The experience of occupational stress;
 - b. The management of occupational stress;
 - c. Individual performance within a team; and
 - d. Team performance; and
3. An exploration of the perceived value of the *I.D. System*TM among users of the system in the experience and management of stress.

The aforementioned aim and objectives are achieved through the use of both quantitative and qualitative methodologies.

1.2 Report Outline

The report is structured as follows. *Chapter 2* introduces the present research project by providing a rationale and a brief overview of the current state of knowledge in understanding and managing occupational stress. This includes both published and unpublished works.

Chapter 3 describes the research process embarked upon toward the overarching research aim and objectives. This includes the collection and examination of quantitative survey data, as well as qualitative interview material – both of which were collected from clients of Link-up International.

Chapters 4 and 5 present the findings from this extensive research process. Through quantitative and qualitative representations of the data, the relationship between the *I.D. System*TM and occupational stress is explicated. This helps to verify the findings through data triangulation (McMurray, Pace, & Scott, 2004).

Finally, Chapter 6 brings the present report to conclusion. It reflects on the research process that was undertaken, summarises key findings, and also proposes insightful recommendations.

Before pursuing the overarching aim and objectives of the study, it is important to first understand key terms – namely, the *I.D. System*TM and *occupational stress*. While both are explicated in the subsequent chapter, brief definitions are provided for the sake of clarity.

1.3 What is the *I.D. System*TM?

The *I.D. System*TM is premised on the notion that human beings are driven by four key innate qualities. These include the *Instinctive Drive to Verify*TM, the *Instinctive Drive to Authenticate*TM, the *Instinctive Drive to Complete*TM and the *Instinctive Drive to Improvise*TM. Each constitutes a continuum, polarised by a drive toward the instinct and a drive to avoid the instinct. To identify where an individual is situated on each of the four continua, a 32-item, closed-response survey is used. The resulting four-digit figure provides insight into the natural tendencies and innate capacities of an individual. For a detailed explication of the *I.D. System*TM, please see Burgess (2007).

1.4 What is Occupational Stress?

Stress is a nebulous term, often associated with activity and pressure (Donnelly & Long, 2003; Neary, 2005). While stress can be beneficial as a source of motivation, it is often associated with negative outcomes, which will be elaborated in subsequent sections (Mills, Davidson, & Farag, 2004; Rau, 2006; Shima & Satoh, 2006; Wiesner, Windle, & Freeman, 2005). It is associated with “fear, dread, anxiety, irritation, annoyance, anger, sadness, grief, and depression” (Motowidlo, Packard, & Manning, 1986, p. 618). Occupational stress is thus understood as physiological or emotional responses evoked by doubt about being able to cope with employment-related tasks (US NIOSH1998). Articulated in more simplistic terms, it is “a perception that the resources available do not match the demands made” (Bonn & Bonn, 2000, p. 124). This is founded on the seminal work of Lazarus and Folkman (1984) who argued that if an environmental event is considered potentially threatening, it is translated into the experience of stress (Bennett, Lowe, Matthews, Dourali, & Tattersall, 2001). Following this translation, strategies to reduce the emotional sequelae to this potential threat would be employed.

1.5 Summary

This chapter has articulated the scope of the present study, identifying its overarching aim and objectives. It has also defined the key terms; notably, the *I.D. System*TM and *occupational stress*. The stage is now set for the remainder of the report.

2 Review of the Literature

Following a description of the research aim, objectives and key terms in Chapter 1, this chapter presents the context and rationale for the project. Through a review of relevant literature, the chapter begins with an examination of occupational stress. It investigates prevalence, consequences, contributors as well as management strategies. The chapter then provides an overview of the *I.D. System*TM. Those interested in further detail about the system, including its theoretical foundations, its validity, its reliability, its benefits and its limitations, are referred to other literature (Fitzgerald, Dadich, Ferres et al., 2006; Fitzgerald, Dadich, & Fitzgerald, 2006; Fitzgerald, Ferres, Dadich et al., 2005; Fitzgerald, Ferres, Hamilton et al., 2005). The review presented in this chapter justifies need to explore the relationship between the *I.D. System*TM and employee wellbeing. More specifically, the chapter justifies the need to determine whether the *I.D. System*TM can facilitate the management of occupational stress.

2.1 Occupational Stress

2.1.1 Prevalence

For many people, work consumes about a third of the time available for living (Csikszentmihalyi, 1997). There are a number of reasons that attract people to work. It is not simply an activity that affords financial gain – it is also an activity that allows people to develop and extend social networks; access resources, skills and knowledge; establish a sense of belonging; and develop a sense of identity and purpose (deVries & Wilkerson, 2003).

However, these benefits are juxtaposed by the negative experiences associated with work. As Csikszentmihalyi (1997) explains:

Work is a strange experience: it provides some of the most intense and satisfying moments, it gives us a sense of pride and identity, yet it is something most of us are glad to avoid (p. 49).

One of the negative experiences associated with work is stress.

At a global level, occupational stress is becoming the most common cause of health problems and disability among employees (deVries & Wilkerson, 2003; Harnois & Gabriel, 2000). For instance, the Second European Survey on Working Conditions indicated that 28 percent of employees report occupationally-induced stress (Haratani & Kawakami, 1999). Similarly, 26 percent of employees in a Canadian study reported work-related psychological issues over a 12-month period; this compares with 18 percent of employees who reported work-related physical injuries or physical illnesses (Berger, 1996). Another Canadian study suggests that 40 percent of job turnover is due to stress and that 25 percent of employees perceive work as their largest source of stress (Perez & Wilkerson, 1998). American figures appear higher; one study for example, found that 79 percent of surveyed employees reported the previous year as their most stressful ever, and this was largely attributed to occupational stress (HR Focus, 1996).

The situation in Australia is comparable. In a review of 400 Pre-Liability Assessments, approximately 70 percent of distress claims were deemed to be legitimately caused by work-related factors; this in turn, had a significant impact on employee wellbeing (Jackson & Clements, 2006). At a national level, workers' compensation claims for occupational stress increased by 62 percent from 1996-97 to 2002-03, while all other types of compensation claims decreased during this period (Office of the Australian Safety and Compensation Council, 2006).

The increase in occupational stress has been attributed to a number of factors. These include the changing nature of work – for instance, the use of downsizing, lean production, and the rapid increase in flexible and insecure forms of employment, evidenced by short-term contracts, virtual organisations, delayering and outsourcing (Arthur, 2004; Cooper, Dewe, & O'Driscoll, 2001). As Winefield and colleagues (2000) explain, “The traditional practice of obtaining one job for life is disappearing and it is increasing the pattern of employment for one person to have a sequence of jobs” (p. 20). Additionally, employees are expected to be innovative, team-oriented, flexible, resilient to information-overload, and efficient (or, more specifically, do more with less) (Goetzl, Ozminkowski, Sederer, & Mark, 2002). Furthermore, there are now longer working hours, with Australians now working the longest hours of any country in the developed world; and there is diminished union visibility (Maxwell, 2004).

Regardless of its cause, occupational stress is now a worldwide epidemic – recognition for which has come from both the World Health Organization (WHO) and the United Nations (UN) (deVries & Wilkerson, 2003).

2.1.2 Consequences

Why should the prevalence of occupational stress elicit concern? The simple answer is cost. This cost is experienced at an organisational level, an economic level, as well as a personal level.

At an organisational level, the costs associated with occupational stress manifest in numerous ways (Collins, 1998; Harnois & Gabriel, 2000; Winefield et al., 2000). These include resistance to change, for instance, modifications to management structure; loss of motivation and organisational commitment; deterioration in organisational morale; tension and conflict between employees and with clients; reduced work performance, productivity and output; poor decision-making and time-keeping; deterioration in planning and control of work; employees working increasingly long hours, but for diminishing returns; increased error rates; an increased number of accidents; increased disciplinary problems; absenteeism, particularly frequent short periods of absence; burnout; and increased voluntary resignations, which is particularly costly for companies at top levels of management. The array of organisational costs suggests that occupational stress constitutes a critical barrier to the sustainability of business management.

Greatly intertwined with organisational costs are economic costs. Employees who experience psychological issues are costly. In addition to the loss of production and recruitment costs to replace absent staff, there are compensation claims, health

insurance costs as well as medical expenses (deVries & Wilkerson, 2003; Winefield et al., 2000). Using cost-benefit equations, Goetzel and colleagues (2002) calculated that, relative to those who do not experience psychological issues, depressed employees are 70 percent more expensive; those who are stressed are 46 percent more expensive; and those with both depression and high levels of stress are 147 percent more expensive.

The economic cost associated with occupational stress has a significant impact on the economy of the business sector and entire nations. Emphasising this point, deVries and Wilkerson (2003) state, “As a health cost to national economies and business, mental disability is out of control” (p. 47). For instance, each year in the United Kingdom, eighty million days are lost to mental illness, costing employers approximately one to two billion pounds annually (Mental Health Foundation, 2000). At a national level, the United States spends about thirty to forty billion American dollars each year on depression alone, with an estimated 200 million days lost from work annually (Conti & Burton, 1994; Washington Business Group on Health, 1995) – this equates to approximately sixty billion American dollars a year in lost productivity (Eisenberg, 1998).

Australia has also witnessed the increased economic costs of occupational stress. Recent indicators suggest that the average cost of a psychological injury claim is \$27,798 per claim compared to \$18,913 for a physical injury claim (WorkCover, 2005). Furthermore, the mean time from work has peaked to 21 weeks compared with eight weeks for a physical injury claim. It thus appears that occupational stress influences the economic value of an organisation.

At a personal level, occupational stress seriously impacts upon wellbeing. A common reason people visit their General Practitioner is because of occupational stress (Dollard, 2006). Negative reactions to stress reveal themselves in a multitude of ways. These include decreased job satisfaction, increases in work-related injuries and accidents, anxiety, depression, diminished sociability, as well as burnout (Bonn & Bonn, 2000; Collins, 1998; Harnois & Gabriel, 2000; Töyry et al., 2004). The psychological consequences can be dire, as experiences of anxiety and depression can progress to clinical levels, thus warranting the diagnosis of a mental illness like Adjustment Disorder, Major Depression or Post Traumatic Stress Disorder. In fact, an Australian study by Jackson and Clements (2006) indicates that employees who lodge WorkCover claims for psychological injury do so only once their distress has become significant; and it might be argued that prolonged delays without clinical intervention has the potential to increase the risk of suicide.

A large body of research in the field of psychoneuroimmunology verifies that occupational stress can also cause poor physical health (Harnois & Gabriel, 2000; Mills et al., 2004; Rau, 2006; Smith, Roman, Dollard, Winefield, & Siegrist, 2005). This includes hypertension, hypercholesterolemia, heart disease, ulcers, distorted sleeping and eating patterns, skin rashes, headache and migraine, neck and backache, as well as low resistance to infection. Collectively, these contribute to the wear and tear of the human body (Jönsson, Johansson, Rosengren, Lappas, & Wilhelmsen, 2003).

Further to this, without sufficient opportunity for convalescence, ongoing exposure to occupational stress leads to physiological change; for instance, degradation of the hippocampus (Dollard, 2006). Not only is this a significant problem for the individual employee, but it also has major implications for the business sector – especially knowledge economies. As Dollard explains, this is because the hippocampus is required for higher level cognitive functions.

The personal costs of stress permeate into family networks and the wider community. As Hoggan (2004) has found, the imbalance between effort and reward is associated with antisocial behaviours like road-rage.

2.1.3 Contributors

Given the organisational, economic and personal costs associated with occupational stress, it is important to identify factors that contribute to it. A review of relevant literature suggests that these might be understood as external (or workplace) factors and internal (or personal) factors.

A report by the WHO presents a number of workplace factors that have the potential to heighten occupational stress among employees (see Table 2.1) (Harnois & Gabriel, 2000). These include contextual characteristics, like the *function and culture* of an organisation – particularly if it is not conducive to problem-solving and is non-supportive; ill-defined *roles* among employees; few, if any *career prospects*; as well as little opportunity to participate in *decision-making* practices – in fact lack of control over work might be as much a threat to cardiovascular health as smoking cigarettes (House, Landis, & Umbessen, 1983). Equally influential are *interpersonal relationships* between co-workers. Working alliances marred by conflict or distance also mars employee wellbeing.

The WHO also recognises the importance of workplace content (Harnois & Gabriel, 2000). This encompasses *tasks* – for instance, work that is ill-defined, marked by a high level of uncertainty, lacks variety, fragmented or meaningless, underutilises employee skill, or involves continued exposure to clientele or, as highlighted by Jackson and Clements (2006), critical incidents. The *load* and the *pace* of the work also influence occupational stress, particularly when there is little control over these. Similarly, the *quantity and quality* of work can contribute to occupational stress – whether there is too much, too little, or there is heightened time pressure. Furthermore, occupational stress is affected by the *schedule* of work – more specifically, shift working, an inflexible work schedule, unpredictable working hours, as well as long or unsociable working hours. Finally, while seldom recognised in the literature, the WHO report also recognised the contribution of sexual harassment and discrimination to occupational stress, particularly for women and minority groups.

Table 2.1: Stressful Characteristics of Work

Work characteristics	Condition defining hazard (demands, control and support)
<i>CONTEXT</i>	
Organizational function and culture	Poor task environment and lack of definition of objective Poor problem solving environment Poor development environment Poor communication Non-supportive culture
Role in organization	Role ambiguity Role conflict High responsibility for people
Career development	Career uncertainty Career stagnation Poor status or status incongruity Poor pay Job insecurity and redundancy Low social value to work
Decision latitude/control	Low participation in decision-making Lack of control over work Little decision-making in work
Interpersonal relationships at work	Social or physical isolation Poor relationships with supervisors Interpersonal conflict and violence Lack of social or practical support at home Dual career problems
<i>CONTENT</i>	
Task design	Ill-defined work High uncertainty in work Lack of variety of short work cycles Fragmented or meaningless work Underutilization of skill Continual exposure of client/customer groups
Workload/work pace Quantities and quality	Lack of control over pacing Work overload or underload High levels of pacing or time pressure
Work schedule	Shift working Inflexible work schedule Unpredictable working hours Long or unsociable working hours

Source: (Harnois & Gabriel, 2000, p. 10)

Although comprehensive, Akerboom and Maes (2006) add to this list, highlighting the importance of material resources. They found that inadequate tools, frequent incidental repairs, and dated equipment and tools were associated with higher levels of somatic complaints than resources that were appropriate, reliable and well-

maintained. Bennett and colleagues (2001) also add to the list. They cited lack of managerial support and lack of recognition by the organisation as factors that contribute to organisational stress.

While this brief overview indicates the organisational contribution to occupational stress, there appears to be a larger body of literature that recognises the role of internal or personal factors. As Brooker and Eakin (2001) explain, “Individuals are not merely acted ‘upon’, but play an active part in perceiving the environment and reacting to it, which in turn can effect their health” (p. 102). This recognition might be partly because it is easier to incite change in an individual employee, than an entire organisation (Kenny, 2000).

Perhaps the most renowned disposition associated with stress is the Type A behaviour pattern (TABP) (Friedman & Rosenman, 1974). It is indicated by a sense of time urgency, continually working at or near maximum capacity, and assuming too many activities simultaneously (Glass, 1977; Wright, 1988).

An array of other dispositions has been associated with stress. These include limited hardiness (Kobasa, Maddi, & Kahn, 1982), negative affect (Matuszek, Nelson, & Quick, 1995; Scheier & Carver, 1987), little sense of self-efficacy (Bandura, Taylor, Williams, Mefford, & Barchas, 1985), limited ego-control (Funder & Block, 1989), limited ego-resiliency (Block & Block, 1980), an external locus control (Dalgard & Haheim, 1998; Rodin, 1986; Skinner, 1996), a passive coping style (Zuckerman, 1989), and organizational citizenship behaviour – that is, high levels of personal initiative (Organ, 1988, 1997). To this list, Jackson and Clements (2006) add high levels of emotionality and self-focus, perfectionist traits, as well as a distrustful and rigid thinking style.

Some scholars in the field of occupational stress are mindful of the complexities that surround the link between personality disposition and stress. Phares (1991) for instance, advises that it is difficult to make an irrefutable link between a particular disposition and stress; furthermore, “we cannot always be sure that supposedly different traits really are different; maybe they are basically the same but with different names” (p. 457). Similarly, Arthur (2004) states “employees do not become stressed just because of character flaws or mental health vulnerability; rather the context in which people live and work can stress them” (p. 160). Despite these concerns, contemporary research recognises the role of personal attributes in the experience of occupational stress (Jackson & Clements, 2006).

2.1.4 Management Strategies

In light of the prevalence, consequences and future implications associated with occupational stress, there is an urgent need for effective management strategies; this is particularly because of current business trends and its increasing reliance on knowledge and information, as opposed to labour. As stated by deVries and Wilkerson (2003):

Mental capacity will do the ‘heavy lifting’ in the information economy. Mental health then is an important business productivity weapon in an intensely

competitive data-based world economy ... In this environment, organizations that promote employee well-being enhance their own competitive position by promoting the mental output of skilled workers. Thus, management practices – can be critical in promoting emotional stability and functioning in the modern workforce (p. 46).

Despite the earlier cited cautions from Phares (1991) and Arthur (2004), many strategies used to manage occupational stress continue to focus on the individual employee (Kenny, 2000). International literature suggests that, while the bottom-line motivates employers to address occupational stress, they do not necessarily consider workplace demands (Arthur, 2004; Sanders, 2001). For instance, in their study of 36 senior managers from large successful organisations, Sharpley and Gardner (2001) found that, while over three-quarters recognised stress as a significant issue, half viewed it as a response to events, rather than a need to examine the events themselves. The situation in Australia is somewhat similar. A recent Victorian study found that the management of occupational stress “is currently dominated by individually-focused understandings of the problem as well as individually-focused interventions” (LaMontagne et al., 2006, p. vii).

According to Giga and colleagues (2003), individual interventions in this area “aim to provide individual employees with the skills to understand and cope with pressure and stress” (p. 285). Such strategies can be particularly useful during times of transition (Winefield et al., 2000).

Ostensibly, this approach appears to equip and empower individuals (Akerboom & Maes, 2006). However, without organisational procedures that aim to reduce, if not prevent occupational stress, it is unlikely that individual management strategies will sustain employee wellbeing (Cooper & Cartwright, 1997; Van der Klink, Blonk, Schene, & Van Dijk, 2001).

Sole focus on individual management strategies is problematic for a number of reasons. Principally, it allows stressful practices and conditions within the workplace to continue unchallenged; it deflects responsibility away from the organisation; and it attributes to blame to the individual employee, neglectful of other important causal factors (Dewe & O’Driscoll, 2002; Giga et al., 2003; Morris & Raabe, 2002; Sanders, 2001). In summary, “We chip off the rust while the boat sinks” (Levi, Sauter, & Shimomitsu, 1999, p. 394).

Why then does there continue to be a preference for individual approaches to manage occupational stress? According to Arthur (2004), there are four key reasons; namely:

(1) the disruption organisational change may cause, (2) the desirable high visibility of providing stress management programmes, (3) the perceived greater cost return of EAPs [Employee Assistance Programmes], despite the uncertain evidence... and (4) the preference of most stress professionals for individual intervention strategies (p. 161).

Adopting a more critical view, Kompier and Cooper (1999) assert that senior personnel abdicate responsibility and attribute blame to subordinates and the lifestyles they lead. The authors also highlight the fact that psychologists involved in stress management concentrate on subjective and individual differences. Furthermore, it is difficult to adhere to systematic intervention and evaluation strategies within ever-changing organisational settings. Finally, there is a dearth of empirical evidence on the costs and benefits of organisational strategies that address occupational stress.

This is not to suggest that organisational stress management approaches are not used. Climate and culture surveys for instance, examine policies, practices, workplace conditions, perceptions of supervisory skills, organisational morale and vocational discontent (Giga et al., 2003; Jackson & Clements, 2006). Despite these organisational efforts to improve workplace conditions, “what works in one situation may not work in another” (Winefield et al., 2000, p. 21).

The compartmentalisation of occupational stress into mono-theoretical models is largely futile (Arthur, 2004; Briner & Reynolds, 1999). Sole focus on either individual or organisational approaches will not effectively address the problem of occupational stress. The limitations within available research have not gone unnoticed (Wainwright & Calnan, 2002). Briner and colleagues (2004) for instance, argue:

research and theory tend to assume that people do not influence what they experience at work, that they don't think deeply or reflexively about their experiences. Just a few seconds spent listening to others or attending to our own experience makes it clear that this is simply not the case (p. 233).

It thus appears that the effective management of occupational stress will require a holistic approach. More specifically, it will require more integrated approaches that connect individual employees with the organisation as a whole (Giga et al., 2003).

There is growing literature in the field of occupational stress that recognises the importance of links and communication between all levels of an organisation (Cooper & Williams, 1994; LaMontagne et al., 2006; Murphy & Cooper, 2000; Sauter et al., 1996). As Arthur (2004) explains.

The study of work-related stress has become like the Buddhist parable of the six blind men who encounter an elephant, describe it according to the different parts they touch, but finally require the zoo-keeper to tell them that ‘Only by sharing what each of you knows can you possibly reach a true understanding’... work-related stress is ‘relational in nature involving some sort of transaction between the individual and the environment’... and only by examining all of its many components will the gestalt of the elephant appear (p. 158).

A combined approach typically addresses particular issues that involve the interface between the employee and the organisation, and they attempt to ensure that employees can adequately perform their duties (Giga et al., 2003). As a multidimensional intervention, the approach recognises the source(s) of workplace stress, as well as the importance of support for those who are insufficiently protected by the organisational approach.

While a seemingly effective option, combined approaches can be difficult to evaluate. This is largely because of the array of diversity – not only in the population under study, but also in organisational culture and the design of particular interventions. However, following a recent meta-analysis of peer-reviewed scientific papers that examined workplace teams and associated psychological factors, Rasmussen and Jeppesen (2006) reported positive associations between the two, regardless of team type, team size or contextual factors. This might partly explain the growing proportion of research evaluating workplace interventions that are both organisationally and individually focused (LaMontagne et al., 2006).

The first step towards a combined stress management approach is communication. The effective and efficient flow of information between various workplace units is the cornerstone to organisational success. American scholar, Karasek, affirms, “An important objective is to create a more sympathetic work environment and to encourage participatory decision making, skill building, and social support from supervisors as well as from colleagues” (cited in Bonn & Bonn, 2000, p. 124). Communication is positively associated with job satisfaction, training opportunities and adaptability to change, while it is negatively associated with psychological distress, somatic complaints and emotional exhaustion (Akerboom & Maes, 2006; Gowing, Kraft, & Quick, 1997).

One tool with a demonstrated ability to facilitate communication in the workplace is the *I.D. System*TM. This is described in the following section.

2.2 *Instinctive Drives*TM System

Reflective of trait theory (McCrae & Costa, 1999), the *I.D. System*TM is founded on the notion that:

individuals can be characterised in terms of relatively enduring patterns of thoughts, feelings, and actions; that [these patterns] ...can be quantitatively assessed; [and] that they show some degree of cross-situational consistency (p. 140).

The system is a means of identifying and assessing the innate attributes of each respondent. These are the natural qualities of the individual and are alleged to be the key to achieving and enjoying peak performance, personal fulfilment and optimum health (Burgess, 2007). However, the developer of the system proposes that it is by understanding the dynamics between the innate attributes of individual team members that team performance can be improved (Burgess, 2003).

The system is premised on the view that human beings are motivated by four key innate qualities. These include the *Instinctive Drive to Verify*TM, the *Instinctive Drive to Authenticate*TM, the *Instinctive Drive to Complete*TM and the *Instinctive Drive to Improvise*TM (see Figure 2.1). Each constitutes a continuum, polarised by a drive toward the instinct and a drive to avoid the instinct.

Notwithstanding primal instincts like hunger, sexual desire and the fight and flight mechanism, the existence of secondary human instincts has been a contested issue (Lorenz, 1973; Nissen, 1953). Debate surrounds whether instinct is the source of other behaviours (Hinde, 1960), including workplace performance (Kolbe & Kolbe, 1999). Such debate has been attributed to a number of reasons, including the rise of cognitive psychology; concern that the study of instinct may equate human beings with primitive animals (Morrow, Hansen, & Pearson, 2004); the limited opportunity to empirically measure instinct; and the complexity of instinct theory (Murray, 1964).

Providing a relatively broader view of human instinct, Steers and Porter (1991) propose that intrinsic needs help to motivate behaviour. More specifically, the human need for competence and self-determination energise an array of behaviours and psychological processes that help to fulfil these drives. As the authors explain:

Intrinsic needs differ from primary drives in that they are not based in tissue deficits and they do not operate cyclically, that is, breaking into awareness, pushing to be satisfied, and when satisfied, receding into quiescence. Like drives, however, intrinsic needs are innate to the human organism and functioning as an important energizer of behaviour. Furthermore intrinsic motivation may interact with drives in the sense of either amplifying or attenuating drives and of affecting the way in which people satisfy their drives (p. 32).

According to Burgess (2007), the *I.D. System*TM can help to understand human behaviour by assessing motivation levels. To identify where an individual is situated on each of the four aforesaid continua, a 32-item, closed-response survey is used. A resulting four-digit profile number provides insight into the natural tendencies and innate capacities of an individual. While further detail about each of the four drives is provided in the subsequent section, additional information can be sourced from existing literature (Fitzgerald, Dadich, Ferres et al., 2006; Fitzgerald, Dadich, & Fitzgerald, 2006; Fitzgerald, Ferres, Dadich et al., 2005; Fitzgerald, Ferres, Hamilton et al., 2005).

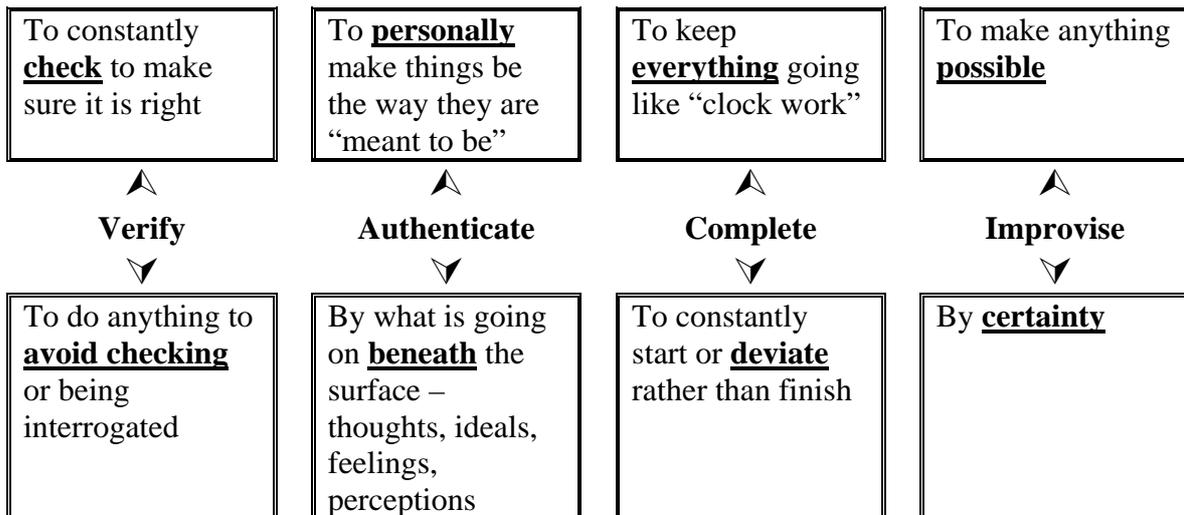


Figure 2.1: Instinctive Drives™ (Link-up! International, 2005, p. 35)

2.2.1 Four Instinctive Drives™

The following material was extracted from the literature developed by Link-up International to explicate the four dimensions (Link-up! International, 2005, pp. 36-47).

2.2.1.1 Instinct to Verify™

“This is the *Instinctive Drive*™ for continuously *checking* and constantly *evaluating*:

- To make sure things are *right*.
- To (know how to) do things *right / better*.
- To determine the *right* thing to do.

If you are driven to use the Instinct to Verify™, you need to know why and need to think things through, working out the right thing at the right time... and you need reassurance then to know you were right!

If you are driven to avoid the Instinct to Verify™, you don't really see things as being “right” or “wrong”. They just “are”. You accept them as is. After all, what does right mean anyway? It is not that you “don't check”, it's just that you will do what you can to avoid that process: for example, trust, assume, accept, avoid, etc.”

2.2.1.2 Instinct to Authenticate™

“This is the *Instinctive Drive*™ for constant and genuine *congruency*:

- In what is *discussed*.
- In what is *done*.
- In what is *perceived*.

If you are driven to use the Instinct to Authenticate™, your reality is what you see, hear and interpret because these things are real to you. You strive to eliminate the gap between your perceived reality and the way things are meant to be. Things must ultimately manifest for you to be fulfilled.

If you are driven to avoid the Instinct to Authenticate™, you are motivated more by the feelings you and others have (or could have) “on the inside” more than what is or is meant to be externally. Such intangibles (emotions, philosophies, perceptions, dreams and ideals) are reality to you.”

2.2.1.3 Instinct to Complete™

“This is the *Instinctive Drive*™ for keeping everyone and everything in your world in harmony:

- Not just some people or some things but every aspect of your life.
- Yesterday and tomorrow as well as today.
- The “what ifs” as well as “what is”... the whole lot.

If you are driven to use the Instinct to Complete™, you need to integrate everything and are always anticipating (and recalling!) so that you keep all of the wheels turning. That is why you need structure – so you can see how everything fits together.

If you are driven to avoid the Instinct to Complete™, you view things as exceptions or “one-offs”. You thrive on challenging the sense of harmony that exists by (for example) changing things for the sake of change, starting but not always finishing, acting spontaneously, interrupting, etc.”

2.2.1.4 Instinct to Improve™

“This is the *Instinctive Drive*™ for committing:

- Without knowing the time or resources are available to enable success.
- To outcomes which stretch existing boundaries or methodologies.
- Then inventing or persuading to achieve the outcomes.

If you are driven to use the Instinct to Improve™, you always say “Yes!” (one way or another) which helps you then see possibilities in seemingly impossible or nothing situations and thrive on making it happen – especially when others think it can’t be done.

If you are driven to avoid the Instinct to Improve™, you need to “set your own pace” and need to work within existing boundaries and with proven methods so that you are always certain the desired outcomes will be achieved. Certainty is the key!”

2.2.2 Strengths of the Instinctive Drives™ System

Arguably, there are a range of renowned psychometric tools that assess personal attributes. These include the Myers-Briggs Type Indicator (MBTI) (Myers &

McCaulley, 1985), the Dominance, Influence, Steadiness and Compliance (DiSC®) system (Mills & Associates, 2005), and the Team Management Index (Margerison & McCann, nd). However, the *I.D. System*TM has a number of unique strengths.

Firstly, although developed in Australia – and thus, appropriate for Australian research, the system can also be adapted to the global context. This is indicated by support from international firms such as Cisco Systems Incorporated. An Australian study on occupational wellbeing is opportunistic because, relative to the United States (where employers are closely tied to employee health insurance), employee mental health is sorely neglected in corporate Australia. Secondly, recent empirical research verifies that the system is valid, reliable and authentic (Fitzgerald, Dadich, Ferres et al., 2006; Fitzgerald, Dadich, & Fitzgerald, 2006; Fitzgerald, Ferres, Dadich et al., 2005; Fitzgerald, Ferres, Hamilton et al., 2005). Thirdly, published commentary reveals that it fares favourably when compared with the MBTI and the DiSC® system – more specifically, where comparative data are available, the *I.D. System*TM demonstrates superior reliability and validity.

Toward the aim of improving team performance, the developer of the *I.D. System*TM has experienced a degree of international success (Burgess, 2007). Within companies of various sizes, Burgess has demonstrated an ability to understand individual innate qualities, identify effective workplace practices – particularly in the context of managing organisational change, and facilitate team improvement. This experience is complemented by empirical research, which verifies that the *I.D. System*TM can have a valuable role in the workplace. It can provide employees with an improved understanding of themselves and of others; it is a potential catalyst for greater communication between co-workers and with clients; it can also initiate personal as well as team development (Fitzgerald, Dadich, & Fitzgerald, 2006; Fitzgerald, Ferres, Dadich et al., 2005).

2.2.3 Interventions towards Change

While an *I.D.*TM profile might be insightful in itself, Link-up International helps interested clients to maximise personal performance by facilitating change. Trained consultants meet with clients to help them understand their profile, examine their professional and/or personal behaviours, and identify strategies to improve personal functioning and relationships with others (Link-up! International, 2005). It should be noted that the frequency and regularity of contact between consultant and client is determined by both parties; so too is the choice of strategy implemented.

Client change is facilitated by a number of interventions employed by the consultant. These include personal coaching; the use of a Management Strategies report, which outlines individualised strategies for self-management, providing insight into own drives, and for the participant's immediate supervisor, outlining how to get the best out of the employee; interactive workshops for groups of clients; the provision of homework or exercises to the client; observing the client during daily routine; and the involvement of significant people in the client's life, which might include workplace supervisors, human resource personnel and/or family members. Such variety allows the consultant to employ the intervention that meets the individual (and changing) needs of the client.

According to the Burgess (2007), client behaviour is enhanced because the consultants help clients to function in stride. That is, by using the *I.D.*TM profile as an “internal compass” (p. 187), clients become “true to themselves” (Link-up! International, 2005, p. 76). This view is explicated in the following section.

2.2.4 Functioning in Stride

Functioning in stride describes compatibility between behaviour and innate drives (Burgess, 2007). Such behaviour appears natural, effortless and genuine. Demonstrations of functioning in stride include (but are not limited to) the ability to function at an optimum level and a feeling contentment.

Functioning in stride is said to optimise both psychological and physical wellbeing. Reflecting on his experience with facilitating client change, Burgess (2007) states:

When you're pulled out of stride with your *I.D.*TM, your incongruence with it may initially show up in your attitude and lack of motivation...

You could be unusually tired, irritable, bad tempered or easily brought to tears. Maybe you are so used to regular headaches you consider it normal, or you struggle to sleep properly and can't really be bothered doing much about it...

Your immune system is compromised when you are constantly dealing with low-level stress – making you more susceptible to colds and less able to shake them... Being in stride with their *I.D.*TM actually boots people's immunity to protect them from whatever diseases are floating around...

every person I worked with seemed to 'shine' whenever in stride with his or her *I.D.*TM and experience some form of health issue whenever out of stride. At first this just seemed a mere coincidence, but the pattern was too strong to ignore (pp. 186-188).

While his views lack empirical strength, Burgess (2007) alleges there to be eight benefits associated with functioning in stride. These include:

1. A sense of fulfilment;
2. A sense of achievement;
3. Peak performance;
4. Increased self-esteem;
5. Increased self-confidence;
6. Improved self-worth;
7. Improved energy levels; and
8. Optimal health.

Conversely, functioning out of stride is assumed to compromise at least one of the eight areas. Through his professional experience, Burgess has observed a number of correlations between functioning out of stride and symptomatology (see Figure 2.2).

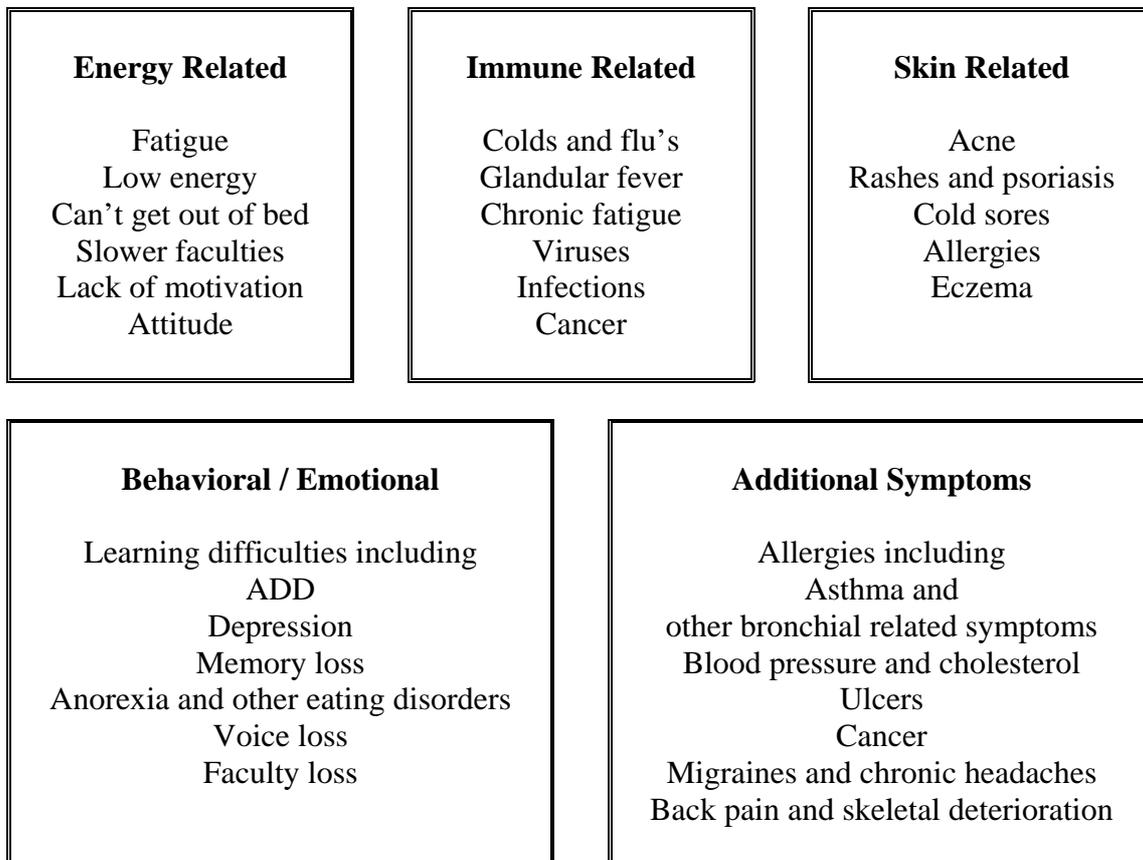


Figure 2.2: Symptoms associated with functioning Out of Stride (Link-up! International, 2005, p. np)

Ostensibly, the link between functioning in stride and wellbeing appears tenuous. Devoid of empirical research, the claim remains just that. However, existing literature may illuminate the link – this includes research on the concept of homeostasis.

2.2.5 Supporting Literature

Introduced by Cannon (1932), homeostasis describes the proper balance of physiological variables such as temperature, nutrient levels and fluid concentration (Carlson, 1990). However, when a state of disequilibrium arises, psychological drives attempt to propel behaviour that might expedite a return to homeostasis. This link between homeostasis (or wellbeing) and psychological drive might help to understand the connection between functioning in stride and wellbeing, described by Burgess (2007).

Similar support is derived from research on the concept of flow. Coined by Csikszentmihalyi (1975), flow describes the transcendence experienced when action and awareness unite. More specifically, it emerges when perceived challenges are commensurate with perceived skills and a state of “harmonious participation with the environment” (p. 194) is achieved (see Figure 2.3).

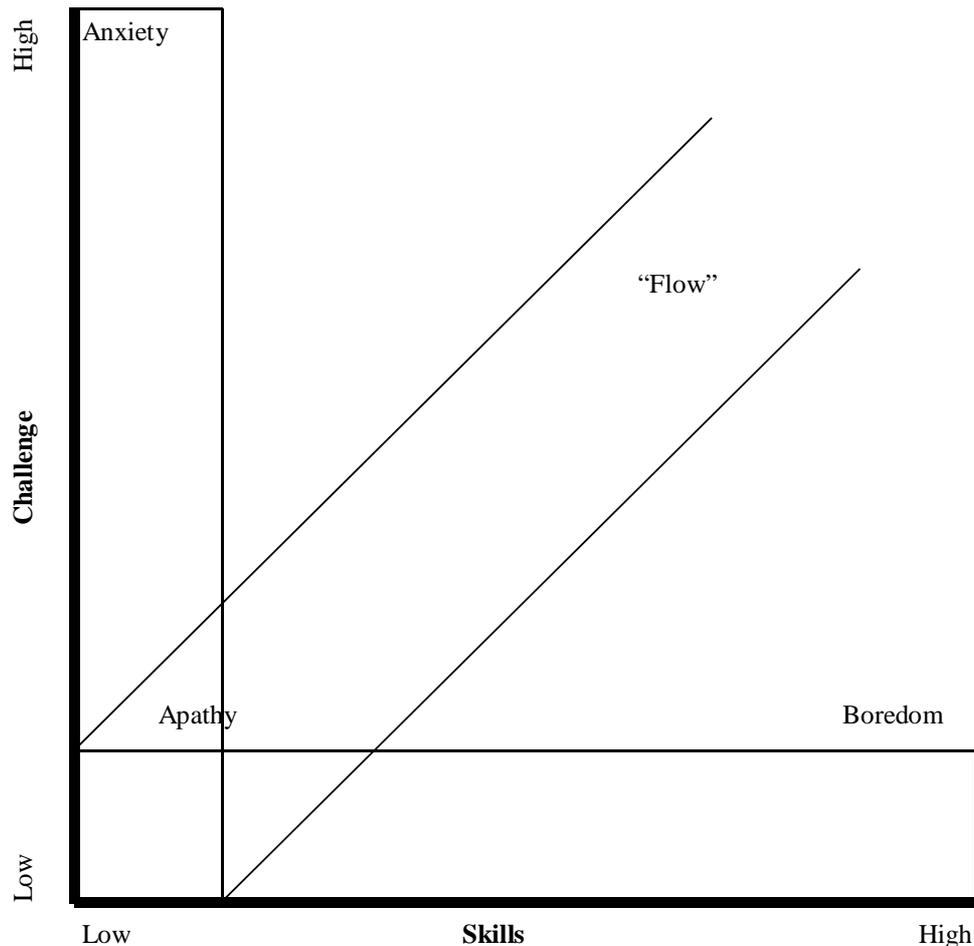


Figure 2.3: Flow (Farmer, 2004)

According to Farmer (2004), people who experience flow feel a number of emotions. They feel completely involved in their activity and focused; a sense of ecstasy; great inner clarity, with awareness of the tasks at hand and the progress they are making; confident that the task is achievable and are neither anxious or bored; a sense of serenity; a sense of timelessness; as well as intrinsically motivated – that is, the task, rather than the outcome, becomes its own reward.

This is not to suggest that flow is a novel concept. Csikszentmihalyi (1990) indicates that it borrows largely from the concept of *Yu*, which was described some 2,300 years ago in the writings of Taoist scholar, Chuang Tzu. However, Csikszentmihalyi has applied the concept to contemporary, Western activities.

Akin to the notion of functioning in stride (Burgess, 2007), flow is not consequent to the intensity of an activity, but rather, the internalisation of the activity and the way it is approached (Csikszentmihalyi, 1975). Once developed, the ability to find flow in other settings becomes possible as the skills are transferable to an array of situations – including the workplace.

Given the negative experiences often associated with labour, Csikszentmihalyi (1997) examined the experience of flow within the workplace (among other settings). His research suggests that any setting can elicit flow – this includes the horrific

environment of a concentration camp. While it does not require great intelligence, it does call for a sense of personal agency. It requires the individual to engage with their surrounds and construct a setting that optimises their experience of flow. As Csikszentmihalyi (1975) states:

just as culture itself is man-made, flow activities are also the result of human decisions. Emphasis on the culturally structured aspects should not conceal the fact that people can turn any situation into a flow activity. We have seen that surgical operations can be tremendously enjoyable as long as the surgeon is able to maintain the flow-producing conditions of the activity. Even in concentration camps, prisoners who are able to superimpose a symbolic world, with its own goals and rules, on the grim “reality” of their condition seem to survive better and sometimes even to enjoy their experience...

But one need not be highly trained in the manipulation of symbols – as intellectuals are – to change everyday life into a flow experience... almost any situation can be turned into an enjoyable one (p. 193).

As a reward in itself, work activity that is conducive to flow can be a source of powerful intrinsic motivation. This in turn, complements (if not surpasses) existing extrinsic rewards, including income, authority and prestige.

A review of literature pertaining to flow (Csikszentmihalyi, 1975, 1990, 1996, 1997) suggests that it is conceptually similar to functioning in stride (Burgess, 2007). Firstly, both are said to involve enhanced awareness and insightfulness – those who experience flow or function in stride are more conscious of their mental state and their surrounds. Secondly, both emerge when opportunity for action corresponds with capability. Thirdly, when such correspondence occurs, the activity appears “to need no conscious intervention by the actor” (Csikszentmihalyi, 1975, p. 36) as it is aligned with his or her “innate, natural optimal way of being” (Burgess, 2007, p. 185).

Related to this is the fourth similarity. Literature on both concepts consider the role of “innate genetic causes” (Csikszentmihalyi, 1990, p. 84) or *Instinctive Drives*TM (Burgess, 2007) in the ability to experience flow or to function in stride. However, Csikszentmihalyi exercises greater discretion, suggesting that there are a number of factors that influence this ability:

Just as some people are born with better muscular coordination, it is possible that there are individuals with a genetic advantage in controlling consciousness... people might vary in the number of external cues they need to accomplish the same mental task... The neurological evidence does not, however, prove that some individuals have inherited a genetic advantage in controlling attention and therefore experiencing flow.

The findings could be explained in terms of learning rather than inheritance (pp. 86-88).

Finally, while both concepts recognise the role of inherent attributes, they also emphasise the importance of personal agency. The actor can play a decisive role in shaping his or her experience of the world; by exercising personal agency, he or she can create conditions that are conducive to flow or functioning in stride. With particular reference to employment, Csikszentmihalyi (1990) explains:

To improve the quality of life through work, two complementary strategies are necessary. On the one hand jobs should be redesigned so that they resemble as closely as possible flow activities... But it will also be necessary to help people... by training them to recognize opportunities for action, to hone their skills, to set reachable goals. Neither one of these strategies is likely to make work much more enjoyable by itself; in combination, they should contribute enormously to optimal experience (p. 157).

However, this is not to suggest that flow and functioning in stride are synonymous. The point of departure between the two concepts pertains to whether they can be predicted. While Csikszentmihalyi (1975) concedes a limited ability to predict the experience of flow, Burgess (2007) argues that the *I.D. System*TM helps determine whether an individual is functioning in stride.

According to Csikszentmihalyi (1997), people who experience flow are those who have an autotelic personality. They have an inexhaustible psychic energy that enables them to engage with complex activities and exercise creativity. However, determining whether an individual is autotelic is no simple feat. It involves studying the individual over an extended period, rather than a short psychometric test. As Csikszentmihalyi explains:

The best method is to observe a person over a long period of time, in many different situations. A short "test" of the kind psychologists use is not very appropriate, in part because flow is such a subjective experience that it would be relatively easy for a person to fake his or her responses... I prefer to use a more indirect measure. According to the theory, persons should be in flow when they perceive both the challenges in a given situation and their skills to be high. So one way of measuring how autotelic person is, is by computing the frequency with which they report being in a high-challenge, high-skill situation over a week of paging with the Experience Sampling Method (p. 118).

Conversely, Burgess (2007) advocates the merits of the *I.D. System*TM. By using a simple and quick test to gauge an individual's drives, it is possible to promptly establish whether he or she will function in stride in a given situation:

By knowing your *I.D.*TM you can know what that... pathway is for you, recognise earlier the people and situations that are likely to pull you out of stride and have strategies to help you get back in stride – and stay there. If you are in stride and working with your *I.D.*TM – working the way that best suits your innate nature – then the benefits are overwhelming... When you know your *I.D.*TM and the *I.Ds*TM in your family, you can truly communicate with your family in a way that not only guarantees less arguments but also more harmony and fun (p. 193).

While this claim lacks empirical evidence, the *I.D. System*TM has proven to be a valid and reliable tool (Fitzgerald, Dadich, Ferres et al., 2006; Fitzgerald, Dadich, & Fitzgerald, 2006; Fitzgerald, Ferres, Dadich et al., 2005; Fitzgerald, Ferres, Hamilton et al., 2005). It also has a demonstrated ability to facilitate effective communication in the workplace.

2.3 Summary

In light of its qualities, does the *I.D. System*TM offer an integrated way of managing occupational stress; more specifically, can an awareness of individual's instinctive drive facilitate the management of this form of stress? Empirical research has not yet examined this area. The void in the existing body of knowledge was the primary impetus for the present study.

3 Methodology

Following from the review of relevant literature in Chapter 2, this chapter outlines the research process that was employed to achieve the overarching aim of the study. This involved a two-phase longitudinal design incorporating a combination of quantitative and qualitative methods. This design provided the comparative data needed to understand the influence of the *I.D. System*TM on occupational stress.

3.1 Recruitment Process

Following clearance from the relevant academic ethics committee, potential research participants were recruited by fourteen consultants who promoted the *I.D. System*TM. Consultants are accredited representatives of Link-up International whose task is to recruit clients, both organisations and individuals, and help them to function in stride. This is achieved through the use of the *I.D. System*TM, which organisations or individuals pay to use.

As consultants become more experienced and successful at recruiting and retaining clients, they are rewarded with status. More specifically, those who have received complimentary feedback from clients, demonstrate sound knowledge of the *I.D. System*TM and facilitate client change are titled, Blue Belt consultants. These individuals are mentored by a senior consultant known as a Black Belt consultant. Armed with a comprehensive understanding of the *I.D. System*TM, Black Belt consultants are considered to be effective and insightful during every client interaction and have the capacity to facilitate sustainable client change.

In consultation with senior personnel from Link-up International, it was decided that Blue and Black Belt consultants would be asked to recruit potential research participants for the study. This was because consultants who achieved a certain level of competency were more likely to provide a consistent standard of service, diminishing the potential for diversity in providing insights and interpreting and delivering support strategies.

At the time of study, there was a total of 26 consultants who supported the *I.D. System*TM – of these, 17 were Blue or Black Belt consultants. Requesting the consultants to recruit potential research participants was important for two key reasons. Firstly, it minimised researcher interference in the project; secondly, it helped to ensure the timely completion of the study, as the researchers were not required to establish rapport with potential research participants.

The recruitment process endured for approximately 18 months. During this time, the research team supported the consultants, providing detailed information about the study, the proposed schedule of research phases, the progress of the study, and contact details for the chief investigator should they require additional information (see Appendix 7.1).

As the consultants often worked with complex, hierarchical organisations, it was important that proper recruitment protocol be observed. For the purpose of this study, Blue and Black Belt consultants were advised to:

- Identify organisations they will work with that have not yet employed the *I.D. System*TM;
- Request permission from the general manager to recruit employees to the study (see Appendix 7.2); and
- Pending approval from the general manager, recruit approximately 15 staff members from the organisation who intend to engage with the *I.D. System*TM (see Appendix 7.3) – a quota of 15 was selected because the intention was to recruit over 200 participants.

The consultants were advised to inform the general managers and staff members that the decision to participate in the study will have no bearing on future relations with Link-up International or UWS.

3.2 Phase One

3.2.1 Research Tools

Using a quantitative approach, the initial phase of the study sought to collect baseline data from research participants about perceived wellbeing and workplace functioning. To ensure thoroughness, a number of quantitative measures were employed that measured variables of interest and had good reliability and validity. The selection of tools followed a careful consideration of the way each would enhance the ability of the study to meet its overarching aim. Also carefully considered was the order of the measures. More specifically, the researchers considered the way in which responses to one measure would influence responses to subsequent measures.

The measures used in phase one included (in order of appearance):

1. Self assessed health status (ABS2005):
These items invite respondents to report on perceived health, using Likert scales, ranging from *excellent* or *definitely yes* to *poor* or *definitely not*. Inclusion of these items allowed the perceived health of the sample to be compared with that of the Australian population, and thus gauge sample representation.
2. General Health Questionnaire (GHQ12) (Goldberg, 1978; Goldberg & Williams, 1988):
The self-administered 12-item version of the GHQ measures general level of happiness, experience of depressive and stress symptoms, as well as sleep problems over the last few weeks. A four-point Likert system is used to recode scores on a bi-modal scale. When queried about symptom presence, respondents may reply with *one* to suggest *not at all*, which results in a score of zero, *two* to suggest *same as usual*, which also results in a score of zero, *three* to suggest *more than usual*, which results in a score of one, or *four* to suggest *much more than usual*, which also results in a score of one.

Goldberg and Williams (1988) have published an extensive presentation of the psychometric properties of the GHQ12, which are satisfactory. In their investigation, coefficient alpha, estimating the reliability of the instrument,

was calculated to be 0.68 using the bimodal method of scoring. Additionally, Kalliath and colleagues (2004) have reported an acceptable level of internal consistency reliability, with a Cronbach's alpha coefficient of 0.91. Similarly, this study found a Cronbach's alpha coefficient of 0.84.

3. Perceived Stress Survey (Cohen & Williamson, 1988):

The Perceived Stress Survey is a brief gauge of tension as experienced by respondents – that is, “the degree to which one perceives aspects of one's life as uncontrollable, unpredictable, and overloading” (Roberti, Harrington, & Storch, 2006, p. 136). It was included to help identify respondents who might be experiencing high tension levels, despite being assessed as healthy by the GHQ12. Although available as a four-, ten- or 14-item survey, the ten-item survey was selected to limit the length of the survey without jeopardising validity or reliability.

While there are a number of psychometric tools available to gauge stress, including the Job Stress Survey (Spielberger & Vagg, 1991) and the Derogatis Stress Profile (Derogatis, 1986), the Perceived Stress Survey was employed for several reasons; namely, the comprehensibility of individual items; the generic nature of the items, allowing them to be applicable to any sub-population; the brief timeframe required to complete the tool; the domains assessed by the tool, particularly, health and quality of life; and its financial accessibility.

The measure was tallied by reversing the scores of negatively-worded items, and adding the scores of all questions. This procedure resulted in a total score, with low scores corresponding to low stress levels, and high scores corresponding to high stress levels.

The survey has acceptable psychometric properties. For instance, Roberti and colleagues (2006) found the measure had a Cronbach's alpha coefficient of 0.89. Similarly, the present study found that the scale had a Cronbach's alpha coefficient of 0.86.

4. Stride Scale:

Developed specifically for this study, the Stride Scale is a ten-item measure to gauge perceived compatibility between workplace behaviour and innate drives (Burgess, 2007). Respondents are asked to consider whether their current roles and responsibilities allow them to perform at optimum capacity. This is indicated using a seven-point Likert system, where *zero* indicates *never*, and *seven* indicates *always*. The scale was scored by reversing negatively-worded questions, and adding the total. This procedure resulted in a total score, with low scores identifying respondents who were functioning in stride, and high scores identifying respondents who were functioning out of stride. The scale was found to have an acceptable level of internal consistency reliability, with a Cronbach's alpha coefficient of 0.79.

5. Demographic information:

To contextualise the data and control for individual differences, demographic information on age and gender was collected via two single items. Information

pertaining to professional position, length of service within the current organisation, and length of service in current position was also collected via three single items. Demographic information was collected at the end of the battery to ensure that respondents would not be affronted by an initial request for personal information (Bourque & Fielder, 1995).

6. Interest in further involvement:

The battery of quantitative measures concluded with a final item, asking research participants if they would like to contribute to the qualitative component of the project through a confidential interview with a member of the research team. Link-up International provided the research team with contact details for those who responded positively.

The battery of quantitative measures was uploaded onto a secure and protected Uniform Resource Location (URL) on the Internet. To access the site, each research participant was issued with a designated username and a five-digit Personal Identification Number (PIN). Each PIN was comprised of a two-digit number assigned to the consultant and a three-digit number assigned to the research participant.

As suggested by relevant literature (Bonometti & Tang, 2006; Griffis, Goldsby, & Cooper, 2000; Klassen & Jacobs, 2001; Simsek & Veiga, 2000), the use of the Internet for data collection was beneficial for two reasons. Firstly, it expedited the process of data collection, as each research participant was permitted to access computing facilities in the workplace, therefore facilitating Internet access. Secondly, it reduced the possibility of human error during data entry. Although online completion of the tools was preferred, it was possible for research participants to contribute their responses by other means. However, all surveys were completed electronically.

Before the site was made available to research participants, it was piloted by a number of consultants. The feedback they provided was most constructive, as it helped to ensure that the site was accessible and commonsensical. The pilot phase also ensured that survey completion was not a prolonged process. The consultants indicated that the battery could be completed between 15 and 30 minutes.

3.2.2 Collection and Analysis of Research Material

Following completion of the *ID*.TM profile and consent form, each research participant was issued with a username and PIN. The battery of measures was self-administered, completed individually, and un-timed.

The research team then endeavoured to systematically examine the dataset using descriptive analysis, correlation analysis, paired samples *t*-tests using SPSS 15 computer software. Although additional analyses were conducted (namely, regression and ANOVA methods), these were futile due to a lack of statistical power.

3.3 Phase Two

3.3.1 Panel Research Tools

To expand on phase one of the study, the second phase commenced with the collection of longitudinal data. In addition to the measures employed in initial phase, phase two involved a number of other elements – some of which collected qualitative research material. More specifically, the battery of surveys employed in phase two included (in order of appearance):

1. Recall item:
The battery commenced with a single item to determine whether research participants could recall their *I.D.*TM profile. This helped to ascertain level of awareness of their Instinctive DrivesTM.
2. Lessons of Self item:
A single open-ended item was included to identify the three most pertinent lessons that the research participants have discovered about themselves through the *I.D. System*TM.
3. Four of the quantitative measures employed in phase one of the study; namely:
 - a. Five items on self-assessed health status, as developed and utilised by the Australian Bureau of Statistics (2005);
 - b. General Health Questionnaire (GHQ12) (Goldberg, 1978; Goldberg & Williams, 1988);
 - c. Perceived Stress Survey (Cohen & Williamson, 1988); and
 - d. Stride Scale.
4. Modes of Interaction Survey:
Developed specifically for this study, the Modes of Interaction Survey is a 30-item measure to identify the particular methods consultants used with the research participants to help them to function in stride. This helped to ascertain the approaches that facilitated or hindered the relationship between the *I.D. System*TM and occupational stress. The survey requires respondents to select the options that they personally participated in. To ensure thoroughness, the last open-ended item allows respondents to nominate *other* mode(s) not included in the survey.
5. Social Readjustment Rating Scale (Holmes & Rahe, 1967):
The Social Readjustment Rating Scale is an oft-cited measure in research that explores the association between stress and change (Sears, Peplau, & Taylor, 1991). It invites respondents to identify major life events they have experienced within the last six to twelve months. In its original form, the scale lists 43 graded events that were determined to impel the greatest change (Holmes & Rahe, 1967). Each event is assigned life-change units, the total of which constitutes the respondent's score (Phares, 1991). To minimise survey fatigue among respondents, an abridged version of the scale, comprised of 21 items, was used in the present study (see Foster, 1976). To ensure thoroughness, the last open-ended item allows respondents to nominate *other* life event(s) not included in the scale. Respondents were asked to identify the life events they had experienced since completing the *I.D. System*TM. This

helped to identify confounding variables that may have influenced the relationship between the *I.D. System*TM and occupational stress.

6. Perceived value of the *I.D. System*TM:

The battery of measures concluded with four open-ended items that invited respondents to describe the perceived value of the *I.D. System*TM. These items helped the researchers to understand the importance of the system in the daily working lives of the respondents.

Link-up International provided research participants with the battery of measures electronically. The research participants then provided Link-up International with the completed measures and these were forwarded to the research team.

3.3.1.1 Collection and Analysis of Research Material

Following an interval of approximately three to six months, the research participants were invited to complete the battery of measures. Consent forms signed during phase one of the study also addressed this phase. Akin to phase one, the battery of measures was self-administered, completed individually, and un-timed.

To achieve the aim and objectives of this report, the quantitative panel data were analysed by testing the following hypotheses:

1. Increased awareness of innate drives among employees affects perceived health over time;
2. Increased awareness of innate drives among employees affects perceived stress levels over time; and
3. Increased awareness of innate drives among employees affects perceived ability to behave in accordance with drives over time

Testing these hypotheses involved a systematic examination of the dataset. This involved calculating paired-sample *t*-tests for both phases of the study to identify differences consequent to awareness of innate drives. Demographic data was included in the analysis, as were different combinations of the drives measured by the *I.D. System*TM. This was to determine whether participants with particular drives were more or less likely to benefit from the system. However, given the lack of statistical power, only informative findings are reported.

3.3.2 Qualitative Research Phase

3.3.2.1 Research Tool

To explore the role of the *I.D. System*TM in managing occupational stress, a semi-structured, open-ended interview schedule was designed to guide consultation with participants who had expressed interest in this phase of the study during phase one. Questions clustered around the following themes – the perceived influence of the *I.D. System*TM on individual performance; the perceived influence of the *I.D. System*TM on group performance; and the perceived influence of the *I.D. System*TM on occupational stress (see Appendix 7.4). Given that the interviews were to be semi-structured, the designed schedule guided the interactive process, rather than dictate it.

3.3.2.2 Recruitment

Among those who had participated in phase one of the study, 44% (n=72) expressed interest in the qualitative research phase and 33% (n=52) were unsure. A total of 37 initial participants (23%) elected not to participate in phase two. From the cohort who expressed an interest to be involved with phase two, every fifth person was selected by the research team. At the time of data collection, 13 persons were available.

3.3.2.3 Collection and Analysis of Research Material

Each interview was conducted six to nine months after phase one. The interviews commenced with the presentation and discussion of the consent form, with particular reference to the purpose of the study, the way in which research material would be used, the anonymity of respondents and confidentiality of research material, and the opportunity for the revocation of consent without consequence. Those who continued to express an interest in project participation were invited to sign a consent form (see Appendix 7.5).

Each interview, which transpired for an average of thirty minutes, was audio-taped and transcribed verbatim. QSR N-Vivo® software was used to aid detailed coding and analysis of the collected research material, facilitating the interpretation process.

Through the analytic phase of the project, the research material was found to cluster around a number of core themes, as the participants constructed their own meanings of situations through the interview process. Using a reflective, iterative process, theme content was then interrogated to explore relationships between and within the themes. The process enabled the researchers to engage in a systematic method of analysis using an eclectic process, whilst remaining open to alternative explanations for the findings (Creswell, 1998).

It must be acknowledged that observational objectivity is problematic. The perceptions of the research team of the issues under investigation cannot claim exclusive privilege in the representation of those issues. However, to diversify the perceptions reflected in the research material, regular meetings were held to provide the researchers with a forum in which to discuss the research material and their interpretations. These meetings provided important opportunities to create, check and recreate meaning from observations and impressions, constantly reflecting on personal biases. Additionally, the research team was careful to ensure that the demographics represented in the study were diverse – this includes the demographics of those who were interviewed and the organisations they represented.

To synthesise these perceptions and develop a degree of consistency within each theme, codebooks were developed. These included detailed descriptors of each theme, inclusion and exclusion criteria, and exemplars from the research material.

3.4 Methodological Considerations

To achieve the overarching aim of this study, the role of a control group was considered. By comparing the experience of occupational stress between a cohort that utilised the *I.D. System*TM with one that did not would help to ascertain the relationship between the *I.D. System*TM and occupational stress. However, following careful consideration and discussion with research experts, the inclusion of a control group in the present study would not make effective use of limited resources (personal communication, Hodge, 2005). More specifically, despite the time and effort needed to include a control group in the study, it would only test the normalcy of the sample. This is the role of standard deviations. Furthermore, a control group would not necessarily ensure rigour. For these reasons, a control group was not included in the present study. Instead, the research team endeavoured to recruit as many participants as possible for the purpose of the longitudinal study. Furthermore, the use of complementary qualitative research methods would help to strengthen the findings.

3.5 Ethical Considerations

Approval to conduct the present project was gained from the university ethics committee (see Appendix 7.6). Given that Link-up International managed the collection of quantitative data, it was difficult for the research team to ensure that participating organisations represented diverse structures and sizes. However, organisations represented in the qualitative phase of the study were carefully considered to ensure the representation of those that differed in structure and in size.

4 Research Findings: Phase One

4.1 Research Participants

A total of 162 respondents participated in phase one of the study (mean age: 38.43 yrs; sex: 54.9% female) (see Table 4.1).

Table 4.1: Research Participants by Age in Years*

	N ^o	Minimum	Maximum	Mean	SD
Male	64	20.00	62.00	39.75	8.71
Female	84	23.00	65.00	37.80	10.14
TOTAL	148				

* Demographic data were not provided by all respondents.

4.2 Findings

4.2.1 Instinctive Drives™

Gender appeared to have little influence in determining the *I.D.*™ profile (see Table 4.2). One exception however, is the finding that males tended to score higher on the *Instinct to Authenticate*™ (see Table 4.3).

Table 4.2: Means and Standard Deviations for the *Instinctive Drives*™ as a function of Gender

	Gender	N ^o	Mean	SD	Std. Error Mean
<i>Verify</i>	Male	62	5.79	1.56	0.20
	Female	77	5.65	1.64	0.19
<i>Authenticate</i>	Male	62	5.58	1.37	0.17
	Female	77	5.01	1.39	0.16
<i>Complete</i>	Male	62	4.77	1.70	0.22
	Female	77	4.74	1.67	0.19
<i>Improvise</i>	Male	62	4.06	2.13	0.27
	Female	77	4.70	2.16	0.25

Table 4.3: *t*-Test Results for the *Instinct to Authenticate*™ as a function of Gender

Levene's Test for Equality of Variances		<i>t</i> -test for Equality of Means						95% Conf. Interval of Diff.	
F	Sig.	<i>t</i>	df	Sig. (two-tailed)	Mean Diff.	Std. Error Mean	Lower	Upper	
0.33	0.57	2.41	137	0.02	0.57	0.24	1.03	0.10	

Similarly, age appeared to have little influence over the *I.D.*™ profile. One exception however, is the finding that the mean age of those driven to use the *Instinct to Improvise*™ was significantly less than the mean age of those scoring five or less on this *Instinctive Drive*™ (see Tables 4.4 and 4.5). This means that, in this cohort, younger males were relatively more likely to be high improvisers.

Table 4.4: Means and Standard Deviations for the *Instinct to Improvise*TM as a function of Age

<i>Instinct to Improvise</i> TM	N ^o	Mean	SD	Std. Error Mean
0.00	87	40.18	9.81	1.05
1.00	46	37	7.41	1.09

Table 4.5: *t*-Test Results for the *Instinct to Improvise*TM as a function of Age

		Levene's Test for Equality of Variances		<i>t</i> -test for Equality of Means						
		F	Sig.	<i>t</i>	df	Sig. (two-tailed)	Mean Diff.	Std. Error Mean	95% Conf. Interval of Diff. Lower Upper	
Equal variances assumed		7.17	0.01	2.49	131	0.12	4.08	1.65	7.34	0.81
Equal variances not assumed				2.69	115.25	.01	4.08	1.52	7.08	1.07

4.2.2 Self-Assessed Health Status

Most participants reported very good or excellent health (see Figure 4.1). This is similar to the self-reported health of the Australian population (ABS, 2005). As such, the self-reported health status of the participants did not greatly differ from that of the remaining Australian population.

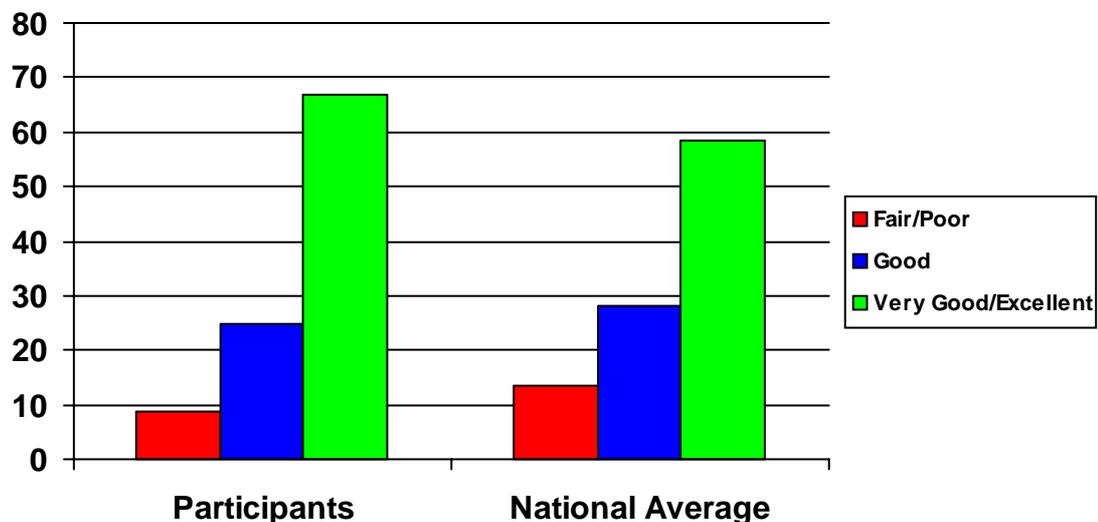


Figure 4.1: Self-Assessed Health of Participants relative to the National Average (n=144)

4.2.3 General Health Questionnaire

The average GHQ12 score across all participants was 2.71 out of 12. As low scores are indicative of better health, this finding suggests that participants were generally healthy according to the GHQ12. Males over 40 years of age reported significantly better health than younger males (see Figure 4.2). The health of females was not clearly differentiated by age.

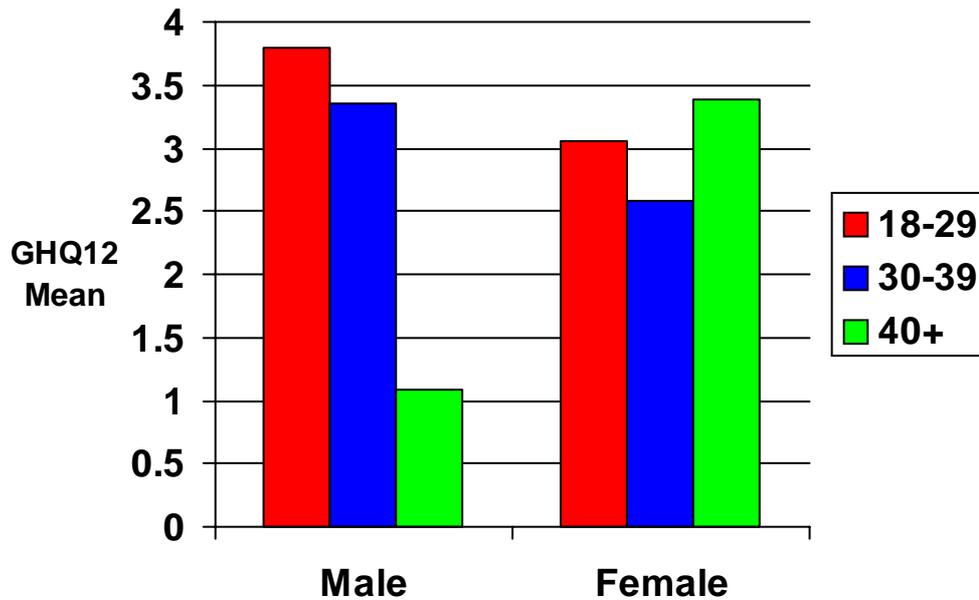


Figure 4.2: General Health of Participants (Male n=69, Female n=85)

4.2.4 Perceived Stress Survey

The average score on the Perceived Stress Survey was 16.32 out of a possible 40. As lower scores indicate less perceived stress, this finding suggests that participants were under a moderate amount of perceived stress prior to completing the *I.D. System™* survey. Collectively, the female participants appear to have experienced slightly more stress, relative to their male counterparts (see Figure 4.3).

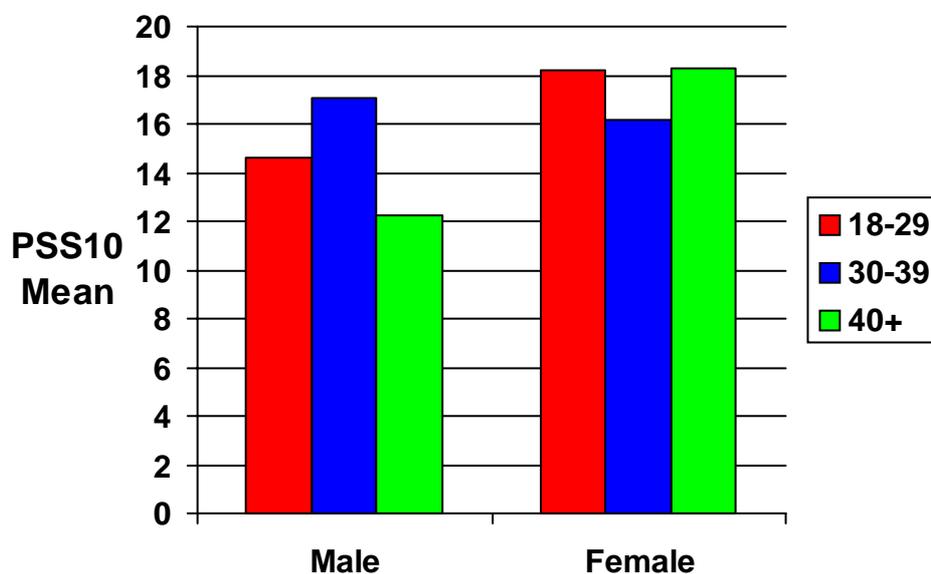


Figure 4.3: Perceived Stress Survey Scores by Age and Gender (Male n= 67, Female n=88)

4.2.5 Stride Scale

The average Stride Scale score for participants in the current study was 33.19 out of a possible 70. As a tool that was developed specifically for this study, the validity of the

Stride Scale is yet to be determined. However, assuming that the tool helps to gauge perceived compatibility between workplace behaviour and innate drives, the findings suggest that, prior to completing the *I.D. System*TM survey, the participants were not noticeably functioning out of stride, nor were they functioning in stride. However, female participants over 40 years of age seem to be significantly more in stride, relative to their male counterparts in the same age group (see Figure 4.4).

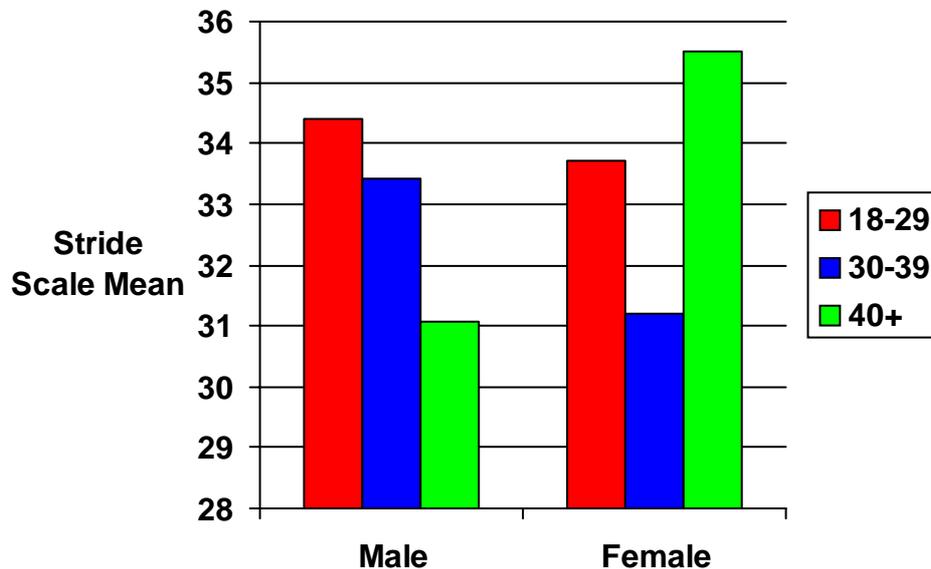


Figure 4.4: Stride Scale Scores by Age and Gender (Male n=62, Female n=84)

4.2.6 The *I.D. System*TM and Overall Health

To determine whether particular drives correlated with self-reported health, perceived stress, or perceived ability to function in stride, scores from the GHQ12, the Perceived Stress Survey and the Stride Scale were measured as a function of *I.D.*TM profile. Results demonstrate that participants driven to avoid the *Instinct to Authenticate*TM, driven to use the *Instinct to Complete*TM, and driven to avoid the *Instinct to Improvise*TM reported a higher level of general health (see Figure 4.5).

Additionally, the Perceived Stress Survey score for the inclination to use the *Instinct to Complete*TM is reportedly lower, indicating less perceived stress. Furthermore, the Stride Scale scores indicate that those driven to avoid the *Instinct to Improvise*TM perceived a greater ability to function in stride, relative to those driven to use the *Instinct to Improvise*TM.

Overall, the only *statistically significant* finding was the difference between the drives to use or avoid the *Instinct to Complete*TM. More specifically, participants driven to use the *Instinct to Complete*TM reported a higher level of general health and a lower level of perceived stress. A combination of drives (eg having the drives to complete *and* avoid improvise) may yield significant results in comparison with other combination of drives. However the lack of statistical strength of the data, as a result of low participation rate, prevented such analysis.

The combined result (high complete, avoid improvise) is said to be indicative of an ability to be clear about tasks and to be organised. Therefore, when in a suitable role, high completers/avoid improvisers may experience greater health and less perceived stress– at least in the current role of participants in this research. Yet, high completers that are not in stride might experience relatively poorer wellbeing and perceive much more stress.

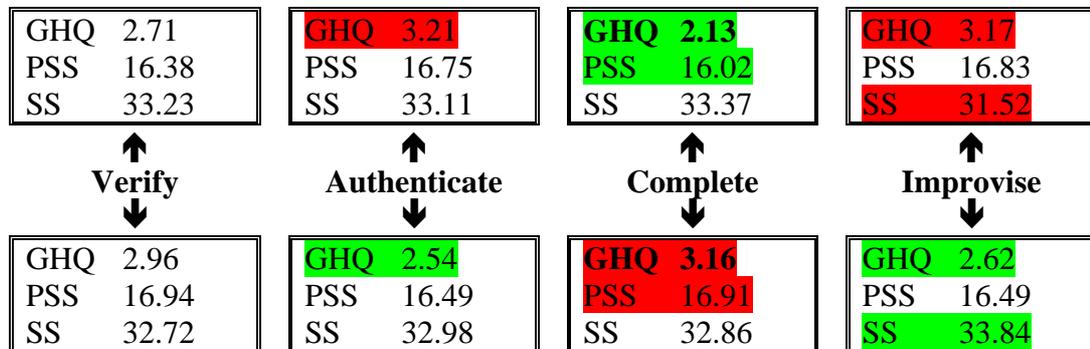


Figure 4.5: *I.D. System™* and General Health

* Red denotes poorer wellbeing

** Green denotes better wellbeing

*** Bold denotes a *statistically* significant difference at the 95% confidence level

Because the *I.D.™* profile is comprised of four drives, each measured by degree of inclination, the research team attempted to determine whether particular profiles correlated with self-reported health, perceived stress, or perceived ability to function in stride. However, as a result of the low response rate, it was not possible to analyse the combination of drives.

4.3 Summary

The self-assessed health status of the participants, and their responses to the GHQ12, indicate that they were generally healthy. Scores on the Perceived Stress Survey suggest that participants were under a moderate amount of perceived stress, while their scores on the Stride Scale imply that they did not perceive themselves to be noticeably functioning in or out of stride. An examination of participant *I.D.™* profiles demonstrates that high authenticators, low completers, and high improvisers had higher scores on the GHQ12, relative to those with converse profiles. Furthermore, high completers perceived less stress, while low improvisers perceived themselves to be functioning in stride, relative to those who were high improvisers.

5 Research Findings: Phase Two

5.1 Panel Research

5.1.1 Research Participants

Of the 162 respondents who participated in phase one of the study, only 51 in phase two, three months later (mean age: 39.35 yrs; sex: 61.1% female) (see Table 5.1). This demonstrates a return rate of 31.5%. Data were analysed to identify any trends that may help to explain respondent decision to participate in phase two. Examining the demographic data, results on the GHQ12 (Goldberg, 1978; Goldberg & Williams, 1988), the Perceived Stress Survey (Cohen & Williamson, 1988), the Stride Scale, and results on the *I.D. System*TM revealed only one significant finding; participants scoring high in the *Instinct to Improvise*TM were more likely to participate in phase two of the study. These 51 employees participated in various interventions to help them to function in stride. These included regularly contact with a consultant and participation in team workshops within the workplace.

Table 5.1: Research Participants*

	N ^o	Minimum	Maximum	Mean	SD
Male	19	20.00	53.00	38.74	8.37
Female	30	23.00	88.00	40.33	14.38
TOTAL	49				

* Demographic data were not provided by all respondents.

5.1.2 Findings

Data were screened and all assumptions for paired sample *t*-tests were met. Descriptive statistics for all the GHQ12, the Perceived Stress Survey and the Stride Scale were calculated (see Table 5.2). There were no significant findings based on demographic data. Similarly, there were no significant findings based on particular combinations of innate drives. This indicates that all respondents had the potential to benefit from increased awareness about their innate drives.

Table 5.2: Means and Standard Deviations from Phases 1 and 2

		N ^o	Mean	SD	Std. Error Mean
<i>GHQ12</i>	Phase 1	48	3.13	2.78	0.40
	Phase 2	48	1.44	2.33	0.34
<i>Perceived Stress Survey</i>	Phase 1	46	22.65	2.43	0.36
	Phase 2	46	20.07	3.32	0.49
<i>Stride Scale</i>	Phase 1	49	34.00	8.29	1.19
	Phase 2	49	28.13	8.83	1.26

5.1.2.1 Hypothesis Testing

Hypothesis 1 was tested by comparing GHQ12 scores collected at phases one and two of the study. The mean score *before* receiving a personal *I.D.*TM profile report ($M=3.13$; $SD=2.78$) was significantly greater than the mean score a minimum of three months *after* receiving the report ($M=1.44$; $SD=2.33$; $d=1.69$; $t(47)=3.89$; $p=0.00$)

(see Table 5.3). The hypothesis was therefore accepted. This indicates that the general health of participants had significantly improved in three to six months after becoming aware of their *I.D.*TM profile.

Table 5.3: *t*-Test Results

	Paired Differences			95% Conf. Interval of Diff.		<i>t</i>	df	Sig. (2- tailed)
	Mean Diff.	SD	Std. Error Mean	Lower	Upper			
<i>GHQ12</i>	1.69	3.01	0.43	0.82	2.56	3.89	47	0.00
<i>PSS</i>	2.59	3.23	0.48	1.63	3.54	5.44	45	0.00
<i>SS</i>	5.87	8.98	1.28	3.29	8.45	4.57	48	0.00

Hypothesis 2 was tested by comparing Perceived Stress Survey scores collected at phases one and two of the study. The mean score *before* receiving a personal *I.D.*TM profile report ($M=22.65$; $SD=2.43$) was significantly greater than the mean score a minimum of three months *after* receiving the report ($M=20.07$; $SD=3.32$; $d=2.59$; $t(45)=5.44$; $p=0.00$) (see Table 5.3). The hypothesis was therefore accepted. This indicates that participants' perceived stress levels had been significantly reduced three to six months after becoming aware of their *I.D.*TM profile

Hypothesis 3 was tested by comparing Stride Scale scores collected at phases one and two of the study. The mean score *before* receiving a personal *I.D.*TM profile report ($M=34.00$; $SD=8.29$) was significantly greater than the mean score a minimum of three months *after* receiving the report ($M=28.13$; $SD=8.83$; $d=5.87$; $t(48)=4.57$; $p=0.00$) (see Table 5.3). The hypothesis was therefore accepted. This indicates that participants' ability to function in stride had significantly increased three to six months after becoming aware of their *I.D.*TM profile.

Additionally, *I.D.*TM profile was not significantly associated with degree of change in general health, perceived stress, or ability to function in stride. This suggests that the benefits associated with the *I.D. System*TM are likely to be experienced regardless of profile.

5.1.2.2 Modes of Interaction

To calculate the degree of change experienced by the participants over time, scores collected during phase two of the project were subtracted from those collected during phase one. Given that lower scores were indicative of being healthier, less stressed, and greater ability to function in stride, a positive difference score is indicative of an improvement in condition, while a negative difference score is indicative of deterioration.

Difference scores from the GHQ12, the Perceived Stress Survey and the Stride Scale were standardised and then added for each participant. This reduced the dataset and produced a single score of change for each participant.

The reduced dataset were then examined with scores from the Modes of Interaction Survey. This helped to determine whether the interventions used to facilitate an ability

to function in stride were associated with change in general health, perceived stress or ability to function in stride.

The results suggest that telephone interaction with consultants was associated with improved scores on the GHQ12, the Perceived Stress Survey and the Stride Scales. Although these relationships were not statistically significant, participants who received this intervention were significantly more likely to perceive better health, less stress, and a greater ability to function in stride at phase two.

No significant results or trends were found for email interaction. Similarly, there were no significant results for personal interaction. However, only 12 of the 51 participants indicated that they had had personal interaction with a consultant about their profile. This small sample size may have had an adverse effect on the statistical significance of these interventions.

Participants who participated in a workshop facilitated by a consultant were significantly more likely to perceive less stress and an improve ability to function in stride.

Additional analyses were undertaken to determine whether individual interventions were associated with greater improvements in wellbeing, relative to group-based interventions. These analyses were performed using difference scores from the GHQ12, the Perceived Stress Survey and the Stride Scale, as well as the reduced dataset (in which difference scores were standardised and added for each participant). There were no statistically significant relationships to indicate a difference between individual and group-based interventions. However, findings suggest that a greater level of intervention leads to better scores on the GHQ12 (see Figure 5.1).

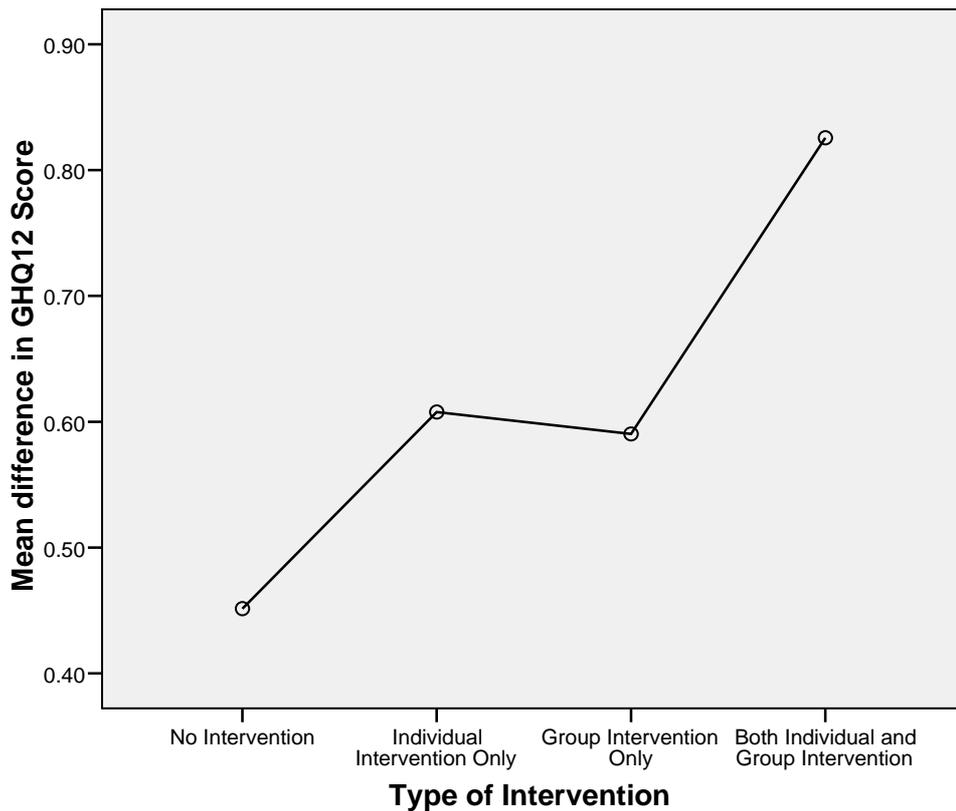


Figure 5.1: Individual and Group-Based Interventions by General Health

5.1.2.3 Social Readjustment Rating Scale

The Social Readjustment Rating Scale was used to identify other reasons that might have influenced the score changes for general health, perceived stress, and ability to function in stride. There were no findings to suggest that life events influenced participant responses to the research tools. This may suggest that the *I.D. System*[™] is not context-specific, and the benefits to general health and perceived stress levels should be consistent with all participants, regardless of the life events identified in the Social Readjustment Rating Scale that they might have experienced in the recent past.

5.1.2.4 Recall Item

Thirty-five participants who participated in phase two of the project could recall their *I.D.*[™] profile. Nevertheless, ability to recall was not significantly associated with general health, perceived stress, ability to function in stride, or the four drives. This suggests that the ability to remember one's profile has a limited bearing on wellbeing or their profile.

5.2 Qualitative Research Phase

The explicit aim of the qualitative phase of the project was to explore the inherent value of the *I.D. System*TM in facilitating the management of occupational stress. This involved the analysis of the interview material, as well as the five open-ended items included in the battery of measures used in phase two of the study. As the latter added little to the analytical process, the findings presented in the subsequent sections were chiefly sourced from the interview material.

5.2.1 Research Participants

Thirteen participants were interviewed, all of whom self-identified as managers. Collectively, these individuals represented five firms. Most of the participants were male ($n=9$) and the mean age was 32 years (range= 28-56 years). Most participants had been in their role for less than three years ($n=11$). Although they had all used *I.D. System*TM, they had varied experiences with it. They had completed the questionnaire at different times (ranging from six to nine months, prior to interview), and as such, had used different interventions to facilitate change.

5.2.2 Findings

5.2.2.1 The *I.D. System*TM and Individual Performance

Consequent to their professional role, the participants experienced a range of stresses. These included responsibility for outcomes, understanding colleagues' needs, and limited time:

I liken this place to the emergency ward and I'm a doctor on-call anytime of the day. I liked it at first, but over time, my time wasn't mine. The conflicting things that I needed to do weren't done because time wasn't available to me.

Awareness of their *I.D.*TM profile enabled several participants to understand their seemingly automatic reactions to workplace demands. For instance, it helped to explain their proclivity for particular tasks:

Doing the *I.D. System*TM....made me understand why I dropped out of accounting... I am a high improviser and therefore not into details, and now I know why I felt accounting really wasn't for me.

Conversely, the profile also helped to explain why particular tasks incited anxiety and stress:

I'm a high improviser and some tasks did conflict with how I usually like doing things and so doing project work, which is all milestone stuff wasn't really me. I like coming up with new ideas at the start of projects,

not the day-to-day administration and maintenance of a project.

Although understanding personal tendencies was important, so too was the ability to explain (if not justify) personal tendencies to colleagues. The *I.D. System*TM provided a shared discourse and a common understanding of personal tendencies and preferred working styles:

People seemed to think I make snap decisions, but in fact I'd probably been thinking about it for the last month. They come to me and ask, 'is this or that possible?' and I say, 'yes' or 'no', and they think, 'how has he come to that?' Because I don't give them details, they think I haven't thought about it. Now they know me.

Further to this, the system seemed to provide some participants with the confidence to effectively assert their information needs to colleagues. They no longer hid behind a veil of ignorance:

I have been in meetings and wanted to ask questions but couldn't say something for fear of it making me look bad or appear negative. But now I know I am a high verifier and I need to ask questions to make sense of things in my own way.

5.2.2.2 The *I.D. System*TM and Group Performance

In each of the firms represented in this study, the *I.D.*TM profiles provided an important way to enhance effective communication within teams. The participants indicated that familiarity with colleagues' profiles improved the exchange of ideas. They had become relatively more careful about the ways they chose to transfer information and meaning – whether this involved asking questions, offering instruction, or giving guidance:

I am mindful of how people perceive the first words that come out of your mouth. Now I know that it is better to let the discussion go and guide the discussion with dropping some hints... The same conclusion is reached, but I don't show a dictatorial style that people think I have.

Improved communication had positive effects on collegiality. Participants indicated that the culture of their workplaces was relatively more comfortable as tensions were eased:

I found it quite frustrating communicating with him before we did the *I.D.*TM... But now, I understand why

he was going through that... And the tools that we got from going through the process I've actually been using... Certainly my relationship with that particular staff member has improved dramatically.

Further to this, the profiles facilitated collaboration. Familiarity with preferred working styles helped employees to understand their role within the team, and to fulfil their role confidently:

We are all marketing types here. After doing the *I.D.*TM profiles, we found that four out of the five people were high in improvise, low in verify, and one person was high on verify and low in improvise. We realised that one person was important to keep the rest of us in check. Now that's balance. We were saying, 'yes, we can do this, yes, we can go straight ahead'. We needed this person to say, 'okay, well where's the plan?' It turned out that this person wasn't a very confident person... Knowing his *I.D.*TM has changed things. He has a lot more confidence and has more input into what we do. He sees that he is important.

The explicit relationship between the *I.D. System*TM and productivity was not within the scope of this study. Nevertheless, a few participants speculated that the improved interactions within workplace teams have indirect bearings on company performance. They suggested that the effective management of team dynamics provided greater opportunity to remain focused on their roles and responsibilities:

I wouldn't say it improves productivity in terms of what we do, but it certainly eases the personal... interactions... and eases some tensions... I suppose, ultimately, that... indirectly would enhance productivity... It's probably more an indirect sort of thing by getting rid of the other sort of distractions and tensions.

The ability to communicate effectively and efficiently was especially important when team dynamics had changed. For instance, during times of staff turnover, the *I.D.*TM profiles helped team members to quickly understand how new colleagues prefer to function. Similarly, during times of workplace conflict, the profiles facilitated the resolution:

A particular staff member didn't get on with me, but now I know what I was doing wrong... He was very different to others here and we understand each other a lot better now.

Despite the benefits associated with the *I.D. System*TM, some participants were concerned that it could be used to negatively characterise (if not stigmatise or discriminate against) employees – be they existing or potential. For instance, during recruitment, it might be used as a selection tool:

I would have to be careful... choosing people that meshed well with me.

For this reason, it was important to remain committed to the purpose of the system, as espoused by the developer (Burgess, 2003, 2007) – that is, to improve personal and team performance:

A person's *I.D.*TM should not be seen negatively... It can be used as a tool to make sure that a person can be successful in that job.

5.2.2.3 The *I.D. System*TM and Occupational Stress

According to a number of participants, occupational stress was derived from both internal and external sources. Internal sources included role conflict and discordant expectations:

Understanding and sort of managing their expectations and trying to determine whether what they are saying can be used effectively... is a very difficult task.

External sources of stress included environmental demands. Collegiality was not always apparent; policies were sometimes complex; and resources and time were often limited:

There's a number of different sort of areas I need to focus on and I've only got finite amount of time, so it's quite a lot of multi-tasking.

To effectively manage both internal and external sources of stress, the participants indicated that it was important to identify ways to maximise personal peak performance; this process was eased by the *I.D. System*TM. Familiarity with their own *I.D.*TM profile helped them to understand their preferred working styles and preferred communication methods; this information was then used to improve daily working patterns and reduce perceived stress. For instance, internal sources of stress were eased by realigning the varied expectations team members had of themselves and others:

December was probably the most stressful... I wasn't... someone that was able to be talked to a lot because I was just so stressed. Then coming into January, did the *I.D.*TM test; it was like a re-connection to those people, and actually helps.

Probably my biggest stress would be ensuring I'm meeting what I perceive to be the expectations of other people... [I now] have a bit more of an understanding of how the people communicate and what drives them... [which] helps me understand... where they are coming from.

Similarly, external sources of stress were managed by altering typical responses to workplace exigencies. Respondents were able to use their *I.D.*TM profile to inform professional practice:

Because of who I am, I get quite disruptive if I'm in a meeting for more than an hour... This is stressful to everyone. With the *I.D.*TM, I now have restructured my schedules. I only have formal meetings in the mornings. These I come to with a formal agenda. For other board members with similar profiles to me, I meet in an informal setting; we go out, we grab a coffee. Things are a lot better now.

As the aforementioned excerpt suggests, the *I.D. System*TM also eased external stresses by facilitating the acceptance of diversity. Rather than merely tolerating the dissimilar working styles of others, the system helped the participants to understand and appreciate the ways that colleagues maximised their peak performance.

It thus appears that the *I.D. System*TM increased compatibility between behaviour and personal tendencies – or innate drives; that is, it enabled the participants to function in stride (Burgess, 2007). Many suggested that, as an “internal compass” (p. 187), the system helped them to align personal propensities with the demands of their role:

It takes time to get to know people. I'm a very driven person... The stress I face is dealing with people that slow this process down. You have to learn to deal with them. The *I.D. System*TM helps me understand individuals. It helps me communicate faster and better with others. I know that they were just following their profile and what I do is not wrong either. I have adjusted to make things a bit smoother and give myself less stress, make things easier for me, so I won't get frustrated if I do things a little bit their way.

Consequent to this alignment, participants found that they were better able to manage both the internal and external sources of occupational stress, and maximise personal performance:

I think the *I.D.*TM is all about someone performing successfully in a job... It has a lot to do with their self-awareness and their self-management and how they are managed. You can adjust the KPIs [Key Performance

Indicators] of the role to suit... [and] make sure they are successful in that job. The *I.D.*TM is a tool to manage and review performance.

The *I.D. System*TM has benefited the team immensely. We understand the causes of individual and group conflicts. We know how people operate, what switches people on and what drives them to do what they do

5.2.2.4 Interventions that Facilitate Positive Change

To improve individual and team performance, trained consultants from Link-up International use interventions that might facilitate behavioural change. The frequency and regularity of these interventions is decided by both the client and the consultant; so too is the choice of strategy implemented.

Each participant had individually worked with a consultant to maximise peak performance. Through telephone contact or personal meetings, participants and consultants explored ways to operationalise the *I.D.*TM profile.

Of particular benefit were the documented management strategies provided by Link-up International. The participants largely regarded these documents as a useful intervention. This is because they provided managers with clear guidance, highlighting those factors that warranted consideration when managing the participant. This helped to establish a clear communication channel between participants and their managers, and as such, establish a bond or psychological contract. The documents also provided newly-employed managers with a clear explanation of the *I.D. System*TM and its potential role in the effective management of team members.

The one of the best things that actually came out of doing that course was the couple-of-page management-summary-filling near the end, which we were asked to pass onto whoever we want to pass on and was basically 'how to get the best out of [me]'... I've passed through to my boss and a couple of the other directors... to help [them] understand me a little bit better and help the wheels turn.

Additionally, in each of the firms represented in this study, consultants had facilitated group debriefing sessions with those employees who had received an *I.D.*TM profile. During these sessions, profiles were shared and discussed. Additionally, team building exercises were used to help individuals understand the preferred working styles of colleagues and identify ways to enhance group performance. These exercises were largely determined by the composition, number and roles of particular groups:

The debriefing sessions were important to understand how this stuff plays out. Teamwork, leadership, self-awareness, responsibility, decision making, problem solving – all that sort of stuff. [The sessions show]....

how these issues relate to our own environment. We explored a framework, like a set of coat hooks; you know, something that allows you to hang your coat on, to hang your experiences on and together with a sort of cognitive structure and a language also. [The system] is a most valuable tool.

According to the participants, the interventions were largely helpful at both the personal and organisational levels. However, there is some evidence to suggest that the intensity of interventions was associated with the perceived value of the *I.D. System*TM and its role in the management of occupational stress. Participants who had been involved in relatively more interventions recognised explicit connections between the *I.D. System*TM and improved performance. They indicated that regular structured opportunities to revisit their profile, and the profiles of colleagues, reinforced the identified management strategies that would help to maximise performance, and as such, manage occupational stress:

I think [multiple interventions] kind of... rounded it out a lot. Without face to face, if you just did the survey and got your report, I think you'd only get... 30%, 40% benefit.

6 Discussion

Occupational stress is a significant problem. In addition to the personal and social costs associated with poor employee wellbeing (Harnois & Gabriel, 2000), it is associated with reduced productivity (Bonn & Bonn, 2000; Sanders, 2001), as well as financial and time costs (Jackson & Clements, 2006).

The effective management of occupational stress requires strong connections between all levels of an organisation (Arthur, 2004; Cooper & Williams, 1994; LaMontagne et al., 2006; Murphy & Cooper, 2000; Sauter et al., 1996). This suggests the importance of effective communication. More specifically, stress management – and as such, employee wellbeing, is facilitated by communication with (or greater insight into) the self, as well as communication between employees at all levels of an organisation.

This longitudinal study demonstrates that the *I.D. System*TM can help to facilitate employee wellbeing. By assessing the innate attributes of individual respondents, and identifying practical strategies, the system can provide employees with the insight required to maximise personal performance. This was verified by testing three hypotheses, all of which were confirmed. Their confirmation indicates that awareness of innate drives can significantly increase general health, decrease occupational stress, and increase perceived ability to function in stride.

The findings were further corroborated by the qualitative research material. Armed with knowledge about personal tendencies and preferred working styles, team members can be better equipped to convey information and meaning, effectively and efficiently. Although the system might be used to negatively characterise (existing or potential) employees, this deviates from the fundamental purpose of the tool (Burgess, 2003, 2007).

6.1 Implications

These findings have important implications for organisational behavioural theory (Wood, Zeffane, Fromholtz & Fitzgerald, 2006) as well as for managers wanting to improve the wellbeing within the workplace. With regard to organisational behavioural theory, the findings indicate that closer examination of innate drives may give greater insights into individual capacity and volition for improving organisational performance.

For managers, the findings suggest that the *I.D. System*TM has the potential to increase the health and mental health of staff. Through an increased understanding of personal tendencies and preferred working styles – as well as opportunities to modify professional practice using appropriate interventions – the participants in this study experienced superior health and reduced stress levels. Evidently, healthy employees can make valuable contributions to an organisation, enhancing both productivity and workplace culture (Cordery, 2007).

6.2 Limitations of the Study

Despite the potential value of the *I.D. System*TM, a number of methodological limitations deserve consideration. First, as an exploratory study, only a small number of research participants were involved at both phases of the study, as well as the qualitative research component. Second, as volunteers, it is possible that all of the participants had favourable perceptions of the *I.D. System*TM and, as such, offered a biased view. Third, the participants had had differing exposure to the system – they did not complete the questionnaire simultaneously, nor did they participate in the same interventions to facilitate personal change. Fourth, the cross-sectional nature of this study indicates that the participants merely provided a snapshot of their views, which might alter over time. Fifth, because the interview schedule employed euphemisms for the term, *stress*, it was not possible to identify explicit and direct links between the *I.D. System*TM and occupational stress. Sixth, qualitative research is limited by time, context and the nature of individual perspectives. And finally, the construction of themes from the interview material might not adequately encapsulate the perceptions voiced by the participants.

6.3 Future Research

One advantage of the *I.D. System*TM is that it creates a common language that is tailored to each individual's innate attributes, and as such, encourages positive responsive behaviour. There is limited research on the way in which changing language norms in organisational environments influences individual and/or team performance. This is an area for future research.

Additionally, by using case study techniques, the effectiveness of the *I.D. System*TM can be illustrated by giving accurate examples. Therefore another area for future research is case analysis exploring effective leadership resulting from *I.D. System*TM deployment.

6.4 Concluding Remarks

Despite these limitations, this project is the first to explore the relationship between the *I.D. System*TM and occupational stress. As such, this large mixed-method study makes an important contribution to extant literature.

Given the exorbitant costs associated with poor employee wellbeing, it is vital to identify tools that help to effectively manage occupational stress – the *I.D. System*TM is one such tool. Using a questionnaire that is valid, reliable and authentic (Fitzgerald, Dadich, Ferres et al., 2006; Fitzgerald, Dadich, & Fitzgerald, 2006; Fitzgerald, Ferres, Dadich et al., 2005; Fitzgerald, Ferres, Hamilton et al., 2005), the system helps employees and their managers to identify preferred working styles, possible vulnerabilities, and ways to achieve peak performance within the workplace. This in turn contributes to the wellbeing of employees and the organisation as a whole.

7 Appendices

7.1 Information for Consultants



Dear Consultant,

As you are aware, researchers from the *University of Western Sydney (UWS)* have recently completed a comprehensive study to validate the *I.D. System™*. The consequent findings are quite interesting and we encourage you to read the research report. We are now keen to commence the next phase of our exploratory endeavours. However, to conduct this study effectively, *we need your support*.

What is the Aim of the Study?

The aim of this study is to examine the relationship between the *I.D. System™* and wellbeing. It will use empirical methods to explore whether awareness of *I.D.™* profile influences ability to manage wellbeing and enhance personal performance, particularly in the workplace. This will be achieved through a longitudinal study that will involve asking clients to complete surveys both prior to, and after the completion of the *I.D. System™*. To enhance our understanding of the relationship between the *I.D. System™* and wellbeing, clients will also be invited to partake in an interview. However, to ensure that the privacy of clients is respected at all times, initial contact between clients and the research team will be mediated by *Link-up International or the Consultants*.

What is Involved?

The flowchart overleaf presents the way in which the research project will proceed. Evidently, *you*, as a Consultant, have an imperative part to play in this project, as it is the role of Consultants to gain and maintain the involvement of clients and help them to benefit from the *I.D. System™*.

Why Participate?

To verify and strengthen the inherent value of the *I.D. System™*, it is important to employ empirical research methods. Furthermore, it is important to utilise the expertise of an independent body that has a demonstrated capacity to conduct research in the realm of business management. For these reasons, researchers from *UWS* have been approached to examine the value of the system and explore areas for future development. By lending your support to the project, you will add to the growing body of research on wellbeing in the workplace. You will also help to strengthen the inherent value of the *I.D. System™*. However, it is important to note that your decision to accept or decline our invitation will not have a bearing on your future relations with *Link-up International or UWS*.

Pilot Phase

Before we embark on this project, it is important to ensure that our methods are sound. For this reason, we would like to invite you to test the surveys we hope to use in the study. To expedite the collection of responses, the surveys are available via the Internet, using the following website address:

<http://www.esurvey.net.au/srcp/login.php>

This is a secure and protected site that is only accessible to research participants. To access the site, all participants require a *Username* (which is, *Link*) and a *Personal Identification Number (PIN)*. Although all research participants will share the same *Username*, **the PIN will need to be individually assigned.**

Need Further Information?

We trust that you will recognise the potential value of this research opportunity and extend to it your full support. If you have any queries, concerns, or would like further information, please feel free to contact me at any time. Thank you.

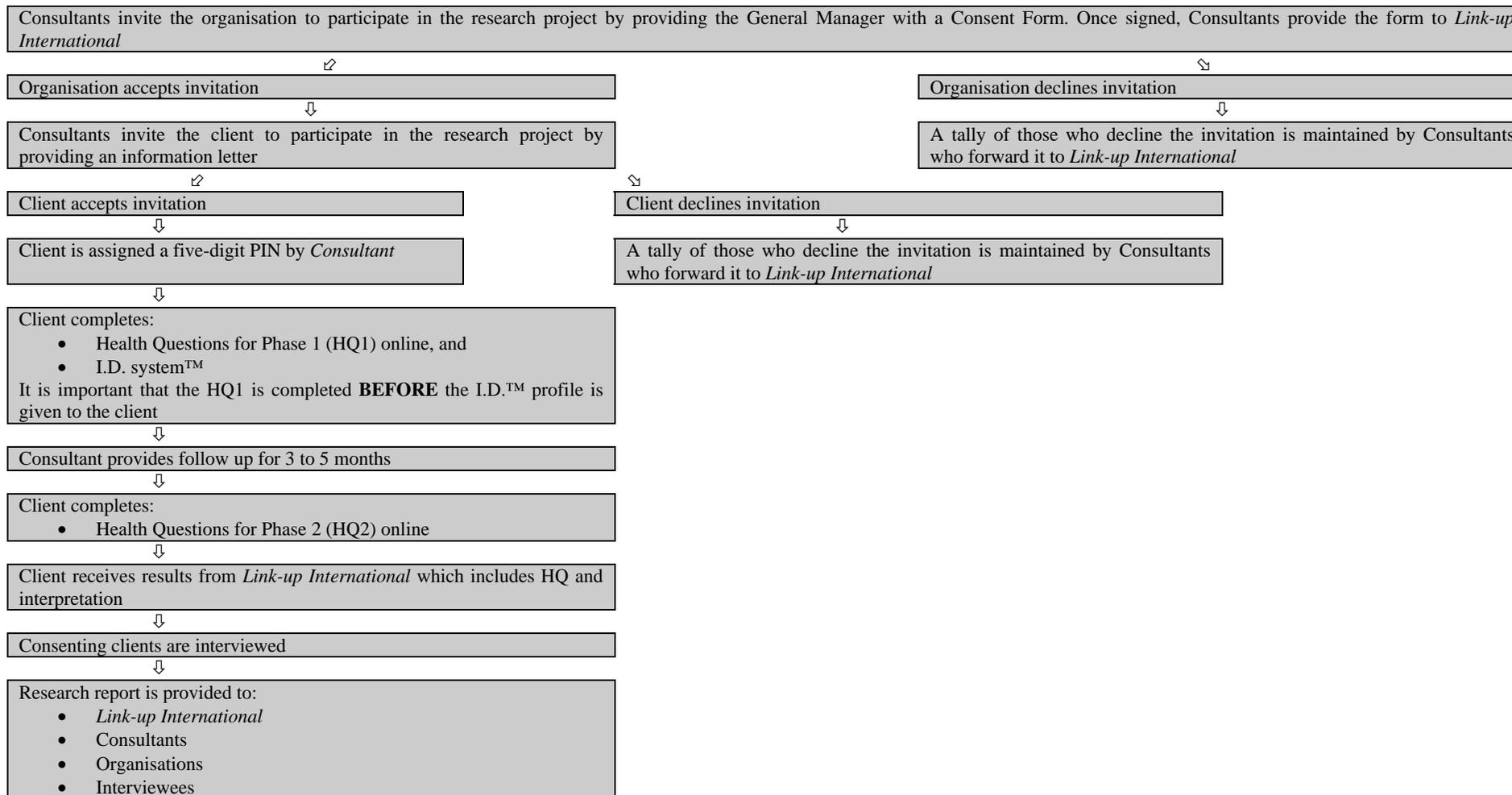
Sincerely,

Dr Anneke Fitzgerald

Research Studies Program Coordinator
College of Business
University of Western Sydney

Business Telephone: +2 4620 3414
Email: a.fitzgerald@uws.edu.au

Project Flowchart



7.2 Information for General Managers



To the General Manager,

Researchers from the *University of Western Sydney (UWS)* have recently completed a comprehensive study to validate the *I.D. System™*. The consequent findings are quite interesting and we encourage you to read the research report. We are now keen to commence the next phase of our exploratory endeavours. However, to conduct this study effectively, we need your support.

What is the Aim of the Study?

The aim of this study is to examine the relationship between the *I.D. System™* and wellbeing. It will use empirical methods to explore whether awareness of *I.D.™* profile influences ability to enhance personal performance, particularly in the workplace. This will be achieved through a longitudinal study that will involve asking employees to complete surveys both prior to, and after the completion of the *I.D. System™*. To enhance our understanding of the relationship between the *I.D. System™* and wellbeing, employees will also be invited to partake in an interview. However, to ensure that the privacy of employees is respected at all times, initial contact between employees and the research team will be mediated by the representative of *Link-up International* that you have contact with.

What is Involved?

The attached flowchart presents the way in which the research project will proceed. Evidently, as a senior staff member, your support is imperative in this project. More specifically, we request your permission to:

- ***Invite personnel within your organisation to participate in the project by completing the on-line surveys***
This process will be facilitated by your contact person at *Link-up International*. Employee participation will involve approximately fifteen minutes of their time at two different points in time. The longitudinal nature of this project will allow us to track any changes experienced by the employees. To ease the collection of survey responses, the surveys will be available via an Internet site. However, the site will only be accessible to those who have been issued with a *Username* and *Personal Identification Number (PIN)*, ensuring that it remains secure and protected.
- ***Allow employees who are interested in contributing to the project to access computing facilities in the workplace, therefore facilitating Internet access***

- ***Invite employees who chose to complete the surveys to partake in a confidential interview with a member of the research team***

This process will be facilitated by the research team. The purpose of the interview is to explore changes in wellbeing. The interview is expected to endure for sixty to ninety minutes, and will be held at a time and place that is deemed suitable by the employee.

Why Participate?

To help improve staff wellbeing and its potential effect on performance. At a personal level, ignoring wellbeing has the potential to negatively affect employee health and job performance. At an organisational level, the effects of poor wellbeing of staff members can have a marked impact on employee dynamics and financial resources. For these reasons, we are keen to improve current understandings of wellbeing and effective management strategies. By lending your support to the project, you will add to the growing body of research on wellbeing in the workplace.

Ethical Considerations

This study was been approved by the *UWS Human Research Ethics Committee* (protocol number: HREC 04/043). It therefore adheres to the strict ethical guidelines espoused by this body. In accordance with these guidelines, participation in the project is entirely voluntary and those who choose to participate can withdraw from the study at any time without consequence. Further to this, the anonymity of individual contributors is protected at all times as all research material is de-identified and stored securely by the research team. In accordance with the *UWS Human Research Ethics Committee* guidelines, survey responses will be stored for five years after completion of the study and then destroyed.

It is important to note that your decision to accept or decline our invitation will not have a bearing on your future relations with *Link-up International* or *UWS*. Similarly, the decision of individual employees will not have a bearing on his/her future relations with *Link-up International* or *UWS*.

If you would like your organisation to participate in this important project, we request that you sign the attached *Consent Form* and return it to the representative of *Link-up International* that you have contact with.

Need Further Information?

We trust that you will recognise the potential value of this research opportunity and extend to it your full support. If you have any queries, concerns, or would like further information, please feel free to contact me at any time. Thank you.

Sincerely,

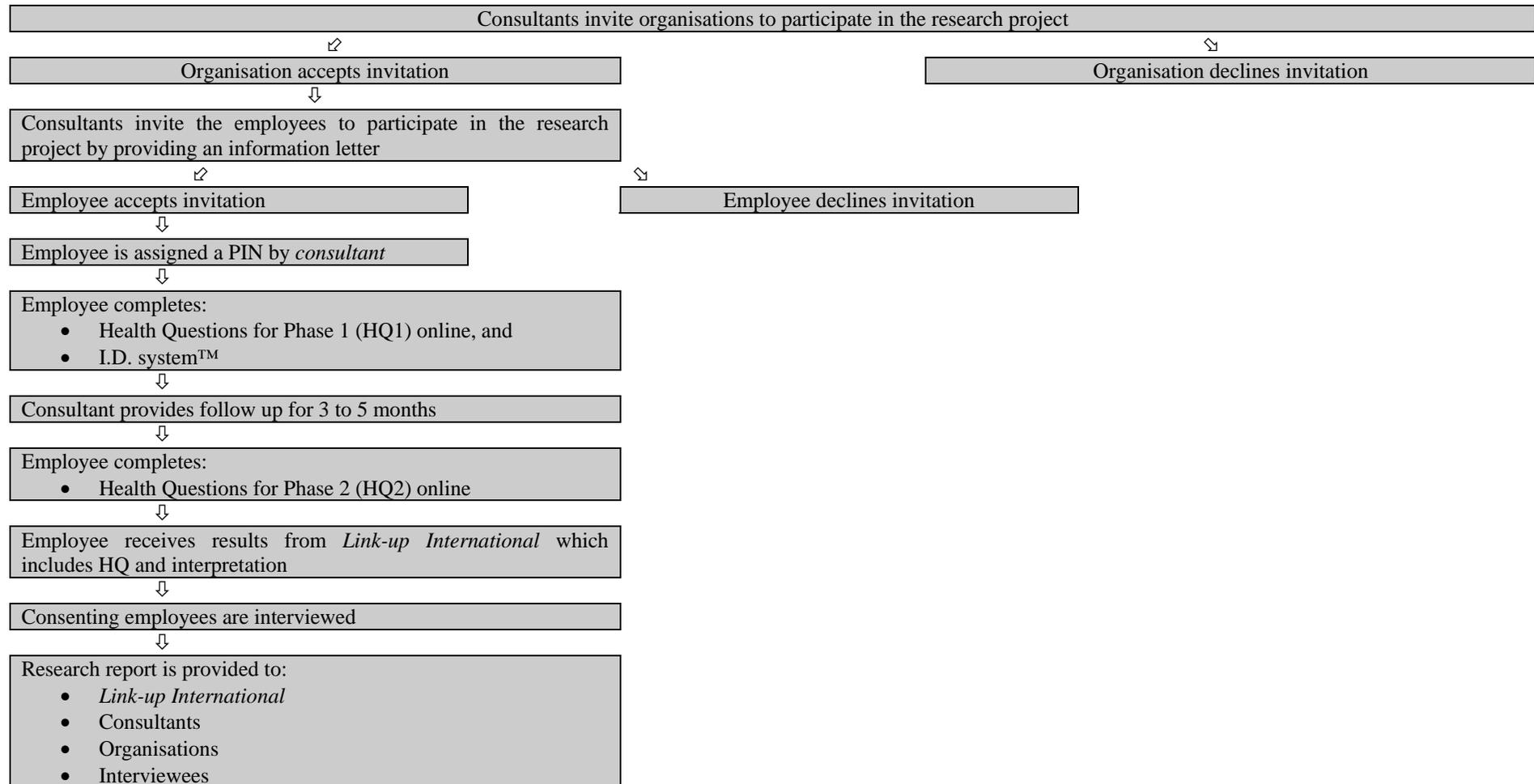
Dr Anneke Fitzgerald

Research Studies Program Coordinator
College of Business
University of Western Sydney

Business Telephone: +2 4620 3414
Email: a.fitzgerald@uws.edu.au

The ethical aspects this study have been approved by the University of Western Sydney Human Research Ethics Committee. If you have any complaints or reservations about the ethical conduct of this research, you may contact the Ethics Committee through the Ethics Officer, Kay Buckley, UWS Research Services, Locked Bag 1797, PENRITH SOUTH DC 1797, NSW 1797. Tel number: +2 4570 1136, Email address: k.buckley@uws.edu.au. Any issues raised will be treated in confidence and investigated fully, and you will be informed of the outcome.

Project Flowchart





Consent Form

As a senior staff member, I hereby provide permission for:

- Employees within the organisation to be invited to participate in the research project.
- Employees who are interested in contributing to the project to access computing facilities in the workplace for the purpose of the project.

Organisation: _____

Name: _____ Job Title: _____

Signature: _____ Date: _____

7.3 Information for Research Participants



To Staff Member,

Researchers from the *University of Western Sydney (UWS)* are currently collaborating with *Link-up International* to explore ways to enhance personal wellbeing among professionals. As a professional, we would like to warmly invite you and your co-workers to be part of this endeavour.

What is Involved?

The attached flowchart presents the way in which the research project will proceed. Your participation will involve the completion of confidential, computer-based surveys at *two* different points in time. The surveys ask questions about your health and wellbeing. Completion of the surveys will take approximately fifteen minutes at both times, and will involve accessing a secure and protected Internet website that is only accessible to those with a designated *Username* and *Personal Identification Number (PIN)*. The URL, username and PIN will be provided to you.

By asking you to complete the surveys at two different points in time, we will be able to track any changes you have experienced. We will then provide you with personal feedback about your responses.

The management of your organisation has allowed those staff members involved with the study to complete the surveys during work time, using computer facilities within the workplace. However, all responses remain confidential. As the website is managed by the research team, your responses *cannot* be accessed by anyone who is not part of this team.

We would also like to interview you about your experiences of wellbeing, particularly in the workplace. This will help us to understand the occupational factors that promote and hinder wellbeing among professionals. The interview, which will be conducted by members of the research team, is expected to take sixty to ninety minutes and it will take place at a time and location that is suitable to you.

Why Participate?

We are keen to improve current understandings of wellbeing among professionals. This research has the potential to help organisations create environments that maximise employee health. However, to conduct this study effectively, we need your support.

Ethical Considerations

This study was been approved by the *UWS Human Research Ethics Committee* (protocol number: HREC 04/043). It therefore adheres to the strict ethical guidelines espoused by this body. In accordance with these guidelines, participation in the project is entirely voluntary and if you choose to participate, you can withdraw from the study at any time without consequence. Further to this, your anonymity is protected at all times as all research material is de-identified and stored securely by the research team. In accordance with the *UWS Human Research Ethics Committee* guidelines, survey responses will be stored for five years after completion of the study and then destroyed. It is important to note that your decision to accept or decline our invitation will not have a bearing on your future relations with *Link-up International* or *UWS*.

Need Further Information?

We trust that you will recognise the potential value of this research opportunity and extend to it your full support. If you have any queries, concerns, or would like further information, please feel free to contact me at any time. Thank you.

Sincerely,

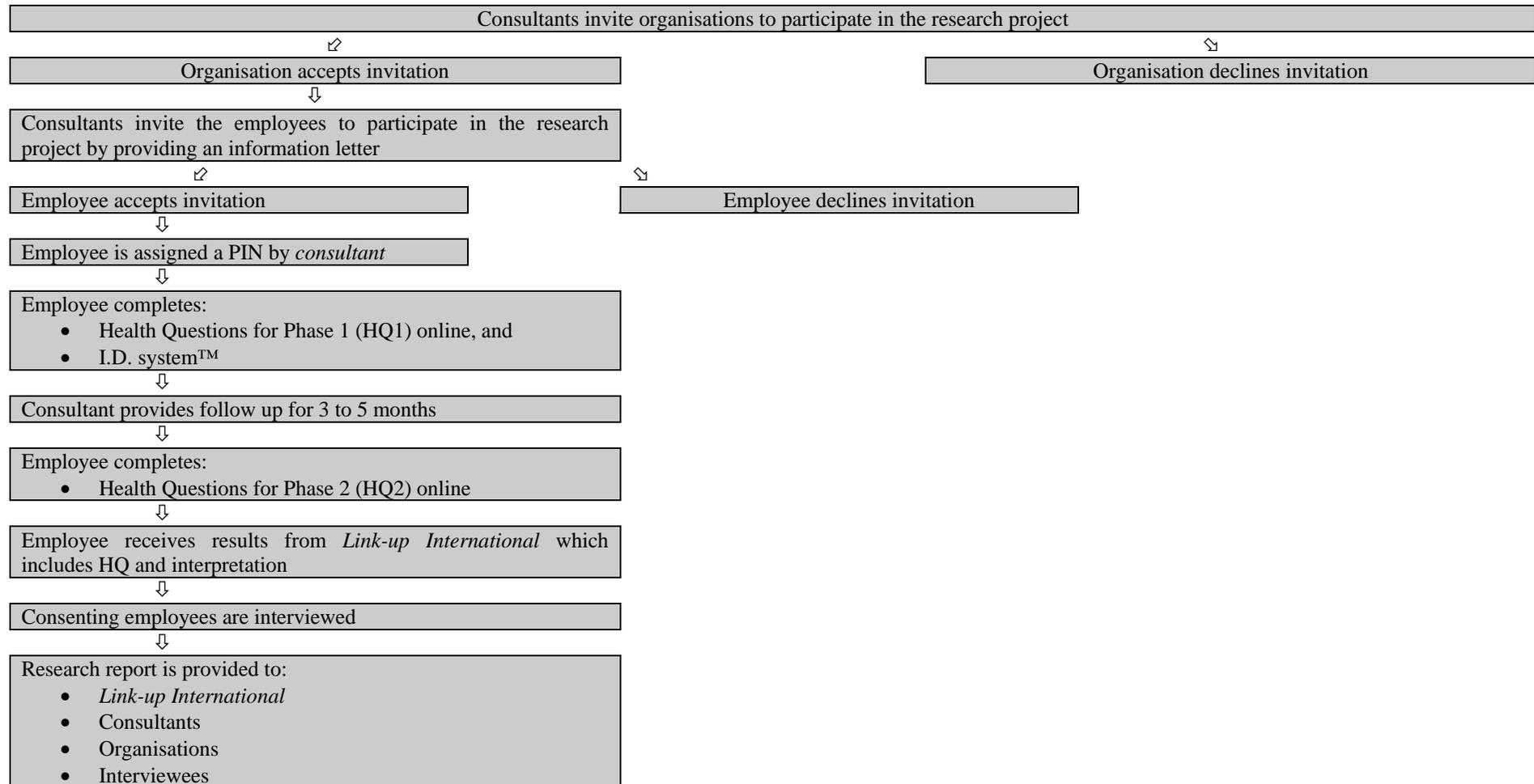
Dr Anneke Fitzgerald

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College of Business
University of Western Sydney

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Email: a.fitzgerald@uws.edu.au

The ethical aspects this study have been approved by the University of Western Sydney Human Research Ethics Committee. If you have any complaints or reservations about the ethical conduct of this research, you may contact the Ethics Committee through the Ethics Officer, Kay Buckley, UWS Research Services, Locked Bag 1797, PENRITH SOUTH DC 1797, NSW 1797. Tel number: +2 4570 1136, Email address: k.buckley@uws.edu.au . Any issues raised will be treated in confidence and investigated fully, and you will be informed of the outcome.

Project Flowchart



7.4 Interview Schedule

1. Demographic data:
 - a. Which company do you work for?
 - b. What is your professional position within this firm?
 - c. Describe your role within the company?
 - d. How long have you been with the firm?
 - e. How long have you been appointed in your current position?
 - f. When did you last complete the *I.D.*TM survey?
 - g. What subsequent management training, associated with the *I.D. System*TM, have you been involved in?
2. Have you experienced change in stress levels and/or wellbeing since becoming aware of your *I.D.*TM profile?
 - a. Why do you say this?
3. If change was experienced:
 - a. What type of change was observed?
 - b. When were the changes observed?
 - c. Which strategies and/or interventions were employed to effect change?
 - d. Which strategies proved useful? Why?
 - e. Which strategies did not prove useful? Why?
4. Did you expect change to occur, consequent to learning your *I.D.*TM profile?
 - a. Why do you say this?

7.5 Interview Consent Form



I (the participant) have read and understand the information given, and any questions I have asked have been answered to my satisfaction. I understand that my participation is voluntary and I agree to participate in this research, knowing that I can withdraw at any time. I have been given a copy of this form to keep.

Participant's name: _____
(print)

Participant's signature: _____ Date: _____

Investigator's name: _____
(print)

Investigator's signature: _____ Date: _____

NOTE: This study has been approved by the UWS Human Ethics Committee. If you have any complaints or reservations about the ethical conduct of this research, you may contact the Ethics Committee through the Human Ethics Officer (tel: 02 4736 0169). Any issues you raise will be treated in confidence and investigated fully, and you will be informed of the outcome.

7.6 Ethics Approval Number

UWS Ethics Protocol Number:

HREC 04/043

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