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The *Instinctive Drives System*[™]

A Reliable and Valid Catalyst for
Improving Team Performance

Report By
Dr Anneke Fitzgerald
Ms Natalie Ferres
Dr Ann Dadich
Ms Kara Hamilton

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Foreword

I am delighted to introduce you to this groundbreaking research lead by the research team at the University of Western Sydney.

For me personally, this process (and resulting document) marks a significant milestone in an area that has become my life's work and passion – that of identifying and understanding natural *Instinctive Drives*[™] in people... essentially, what makes them tick!

Ironically, my work in the area of *Instinctive Drives*[™] and specifically, the development and use of the *I.D. System*[™] has actually been an ongoing research project anyway - validated day upon day for the past 15 years. Every time a person receiving their ID exclaimed, “*That’s me!*”, “*You nailed me!*” or “*Wow! Now I understand why I do what I do!*”, they were validating the accuracy and reliability of the *I.D. System*[™]. Moreover, when they applied Link-up’s suggested strategies and experienced unprecedented success or change as a result, I enjoyed the fulfilment of knowing that I was making a significant difference for them or at the very least, being a genuine catalyst for it.

Nonetheless, these were all anecdotal and widely open to misinterpretation by those who looked at my work with natural scepticism. There have always been the “doubting Thomases” who question why the *I.D. System*[™] and all of my research hadn’t actually been verified by an independent, academic body. In my heart, I knew that, if we could obtain such verification, it would make a huge impact on the credibility of the *I.D. System*[™] and significantly accelerate the difference it can (and is) making to the world - yet equally, I also knew that it would not change the fundamentals; the *I.D. System*[™] would still have the same impact, whether it was validated independently or not.

Of course, in developing the *I.D. System*[™], I put it through a rigorous set of reliability and validity tests before making it available to the general public. However, finding appropriately qualified, willing and available experts to conduct such extensive research independently proved to be a huge challenge. For 13 years, I tried to find such a researcher or research team but always without success. Enter Dr Anneke Fitzgerald and Ms Natalie Ferres!

On a serendipitous flight in December 2003, one of my senior consultants (Greg Meyer) had the good fortune to be seated next to Anneke on a flight from San Francisco back to Sydney. Greg talked with great enthusiasm about what he did as a consultant and specifically the way he uses the *I.D. System*[™]. Anneke was enthralled – her passion is organisational behaviour and psychology and she saw an opportunity to work together.

Anneke and Natalie pulled together an outstanding team of researchers from UWS and, with the cooperation of members of my team from Link-up International (particularly Iulia Williams), spent the next 18 months diligently interrogating the *I.D.*[™] model and interviewing many of our clients.

For the most part, I have been largely uninvolved as I was fanatical about this research being independent, authentic and very transparent. Indeed, a research project even commenced without my knowledge so that Anneke and Natalie could test for themselves the initial merit of the *I.D. System*TM. Every step of the way has been completely transparent, independent and authentic, and for that reason, I am even more delighted at the results this research has uncovered.

As I mentioned earlier, I already had experienced the face validity of the *I.D. System*TM and lead the initial reliability and validity studies during its development so I had complete faith that it was valid in terms of its ability to accurately identify and measure a person's *Instinctive Drives*TM; and I was certain that the strategies worked and made a significant difference in helping them live a life that was more true to themselves - in stride, purposeful, productive, confident and happier. I had also witnessed countless teams perform more effectively AS TEAMS when they applied relevant *I.D.*TM strategies.

Nonetheless, to have such a credible team and equally credible organisation independently conclude that the reliability and validity of the *I.D. System*TM is meritorious makes me absolutely ecstatic!

From the very start of my own journey in this area, I sensed that the *I.D. System*TM was breakthrough technology and that it had the potential to make a magnificent impact in the world. Now with the support of this research, I am sure that the depth and breadth of *I.D.*TM will expand exponentially, enabling many more people to live more productive and fulfilling lives and equally fulfilling relationships. I proudly commend this research to you.

Mr Paul Burgess
Managing Director
Link-up! International Pty Ltd
22 November 2005

Executive Summary

This report examines the reliability and validity of the *Instinctive Drives*TM system (also known as the *I.D. System*TM), as developed by *Link-Up! International Pty Ltd.* The system is said to gauge the innate qualities of individual team members by assessing four key drives; namely, 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. Through an improved understanding of the drives of individual team members, it is argued that individual and team performance can be enhanced quickly by employing specific strategies for communication and management. As such, the present report explores this claim. More specifically, the study statistically validates the *I.D.*TM questionnaire; it validates a refined version of the questionnaire; it explores the relationship between the refined version and personality factors, leadership style and general health factors; and it explores the inherent value of the *I.D. System*TM, including the questionnaire outcomes (or *I.D.*TM profile) and associated targeted strategies for improvement.

Quantitative methods used to substantiate the *I.D. System*TM suggest that both the existing and refined versions are reliable and valid assessment tools for gauging individual instinctive drives. The results also indicate that the *I.D. System*TM is multidimensional. Factor analysis was undertaken as a common test of construct validity. Not surprisingly, construct validity by factor analysis was not supported. This is consistent with factor analysis on other widely known and commonly used psychometric tools. Hence, other validity tests were added including test-retest reliability, discriminant analysis with personality testing, leadership styles, and a correlation between *I.D.*TM profile and general health.

The test-retest of the refined *ID*TM survey proved to be reliable. Although caution needs to be exercised due to a low response rate, an examination of the relationship between the refined *I.D.*TM survey and personality factors suggests that, in this cohort, these are largely unrelated indicating discriminance. An examination of the relationship between the refined *I.D.*TM survey and leadership style suggests that survey scores are largely discriminant from self-ratings of leadership style, except for one significant correlation between the *Instinctive Drive to Authenticate*TM and the use of transactional-contingent reward leadership strategies. Finally, an examination of the relationship between the refined *I.D.*TM survey and general health factors suggests that they are largely unrelated, except that a stronger intensity in the *Instinctive Drive to Authenticate*TM was significantly related to higher levels of reported health issues, such as sleep disorder and stress. Hence, we conclude both versions of the questionnaire demonstrate meritorious statistical and practical consistency.

Published commentary on reliability and validity testing of other well-known psychometric tools reveals the *I.D.*TM survey appears to fare favourably relative to the MBTI (Myers & McCaulley, 1985) and the DiSC® system (Mills & Associates, 2005). More specifically, where comparative data were available, the *I.D.*TM survey demonstrated superior reliability and validity. Further to this, as part of the overall *I.D. System*TM, they retain strong face validity.

Face validity was proven via questioning perceptions of current users and company members who had stopped using the system. The qualitative methods used to explore

the inherent value of the existing *I.D.*TM survey suggest that the system offers a number of benefits to those who engage with it. Research participants spoke of improved communication with co-workers, improved communication with clients, an improved understanding of the self, an improved understanding of others, as well as opportunities for development – both at a personal level and at a team level. Some had also extended their use of the *I.D. System*TM beyond the professional domain.

In addition to its many benefits, the research participants also spoke of a number of potential limitations with the *I.D. System*TM. These included a potential risk that individuals may be stereotyped according to their *I.D.*TM profile – particularly during staff recruitment, and a potential for individuals to abdicate personal responsibility for their behaviours. In addition, there was some expressed concern with ongoing follow-up support from *Link-Up! International* and associated costs of the system – both financial and the time required for effective utilisation of the system. Further, some criticism of the *I.D. System*TM pertains to the possible misuse of personal information, whereby the privacy and confidentiality of employees are breached.

Nevertheless, research participants overwhelmingly recognised and expressed the value of their own experience with the *I.D. System*TM and the potential of the system to strengthen familial networks and improve personal well-being – physically, psychologically, emotionally and spiritually. Upon disclosure of findings to *Link-up! International* it became clear that all of the above concerns expressed by research participants have been recognised and addressed.

Following from this investigation, it appears that the *I.D. System*TM attempts to give rise to the individual consciousness of innate behaviours. It reliably identifies a personal profile that can be used as a platform for dialogue with individuals and groups. Although its statistical *construct* validity remains limited, the strength of the system appears to be embedded in the strategies directed at individual motivations to understand and alter behaviours they would normally resist. Further to this, the system serves as an important catalyst or springboard for communication. By exposing the essence of individual team members, teams, particularly those within the workplace, are able to engage in effective communication quickly. Hence, we conclude that the *I.D.*TM survey tool is reliable and valid.

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1 Introduction

The workplace is often a site of teamwork – where groups of individual employees work together toward common organisational goals (Wood et al., 2004). The dynamics within these teams is influenced by a multitude of factors, including both the personal attributes of individual team members, as well as societal factors. The combination of these determinants places enormous demands on managers who are required to configure productive and collegial teams.

Such strain has amplified in recent years in light of increased instability in the employment sector. This is partly attributable to the proliferation of globalisation, competition and market instability (Wood et al., 2004). Managers are thus compelled to adapt and mould work structures and workplace teams in hope of *best fit*.

However, this is not without problem, for there is limited predictability in the principal drives of staff behaviour. It is often difficult for managers to successfully forecast the effectiveness of a team of individual employees (McShane & Travaglione, 2003). Evidently, this poses a serious concern, implicating *economic*, *social* and *personal* costs.

From an *economic* perspective, ineffective team dynamics can increase staff turnover and the associated costs of recruitment and training (Schermerhorn, Hunt, & Osborn, 2005). Consequent to staff turnover, *social* consequences within the workplaces are also apparent; remaining personnel must adapt to changes within the team dynamics and acclimatise workplace relationships accordingly. From a *personal* perspective, such adaptation, particularly if regular, can be testing. Individual staff members are placed under greater strain in their appropriation of workplace behaviour.

These costs have given rise to a growing body of research, particularly within the field of organisational psychology (Aamodt, 2004). Yet, researchers have had limited success in enhancing team performance with absolute confidence (Fitzgerald, Ferres, Hamilton, & Fitzgerald, 2005).

In the pursuit of enhancing team performance, most research to date has concentrated on the personal attributes of individual team members, as well as societal factors (Wood et al., 2004). However, one area that is receiving increasing attention is the influence of the *innate* abilities of individual team members – that is, those natural qualities that are constant and invariable.

Link-up! International Pty Ltd is one organisation that has brought the importance of innate qualities to the fore. After much exploratory effort, the company purports that comprehending and appreciating the innate qualities of team members is the essence of understanding and enhancing team performance.

In the attempt to gauge the innate qualities of individual team members, *Link-up! International* has devised the *Instinctive Drives™ (I.D.™)* system. Through a 32-question survey, the system claims to identify and assess the instinctive drives 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. However, *Link-up! International* proposes that it is by understanding the

dynamics between the instinctive drives of each team member that team performance can be improved.

Toward the aim of improving team performance, *Link-up! International* has experienced a degree of international success. Within companies of various sizes, the organisation has demonstrated its ability to understand individual innate qualities and affect team improvement.

However, empirical research has not yet substantiated the *I.D. System*TM. It is thus the purpose of the present report to validate the tool and system both quantitatively and qualitatively.

1.1 The Aims of the Study

The *aims* of this report are to:

1. Validate the *I.D. System*TM;
2. Validate a refined version of the *I.D. System*TM;
3. Explore the relationship between the refined version of the system and personality factors, leadership style and general health factors; and
4. Explore the inherent value of the existing *I.D. System*TM.

These aims 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 predicting team performance. This includes both published and unpublished works.

Chapter 3 describes the research process embarked upon toward the three research aims. This includes an examination of data collected by *Link-up! International*, as well as consultation with personnel from companies that have utilised the tool.

Chapters 4 and 5 present the findings from this extensive research process. Through quantitative and qualitative representations of the data, the validation of the *I.D. System*TM is explored and considered. This helps to ensure both the empirical and practical value of the tool.

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 attempting to discuss the *I.D. System*TM and the predictability of team performance, it is important to first understand key terms – namely, the *I.D. System*TM

and *team performance*. While the *I.D. System*TM is explicated in the subsequent chapter, the following section defines *team performance*.

1.3 What is Team Performance?

For the purpose of clarity, a team is defined as a collection of individuals who interact extensively to develop an organisational product, plan, decision or service. A team has an identifiable purpose, where members share an interdependent relationship, consequent to their complementary skills, and are thus collectively accountable (Aamodt, 2004; Wood et al., 2004).

Team composition forms a crucial ingredient of team performance. For instance, a degree of homogeneity among team members can be advantageous for team dynamics. Individual members have the opportunity to develop relationships promptly, and thus engage in effective interaction to perform. Conversely, homogenous membership can limit group progress. The development of innovative ideas and viewpoints and may be stunted by the blinkers that limit creativity.

Heterogenous teams offer a rich pool of information, talent and varied perspectives. This in turn, can help improve team problem solving and increase creativity. This is especially valuable to those teams that operate in a highly complex environment. Contemporary research indicates that team diversity is often a source of performance difficulty; this is especially the case when the team is in its infancy (Schermerhorn, Hunt, & Osborn, 2005). Heterogeneity appears to contribute to interpersonal stresses and conflicts that impede upon the development of relationships, the sharing of information and the solving of problems. Managing these dynamics can hinder team processes and thus influence both team effectiveness and team efficiency. However, once such difficulties are resolved, heterogenous teams are well positioned to take full advantage of membership diversity to achieve its objectives and sustain itself over time (McShane & Travaglione, 2003).

Team performance is therefore the extent to which the results of a team are linked with organisational objectives. Admittedly, there are many ways to measure this, including a consideration of customer satisfaction. However, unlocking the full potential of a team that is rich in diversity is one of the great advantages of high performing organisations (Wood et al., 2004).

2 A Review of the Literature

Following a description of the research aims and the definition of *team performance* in Chapter 1, this chapter presents the context and rationale for the project. Through a review of relevant literature, the chapter begins with an exploration of psychometric tools within the workplace. It then discusses, with particular detail, the *I.D. System™*, its theoretical foundations and some of the benefits it is said to offer. Through this review, the chapter justifies need to improve current practices in understanding and enhancing team performance, particularly in the workplace. More specifically, the chapter justifies the need to validate the *I.D. System™*.

2.1 Understanding Workplace Teams

Despite their inherent value within the workplace, teams pose particular challenges to those in managerial positions. Principally, this includes the limited ability of the manager to quickly predict whether a team is likely to succeed in its designed role. While the technical expertise of individual team members might be explored, other aspects influence team performance; for instance, the idiosyncratic practices of each team member. Consequently, a manager may ponder on whether he/she has assembled the most appropriate mix of individuals; whether the individuals will achieve organisational aims; and the kind of conflict that might arise within the team (Lee-Emery, 1990). Such considerations are particularly important given the likelihood of de-motivation, should individual team members be unable to cooperate effectively. Relevant literature advises that, in modern organisations that rely on teamwork, the “difference between highly effective organisations and less effective ones... lies in the motivations of its members” (Moorehead & Griffin, 2001, p. 113).

There is a wealth of literature pertaining to team building and team dynamics. It generally describes team building as the art of assembling individuals according to complementary skills or expertise for the purpose of task completion (Fitzpatrick, Askin, & Goldberg, 2001; Wellins, Byham, & Wilson, 1991; West, 2004; Wood et al., 2004). This body of literature suggests *specialisation* to be the key to success in teamwork. Such specialisation occurs through the development of highly efficient, high-performing, cross-functional teams of people. Successful individuals are brought together to optimise the synergistic outcomes associated with teams (French, Bell, & Zawacki, 2000; L. Lingard, Reznick, DeVito, & Espin, 2002; R. Lingard & Berry, 2002; McShane & Travaglione, 2003; Salas & Fiore, 2004; West, 2004).

However, teams composed on the basis of cognitive abilities alone still often fail to achieve designated tasks. This is said to be because of *attitude* (Wood et al., 2004). Attitudes are evaluative assessments, both favourable and unfavourable, concerning witnessed experiences that relate to objects, events and people (Berry & Lingard, 2004; Robbins, Bergman, Stagg, & Coulter, 2003; Salas & Fiore, 2004; Thomas, 1998). Attitudes influence intention to behave in a specific way and include both cognitive and affective components – while cognition allows for reason, affect incorporates emotion (Sweeney & McFarlin, 2002). However, this understanding of attitude fails to consider the influence of inherent drives. Without such knowledge, there is thus a limited appreciation for the factors that contribute to individual and collective behaviours.

In the pursuit of task completion, conflict within a team can yield constructive creativity (Applebaum, Shapiro, & Elbaz, 1998). However, interpersonal differences resulting in expressed behaviour can have unhealthy consequences for the individual and the team (Salas & Fiore, 2004; Wellins, Byham, & Wilson, 1991; West, 2004). Negotiating a resolution to such conflict relies heavily on shifting individuals away from their position and focusing instead on individual needs (Fisher, Ury, & Patton, 1999; Lewicki, Saunders, Minton, & Barry, 2003). This process can be an arduous and painstaking discovery of individual volition.

There have been a number of efforts to improve team member attitudes. Most of these attempt to gauge individual learned behaviours that are adopted to understand self and/or others (Barrick, Stewart, Neubert, & Mount, 1998; Guzzo & Dickson, 1996; Levine & Mooreland, 1990; R. Tett & Murphy, 2002). Although very few diagnostic tools attempt to measure the inherent drives of individuals, and possible impact on team *performance*, psychometric assessment in the organisational context remains very popular (Hoffman, 2002; Muchinsky & Monohan, 1987; R. Tett & Murphy, 2002). The following section outlines some of the popular psychometric tools used in the context of team development.

2.2 Organisational Psychometric Tools

The psychological testing of employees has occurred for almost a century (Hoffman, 2002). Despite its increasing popularity, its history is controversial. In the 1920s, when the theoretical and methodological principles of organisational psychology were in their infancy, the effectiveness of psychological tests for employees remained suspect (Yerkes & Yoakum, 1920). However, by World War II, employee testing increased dramatically and by the middle of the 1950's, almost 66 percent of large organisations psychologically profiled their employees. Such profiling not only occurred at time of recruitment, but also when new teams were formed (Chatman, 1989; Day & Bedeian, 1991; Hoffman, 2002; Schneider, 1983).

There is an extensive body of literature concerning measurement tools for organisational behaviour. In fact, some psychologists endorse personality profiling, as this practice is considered a reliable predictor of adult behaviour (Alder, 1996; Barrick & Mount, 1991; Hogan & Shelton, 1998; Hough, 1992; Hough, Eaton, Dunnette, Kamp, & McCloy, 1990; Motowidlo, Borman, & Schmidt, 1997; Salgado, 1997; R. Tett & Murphy, 2002; R. P. Tett, Jackson, & Rothstein, 1991). Such tools include the Jungian 16 personality typology test (Marcic & Nutt, 1989), the Internal-External Control Scale (Rotter, 1966), the Jenkins Activity Survey (JAS) for Health Prediction (Jenkins, Zyzanski, & Rosenman, 1971) – which is used to gauge Type A and Type B behaviour patterns, and measures that gauge ability to manage ambiguity (Aamodt, 2004; Martinez, 2001; Wood et al., 2004).

Based on the work of Swiss psychologist, Carl Jung (1976), the Myers-Briggs Type Indicator (MBTI) (Myers & McCaulley, 1985) is one of the most popular personality typology tools used by organisations to develop stronger teams (J. B. Murray, 1990). However, some studies suggest that caution be exercised when utilising the tool (McCrae & Costa, 1989). For instance, following their in-depth analysis of the strategies used for item construction, response format and the scoring of the MBTI

items, Tzeng and colleagues (1984) state, “several measurement issues were raised to caution the future users about the social consequences of its application in terms of both the benefits and possible side effects to society” (p. 256). Further to this, Carlson (1985) asserted that greater research is needed to ensure the reliability of the instrument – chiefly across extended test-retest intervals, and to provide more systematic construct validation. Nevertheless, the tool remains to be extremely popular, and it enjoys a high level of *psychological* validity (Carlson, 1989).

Secondly, there is a strict delineation between personality preferences. Of two options, respondents are assumed to prefer *only* one. There is no scale to acknowledge that a mild ‘introvert’ and a mild ‘extrovert’ may actually behave in a similar way.

Thirdly, there is the possibility that the tool may be used to discriminate *against* particular MBTI preferences in the workplace. Employers may demonstrate a penchant to particular individuals because of their MBTI profile. This type of pigeonholing is of particular concern when the tool is used for recruitment purposes. For example, in the workplace, ‘thinkers’ are typically preferred to ‘feelers’ as this reflects current economic rationalist tendencies (Hoffman, 2002). Additionally, it has been shown that the MBTI indicates clear gender differences; approximately 66 percent of all men are ‘thinkers’, while approximately 66 percent of all women are ‘feelers’ (Hoffman, 2002; Moorehead & Griffin, 2001). Hence, the MBTI must be used with caution when recruiting new staff (Shakleton & Fletcher, 1984), as its use could breach current discrimination laws at both Federal (Commonwealth Government, 1984) and State levels (SA Government, 1984; WA Government, 1984).

However, the MBTI is not the only psychometric tool with identified flaws. Most, including the Stress Analysis System (Nelson, Schmidt, & Nelson, 1983) and the Job Stress Survey (Spielberger & Vagg, 1991), both of which attempt to gauge personality contributors to stress, tend to lack empirical reliability and validity (Johnson, Blinkhorn, Wood, & Hall, 1989; Pinkney, nd; Stake, nd). This could be due, in part, to *attribution theory*, whereby observed behaviour is justified by attaching it to particular attributes (Weiner, 1978). This assessment process is based on perceptions of reality, which can vary widely amongst individuals and are contingent on context and time (Moorehead & Griffin, 2001). It can therefore be difficult to attribute all observed behaviour to one personality type.

A related issue is the use of psychometric tools for recruitment purposes. Although some tools, like the Manager Profile Record (Richardson Bellows, 1985) and the Modern Occupational Skills Test (Johnson, Blinkhorn, Wood, & Hall, 1989), purport to effectively gauge *potential* staff effectiveness, there is danger in stereotyping individuals before they have had opportunity to demonstrate their knowledge and skill-base.

Another flaw often associated with psychometric tools is the limited follow-up support integrated into the assessment process. Many, including the Dominance, Influence, Steadiness and Compliance (DiSC®) system (Mills & Associates, 2005) and the Team Management Index (Margerison & McCann, nd), fail to offer appropriate strategies for team development and are not conducive to an evaluation of organisational outcomes.

Despite the aforesaid imperfections, psychometric tests for employees enjoy growing popularity. This is primarily because of their ability to ostensibly satisfy organisational objectives (Hoffman, 2002). Psychometric tests also provide insight into individual behaviours (or perceived behaviours).

Further to this, personal insight has significant catalytic qualities, particularly in those workplaces that utilise teamwork. For instance, it can spur greater contact among co-workers. Communication is vital within any effective organisation. It allows information to be shared; it allows instruction to be given and received; it facilitates the identification of problems and goals; and it allows individuals to express thoughts and emotions (Moorehead & Griffin, 2001). Communication is particularly important in group/team situations where synergy is the aim.

However, effective communication within workplace teams demands adept interpersonal skill. Skill is required to manage communication flow, resolve conflict, direct questions appropriately, facilitate discussion, provide support and recognise the interests of all team members (Aamodt, 2004; Hoffman, 2002; McShane & Travaglione, 2003; Salas, Cannon-Bowers, & Hall Johnston, 1997; Schermerhorn, Hunt, & Osborn, 2005; Wood et al., 2004).

One tool that is part of the growing pool of organisational tests is the *I.D. System*TM, a concept developed by Paul Burgess and applied by *Link-up! International*. The assessment tool forms part of an extensive system that first identifies individual instinctive drives, and then suggests and counsels intervention strategies for team performance. Before exploring this tool in further detail, it is important to understand its theoretical foundations. This is discussed in the following section.

2.3 The Theoretical Foundations of Instinctive DrivesTM

There is a body of literature in the discipline of psychology that implies the role of *instinct* in understanding of employee performance. As will become apparent through the following sections, preliminary work in this area suggests quite different understandings of the concept, compared to those purported by contemporary authors. Historical literature describes instinct as a striving mechanism, a motive, a need and a form of self-actualisation (Freud, 1915; Lorenz, 1950; Maslow, 1970; McDougall, 1908), while contemporary works allude to it as an innate *modus operandi* (Burgess, 2003a, , 2003b).

2.3.1 Early Understandings of Instinct

One of the earliest understandings of instinct speaks of hedonistic tendencies. In its simplistic form, *hedonism* is the notion that individuals seek pleasure and avoid pain (McDougall, 1908). The theory originates from ancient Greek philosophers and is the foundation for most contemporary theories of motivation. For example, American psychologist, William James (1890), wrote that pleasure reinforces behaviour, while pain inhibits it; thus, reinforced actions attract greater priority, relative to impulsive behaviours (Moorehead & Griffin, 2001; Steers & Porter, 1991; Vroom, 1995).

As well as lacking empirical evidence, the key problem with hedonism is its conceptual ambiguity (McDougall, 1908). There is little clarity around the way in

which pleasure and pain are defined at an individual level. For instance, some people find (conventionally) painful endeavours enjoyable. Hedonism survives in modern organisations by rewarding desirable behaviour, while punishing undesirable ones. In criticism of the theory, British psychologist, William McDougall (1908) postulated that hedonistic pleasures and pains were habits formed over time that simply served underlying instincts.

Instinct, and its related concepts of *drive* and *motivation*, was first described in the literature in the 1880's (Dewey, 1886; Sully, 1884). Instinctual drives were argued to motivate particular behaviours. Motivation was thus considered to be an implicit driving force of instincts and desires (both involuntary and voluntary) causing action (Bindra & Stewart, 1966).

However, instinct was originally believed to drive only *primitive* actions, such as eating, drinking, sleeping, sexual desires and the fight / flight mechanism. However, McDougall (1908) hypothesised that instincts were the prime source of many other behaviours. He argued that instincts were the result of a complete mental process that encompasses the cognitive, the affective and the conative parts of the brain. McDougall suggested that every instinctive behaviour is accompanied by thought and emotion, and in experiencing these, an individual would either strive toward the behaviour, or shy away.

Others however, argued that instinct was too complicated to understand through the discipline of psychology. Austrian physician, Sigmund Freud (1915) considered instinct to be the boundary that divides the mental and the physical. He argued that instinct was out of the realm of psychology to accurately determine its *modus operandi*. Suffice to say, Freud believed that instinct was a natural reaction to both internal and external stimuli that required satisfaction. Although this could be achieved in numerous ways, it was chiefly determined through cognition. Freud proposed two distinct groups of primal instincts – the self preservative (ego) instincts and the sexual instincts. Yet, he acknowledged that these were arbitrary classifications and were subject to modification. Most of Freud's research focussed narrowly on the internal sexual instincts, exploring ramifications for the treatment of what he termed, 'neurotic affections.' However, much of his work in this area has been criticised for lacking empirical support (Hinde, 1960).

Owing to their interests in evolution, ethnologists also took a keen interest in understanding instinct. It was initially believed that instinctual behaviours, like reflexes, were triggered by particular external stimuli. However, Lorenz (1950) and Tinbergen (1951) asserted that this is an over simplification of the process. In his research on animal behaviour, Lorenz discovered that even captive animals who were deprived of such external stimulation continued to display the same innate behaviour as non-captive animals. Tinbergen extended this work, suggesting that, although research has not yet discovered the precise triggers of complex instinctual behaviours, this did not preclude research into the consequences of those instincts. He proposed a hierarchy of *interrelated* instincts that impel behaviour.

Nissen (1953) furthered this work, claiming that instinctual behaviours were based on a continuum, with some more dominant than others. Thus, to oversimplify instincts by categorising them as a few primary and secondary behaviours was erroneous.

Research to enhance understanding around instincts was generally accepted by the discipline of psychology. In fact, Murray (1964) notes that there were over 6,000 instincts recorded by researchers by the 1940's. However, in the 1920's, cognitive research gained increasing popularity. Situating itself at the opposite side of the nature versus nurture debate, it attempted to explain behaviour as learnt actions, rather than as instinct. This brought the great nature versus nurture debate to the fore.

In addition to the rise of cognitive psychology, instinct theory was generally abandoned for other reasons. These include the concern that the study of instinct may equate human beings with primitive animals (Burgess, 2003a; Morrow, Hansen, & Pearson, 2004). It was also argued that, unlike the measurement of overt behaviours, there was limited opportunity to empirically measure instinct. Additionally, there was concern about the growing complexity of instinct theory. Some dissenters argued that the suggested existence of 6,000 instincts was overly complicated (E. J. Murray, 1964). When advocates for cognitive psychology came to the fore, they questioned whether the instincts were not simply examples of learned behaviour (Steers & Porter, 1991). Much of this confusion highlighted the need to distinguish instinct from the mechanism that drives it (Lorenz, 1973).

To a large extent, the criticism that instinct theory attracted actually related to the mechanism, rather than the instinct per se (Nissen, 1953). For instance, Hinde (1960) was highly critical of the energy models proposed by Freud (1915), McDougall (1908), Lorenz (1950) and Tinbergen (1951); yet, he did *not* discount the content of their views about *instincts* – only the mechanism thought to drive it. Ironically, advocates of the energy model explicitly acknowledged its imperfections. However, this did not deter figures like Hinde from discrediting the underlying theory of instinct. It appears that the advocates were well aware of the complexity of instinct theory, which in turn, prevented them from collating empirical evidence to verify their claims. This partly explains the extinction of instinct theory.

Through the course of research developments, numerous theories have permeated the literature pertaining to behavioural causation, attempting to blend consideration of both instinct and cognition. *Drive theory* for instance, argues that any physiological or psychological imbalance will motivate behaviour designed to restore homeostasis or equilibrium (Hilgard, Atkinson, & Atkinson, 1975). McClelland and colleagues (1953) considered behaviour to be chiefly motivated by *n* (the need for) Achievement – that is, a want to demonstrate competency and attain goals. Given its prominence in Western society, both behaviourally and in terms of values, the need for achievement as an area of research has attracted much attention (Weiner, 1978). However, the literature also suggests that behaviour is motivated by *n* Power, or a desire to exert control over events that influence our lives (McClelland, 1975; Winter, 1973; Winter & Stewart, 1978), as well as *n* Affiliation, typifying those who are motivated to “seek out others, to value being with them, and to care about them” (Phares, 1991, p. 250).

Another significant contribution to the literature is Maslow's (1970) *hierarchy of needs* – the assertion that behaviour is motivated by a series of graduated unmet desires, from the most fundamental (including the need for food, shelter and sleep), to consequent, abstract ones (including love and esteem). However, it is argued that

consequent, abstract desires are only pursued if the fundamental ones have been met (McInerney & McInerney, 1998).

Maslow's (1970) theory has attracted much academic attention. This is partly because of its commonsensical approach and its consideration of *both* physiology and cognition. Subsequently, it has been indoctrinated into the business community (Stum, 2001). However, the theory has also received severe criticism. There is an alleged *reliance* on five levels of need and an *insistence* on a strict hierarchical order that has not translated well in non-western cultures (Aamodt, 2004; Alderfer, 1972; Moorehead & Griffin, 2001; Soper, Milford, & Rosenthal, 1995).

Refinements of the *hierarchy of needs* have been attempted. Alderfer (1972) for instance, reduced Maslow's (1970) five needs to three and proposed the Existence, Relatedness and Growth (ERG) theory. He also argued that needs could operate *simultaneously*. Noteworthy is the fact that there is empirical research to support Alderfer's theory (Hall & Nougaim, 1968; Salancik & Pfeffer, 1977).

Maslow's (1970) seminal work has had important repercussions on organisational psychology. He believed that, to be content, each individual must strive to be all that he/she can be. A person who has achieved all fundamental needs has the opportunity for *self-actualisation*. A self-actualised individual is said to be ruled by *being values* or metamotives, rather than deficiencies. "Being values are growth motives whose purpose is to extend our experience and enrich our lives. This kind of motivation does not compensate for deficits; rather, it pulls us toward enlarged vistas" (Phares, 1991, p. 172). The self-actualised individual utilises personal potential by knowing, trusting and acting upon his/her innate nature.

Late in his career, Maslow (1970) investigated the concept of *innate nature* and believed that it was a biologically-based core that could have wide implications for team productivity in the workplace. Unfortunately, Maslow did not have the opportunity to pursue his ideas and conduct empirical research into his hypothesis. Nevertheless, two people have continued this work; namely, British-based psychologist, Dr Michael Kirton, and US-based organisational consultant, Kathy Kolbe. Both have relied heavily on applied organisational work rather than academic theory (Hoffman, 2002).

2.3.2 Contemporary Understandings of Instinct

In his observations of managers, Kirton (1987) discovered that, although managers are cognitively capable and generally have the desire to succeed on both personal and business levels, some still fail to do so. To understand this, he argued that individuals are situated on a continuum, with *adapters* and *innovators* at either extreme. Adapters are precise, reliable, methodical and prudent; they believe in incremental improvement to limit disruption. Innovators however, challenge norms; they have limited respect for tradition and they believe in radical change. People defined as innovators generally prefer to think laterally.

Although neither extreme is superior to the other, people at opposite ends of the continuum operate in very distinct ways. To understand these differences, the Kirton Adaptation Innovation (KAI) inventory was developed, providing a score to indicate

an individual's position on the continuum (Kirton, 1987). It also offers three interrelated sub-scores; namely, sufficiency of originality, efficiency and rule/group conformity. Kirton (1987) acknowledges that, in order to increase individual performance, adapters and innovators need to work in their preferred mode. He also offers other important recommendations – for instance, there should be no more than a 20-point gap between the KAI scores of co-workers, and the mix of innovators and adapters is dependant upon the purpose of the team. Research indicates that KAI scores are constant and resistant to change (Hoffman, 2002). This affirms Kirton's belief that it forms part of our innate temperament and is therefore genetically influenced.

Kolbe (1991) is another figure in the theoretical understanding of team performance. Her work has culminated in the Kolbe A Index (K. Kolbe, 1993) – an assessment tool akin to the KAI inventory (Kirton, 1987), measuring constructs that are distinguishable from intelligence, personality and cognition. Kolbe proposes four conative modes; namely, fact-finder, follow-through, quick-start and implementer. For each mode, the Kolbe A Index indicates an individual's natural tendency to initiate action, respond to needs, or prevent problems. This is achieved by asking respondents to reflect their most and least preferred answers to 36 problem solving scenarios. The composite of these responses is indicative of an individual's drives, and is known as one's Modus Operandi (MO). Kolbe's research suggests that the MO is innate, biologically influenced and for the most part, resistant to change – even following intensive training programs. More interesting perhaps, is the discovery that seventy percent of individuals are in professional positions that conflict with their MO; this is said to significantly affect individual productivity and therefore, team and organisational productivity (Hoffman, 2002). Subsequent research has attempted to understand the individual MO required within a team to improve its performance. Using the Kolbe A Index, Lingard and Berry (2002) discovered that the synergy required to increase group performance could be achieved when a team included 25 percent of initiators, fifty percent of responders, and 25 percent of preventers.

Advocates of instinct theory and cognitive psychology have largely reconciled theoretical differences. There is now general acceptance that behaviour is influenced by *both* nature and nurture (Pinker, 2004). This belief is appositely described by Murray (1964) in the following statement:

“It is my contention that the field of motivation and emotion is in a period of creative flux that is gradually leading to a new image of the nature of man. In the past, the field of motivation and emotion was dominated by two theories – the classical Freudian and the classical behaviorist. The Freudian image of man was that of a creature driven by inherited, unconscious sexual and destructive instincts constantly seeking release in a frustrating social environment. The behaviorist view was that of a creature quietly metabolizing in the shade, occasionally goaded into action by the hot sun and the lure of a cold glass of beer. There is probably not a psychologist alive who would accept either of these views today, but what is the new image like?”

To begin with, the old battle between heredity and environment is largely dead. Man is not thrust into the world with ready-made, inflexible instincts nor is he a passive piece of clay that society models into neat value systems. Man is born with a great many potentialities that interact with a complex physical and social world to form a spectrum of motivational systems. There is probably not a single motive that is entirely innate or entirely learned. Biological potentialities are channeled and inhibited, expanded and contracted. We still do not know what man's full potential is.

There is increasing agreement that man's potential depends largely on his incredible intricate brain. Motivation is not a simple matter of visceral tensions and tissue needs. Motivation depends on a brain that contains mechanisms for pleasure and pain, that controls its own level of arousal, and that is sensitive to external as well as internal events. Probably all motives contain internal and external features.

Man is not simply warding off noxious stimuli and seeking the peace of death or nirvana. He actively interacts with the environment. He is curious, playful, and creative. He conceives great ideas, seeks meaning, and envisions new social goals – these products of his own imagination influence his own striving, his own motivational pattern, and the course of civilization.

Finally, human warmth and relatedness are not epiphenomena grafted to a peristaltic rhythm. Giving and receiving love are every bit as much a part of human biological nature as the need to urinate. We lust but we also seek affection. We hate but we also seek closeness and esteem. We even try to love and esteem ourselves.

This image of man is emergent, but perhaps man himself is emerging” (p. 110).

Although free will and rational thought are fundamental to modern society, and distinguish humanity from the animal kingdom, it is instinct that helps to explain cognitive choices. However, while inherent instincts may motivate particular behaviours, these can be modified through the use of cognition. Such modifications

may not transform the individual, but rather, teach different behaviours and expand one's skill-base.

To understand the complex relationship between instinct and cognition, some psychologists concede that the mind is made up of three domains. These include the cognitive domain (thoughts and skills); the affective domain (shared values underpinning attitudes); and the conative domain (instinctive approaches) (Snow & Jackson, 1993). While the cognitive and affective domains are variable, conative actions are not and are largely derived from striving instincts. Given its rigidity, instinct may be of particular interest to researchers who are investigating and attempting to *predict* team performance.

As mentioned, with the rise of cognitive psychology came a general abandonment of instinct theory. Among the reasons for this was concern about the limited ability to study instinct empirically. Striving instincts are subconscious and largely immeasurable. However, conative *actions* can be quantified. This realisation was translated into the Kolbe Conative Index (K. Kolbe & Kolbe, 1999) – a tool said to assess the behaviours individuals would engage in, when faced with particular scenarios.

However, some research suggests that the three suggested domains of the mind are not as distinct as initially thought. Snow and Jackson (1993) for instance, devised a model to demonstrate that the three domains are closely connected. Further to this, they are each linked by personality and intelligence, as depicted in Figure 2.1. Similarly, in an attempt to understand principal motivations for human behaviour, (Huitt, 1999) argues that conation is the nexus between knowledge and affect.

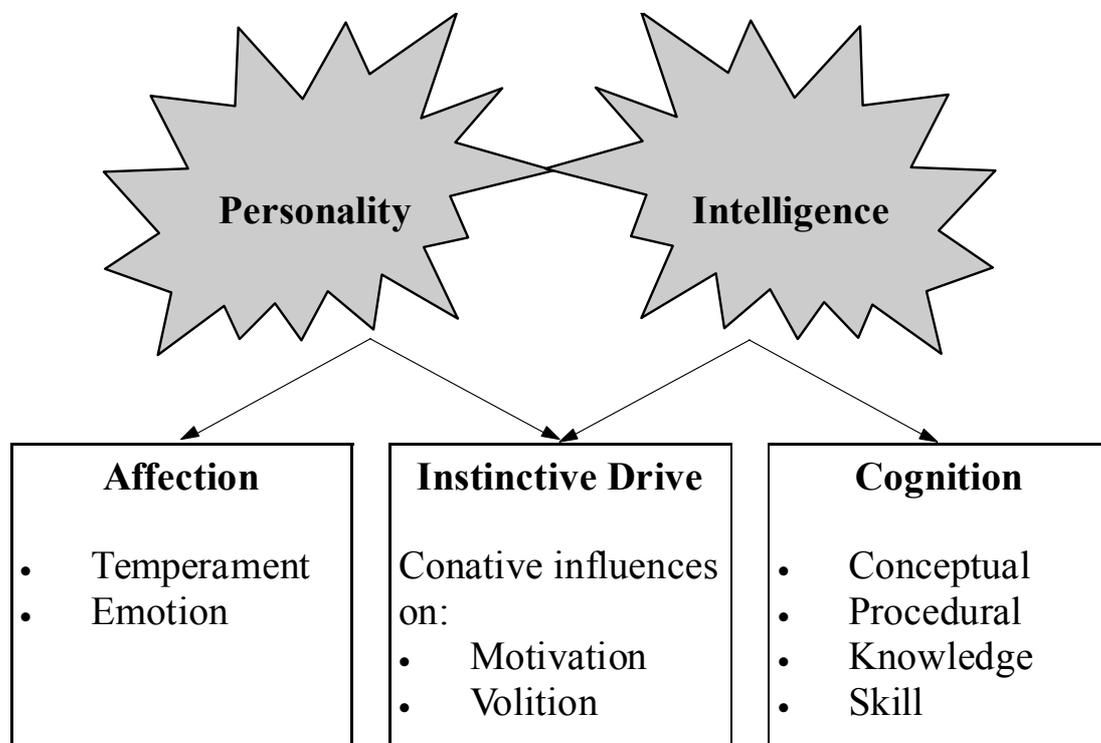


Figure 2.1: Taxonomy of Instinctive Drive Positioning adapted from Snow and Jackson (1993)

Given previous thought that instinct was largely invariable, the research efforts of Snow and Jackson (1993), as well as Huitt (1999) offer interesting insights. They have broadened an understanding of instinct to encompass cognition and emotion – all of which influence team performance.

2.3.3 The *Instinctive Drives System*TM

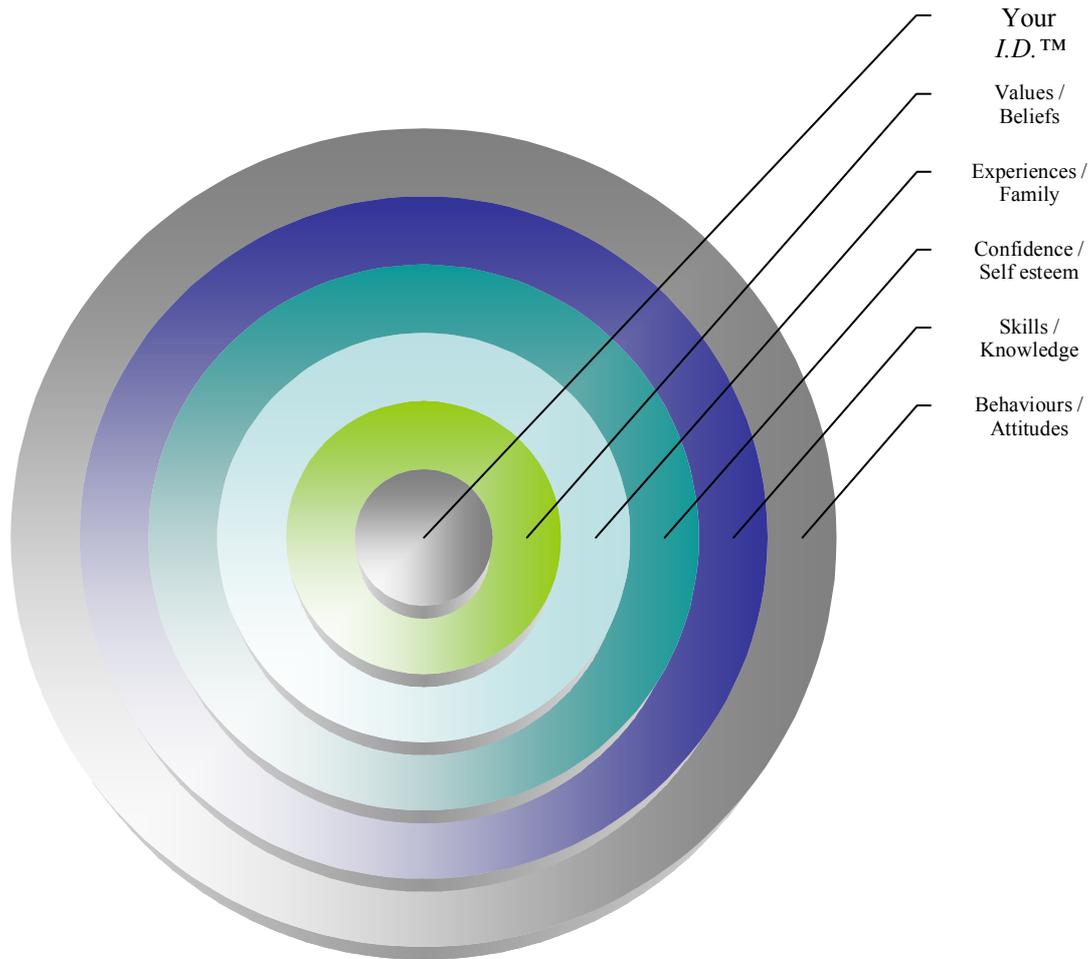
The interrelationship shared by instinct, cognition and emotion is the fundamental premise of the *I.D. System*TM. While advocating the importance of instinct theory in understanding individual performance, there is ample scope to amend behaviour through modification techniques. Evidently, those techniques that prove most effective are those aligned with one's instinctive drives.

The *I.D. System*TM seeks to investigate the drives of individual team members. Once identified, it is then possible to implement strategies that enhance team performance. These interventions are designed to help individual team members function in accordance with their instinctive drives as this will result in personal peak performance. Conversely, those who diverge from their instinctive drives generally perform below capacity, and are prone to health issues (Burgess, 2003a, , 2003b).

Burgess (2003b), the developer of the *I.D. System*TM, advises that instinctive drive is at the core of all performance. Thus, understanding this core will help manage the overt influences of individual and team performance, such as behavioural influences. Thus, while Kolbe and Kolbe (1999) ask, '*what is the action?*', Burgess asks, '*why the behaviour?*'

Burgess (2003a; , 2003b) developed the *I.D. System*TM to quickly measure the drives of behaviour beyond mere personality constructs. He argues that understanding drives within the self and within others improves team performance, particularly within the workplace.

The *I.D. System*TM portrays the instinctive drive to be at the core of all learnt behaviour and knowledge. In effect, it might be best understood as an onionskin model (Burgess, 2003b). The model provides a useful analogy for the values, personal experiences, confidence, skills and attitudes that encapsulate the core of *instinct*, from a level of visibility to one of invisibility. It is argued that once an individual is aware of his/her inherent operational approach, which is invisible and instinctively driven, and behaves accordingly, he/she has the potential to achieve personal best. However, if individual performance contravenes his/her natural tendencies, misalignment stress may cause physical unwellness and dysfunctionality.



Your *I.D.*™ drives your personality and is the innate aspect of your personality.
The outer layers are learnt.

Figure 2.2: The Onionskin Model of *Instinctive Drives*™ adapted from Burgess (2003b)

The *I.D. System*™ is measured through a closed-question survey that appraises the inherent *motivations* of individual team members (Burgess, 2003a; , 2003b). The survey is comprised of a comprehensive system of interdependent components, including:

1. A combination and intensity of scores, team environment, comparisons with individual attributes and influences;
2. The relationship between the *I.D. System*™ and demographic data;
3. The Peak Performance Indicator measuring tool;
4. The onionskin model and the relationship between the *visible* and *invisible*;

5. Strategies developed for each *I.D.*TM profile; and
6. The delivery methodology and ongoing counselling of individuals and teams to help them reach their combined potential (Burgess, 2003a).

This approach differs from well-known personality classification tests. For instance, the DiSC® system (Mills & Associates, 2005) identifies personality styles through a thirty-minute survey. As the name suggests, resultant personality profiles are anchored in four primary concepts; namely, Dominance, Influence, Steadiness and Compliance. These are further divided into twelve sub-traits. However, the difficulty with this assessment tool is that responses to the survey are contingent on context. Thus, although it analyses behaviour, it fails to assess the drives of behaviour.

Similarly, the previously mentioned MBTI (Myers & McCaulley, 1985) tends to explain behaviour, rather than its primary causes. This tool utilises a 93-item survey to measure Jung's (1976) theory of personality styles, which are a function of the way people perceive and judge. In effect, the MBTI is an indicator of temperament and social style. Preferences are explored via four basic scales with opposite poles. These include extraversion / introversion, sensate / intuitive, thinking / feeling and judging / perceiving. These combine to form 16 personality types. The face validity of the MBTI is adequate, as evidenced by its popularity as a tool for recruitment purposes and team building. However, statistical reliability and validity are unstable as preferences are contingent on context (Carlson, 1985).

The Team Management Index (Margerison & McCann, nd) is yet another renowned personality classification test with a limited ability to gauge the primary causes of behaviour. Based on the premise that personal performance is superior when operating within a *preferred* role, the tool utilises a 60-item survey to identify individual predilection for approaches to workplace tasks. Some of the preferences explored include the preference to work with others; the preference to gather and use information; the preference to execute decisions; and the preference to organise. Consequent to this assessment process, a model representing preferred types of work is developed with reference to nine key performance factors. These include advising, innovating, promoting, developing, organising, producing, inspecting, maintaining and linking. However, because this analysis is conducted in the context of work and work role, individual profiles may vary over time.

Evidently, a number of recognised personality classification tests tend to analyse behaviour, rather than causative drives of the behaviour. While they may all offer interesting insights and cause for greater discussion among individual team members, their analytical scope is limited. Furthermore, they fail to identify internal distress that may arise when work practices conflict with innate tendencies.

Innovatively, the *I.D. System*TM overcomes these limitations. Not only does it explore innate predispositions, but it also examines consequences that arise when these predispositions are contravened. Such personal insight can facilitate a sense of empowerment among employees. It allows them to direct their course of action within a defined role, and within organisational protocols. This has significant implications,

for it is well documented that empowered employees demonstrate relatively greater productivity (Moorehead & Griffin, 2001).

Further to this, the *I.D. System*TM offers more than a mere profiling tool – it provides immediate, practical strategies that are commonsensical and produce measurable results. Team members learn pragmatic approaches that facilitate personal development in themselves and their co-workers. This in turn, allows the team to work collaboratively, to produce quality work and to feel content in its role. This has been evidenced through the efforts of *Link-up! International*, the firm responsible for the deployment of the *I.D. System*TM.

To ensure that the potential benefits of the *I.D. System*TM are realised by a team, *Link-up! International* recognises the value of follow-up support. While individual core instincts can be easily measured, the firm provides ongoing assistance to the team to assist with the effective utilisation of individual *I.D.*TM profiles. This in turn, helps to improve organisational performance, which is foundation of the *I.D. System*TM. The need to provide follow-up support and appropriate strategies is evidenced by the notion of overlap and influence between the three parts of the mind, as suggested by Snow and Jackson (1993), as well as Huitt (1999).

The aforementioned description of the *I.D. System*TM suggests that it has particular value in the workplace. However, to date, there has been little empirical research to confirm these claims. It is thus the purpose of this project to validate the *I.D. System*TM and explore the value of a refined version of the tool.

2.4 Summary

Through an overview of available literature, this chapter has confirmed the need to explore and improve current practices in understanding and enhancing team performance, particularly within the workplace. It has explored the use of organisational psychometric tools. More specifically, it has described the *I.D. System*TM, its theoretical foundations and its proposed benefits. However, to verify these proposed benefits, the chapter has also identified a need to validate the system and explore its inherent value.

3 Methodology

Following from the review of relevant literature in Chapter 2, this chapter outlines the research process that was embarked upon toward the three aims of the study. This involved a combination of quantitative and qualitative methods.

3.1 The Quantitative Phase

Through a quantitative approach, the initial phase sought to validate the existing *I.D.*TM survey as well as a refined version of the assessment tool. These were investigated by statistical analysis:

- Reliability analysis;
- Exploratory Factor Analysis (EFA), in line with analysis generally accepted and undertaken on psychometric tools;
- Test and re-test on the refined *I.D.*TM questionnaire;
- Discriminant analysis by comparing the refined *I.D.*TM questionnaire with the:
 - NEO-Personality Inventory-Revised Version;
 - Multi-factor Leadership Questionnaire;
 - General Health Questionnaire.

This section will explore these research tools in greater depth.

3.1.1 Research Tools

Since its establishment, *Link-up! International* has collected a wealth of data from clients who have utilised the *I.D. System*TM. The present project sought to maximise the value of the data by conducting a thorough validation study of the existing *I.D.*TM survey.

The existing *I.D.*TM survey is comprised of 128 items categorised into 32 questions and four instinct subscales. These include *Verify*, *Complete*, *Improvise* and *Authenticate*. Within the 32 questions, participants are asked to rank four item options. For each of the four options, '1' placed next to the alternative the respondent is 'most likely' to do, followed by '2', '3' and finally '4', indicating the option the respondent are 'least likely' to do. Scores are reversed so that higher scores indicate a stronger drive towards the instinct, while lower scores indicate an avoidance of that instinct.

Through the course of its efforts to predict team performance, *Link-up! International* has refined the *I.D.*TM survey. The relatively recent changes are believed to offer a superior assessment tool in the identification and consideration of instinctive drives. To determine the potential value of this refined tool, the quantitative phase of the

study also sought to validate this amended version. This was achieved by collecting a body of survey responses from consenting research participants.

The refined *I.D.*TM survey is composed similarly to the existing *I.D.*TM survey, with 128 items categorised into 32 questions and four instinct subscales. Unlike the existing *I.D.*TM survey however, various items within the scale have been reworded. Yet, the scoring system remains unchanged.

To explore factors that may or may not be related to the refined *I.D.*TM survey, the quantitative phase of the study was also used to explore the relationship between its four instinctive drives and personality factors, leadership style and general health. This was achieved by requesting consenting research participants to complete a number of assessment tools, including:

- The refined *I.D.*TM survey;
- The 243-item NEO-Personality Inventory-Revised Version (NEO PI-R):
 - This tool was employed to obtain a general description of normal personality. The NEO PI-R is based on the five-factor model of personality, with 240 facet and domain items rated on a five-point Likert scale, where *one* corresponds to *strongly disagree* and *five* corresponds to *strongly agree*. Three validity items were also included. Table 3.1 outlines the alpha reliabilities for each factor within the inventory.

Table 3.1: Factors, Facet Scales and Reliabilities for the NEO PI-R (Costa & McCrae, 1985)

| Factors (48 items each) (α) | Facet Scales |
|---|--|
| 1. Neuroticism ($\alpha = 0.93$) | Anxiety, hostility, depression, self-consciousness, impulsiveness, vulnerability |
| 2. Extraversion ($\alpha = 0.90$) | Warmth, gregariousness, assertiveness, activity, excitement-seeking, positive emotions |
| 3. Openness to experience ($\alpha = 0.89$) | Fantasy, aesthetics, feelings, actions, ideas, values |
| 4. Agreeableness ($\alpha = 0.95$) | Trust, modesty, compliance, altruism, straightforwardness, tender-mindedness |
| 5. Conscientiousness ($\alpha = 0.92$) | Competence, self-discipline, achievement-striving, dutifulness, order, deliberation |

- An adapted version of the Multi-factor Leadership Questionnaire (MLQ) (Kraft, Englebrecht, & Theron, 2003):
 - This tool measures leadership style through 32 items, all of which are measured on a six-point Likert scale, where *one* corresponds to *strongly disagree* and *six* corresponds to *strongly agree*. The original MLQ was developed by Bass and Avolio (2000), and is understood to

be the most widely used tool to gauge transformational and transactional leadership characteristics (Parry, 1998). However, Englebrecht (2001, personal communication) is alleged to have purified the original instrument using exploratory and Confirmatory Factor Analysis (CFA). This produced seven factors, each of which parallel the dimensions contained in the original MLQ as well as the abbreviated MLQ (5X) (Englebrecht, 2001, personal communication). The four transformational subscales within the adapted MLQ include *idealised influence* (eight items), *inspirational leadership* (four items), *intellectual stimulation* (four items) and *individualised consideration* (four items). The unearthed transactional leadership subscales are *contingent reward* (four items), *management-by-exception (active)* (four items) and *management-by-exception (passive)* (four items). Englebrecht found good internal consistency reliabilities for all subscales, ranging between $\alpha = 0.72$ and $\alpha = 0.93$. The adapted questionnaire used in the present study was chosen over the original as it was parsimonious whilst still offering construct validity.

- General Health Questionnaire (GHQ12) (Goldberg, 1978):
 - The self-administered 12-item version of the General Health Questionnaire 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 bimodal 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. A score of four or more is the typical threshold for an individual with a high GHQ12 score. 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.

Demographic information for the gender and age of all research participants involved in the quantitative phase of the project was collected via two single items. This information was used to determine discriminant validity of the survey, and to control for individual differences. During the validation of the refined *I.D.*TM survey, information pertaining to the professional position of the research participants was also collected through an additional single item within the survey.

3.1.2 Recruitment Process

By way of a return letter of consent to *Link-up! International* (see Appendix 7.2), *Link-up! International* sought permission from past participants to utilise their responses to the existing *I.D.*TM survey for the purpose of the present project. The letter included information about the purpose of the study, the way in which research material would be used and the fact that individual contributors to the project would

remain anonymous in the presentation of research findings. The letter also invited research participants to participate in a focus group and/or an individual interview for the qualitative phase of the study. Following the return of letters of consent, *Link-up! International* provided the research team with the de-identified data it was permitted to access.

To validate the refined version of the *I.D.*TM survey, *Link-up! International* randomly invited the participation of those research participants involved in the validation of the existing *I.D.*TM survey. Those interested in this endeavour were issued with the refined *I.D.*TM survey for completion.

To assess the test-retest reliability of the tool, convenience sampling was used to invite a smaller cohort of approximately 200 research participants to complete the refined *I.D.*TM survey for a second time. To assess test-retest reliability, it is preferable that research participants experience a similar time lapse before retesting; this allows the time factor to be dismissed as a confounding variable (Fraenkel & Wallen, 1990). However, as the study involved legitimate firms, this proved difficult through the course of the recruitment process. Consequently, the period between testing and retesting ranged from six weeks to ten months.

To explore the relationship between the four instinctive drives of the refined *I.D.*TM survey and personality factors, leadership style and general health, convenience sampling was employed. The resulting cohort included employees and clients of *Link-up! International*, UWS students and interested associates.

Following the return of the completed surveys, *Link-up! International* provided the research team with the de-identified datasets.

3.1.3 Collection and Analysis of Research Material

The existing and refined *I.D.*TM surveys, as well as the NEO PI-R, the MLQ and the GHQ12 were self-administered and completed by relevant research participants individually. Completion of the assessment tools was un-timed.

The existing and refined *I.D.*TM surveys were distributed to research participants via electronic mail from *Link-up! International*, or administered by a facilitator as part of an organisational exercise. Individual participants were issued with feedback through a personalised report. Where applicable, a combined survey including the NEO PI-R, the MLQ and the GHQ12 was also distributed to research participants via the same method.

The research team then endeavoured to systematically analyse the de-identified datasets provided by *Link-up! International*; namely:

- Responses to the existing version of the *I.D.*TM survey:

The dataset is comprised of responses to the *I.D.*TM survey that were collected by *Link-up! International*. The set includes responses from 1,014 consenting research participants.

- Responses to the refined version of the *I.D.*TM survey:

The dataset is comprised of responses to the refined *I.D.*TM survey that were collected by the research team in 2005. The set includes responses from 349 consenting research participants.

- Responses to the refined version of the *I.D.*TM survey, the NEO PI-R, the MLQ and the GHQ12:

This dataset was collected by the research team in 2005. The set includes responses from 30 consenting research participants.

The systematic analysis of both datasets included descriptive analysis, correlation analysis, Factor Analysis (FA), CFA and Structural Equation Modelling (SEM). The process was aided through the use of SPSS® and SEM® computer software.

3.2 The Qualitative Phase

To explore the inherent value of the existing *I.D. System*TM, a qualitative approach was also embarked upon through the course of the study.

3.2.1 Research Tools

A semi-structured, open-ended interview schedule was designed to guide consultation with company directors and team leaders from firms that have utilised the tool (see Appendix 7.4). More specifically, questions clustered around the following themes:

- Perceived influence of the *I.D. System*TM on individual performance;
- Perceived influence of the *I.D. System*TM on group performance; and
- Perceived influence of the *I.D. System*TM on leadership.

Given that the interviews were to be semi-structured, the schedule was to merely guide the interactive process, not dictate it.

3.2.2 Recruitment Process

As mentioned, participation for the qualitative phase of the project was sought through a return letter of consent (see Appendix 7.2). This letter was issued by *Link-up! International* to past participants and requested those interested in this phase of the study to contact the research team. Following the return of letters of consent, *Link-up! International* provided the research team with permission to contact those who expressed an interest in contributing to the qualitative phase of the study.

3.2.3 Collection and Analysis of Research Material

Each interview commenced with a reiteration of the return letter of consent, with particular reference to the purpose of the study, the way in which research material

would be used and the fact that individual contributors to the project would remain anonymous in the presentation of research findings. Those participants who continued to express an interest in project participation were invited to sign a consent form (see Appendix 7.3).

Each interview 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.

An analysis of the research material allowed for themes to emerge, as the research participants constructed their own meanings of situations through the interview process. Through the analytic phase of the project, the research material was found to cluster around a number of core themes. To ensure consistency within each theme, codebooks were developed that included detailed descriptors of each theme, inclusion and exclusion criteria, and exemplars from the research material.

Through a reflective, iterative process, theme content was 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 ensure that diverse perceptions were reflected in the research material, at least two interviewers were present at each research site. Furthermore, regular meetings were held to provide the research team 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.

3.3 Ethical Considerations

Approval to conduct the present project was gained from the university ethics committee (see Appendix 7.1). Given that *Link-up! International* managed the collection of quantitative data, it was difficult for the research team to ensure that the firms represented in the quantitative phase of the study included organisations of various structures and sizes. However, firms represented in the qualitative phase of the study were carefully considered to ensure the representation of organisations that differed in structure and in size.

4 The Quantitative Phase

The explicit aims of the quantitative phase of the project were to validate the existing and refined versions of the *I.D.*TM survey, as well as explore the relationship between the latter and personality factors, leadership style and general health factors. These were investigated by statistical analysis:

- Reliability analysis;
- Exploratory Factor Analysis (EFA), in line with analysis generally accepted and undertaken on psychometric tools;
- Test and re-test on the refined *I.D.*TM questionnaire;
- Discriminant analysis by comparing the refined *I.D.*TM questionnaire with the:
 - NEO-Personality Inventory-Revised Version;
 - Multi-factor Leadership Questionnaire;
 - General Health Questionnaire.

Findings from this analytical process are presented in the four subsequent sections.

4.1 Validation of the Existing *I.D.*TM Survey

4.1.1 Research Participants

A total of 1,014 survey respondents were involved in the validation of the existing *I.D.*TM survey (55.4 percent male, 44.4 percent female, 0.2 percent not recorded). The average age of research participants was 38.15 years (range: 18 – 83 years, SD = 10.48). Listwise deletion of missing data was used, yielding 1,011 valid responses. Research participants consisted of individuals from a broad range of industries in both the private and public sectors who volunteered their data for use in the validation process. These participants first completed the existing *I.D.*TM survey as part of an organisational or team development exercise.

4.1.2 Analytical Process

A variety of statistical procedures were employed to test the reliability and validity of the existing *I.D.*TM survey. First, variables were screened for normality, homogeneity of variance and outliers. This analysis revealed that the data were slightly skewed; however, there were no gross violations of normality and linearity assumptions. One outlier, with scores above possible totals, was detected and omitted from the analysis. Listwise deletion of missing data was also performed. Second, descriptive statistics were calculated for the four instinctive drives, as were the internal reliabilities of the collated subscale scores. The third step involved the use of Exploratory Factor Analysis (EFA). The study used the most efficient method for obtaining simple structure- principle components, a Scree test and rotation of significant factors by

direct oblimin (P. Kline, 1993). An oblimin rotation was selected for EFA as the instincts may be theoretically correlated. Furthermore, converse to orthogonal rotations, the direct oblimin method allows for correlations between factors.

4.1.3 Descriptive Analysis

The means, ranges and standard deviations for each instinct subscale of the test are presented in Table 4.1. Overall, scores were close to the scale mid-point of 2.5.

An Analysis of Variance (ANOVA) revealed two significant differences in mean drives across males and females, with males scoring slightly higher on the ‘Authenticate’ drive ($F(1, 1007) = 33.17, p < 0.05$), and females slightly higher on the ‘Improvise’ drive ($F(1, 1009) = 33.17, p < 0.05$). Levene’s test showed no significant difference in the homogeneity of the groups ($p = 0.26 - p = 0.99$).

Table 4.1: Means and Standard Deviations of each Drive across both Samples

| Variable | Sample Number | Mean ^a | SD |
|--------------------|---------------|-------------------|------|
| Verify drive | 1011 | 2.69 | 0.27 |
| Authenticate drive | 1011 | 2.44 | 0.23 |
| Complete drive | 1011 | 2.31 | 0.31 |
| Improvise drive | 1011 | 2.41 | 0.42 |

^a Higher scores indicate higher drive levels for each instinct; range = 1 – 4

4.1.4 Reliability

Reliability refers to the standard of a measurement and its ability to yield consistent results. In assessing the reliability of the existing *I.D.*TM survey, the consistency of scores was measured. The results, which are displayed in Table 4.2, show that the internal consistency of each of the subscales was above the accepted value of 0.7, indicating that the existing *I.D.*TM survey yields reliable scores across each instinct. Thus far, findings from the substantive research to test reliability and validity support that the existing *I.D.*TM survey yields reliable results. This meets an important requirement in the psychometric literature (R. R. Kline, 2005).

Table 4.2: Existing *I.D.*TM Survey Internal Reliability Results

| Variable | Sample Number | α |
|--------------------|---------------|----------|
| Verify drive | 1011 | 0.70 |
| Authenticate drive | 1011 | 0.72 |
| Complete drive | 1011 | 0.77 |
| Improvise drive | 1011 | 0.80 |

4.1.5 Validity

In addition to reliability testing, extensive validity testing of the existing *I.D.*TM survey was undertaken and included EFA, test-retest validity, discriminant analysis, and qualified face validity.

4.1.5.1 Factor Analysis

Despite some reservations about its appropriateness, EFA was conducted to explore construct validity. Reservations existed because of the post hoc scoring algorithm on which *I.D. System*TM results are based and that remains the intellectual property of *Link-up! International*. That is, conducting EFA on raw scores does not contextualise *I.D. System*TM results with the final scoring method that applies an algorithm to neutralise certain items, so that any one item does not appear more popular or correct than another. Hence, the probability of items cleanly loading on four factors was intuitively remote.

In addition to the questionable appropriateness of EFA, another concern was the likelihood of inconsistent factor analytic findings due to the unsuitability of a four-point ordinal scale to EFA techniques. Exploratory Factor Analysis addresses data as continuous. When the number of ordinal categories is large, then the failure to address the ordinality of the data will bring negligible results (Byrne, 2001). Therefore, the four-point scale may not yield enough differentiation in scores compared to, for example, a seven-point scale.

Further to research-specific concerns, there are other parts of construct validity that are not addressed by EFA. The research team concurs with the sentiments of Froman (2001) who asserts that many researchers depend too heavily upon factor analytic studies, often to the exclusion of other means of evaluating construct validity. One should keep in mind that factor validity is but a single aspect of documenting accuracy in measuring a construct, albeit a powerful and widely used one. Hence, other means for quantifying and qualifying validity were added to this study.

Nevertheless, due to general popularity of using EFA when testing construct validity, the technique was applied to investigate validity of the existing *I.D.*TM survey.

Exploratory Factor Analysis was conducted on the existing 128-item *I.D.*TM survey to explore its construct validity. Communalities on the unrotated solution ranged from 0.7 to 0.85, indicating that all items loaded significantly onto a common factor. A scree test indicated four sizeable factors (eigenvalues = 2.7 to 10.17) followed by ten others with eigenvalues over two. The first four factors only explained a total of 16 percent of the variance in *I.D.*TM survey scores. When rotated to oblique simple structure, the resultant correlations did not load cleanly in the solution in terms of the four *I.D. System*TM factors. The 14 extracted factors explained a total of 35 percent of the variance in *I.D.*TM survey responses.

Factors should be defined and interpreted by at least three items with loadings over 0.3. Only five of the extracted factors fulfilled this criterion when rounded to two decimal places. First, for Factor 1, 47 items had a loading of 0.3 or higher. Twenty-three of these items were from the 'Improvise' drive, 14 were from 'Complete' drive, while three were from the 'Authenticate' drive and seven from the 'Verify' drive. Within this factor, the 'Improvise' items had negative loadings and were negatively related to the 'Complete', 'Verify' and 'Authenticate' items. As such, due to the predominance of 'Complete' and 'Improvise' items, this factor could be interpreted as measuring a drive towards 'Complete' and away from 'Improvise'.

Factor 2 had 11 items with loadings of 0.3 or above. These include four ‘Verify’ items with positive loadings, two negatively loaded ‘Improvise’ items, two negatively loaded ‘Complete’ items and three negative ‘Authenticate’ items. This factor may be interpreted as a drive towards ‘Verify’ and away from ‘Improvise / Complete / Authenticate’.

With four items, Factor 3 could be defined as the drive to ‘Authenticate’ and away from ‘Improvise / Complete / Verify’. Factor 6 had one negative loading from a drive towards ‘Improvise’ items, and three ‘Authenticate’ items with positive loadings. This factor may be interpreted as being a drive towards ‘Authenticate’ and away from ‘Improvise’. Conversely, Factor 8 could be interpreted as being the drive towards ‘Verify’ and away from ‘Authenticate’ due to the loading patterns of the four salient items. Hence, EFA was problematic and cannot confirm construct validity across the four factors. However, further statistical analyses to confirm validity are being conducted and may yield different results.

4.1.6 Theoretical Issues and Explanations

These results suggest that the existing *I.D.*TM survey is multidimensional. However, the underlying four-factor theory of instinctive drives purported by *Link-up! International* was not upheld in exploratory analyses. A large proportion of the variance in the scores for the present sample is explained by alternative factors, and items did not load cleanly onto the drive towards or away from ‘Verify’, ‘Authenticate’, ‘Complete’ and ‘Improvise’. As such, and as expected, there is limited support for the factorial or construct validity of the survey via the factor-analytic method.

4.2 Validation of the Refined *I.D.*TM Survey

Following an investigation of the reliability and validity of the existing *I.D.*TM survey, the reliability and validity of the refined version was then examined.

4.2.1 Research Participants

A total of 344 responses to the refined *I.D.*TM survey were used in the second phase of the quantitative data analysis. Listwise deletion of five cases with missing data reduced the number of valid responses from 349. Of the responses that were utilised, 59.4 percent were completed by males, 37.7 percent were completed by females, and the gender of 2.9 percent was not recorded. The average age of respondents was 37 years (range: 16 – 75 years, SD = 10.4). Research participants consisted of employees from a broad range of industries in both the private and public sectors who volunteered their data for use in the study. Approximately 70 percent of respondents recorded details of their position. While most were in a managerial (36 percent) or professional role (21 percent), others labelled themselves as an employee or staff member (12 percent), or were in an alternative position (1 percent). These participants completed the refined *I.D.*TM survey as part of an organisational or team development exercise.

4.2.2 Analytical Process

Akin to the analytical process that was utilised to validate the existing *I.D.*TM survey, the validation of the refined *I.D.*TM survey involved a variety of statistical procedures. Variables were screened, alpha reliability was calculated and exploratory factor analysis was performed using principle components and oblimin rotation.

4.2.3 Descriptive Analysis

The means, ranges and standard deviations for each instinct subscale of the test are presented in Table 4.3. Overall, scores were close to the scale mid-point of 2.5 for the refined version of the *I.D.*TM survey. Mean scores for the ‘Verify’ and ‘Improvise’ scales were slightly higher for the refined version, relative to the existing survey. This can be explained by the rewording of items, as well as a variance in sample size and composition.

Table 4.3: Means and Standard Deviations of each Drive across both Samples

| Variable | Sample Number | Mean ^a | SD |
|--------------------|---------------|-------------------|------|
| Verify drive | 344 | 2.36 | 0.28 |
| Authenticate drive | 344 | 2.38 | 0.21 |
| Complete drive | 344 | 2.41 | 0.32 |
| Improvise drive | 344 | 2.62 | 0.39 |

^a Higher scores indicate higher drive levels for each instinct; range = 1 – 4; significant differences between mean scores on the existing and refined surveys at * $p < 0.05$

An ANOVA revealed two significant differences in mean drives across males and females, with males once again scoring higher on the ‘Authenticate’ drive ($F(1, 332) = 6.25, p < 0.05$), and females scoring higher on the ‘Improvise’ drive ($F(1, 332) = 4.54, p < 0.05$). Levene’s test indicated no significant difference in the homogeneity of the groups ($p = 0.06 - p = 0.26$). Consequently, a consistent pattern of gender differences was evidenced in the validation of both the existing and refined surveys with two different samples and two versions of the *I.D.*TM survey. Consequently, it can be stated with confidence that, as a group, males are driven more to ‘Authenticate’, while females are driven more to ‘Improvise’. However, it must be noted that formulating generalisations about gender differences is somewhat precarious due to wide-spread individual differences.

4.2.4 Reliability

Reliability results, which are displayed in Table 4.4, indicate that the internal consistency of each of the subscales was again at or above the recommended value of 0.7. This suggests that the refined version of the *I.D.*TM survey yields reliable scores across each instinct and yet again, the measurement meets an important psychometric requirement (R. R. Kline, 2005).

Table 4.4: Refined *I.D.*TM Survey Internal Reliability Results

| Variable | Sample Number | α |
|--------------------|---------------|----------|
| Verify drive | 344 | 0.72 |
| Authenticate drive | 344 | 0.71 |
| Complete drive | 344 | 0.73 |
| Improvise drive | 344 | 0.76 |

4.2.5 Factor Analysis

The validation of the existing *I.D.*TM survey discussed problems associated with using EFA with four-point ordinal data. It also summarised the way in which factor analytic methods cannot account for the post hoc scoring adjustment of raw *I.D.*TM survey scores. However, the analysis was performed on the refined version of the *I.D.*TM survey as a point of comparison with the existing version. A scree test showed three sizeable factors (eigenvalues = 3.4 to 7.7) followed by 11 others with eigenvalues over two. The first three factors explained a total of 13 percent of the variance in *I.D.*TM survey scores. When rotated to oblique simple structure, the resultant correlations again did not load cleanly in the solution in terms of the four *I.D.*TM survey factors. The 14 extracted factors explained a total of 36 percent of the variance in *I.D.*TM survey responses, which was similar to the results found for the existing version of the survey.

Five of the extracted factors had at least three items with loadings over 0.3. First, for Factor 1, 19 items had a loading of 0.3 or higher. Twelve of these items had negative loadings and were from the 'Improvise' drive, while six items had negative values and were from the 'Verify' and 'Complete' drives. This factor had a similar pattern to the main factor obtained within the validation of the existing *I.D.*TM survey. That is, the 'Improvise' items were negatively related to the 'Complete' and 'Authenticate' items. As such, due to the predominance of negative improvise items, this factor could be interpreted as measuring a drive to 'Avoid Improvise'.

Factor 2 had 11 items with loadings of 0.3 or above, with a mixture of 'Verify', 'Complete' and 'Authenticate' items. The pattern of positive and negative loadings suggested that this factor may be interpreted as a drive to 'Verify and Avoid Complete / Authenticate'.

With eight items, Factor 3 could be defined as the drive to 'Verify and Avoid Improve'. Factor 4 had three items with negative loadings from 'Improvise', and six 'Verify' and 'Complete' items with positive items. This factor may be interpreted as being a drive to 'Verify / Complete and Avoid Improvise'. Factor 5 could be interpreted as being the drive to 'Authenticate and Avoid Verify' due to the loading patterns of the seven items.

The fundamental four-factor theory of instinctive drives maintained by *Link-up! International* was not upheld. Again, these results should be interpreted in light of the aforementioned limitations, including the use of EFA with ordinal data and the neglect of the scoring algorithm within the raw scores. For a second time, it is recommended that complementary methods of construct validity assessment are used instead of focusing too much attention on these factor analytic results.

4.3 Test-Retest Reliability of the Refined *I.D.*TM Survey

Having established the internal consistency of the refined *I.D.*TM survey, additional statistical techniques were performed to determine its test-retest reliability.

4.3.1 Research Participants

A total of 64 participants from a range of organisations completed the refined *I.D.*TM survey at two different time intervals, responses for which were matched using obtained personal data. No cases had missing data. Of these research participants, 57.8 percent were male and 42.2 percent were female, with an average age of 37 years (range: 21 – 58 years, SD = 9.3). With regard to professional position, 20.3 percent of the research participants were professionals, 54.7 percent were managers, 7.8 percent were staff or employees, 1.6 percent were students and 15.6 percent did not record their position.

4.3.2 Analytical Process

The variables were once more screened for normality and outliers. Following this, test-retest reliability was calculated via the Intra-Class Correlation (ICC) coefficient. Some researchers implement Pearson's correlations between time one and time two measures for test-retest reliability. However, this approach is likely to be erroneous as Pearson's is an inter-group calculation rather than an intra-group estimate (McGraw & Wong, 1996). T-tests were then performed to determine differences between *I.D.*TM survey responses at time one and time two. Frequencies of change from time one to time two were then calculated for each drive.

4.3.3 Findings

Table 4.6 displays descriptive statistics, test-retest reliability results (ICCs) and time one to time two mean differences (T). Figure 4.1 illustrates these scores for ease of interpretation.

Table 4.6: Test-Retest Results

| | Mean ^a | SD | Mean ^a | SD | ICC ^b | T Value |
|--------------------|----------------------|------|------------------------|------|------------------|-------------------|
| | <i>Test (time 1)</i> | | <i>Retest (time 2)</i> | | | |
| Verify drive | 1.92 | 1.29 | 2.02 | 1.69 | 0.75** | -0.61 p > 0.05 |
| Authenticate drive | 2.75 | 1.13 | 2.93 | 1.15 | 0.69** | -1.06 p > 0.05 |
| Complete drive | 3.45 | 1.43 | 3.21 | 1.34 | 0.72** | 1.4 p > 0.05 |
| Improvise drive | 2.85 | 1.12 | 2.96 | 1.50 | 0.70** | -1.15 p > 0.05 |

^a Scale range 1 – 4 for each drive, higher scores indicate higher levels of each variable

^b ICC between test and retest significant at **p < 0.01

All ICC test-retest results were highly significant, ranging from 0.69 to 0.75, $p < 0.01$. Additionally, the T-values in Table 4.6 and the graph depicted in Figure 4.1 indicate no significant differences between the mean scores, with all p values > 0.05. These results support the conclusion that there was no statistically significant difference between the test and the retest, and that the scores from the two test administrations were very similar.

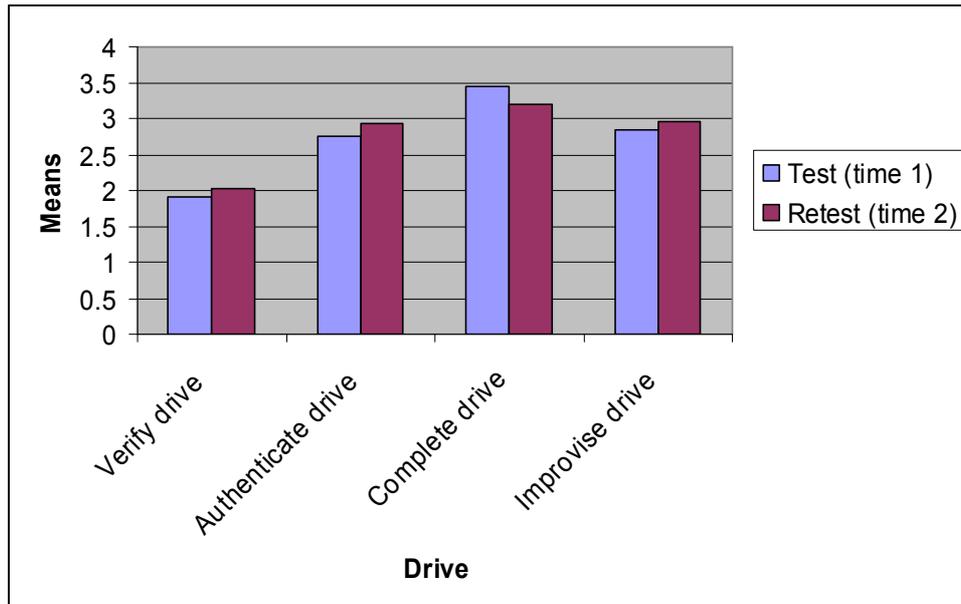


Figure 4.1: A Graph of Mean Test-Retest Scores

ICC test-retest coefficients of 0.70 or greater are usually considered evidence of very high stability over time (Fraenkel & Wallen, 1990). At the very least, it can be argued that the refined *I.D.*TM survey demonstrates good stability. The different lengths of time between the test and retest for the research participants (a range of six weeks to 10 months) were partly responsible for the borderline result for the ‘Authenticate’ drive (0.69). The majority of assessments of test-retest reliability utilise an equal timeframe of much shorter latency between administrations of the instrument (Fraenkel & Wallen, 1990). The test-retest results can be perceived as very solid considering this methodological limitation.

Frequencies were also calculated to examine the percentage of research participants who changed more than one, two or three points on each drive (from a total of eight) over their test-retest period. These were calculated using modified scores from eight. For example, the frequencies calculated if the ‘Verify’ score for one individual decreased from a seven at test time to a five or four at retest time.

Table 4.7: Frequency of Change Analysis (%)

| Drive | No Change | Change of 1 Point | Change of 2 Points | Change of 3 Points |
|--------------------|-----------|-------------------|--------------------|--------------------|
| Verify drive | 32.1 | 36.2 | 21.2 | 10.5 |
| Authenticate drive | 25.2 | 42.7 | 20.0 | 12.1 |
| Complete drive | 29.9 | 48.2 | 12.2 | 9.7 |
| Improvise drive | 35.6 | 37.5 | 18.8 | 8.1 |

In actuality, an individual would have to change more than two points to change direction of type. Overall, it was most common for scores to change by one point or less upon retest. Scores were again shown to be consistent across the vast majority of research participants. There were profiles that changed by three points or more, yet this pattern was evidenced in less than 13 percent of cases for each drive.

Consequently, in over 87 percent of cases, the direction of each drive remained the same. This figure compares very favourably with other assessments, such as the MBTI (Myers & McCaulley, 1985), which is prone to instability. For example, McCarley and Carskadon (1983) found that only 46 percent of people maintained their direction of type when completing the MBTI. Despite the apparent stability of the *I.D.*TM profile, *Link-up! International* concedes that some individuals will have variable instinctive drives upon test-retest (Burgess, 2003a). This may be due to a number of factors, such as a familiarity with the scale or paradigm, or a change in lifestyle or attitude that has brought the individual into or out of stride with his/her innate qualities.

4.3.3.1 Comparisons with other Psychometric Tools

It was not the purpose of the present report to compare the *I.D.*TM survey with well-known psychometric tools. However, a consideration of this survey in relation to the MBTI (Myers & McCaulley, 1985) and the DiSC® system (Mills & Associates, 2005) portrays a favourable picture of the *I.D. System*TM.

*The I.D.*TM Survey

Research into the *I.D.*TM survey revealed Alpha coefficients ranging from 0.71 to 0.76 with a median of 0.72. These reliabilities however, are based on the use of the continuous preference scores from the instrument. One might argue that such analyses are contrary to the ordinal nature of the system's four-point scale. However, as Byrne (2001) notes, when the number of the ordinal categories is sufficiently large, the failure to address the ordinality of the data is negligible. Bentler and Chou (1987) have further argued that with categorical variables, such as the four drives, "continuous methods can be used with little worry when a variable has four or more categories" (p. 88). Similar to the MBTI (Myers & McCaulley, 1985), there are 16 possible "combinations" of likely *I.D.*TM profiles. However, unlike the underlying theory of the MBTI, the *I.D. System*TM was not designed to sort individuals into "types". While assigning continuous scores to MBTI profiles may be incongruent with the presupposed philosophy behind the instrument (Lanning, nd), arguably the same cannot be said for the *I.D.*TM survey.

Test-retest reliability shows that after a two-week to 12-month interval, the percentage of participants reporting either identical scores, or scores with a one point difference from their original results, ranged from 68 percent to 78 percent, with an average of 65 percent. Alpha coefficients ranged from 0.69 to 0.75 over the same period. The majority of assessments of test-retest reliability utilise an equal timeframe of much shorter latency between administrations of the instrument (Fraenkel & Wallen, 1990). The test-retest results can therefore be perceived as very satisfactory considering this methodological limitation. In all, the evidence suggests that the *I.D.*TM survey is internally consistent.

Factor analytic evidence concerning the construct validity of the *I.D.*TM survey was found to be ambiguous. However, it was largely distinct from the NEO PI-R (Costa & McCrae, 1985) personality test, supporting the discriminant validity of the instrument. Preliminary quantitative studies indicated that at least one of the drives was related to important outcomes, such as general health and leadership. Qualitative studies also

strongly supported the predictive validity of the scale. However, scientific validity research into the *I.D.*TM survey is in its infancy, and further research is clearly needed in this domain.

The MBTI

Research to investigate the reliability of the MBTI (Myers & McCaulley, 1985) reveals Alpha coefficients ranging from 0.57 to 0.85, with a median of 0.77 (Hess, nd). Most of these reliabilities however, are based on the use of the continuous preference scores from the instrument. Such analyses are contrary to the theory underlying the MBTI; the instrument is designed to sort individuals into types rather than to assign continuous scores to them (Lanning, nd).

Test-retest reliability indicates that the percentage of participants reporting identical four preferences after a four-week interval range from 55 percent to 80 percent, with an average of 65 percent.

Numerous validity studies correlate MBTI (Myers & McCaulley, 1985) continuous scores with other instruments, such as the California Psychological Inventory (CPITM) (Gough, nd). Factor Analysis reportedly fitted the predicted four factors. However, little if any empirical research is reported in mainstream psychology journals and it may be concluded that statistical analyses on the validity of the instrument have not been scientifically scrutinised. Additionally, FA uses continuous scores, which is contrary to the theory underlying the instrument; these results should therefore be interpreted with caution.

In conclusion, on a continuous scale, the MBTI (Myers & McCaulley, 1985) appears to be reliable and valid. Its authors however, continue to report studies that employ continuous scores as evidence of reliability and validity for the instrument; this is despite the fact that they continue to stress that the instrument was not designed to measure personality traits on a continuous scale. Hence, the statistical testing of the MBTI is unsound.

The DiSC®

Research to investigate the reliability of the DiSC® system (Mills & Associates, 2005) suggests Alpha coefficients ranging from 0.70 to 0.93 for the four subscales and the scales in between. No reliability data are provided in test-retest form. Similarly, no empirical studies providing evidence of predictive validity are reported, possibly because raw data are not available. Also absent is evidence of concurrent validity data with other measures of interpersonal behaviour, communication style, and personality. Furthermore, the technical manual and professional literature contain studies providing evidence that supports the convergent, divergent, or criterion-related validity.

In summary, the DiSC® system (Mills & Associates, 2005) suffers from incomplete reliability testing and has unknown validity.

Overall, relative to well-known psychometric tool, the refined *I.D.*TM survey demonstrates both statistical and practical consistency. This is aptly demonstrated in

Table 4.8. This conclusion was reached after employing test-retest ICCs, T-tests of mean differences, and frequency analysis with the refined *I.D.*TM survey.

Table 4.8: Comparisons of the Refined *I.D.*TM Survey with other Psychometric Tools

| | Refined <i>I.D.</i> TM Survey | MBTI | DiSC |
|-------------------------|--|--|------------------------------------|
| Alpha coefficients | 0.71 - 0.76 Median 0.72 | 0.57 - 0.85 Median 0.77 | 0.70 - 0.93 Median not reported |
| Test-retest reliability | 2 weeks – 12 months 68% -78% Mean 65% | 4 weeks 55% -80% Mean 65% | Not reported |
| Validity | FA ambiguous Discriminant from NEO PI-R Strong qualitative predictive validity | FA flawed No qualitative predictive validity reported | Not reported |

4.4 *Instinctive Drives*TM, *Personality, Leadership and Health*

Following an examination of the test-retest reliability of the refined *I.D.*TM survey, additional statistical techniques were performed to explore the relationship between the four instinctive drives measured by this version and:

1. The *big five* personality factors – namely, openness to experience, neuroticism, extraversion, agreeableness and conscientiousness;
2. Leadership style; Transformational, transactional and passive / avoidant behaviour; and
3. General health.

Essentially, this quantitative analysis was designed to investigate the possible predictive and discriminate validity of the refined *I.D.*TM survey. That is, the study explored factors that the refined *I.D.*TM survey may or may not be related to.

4.4.1 Research Participants

A total of 30 research participants completed the refined *I.D.*TM survey as well as the NEO PI-R, the MLQ and the GHQ12. Four cases had missing data. One of the cases was deleted due to the large number of missing responses. Due to the small sample size it was decided that the other three cases with less than 5 % of the questions unanswered would not be deleted. Instead, missing responses were replaced by a

mean score for that particular item. This procedure is often implemented where researchers need to retain subjects for an adequate sample size (Holmes-Smith, Coote, & Cunningham, 2004). This process resulted in 29 valid responses being used in the analysis with 12 males (41%), 15 females (52%) and 2 (7%) with no gender recorded. The average age of participants was 43 years (SD14.6, range=24-75 years). While some were employees and clients of *Link-up! International*, others were UWS students or interested associates.

4.4.2 Analytical Process

Data was again tested for normality and outliers. Following this, relationships between variables under investigation were explored via correlations.

4.4.3 The *I.D.*TM System and Personality

Correlations were conducted to test the relationship between the refined *I.D.*TM survey and personality, as measured by the NEO PI-R. Table 4.9 reveals the results from this analysis.

Table 4.9: Correlations between the Refined *I.D.*TM Survey and the Big Five Personality Factors (NEO PI-R)

| | Verify Drive | Authenticate Drive | Complete Drive | Improvise Drive |
|-------------------|--------------|--------------------|----------------|-----------------|
| Neuroticism | 0.05 | -0.11 | 0.21 | -0.24 |
| Extraversion | -0.27 | 0.16 | -0.13 | 0.14 |
| Openness | -0.64** | -0.62** | -0.54** | 0.62** |
| Agreeableness | 0.20 | -0.16 | -0.06 | -0.06 |
| Conscientiousness | 0.13 | -0.13 | -0.10 | 0.10 |

** Significant at $p < 0.01$

The refined *I.D.*TM survey was discriminate from four of the big five personality factors as measured by the NEO PI-R. This suggests that the scale add value to the relevant literature. For the most part, it measures something different than the NEO PI-R, meaning that it is tapping into more than just a person's personality.

Following a close inspection of the *openness to experience* (OE) scale and the refined *I.D.*TM survey, and a consideration of relevant literature, a shared relationship between the two scales is to be expected. The OE scale items in the NEO PI-R appear to denote conative items that have conceptual overlap with the four instinctive drives. For instance, the NEO PI-R item, "I often enjoy playing with theories and abstract ideas" could relate positively to the drive to 'Improvise', and could negatively relate to the drive to 'Verify'. Previous studies have found a relationship between at least one aspect of personality, as measured by the MBTI (Myers & McCaulley, 1985) and a conative index (Kolbe, 2005). This is likely to be due to some small overlap between personality and instinct. This relationship is also consistent with the taxonomy of volitional drive positioning as described in the literature review in this report (Snow & Jackson, 1993).

In summary, it was found that the refined *I.D.*TM survey is largely unrelated to personality, yet there was an understandable overlap with openness to experience. The

former finding supports the discriminant validity of the scale, while the latter provides backing for its predictive validity. However, firm conclusions should be made with caution due to the small size and convenient nature of the sample. Indeed, there are significant opportunities for further research into this area.

4.4.4 The *I.D.*TM System and Leadership Style

Correlations were conducted to test the relationship between the refined *I.D.*TM survey and transformational-transactional leadership, as measured by the MLQ. Table 4.10 indicates the results from this analysis.

Table 4.10: Correlations between the Refined *I.D.*TM Survey and Leadership Style (MLQ)

| | Verify Drive | Authenticate Drive | Complete Drive | Improvise Drive |
|-----------------------------------|--------------|--------------------|----------------|-----------------|
| Transformational leadership | -0.32 | 0.15 | -0.01 | 0.14 |
| Transactional leadership: | | | | |
| Contingent reward | -0.26 | 0.36* | -0.24 | 0.29 |
| Transactional leadership: | | | | |
| Management by exception (passive) | 0.20 | -0.23 | 0.18 | -0.15 |
| Transactional leadership: | | | | |
| Management by exception (active) | 0.17 | -0.27 | 0.08 | -0.02 |

* Significant at $p < 0.05$

Fifteen of the 16 correlations were found to be non-significant, meaning that the refined *I.D.*TM survey scores were discriminant from self-ratings of leadership style. The one significant correlation was found between the drive to ‘Authenticate’ and the use of transactional-contingent reward leadership strategies. A leader who uses contingent reward is said to discuss, in specific terms, who is responsible for achieving performance targets. This leader typically provides assistance in exchange for good effort and expresses satisfaction when expectations are met. Although this is an exploratory study, this style of leadership may be more common in individuals with a drive to ‘Authenticate’. It corresponds with the notion of an authenticator’s need to clarify useful outcomes, and have congruency in what is perceived, executed and discussed.

4.4.5 The *I.D.*TM System and General Health

Correlations were conducted to test the relationship between the refined *I.D.*TM survey and general health measures, as assessed by the GHQ12. Table 4.11 indicates the results from this analysis.

Table 4.11: Correlations between the Refined *I.D.*TM Survey and General Health (GHQ12)

| n = 30 | Verify Drive | Authenticate Drive | Complete Drive | Improvise Drive |
|--------------------|---------------------|---------------------------|-----------------------|------------------------|
| GHQ12 ^a | 0.03 | 0.41* | 0.03 | 0.30 |

* Significant at $p < 0.05$

^a Higher scores indicate reduced health

For this sample, GHQ12 scores were unrelated to the ‘Verify’, ‘Complete’ and ‘Improvise’ drives. However, in this study with limited research participants ($n=30$), a higher drive to ‘Authenticate’ was significantly related to higher levels of reported health issues, such as sleep disorder and stress. It could be that the need for congruence causes trait stress that may consequently affect mood and sleep. However, the relationship between the drive toward ‘Authenticate’ and the experience of reduced health is not consistent with anecdotal evidence provided by *Link-up! International*. Yet, this result lends itself to further exploration of the relationship between the refined *I.D.*TM survey and potentially important health outcomes.

5 The Qualitative Phase

The explicit aim of the qualitative phase of the project was to explore the inherent value of the existing *I.D. System*TM. Findings from this analytical process are presented in the subsequent sections.

5.1 Research Participants

The research team interviewed 20 research participants (14 females and 6 males) from seven different companies; while some of these firms were large, others were small to medium enterprises. The average age of the research participants was 35 years. Ten participants assumed a director or management position, while the remaining were general employees of the company they were affiliated with. Length of service ranged between one and 12 years.

Of the 20 research participants, 11 were employed by firms that were actively using the *I.D. System*TM. The remaining nine worked at companies that had used the system in the past and no longer actively engaged with *Link-up! International*. Ten research participants were able to recite their *I.D.*TM profile numbers; however, some of those who could not remember their profile numbers remembered their main drives.

5.2 Findings

5.2.1 Reasons for Using the *I.D.*TM System

Despite the varied responses offered by the research participants, the research material suggests that they collectively utilised the *I.D. System*TM to ensure the achievement of organisational aims. That is, there was an expressed need to circumvent those issues that may thwart the achievement of these aims. This was demonstrated in numerous ways. As the following excerpts suggest, some research participants were hoping to enhance professional relationships, not only with co-workers, but also with clients:

“We wanted to improve team dynamics... Conflict; that particular one was the thing we were most looking to the *I.D.*TM to help us”;

“We have to please these clients.”

It was therefore believed to offer an effective tool to enhance professional interaction at several levels:

“That’s what it was about. It was to get two-way communication”;

“So they’ll work more comfortably together... that’s how *we* use it.”

Notably, the *I.D. System*TM was thought to explicitly demonstrate organisational interest in personnel. To ensure that staff members felt valued by senior management, some research participants considered the tool to be an important way to verify that organisational interest went beyond commercial ambitions:

“Even at the outset, it was a part of its goal to me, a facilitator of communication... And part of that of course, is people underneath thinking, ‘Yes, there is at least a level of interest in me and my needs and goals,’ as opposed to... the corporate goals... Give them the idea that this was a two-way process. That’s what I hoped would be achieved.”

The *I.D. System*TM was also recognised for its ability to identify individual traits and illuminate personal practices:

“I... decided to try it out as a tool for... team management and teambuilding, and also... from the interest factor of understanding people and what makes them work.”

Further to this, it was identified as a means of detecting problem idiosyncrasies and thus improving these, as appropriate. One research participant advised that he uses the tool to “to identify strengths and weaknesses.” In reference to fellow staff members, another research participant stated:

“We want to help them be successful in what they are doing... Any tool that’s going to help you do that more effectively and to help people to survive in their role for the long-term, not just survive and make it through, but actually enjoy it, is going to be a key.”

The potential value of the *I.D. System*TM, as perceived by the research participants, was apparent at various stages of employment. That is, it was of little consequence whether a staff member had recently *commenced* employment with the organisation, or was soon to *terminate* his/her role. One relatively new senior staff member, for example, was particularly interested to see if his professional practices were congruous to that of existing personnel. Given his unfamiliarity with the employment milieu, the research participant wanted to quickly understand his co-workers, which in turn would facilitate strong working alliances:

“The way I work towards a project goal is very different, which could put me [at] odds with the rest of the team.”

However, another organisation sought a tool that would help understand the drives of existing staff members for the purpose of placing them in “more effective” teams. The organisation was keen to ease the transition of existing personnel into appropriate

positions elsewhere. Senior staff members thus thought that the *I.D. System*TM might be of particular value in this situation.

Despite the various paths that led to the *I.D. System*TM, it appears that all of the organisations represented in this study were keen to reduce the negative impact of *organisational change*. This includes changes in personnel, employment practices, or group dynamics. Circumventing the negative impact of such change was thought to be of benefit, not only for personnel, but ultimately for the clients.

Interestingly, despite some interest in enhancing professional communication, the decision to utilise the *I.D. System*TM seldom involved both senior and junior personnel. It was typically a decision made by senior management in isolation from others.

The need to circumvent negative impact was often associated with a sense of *urgency*. A number of research participants advised that they needed a tool that would not be arduous or time-consuming, but could be used to identify and address key concerns in an expeditious manner:

“The best thing is that you do not have to worry about a year of weaning the honeymoon period, getting to know the person... This is a quick way of seeing where the new staff member fits and what makes them tick.”

This is quite an interesting find given the time typically required to understand professional practices and establish effective working alliances.

In summary, the reasons for using the *I.D. System*TM are various. In general, reasons for using the system surround a *need for improved interactions* between employees, as perceived by senior staff, by gaining a better understanding of individual differences to aid communication. This desire for better communication generally arises from a need to change organisational climate promptly.

5.2.2 What the *I.D.*TM System Offered

Collectively, the research participants spoke very favourably about the *I.D. System*TM. As will become apparent, the perceptions of the research participants were that it offered valuable insights and presented new opportunities for improving relations. A thorough analysis of the research material suggests that the key benefit offered by the system was *communication*. The catalytic effects of the *I.D. System*TM facilitated greater interaction between employees at all levels, and with clients.

5.2.2.1 Communication with Co-Workers

Most research participants advised that the *I.D. System*TM fostered intra-agency discourse. It became a point of discussion. Employees engaged in dialogue about their own professional practices:

“Some talked about [the *I.D.*TM report] quite enthusiastically... I don't think there was anybody in the group that said, 'No, that's not me'.”

This in turn, allowed staff members to gain insight about the professional practices of fellow co-workers:

“We were given charts... we have everyone's colours and we know everyone's number. We had a session where we chattered about it and worked in small groups.”

Interestingly, the *I.D. System*TM provided co-workers with a shared language to discuss and explore professional practice. When describing personal instincts, terms like, 'Verify', 'Authenticate', 'Complete' and 'Improvise' were used with common meaning. Consequently, communication channels were further expanded:

“I'm 'use complete, avoid improvise'. [My co-worker] is 'use improvise, avoid complete', and so are the CEO and the General Manager; we basically go bang! And so he thinks about what's happening on Sunday, and about eighteen months from now, I think about every other week in between.”

The research material suggests that *communication begets communication*. With improved interaction between employees, individuals became relatively more attuned to the communicative practices of fellow colleagues. One research participant attested:

“You noticed others also carrying out that improved communication... [One co-worker] tells 'I came in this morning; I thought I was 15 minutes late for a meeting.' She said, 'No, it's 8.30. Go into your office, regroup'... She's just gone... 'You need the time to regroup.' She's changing the way my diary works, giving me the breaks which I didn't fill up.”

The notion that communication generates further communication is affirmed by the suggestion that interaction between personnel needs to be *regular* and *recurring*. One instance of intense communication cannot be expected to benefit staff relations thereafter. A number of research participants recognised this and spoke of attempts to facilitate regular intra-agency communication, particularly when team dynamics were altered:

“[One co-worker] presented a workshop to go through people's *I.D.*TM, and how we can gel as [a] team. So we have those on a fairly regular basis, especially when we get our lot of new team members on board. We'll go

through it, try... to establish that there is no right or wrong in anyone's *I.D.*TM. It's how we work together as a team, you know. You always get, you know, this change issue; it's a bit of challenge."

According to the research participants, the *I.D. System*TM serves as a platform for improved communication. However, they also noted that this communication needs to be regular and continuous to maintain the desired level of interaction between employees.

5.2.2.2 Communication with Clients

Recognising the communicative benefits offered by the *I.D. System*TM, some of the research participants advised that the tool is now used to enhance client relations. To ensure that they understand and are aptly prepared to work with individual clients, some research participants request clients to complete the *I.D.*TM survey. Subsequent results provide them with informative depictions, which are then used to shape staff-client relations. The following excerpts allude to this:

"You sit down with a client in the old days and they ask all these questions, and I can give information, and give information, and give information [until] they're happy. But in the olden days, I didn't know why they need [the information]. I would have been offended... It helped me with my clients. I tailor the interview to what they need";

"We know a number of our client *I.D.*TMs, our key clients... knowing what their *I.D.*TM is... helped us deal with them more effectively, especially with communication... It's a great way of tapping into the client and really sort of [making sure]... you're giving what's important to them; otherwise it is a trial and error".

As the second passage suggests, the *I.D. System*TM also has potential as a valuable educative tool for those in the infancy of their professional careers. Some research participants expressed that knowing the *I.D.*TM profile of key clients had a positive effect on their competitive advantage over other companies.

5.2.2.3 Understanding of the Self

According to most research participants, the *I.D. System*TM offered greater self-understanding. For some, it served to affirm the perception they had developed of themselves:

"I think the vast majority of the people said, 'Yes, you've obviously been looking over my shoulder for the

last 40 odd years?... or however long they've been alive."

For others, it was a window providing a different vista of personal practice – in both the professional and personal domains:

"For me, it has helped me look at the process that I engage in when I'm working... [It helps in] evaluating my own work habits. For example, the *How to Manage...* file talks about how I like to be hands-on in everything, which I do";

"Why I get so frustrated with some people and other people I seem to get on with quite well";

"If I just run and don't listen to what other people are saying, I can really easily drop off into totally bizarre areas, and do crazy things."

Notably, the assessment tool was not always found to be correct in its appraisal. A few research participants expressed reservation about the way they were depicted in the context of the *I.D.*TM profile:

"There is one little thing that I thought, 'No, I don't necessarily agree with it'... [But] I didn't like, read it, thinking that I've got to believe everything it says about me... [It was] more about recognising myself in what it says."

This is quite a telling passage, for it suggests that the research participant approached the *I.D. System*TM with a degree of apprehension. She did not expect the tool to be completely accurate in its descriptions of her instinctive drives. Instead, she thought it might broaden the lens with which she views herself.

Another research participant also spoke of apprehension around the accuracy of the *I.D.*TM profile. However, this individual recognised that this might be consequent to denial, rather than flaws within the *I.D. System*TM:

"We've had the occasional people who thought, 'No, it's not me.' I think it is really them, but they're not wanting it to be that, because... when you go through it, 'This is what you are,' and some people might think, 'Well, I don't really want to be that way, even though I am inside.' So yeah, I've seen some resistance in that regard."

It appears that, in some individual cases, the *I.D.*TM profile can be quite confronting and can discourage active engagement with the system:

“I made a point of going through it and putting it away for quite awhile, because I don’t like to read everything and say, ‘That’s the truth about me’ and see what happens. Later I’ll look at it again.”

Nevertheless, a number of research participants appreciate the consistent way in which instinctive drives are reported. Uniform results offer predictability; they allow individuals to aptly prepare for particular situations and execute their responsibilities:

“I’ve come out in everything I’ve done fairly consistent. So you see the picture, formulate the plan, work the plan.”

Improving interactions between people often begins with *self-awareness*. The research participants clearly perceived the *I.D. System*TM to be of value when they wanted or needed to reflect on their own role and identity when interacting with others.

5.2.2.4 Understanding of Others

The research participants offered extensive examples of the insights they had gained of fellow co-workers, consequent to using the *I.D. System*TM. The employee profiles offered an informative picture, summarising individual idiosyncrasies in an instant:

“[It provides]... an understanding of the dynamics that make up the problem.”

The profiles however, offer far more than a mere numerical depiction of instinctive drives. Individual *I.D.*TM profiles are typically quite comprehensive and can serve like a point of direction. The profiles confer an understanding of other personnel, as well as guide effective professional practice:

“We all go through this *I.D. System*TM with him and tell him, ‘This is the way we’ll be approaching the delivery of work to you, and when you’re asking questions of the managers, you’ve got to be mindful of what their *I.D.*TM is as well’.”

Such information is of particular value in the workplace. It can help to ensure that personnel are well suited to their assigned role and that they understand the division of labour. It also allows for the prompt and successful completion of tasks. The following excerpt demonstrates this:

“This guy is a *6781*. So he’s a bit of a perfectionist to some extent, and doesn’t like change that much either.

So basically, when giving him a job, we've got to go through steps one to ten with him. Now, some of the other managers here are of the complete opposite *I.D.*TM to him. I know one particular manager... he's a person who will just throw the job at them, 'You sort it out'... There's all sorts of problems because the jobs are just done in accordance with how he would like it done. But it's not explained how he would like to get it done. So that's how we'll be managing his guy... And we even might try and align him with one of our other managers who's got a similar sort of *I.D.*TM."

It thus appears that the *I.D. System*TM offers a swift method of identifying the individual co-worker who may assist with task completion. Although perhaps an exploitative view, the tool appears to be valued by those who are pressed for time. As one research participant stated:

"I think that it's important that everyone understands each other, and so if I need someone to do something in a hurry, I look for a 'Completer'... I couldn't operate without everyone knowing their *I.D.*TM to be honest, and knowing each other's... [Especially] if you want a whole heap of particular things... done in a hurry. I have to think, 'I need this done. Will this person or that person do it better?' And on the balance of probabilities, the 'Completer' will do it better and so I give it to them."

To maximise mutual understanding among personnel, some organisations make the *I.D.*TM profiles of individual staff members readily available to all team members. The following statements demonstrate this:

"We've got them all up on a chart, and they're posted up in a couple of locations all round the place, so people can easily see what people's *I.D.*TMs are";

"It's up on the fridge down the back... both in terms of the do's and don'ts, so people can look at it, and use it."

As previously stated, it appears that *communication begets communication*. Increased understanding of fellow co-workers yields greater empathy toward them and a greater commitment to collegial goodwill. As one research participant noted, this is particularly the case among those in senior staff positions:

"In terms of interpersonal interactions, my experience to date has been that *I.D.*TMs actually have been helpful for us, because, if anything, we are probably easier on the people inside the organisation, than we might

otherwise be in a workplace. I might have people here that I would've slapped one or two warning letters on already, because of the nature of employment law. But it's a little bit different here, because we value having relationship capital as opposed to legal capital... We've been given strategies to improve [workplace] frustrations and so... it adds value to us we couldn't get elsewhere."

This interesting comment suggests that the *I.D. System*TM may have an important role in furthering social capital within an organisation. By enhancing empathy between staff, it helps to retain employees and thus minimise disruption to team dynamics.

The *I.D. System*TM may offer insight among employees. But according to one research participant, it fails to adequately resource individuals to work effectively with others:

"With most of the personality things, they help you understand yourself, but they don't necessarily equip you to work in a team environment well."

Another research participant affirmed this. He advised that improved understanding among co-workers is not, in itself, sufficient to generate professional harmony, for this requires commitment, as well as negotiation and communicative skills. Although improved understanding may help to justify particular behaviours, it does not necessarily guarantee greater collegial empathy, and may, in fact, yield conflict:

"[With my co-worker], he is inadvertently driving me up the wall!... I'm talking about X, Y and Z, and the 'User verify' person will tell me why it's not going to happen, because they see the problems, because they need a problem to solve. Then I'm like, 'Oh, talking about raining on the parade!' It's driving me nuts. Constantly being told what the problems are. It's just deflating, and especially deflating for the 'Use improviser', because they need a lot of energy..."

We got a 'User verify, user authenticate' drive. It's very frustrating; just feels like you have to explain yourself, justify it, come up with the reasons why.

It's really painful sometimes... feeling guilty that the person kept on complaining about how much work they had, but kept on taking more on."

These revealing statements highlight the importance of ongoing skill development among personnel. Although staff may understand the idiosyncrasies of co-workers, they also require the dexterity to engage in appropriate communication that will facilitate workplace relations, and, consequently, task completion.

Staff Recruitment Practices

Link-up! International is quite explicit about the limited role of the *I.D. System*TM in staff recruitment practices and discourages such endeavours. The firm maintains that the tool should not be used to limit employment, but rather to enhance team efforts.

Despite this, some of the research participants spoke openly of the way the *I.D. System*TM is used to understand and appoint employees during staff recruitment practices. This is aptly described in the following quotation:

“When we are looking for staff, if I think I’ve got a hole in the team, I might particularly look for someone who is higher on ‘Complete’. So when we shortlist the choice... if I’ve got three people who are equal, and I’m looking for someone high on ‘Complete,’ the person higher on ‘Complete’ will probably get the job...

We generally do get them all to fill out the questionnaire, and then the ones we like, we send off and the others we throw away. But it just depends on how many applicants we’ve got. But when I get down to between four and six, I always do an *I.D.*TM... If I’m looking for a specific thing, then I use *I.D.*TM to help me make a final decision.”

According to some research participants, the use of the *I.D. System*TM during staff recruitment practices is justifiable. To reduce staff turnover, successful candidates must be well suited to the specifications of their assigned role. Furthermore, given the potential effect of one individual on team dynamics, according to the research participants, it is important to ensure compatibility between new and existing personnel, and thus minimise disruption to workplace relations:

“From an administrative point of view, we use it to cull our people because of the role that we want them to play just doesn’t naturally suit their *I.D.*TM... if we wanted them to be a production accountant, then we are looking for someone with a fairly strong ‘Verify’ drive, and somebody with a fairly strong ‘Complete’ drive... But if we are looking for somebody that we want to put in front of clients and to build the client-base, then we are looking for somebody with more of an ‘Innovative’ drive”;

“We’re just recruiting two people at the moment, and we’ve got their *I.D.*TMs here... It’s just one part [of] many parts to employing somebody... Don’t be 100 percent reliant upon it... I think that once you employ somebody, the dynamics of the team change. Just one other person with a slightly different *I.D.*TM can change the dynamics of the team quite dramatically.”

The potential value of the *I.D. System*TM during staff recruitment was also recognised by some of those who had *not* used the system in this way. Albeit cautiously, they acknowledged the potential cost-saving benefit afforded by the system, particularly when individuals are inappropriately appointed:

“I’ve been tempted, but I haven’t done it... I don’t think it’s a bad idea... [But] I think there’s a lot of other factors that you’ll work on to determine whether they fit in or not, or going to fit in.”

However, it appears that not all would agree with the use of the *I.D. System*TM in this way. As the following excerpt suggests, research participants suggested that those vying to secure employment may attempt to deceive employers by responding to the *I.D.*TM tool fallaciously:

“I worried when an applicant asked, ‘Are you going to use this as a way of recruiting me?’ And I said, ‘No, it’s just a jigsaw puzzle,’ and I know the person who asked that question ended up being a flat-line cause he was thinking, ‘How do you want me to answer this question?’”

This comment demonstrates the perceived risk of using the *I.D. System*TM ineffectively, particularly with those who have limited familiarity with its potential value. *Link-up! International* maintains that the *I.D. System*TM is not designed as a recruitment tool. Yet, it appears that some individual company managers choose to use it to align their staff to achieve organisational goals. Simultaneously, some of these managers are cautious with its use for recruitment purposes; this is particularly the case for those who have professional experience in human resources. They are generally opposed to using the *I.D. System*TM in this way, citing professional ethics and discriminatory practices as key reasons.

5.2.2.5 Opportunities for Personal Development

As stated, the *I.D. System*TM was often the catalyst for improved communication – not only between staff members, but also with clients. However, communication did not simply occur for communication’s sake. Most of the research participants recognised the potential value of the *I.D. System*TM as a tool to initiate *personal change*. As one research participant explained:

“From an individual perspective... it’s knowing my strengths and weaknesses and trying to play to the strengths and work on my weaknesses.”

Recollecting the way she experienced personal development, another research participant alluded to a process of meaningful reflection. She deliberated on her professional practices and considered appropriate courses for action:

“I didn’t go out and go, ‘Okay, I need to do this.’ I think I watched how I operated over a period of time and I’ve gone, ‘Okay, this is where I need to adapt the way I operate to be more effective long term.’”

Through enhanced insight of self and others, personnel were able to further working alliances. This in turn, advanced the organisation as a whole. As exemplified in the following passage, individuals became better able to identify *and* implement ways to improve workplace practices:

“The most important thing in an organisation [is] communication, and it seems to me, in my experience, that communication problems come up more frequently [between] an ‘Authenticator’ and ‘Non-authenticators’... and they cannot resolve it because they don’t know what to do about it!...

I find I have a lot of problems with ‘Authenticators’. They all seem just so straight. But whatever they say, I’m hearing something else. [My partner] often describes it as if he’s speaking Chinese, and I’m speaking Swedish and we both call it English. And that [mis]communication in an organisation can slow things down and so many problems... To me, that’s one of the great strengths of the *I.D.*TM, because I know that when I say something... I know exactly what I mean... and the ‘Authenticator’ may hear something different... So I make sure that I ask that the person just confirm what I’ve asked them to do. And similarly, if someone says something and I’m not clear on what they mean, I’ll go actually ask them.”

Another research participant also stated that diversity in *I.D.*TM profile may explain some communication difficulties within the workplace. In turn, this awareness may enhance understanding between organisational members and improve relations:

“That’s one of the greatest pluses for *I.D.*TM in an organisation, in that you can actually get around communication problems... [Most people cannot] honestly admit, ‘Look mate, I don’t know what you’re asking me. What do you want me to do? Why do you want to do that?’ [The *I.D.*TM is] just so fantastic. We are just not brought up to do that because we assume that if someone is speaking English, then we should be able to understand what they say.”

This research participant offers valuable insight into the catalytic potential of the *I.D. System*TM to initiate personal development within the workplace. The passages above

acknowledge and confirm the potential of the *I.D. System*TM to help understand self and others, and, as such, improve communication within a team and an organisation.

5.2.2.6 Opportunities for Team Improvement

According to a number of research participants, enhanced communication typically aided team development. A research participant explained:

“The communication issue is the number one issue. If you can get that going... then, I think you’ve got a good team.”

Consequent to the greater insights individual team members had of themselves and of each other, they seemed to work more collaboratively, and more effectively. Using the *I.D. System*TM, they became better able to identify those attributes or strategies that would facilitate the attainment of organisational goals. The following excerpts suggest this:

“It’s really helpful when working out how I can be working with him more effectively; but he also knows, as my boss, how to get the best out of me. So, it has worked for both. Doesn’t mean it works all the time, but certainly, it has been a very effective tool for us”;

“That’s helpful with the ‘Use verify, use authenticate’ drive; I’m a lot more frank without being rude, because she can handle it.”

Some research participants commented on how improved interpersonal relationships help strengthen working partnerships. This may be due to greater congruence between individual goals and team goals:

“It helps me to align myself with my team.”

In addition, opportunities for team improvements were expressed as a result of improved understanding and communication within the team. In almost all cases, research participants commented on behavioural change within the team, consequent to the use of the *I.D. System*TM; and as a result of behavioural change, interaction between team members is more effective. In particular, there is a clear beneficial effect reciprocated between team members and their leaders, consequent to the *I.D. System*TM. One leader commented on the comfort his staff members receive from understanding his instinctive drives:

“The joke around the office is, ‘Just say it in five words and get out of the office and he’ll sort it out,’ and all those staff have taken that onboard, you know. ‘Don’t sit there and tell me the details. Just tell me the bottom-line.’... Of course, we have our moments, but they feel

comfort in... the fact that, just because I don't want to know the details, doesn't mean that I'm not interested. It means that's the way I am."

Team members appeared to have a better understanding of the most effective way(s) to work with their leaders. This in turn, facilitated greater acknowledgement of individual requirements for improved performance. Commenting on his team leader, one research participant stated:

"She exercises a leadership role [and] needs lots of information, lots of reassurance and [we] just feed back to her on a more regular basis. The guys have started to do that."

Further to this, team members recognised the importance of *I.D.*TM profile diversity within the team to enhance collective performance. Although there was often an appreciation for individual difference *prior* to completing the *I.D.*TM profile, this was not necessarily well understood. The *I.D. System*TM provided opportunity to reflect upon the self and others in an effort to create better interactions. Self-reflection was particularly important; consideration of one's own role when working with others reinforced feelings of self-worth within the team context. As one research participant commented:

"[We found it] was actually essential for the team to have someone like me who is 'Verify authenticate' to operate effectively. That sort of person actually is an essential part of a team."

Research participants also commented on the need to achieve balance among the diverse individual *I.D.*TM profiles. Such balance helps team members understand individual effects on working relationships:

"We looked at the balance, different kinds of ideas, why some working relationships were or weren't working."

As a result of balance within a team, team members began to understand the reasons for interactional difficulties, and the most appropriate way to overcome the difficulties:

"Working out that maybe we didn't have the right person. [For example] if they are in a job that really requires them to complete things for me, and they were an 'Improvise' person, they were never going to finish things. Whatever it is, we could see why maybe we were having problems there and adapt the role or shift the person to a role that [is] more effective."

Research participants also commented on greater tolerance toward some team members, consequent to the *I.D. System*TM. This indicates that, when team members communicate, understanding each other's drives and requirements to achieve optimal performance are essential elements to ensure *team performance*. As one research participant stated:

"I have gained an increased tolerance and perhaps appreciation for the distinct skills and abilities each individual contributes to the team."

In contrast, it was noted that increased tolerance of individual instinctive drives can initiate greater clemency. The *I.D. System*TM may be used to *excuse*, rather than rationalise, individual performance within a team:

"It maybe a weakness [if] you know what somebody's *I.D.*TM is... You become tolerant of them... [and] you can maybe tolerate too much, yeah. And that's why you've got to have good and open communication about the whole process. So take responsibility, don't use it as an excuse."

This comment aptly demonstrates that awareness of the *I.D.*TM profile has the potential to lead to acceptance (subconscious or otherwise) of social loafing, both on the part of the individual and fellow team members. Yet, also noted by some research participants is the notion of *team responsibility*. The team must ensure that the *I.D.*TM profile is not used to exonerate poor individual performance that stifles overall team functioning. The *I.D. System*TM, as a catalyst for communication, can help to counteract this potential problem. In light of these perspectives, it thus appears that, while the *I.D. System*TM can cause a sentiment of tolerance for social loafing, it can simultaneously be used to monitor and manage tolerance among team members.

The *I.D. System*TM also contains opportunities for team development. By tempering strong drives that may be ineffective and/or inefficient, it provides occasions to improve individual and team performance. A research participant, for instance, commented on the way *I.D.*TM profiles reveal efficiencies within a team, as well as their origins:

"We started looking at ways to try and have people realise that they probably didn't need to verify to that extent, and [that] some behavioural issues were probably linked to some of our workflow bottlenecks. And just understanding that and being able to look at people in that light, and look at situations around the office in that light, we [were able to] at least understand the dynamics that make up the problem. Over the years, we have been able to address various situations, and I've tried different things... with that background in mind."

The aforementioned excerpt illustrates that the *I.D. System*TM uncovers great opportunities for team development. Diagnosis of team balance and associated consequences of *I.D.*TM profiles within a team, are integral parts of the *I.D. System*TM. However, rather than pragmatically prescribing the dynamics of the ideal team, the *I.D. System*TM offers great opportunity to learn from the existing balance and improve its efficiency. Evidently, this requires a level of tolerance, whilst simultaneously being attuned to organisational direction and goals.

However, intra-agency conflict is sometimes difficult to avoid. Despite this, the following section indicates that the *I.D. System*TM has an important role in the effective management of team conflict.

Conflict Management

A number of research participants, particularly those in senior positions, recognised the benefits afforded by the *I.D. System*TM in effective conflict management. With enhanced insight into the way in which they and fellow co-workers functioned, they were able to identify possible causes of workplace conflict, rather than attribute blame to particular individuals. This is appositely demonstrated in the following statements:

“It really helps me understand why we were having conflict – why we couldn’t communicate effectively; because I’m always looking below the surface, and he was always up here, and I’m looking for things that don’t exist... although we still have those issues, at least we understand why they happen”;

“As for effective working relationships... I would come into conflict with another key staff member. We are a bit at loggerheads; still trying to achieve the same goals, but really not able to do that well together. But we’ve been able to shift that. Realising that we are going about it differently, in terms of how we communicate and the way we process a problem or work on a project that involved both of us, is much more meaningful because we understand a little bit more of how each other works.”

As the second excerpt suggests, the *I.D. System*TM provides more than a method of merely identifying causes of workplace conflict. It also offers opportunity to effectively *manage* workplace conflict. The detail articulated in individual *I.D.*TM profiles enable senior personnel to harness particular strengths for the benefit of organisational aims.

Problem Solving

Given its potential value in the effective management of workplace conflict, it is not surprising to learn that the *I.D. System*TM also aids problem solving endeavours. According to a number of research participants, the system serves as a springboard

into constructive organisational *change*. It helps each team member to understand the path to personal peak performance, highlighting both particular strengths and the barriers that hinder peak performance. While strengths can be harnessed for the benefit of organisational aims, shortcomings can be managed and restrained appropriately. This in turn, facilitates greater alliance with a team of distinct individuals. Yet, as one research participant noted, change at a personal or organisational level is not always a trouble-free process:

“It’s got its challenges, because knowing what you’re *I.D.*TM is... is just a starting point. It’s the tip of the iceberg. I do implement change, not only within myself, but within the whole team, and I suppose that’s where my greatest challenge has been... with the team here. It’s... implementing that change, because with any change comes a deal of pain.”

Admittedly, the market is awash with various mediums to enhance workplace relations. Some of those consulted in the course of this project told of utilising other tools in the hope of improving problem solving practices within the workplace. However, according to some, these were not always effective. Although they offered insight into individual traits, they did little by way of enhancing problem solving practices:

“We would’ve been easily able to identify everybody else’s personality using those other kinds of tools that we’d used in the past, but they didn’t necessarily help us problem solve effectively...”

We enjoy the process of taking the material and discussing it and looking at how we can do things better... I haven’t had anyone come back to me and say, ‘No’... None have come back.”

Hence, in terms of problem solving capabilities, the *I.D. System*TM helps to understand that different people have different ways of finding solutions. A greater understanding of how different people are driven to find solutions acts as a catalyst for change. Again, here is the suggestion of achieving goals swiftly, which is claimed to be the paramount aspect of using the *I.D. System*TM.

5.2.2.7 Leadership

Although effective problem solving practices were prized by most of the research participants, such practices were of particular value to those in senior positions. In their position of leadership, it is important for them to be well-informed *and* well-resourced; and it appears that the *I.D. System*TM has the potential to assist with both.

Some of those interviewed advised that it is important to be well-informed – not only of workplace situations as they arise, but also of the strengths of individual staff members. When dire situations arise, such insight allows senior personnel to channel

individual qualities appropriately for the benefit of the team and the organisation as a whole:

“Yeah, I suppose it helped me to better deal with people, especially when I know that other person’s *I.D.*™.”

Insight into individual staff qualities also allows senior personnel to utilise *appropriate* management techniques and therefore appear well-resourced. Rather than haphazardly select a management strategy that *may* ease a dire workplace situation, senior personnel can make decisions that are more informed, and perhaps more likely to resolve workplace issues. Evidently, this ability to forecast prevents a waste of time and resources:

“[The *I.D. System*™] offers another skill in assessing particular staffing situations, and provides me with additional options as to how to deal with it.”

The *I.D. System*™ is likely to influence leadership roles greatly. Literature in the field of organisational studies suggests that leaders are chiefly occupied with two concerns – human resource maintenance (that is, influencing individual competence and willingness to perform) and task performance (Wood et al., 2004). It can be argued that as team members understand the drives of fellow team mates, there is potentially less need for strong leadership in the form of human resource maintenance. Consequently, the role of leaders could shift toward a greater emphasis on task performance. The precise way in which the *I.D. System*™ influences leadership is an area for future research.

5.2.3 Beyond the Professional Domain

Interestingly, a number of research participants recognised the potential value of the *I.D. System*™ *beyond* the professional domain. They spoke of ways they had used the system in their personal lives, finding that it not only improved workplace interactions, but also personal relationships. It offered insight into the way significant others functioned, it offered an understanding of the causes of particular behaviours, and it offered an ability to predict the behaviour of others in given situations:

“My best friends and I can turn up one day... and say, ‘Let’s go and have lunch’, whereas other *I.D.*™’s couldn’t deal with that”;

“Because you often do stuff with people that you know, like, you might go camping with them. If you camp with a ‘Use improvise’ drive, or you camp with a ‘Use verify’, the ‘Use verify’ will want to be doing everything right, tent, tools etc; the ‘Improviser’ will be happy to sleep in the back seat of the car... whatever.”

Additionally, as the following section suggests, the *I.D. System*TM has made a number of auspicious entries into the family domain.

5.2.3.1 Familial Relations

A number of those consulted for the present project have extolled the virtues of the *I.D. System*TM within family circles. Convinced of its ability to enhance relationships, they have introduced the tool to others who have indirect affiliation with the workplace milieu:

“I know [one colleague who] is [using it in this way] at the moment... She sat down with some of the key couples in her network and the spouses have found that very helpful to get more of a handle on the way their partner operates.”

More commonly however, research participants had presented the system to their *own* family networks. In an attempt to curb family conflict, one research participant had his partner and children complete the *I.D.*TM assessment tool. The subsequent individual profiles gave direction about the most appropriate ways to strengthen the family bond:

“We had our children done at different times... when they were old enough, just to understand what makes them tick... There was a lot of butting of heads between the girls, and from my wife’s point of view, she got to understand why the girls jacked-up when she wanted them to do things one way. So she started trying to do things other ways, and... she got a result!”

In attempting to understand the value of the *I.D. System*TM within familial networks, one research participant advised he now has an improved awareness of his partner. He understands the way she thinks and behaves, and is able to attribute these idiosyncrasies to distinct causes. This in turn, provides him with an ability to predict her behaviours in particular situations, and thus avoid potentially volatile situations:

“My wife’s had her *I.D.*TM done and she is the complete opposite to me, which has helped, because I’m the ‘Verify’ – I go from step one to ten trying to verify every process. My wife, she’s a rampant ‘Improviser’, so she likes to make a decision like that; it’s gut-feel. We’re completely opposite. So... if we want to make a decision and it’s a bigger issue, we’ll go through the process. But with the smaller issues, she does hers and I do mine. But we understand that we’re not doing it to frustrate one and other... So it has helped from that point of view.”

Other research participants concurred with this view and spoke of similar experiences:

“[My partner] used to say to me, ‘You’re such a control freak!’ And one day we sat down and discussed it... I did tell [him] this morning that we are going [out], so he has enough time to work out things at comfortable pace... whilst I didn’t care”;

“My wife’s done it, so personally it’s helped us. She’s a ‘Use complete avoid improvise’ and when we go on holidays, if we don’t actually go to the brochure rack and get all the brochures and plan our attack, she feels like she’s wasting time. I’m on holidays, so I actually don’t care... So it helped us... We actually know we both need to be pretty planned, we like it that way – routine... We figured it out because we are married; but the *I.D.*TM sort of let us look at certain things.”

As the second excerpt suggests, although the *I.D. System*TM does not replace long-term relationships in which effective communication unfolds, it does have the potential to augment the relationship by offering different perspectives and insights.

5.2.3.2 Changes in Well-Being

In reference to the personal domain, a few research participants suggested that the *I.D. System*TM has the potential to play an important role in enhancing well-being. By identifying individual strengths and weaknesses, it can be used to further personal development – physically, psychologically, emotionally and spiritually. This was noted by a research participant who consistently utilises the *I.D. System*TM to attain personal goals:

“Ten years ago, I used to be very fat and overweight, and I decided to lose the weight. I knew that I had to have something make me do it, and so I decided to engage a personal trainer, and I would go everyday to work at it everyday. So I had to discipline myself to do something everyday. I use my *I.D.*TM to make it work. So I make it fun and make it exciting and make it different... I always have to have a lot of variety. So I’ve used my *I.D.*TM consistently in everything I do to actually make sure that I am working that way, and then that helps me deal with the... boring bits.”

Link-up! International proposes that the *I.D. System*TM also possesses potential benefit for personal well-being. It is argued that by using the *I.D.*TM profile and functioning *within stride*, personal performance will peak and general health will significantly benefit. To explore these assertions, *Link-up! International* and UWS are investigating the influence of the *I.D. System*TM on individual health status. This research will be finalised in 2007.

5.2.4 Familiarity with the *I.D.*TM System

Awareness of the benefits offered by the *I.D. System*TM seems to be somewhat influenced by familiarity with it. One informative indicator was the use of *I.D.*TM language. Some demonstrated an ability to recount their numerical *I.D.*TM profile and describe particular attributes with detail. They were typically comfortable with the tool and incorporated *I.D.*TM language into their own vocabulary:

“I don’t always get it, but quite often in an interview, I can pick up what *I.D.*TM people might be.”

Conversely, others demonstrated greater uncertainty. Seldom did they utilise the language that forms part of the *I.D. System*TM. Not only were they unfamiliar with particular attributes within the procedure, they were also unfamiliar with their own assessment result:

“I actually had to write it down. I had a quick look before I came up here.”

However, according to some of those who were au fait with *I.D. System*TM, it needs to be embraced at an organisational level to ensure benefit:

“If you don’t immerse, if you don’t go for it, you won’t get the best value out of it.”

They argued that it is not adequate to consider the mere use of the assessment tool as sufficient to improve team dynamics. The system needs to be incorporated into the modus operandi of the organisation. In particular, it needs to *continually inform* relationships, both internally between team members, and externally with clients and/or other agencies. As stated by one research participant:

“I think one of the benefits for us is that we did engage with the *I.D.*TM beyond just getting your *I.D.*TM done. If you just got your *I.D.*TM done, you got this little number, and a nice book to read about yourself, would be very easy to pigeonhole yourself and say, ‘This is who I am, and this is why operate, and everybody else just better get with the program.’ That would be the big danger. So we took it beyond that... I think the more familiar with it, the more you start to see the drives in other people and that helps you respond more effectively in those situations. I’ve learnt that *I.D.*TM has been very helpful for me in a team environment.”

However, as the following excerpt suggests, active engagement with the *I.D. System*TM necessitates time and effort – resources that are quite limited for some research participants:

“We haven’t experienced it as much... I don’t think we’ve explored the full extent of its impact on us as a team, because of time and commitment. I think it takes quite a lot of time. It’s like its creator – pretty intense.”

The above comments suggest that the *I.D. System*TM is embraced in various ways by both firms and individual employees. It appears that the level and depth of engagement is contingent on those aspects that appear to be of benefit at a particular time. This may be due to the instinctive drives of the individual and the collective, as well as environmental constraints, such as time and context. Nevertheless, those who have invested time and effort in speaking the *I.D.*TM language and understanding its concepts suggested that this was of great benefit.

5.2.5 Critical Aspects of the *I.D.*TM System

Interestingly, half of the research participants had terminated their use of *I.D. System*TM. To understand the reasons for this, all were offered ample opportunity to critique the *I.D. System*TM. Very few disapproving aspects of the *I.D. System*TM were collectively identified. Of the few that were noted, these appeared to cluster around six key themes; namely, the potential for stereotyping others, unmet expectations, limited follow-up support efforts by *Link-up! International*, the financial costs of the *I.D. System*TM, time constraints to effectively utilise the system, and ethical considerations. Each of these is addressed in turn.

5.2.5.1 Stereotyping

Some of the research participants warned that users of the *I.D. System*TM must be aware of the potential for stereotyping that may be seen to be discriminatory. An *I.D. System*TM profile may invite some individuals, particularly senior personnel, to characterise fellow co-workers and perhaps make incorrect assumptions about skills and abilities. One research participant noted:

“I don’t think you could use it to identify... I wouldn’t be using it as something [to] screen people out. It would be very important not to do that.”

Whilst an *I.D.*TM profile may encourage stereotypical perceptions from others, research participants also highlighted the difficulties of managing their own *I.D.*TM profile. In particular, some deemed it an opportunity to avoid, if not abdicate personal responsibility.

Avoidance of Personal Responsibility

Some of those interviewed advised that the *I.D. System*TM is sometimes used to rationalise personal apathy and lack of initiative. In reference to a fellow co-worker, one research participant stated:

“They think that’s the way I am, and therefore I don’t take responsibility for anything else. That’s the way I am, so you have to live with me.”

Although another concurred with this view, he recognised a method to minimise the avoidance of personal responsibility – that is, effective interaction:

“That’s why you’ve got to have good and open communication about the whole process, so [employees] take responsibility and don’t use it as an excuse.”

There thus appears to be some concern around the ability of the *I.D. System*TM to influence the identity of the self and of others. However, follow-up support sessions that focus on the intended purposes of the *I.D. System*TM may quell these potentially damaging perceptions.

5.2.5.2 Unmet Expectations

Through an analysis of the research material, it became apparent that the philosophical stance of the research participants sometimes differed to the way the *I.D. System*TM was “sold” to the organisation. Some highlighted disparities between the firm beliefs of *Link-up! International* in the *I.D. System*TM, and the actual practical results reaped by the company. One participant for instance, had great expectations of the system, believing it offered *the* ultimate and quick solution to organisational problems. However, the problems were quite complex and required more than mere insights into interpersonal relations; the *I.D. System*TM did not therefore remedy the issues:

“When we got involved in *I.D.*TM, we were using it suddenly; this is the decider, but not with very good results.”

Interestingly, in some situations, the *I.D. System*TM actually augmented workplace issues. It identified a non-functional mix of instinctive drives within a team, and affirmed perceived divisions between co-workers. Sometimes this affirmation prompted the realisation that there would never be a fit between company goals and individual goals. In fact, some individuals terminated their employment so that organisational issues might be resolved. Recognising the ability of the *I.D. System*TM to incite change, one research participant concluded:

“That’s what it is... it’s a tool. As long as you maintain that parameter on it, then I think it’s a helpful thing.”

In spite of these concerns, most of the research participants advised that the promises of *Link-up! International* were generally met. Consequently, many believed that the *I.D. System*TM was “value for money”.

5.2.5.3 Follow-Up Support

Despite the role of the *I.D. System*TM in facilitating effective communication, it is ironic to learn that a few research participants identified communicative issues with the way in which *Link-up! International* communicated with them. This is particularly evident in subsequent support offered by the firm. One research participant, for instance, recounted the follow-up support *Link-up! International* offered the organisation he was affiliated with. With fervour, he suggested that some follow-up support personnel appeared to have limited understanding about the organisation and its ethos:

“This guy sort of meet with each of [the staff here] individually in terms of the instinctive drives, and, one of the women said to me, ‘He’s weird... I was telling him about something or other, and about the family situation, and he said, ‘It sounds like you ought to leave home,’ and I thought, ‘Well... that’s not really part and parcel of what we’re doing here!’... I don’t think [follow-up support is] something you can teach. It’s a level of empathy... and a level of integrity...”

We had another lady come out here... you know, just following it up, and she was here for an hour, and she just didn’t shut up!... [My co-worker] and I... thought we couldn’t use her. We’d never get a word in edgewise! She was like a crashing machine. She just talked 95 to the dozen for an hour and said, ‘Well, thanks. Good to see you’ and left. And we were thinking about doing it at that stage, and I said, ‘No! I’m not going to do it now.’”

The above statement indicates the importance of follow-up support from *Link-up! International*, for this appears to facilitate continued client engagement with both the *I.D. System*TM and *Link-up! International*. Thus, consultants representing *Link-up! International* hold much responsibility and it is important that they remain conscious of their possible influence on client engagement.

Further to this, the viability and continued use of the *I.D. System*TM seem to be contingent the way in which an organisation embraces the system and applies team-enhancing strategies. These may include improving the working alliance between *Link-up! International* consultants and organisational members.

5.2.5.4 Discontinued Use of the *I.D.*TM System

As noted, at time of interview, many of the research participants had terminated their use of *I.D. System*TM. The research team was keen to understand the underlying reasons for this, expecting to find negative features of the system to be the key motive for discontinuation. However, there was a distinct lack of disapproving judgement from the research participants. The lack of condemnation, especially from a cohort that terminated its use, adds to the face validity of the *I.D. System*TM. Interestingly, the main reasons for discontinuation were financial constraints and limited time.

Financial Constraints

Although most research participants considered the *I.D. System*TM to be “value for money”, not all were content with the costs incurred through using the system. As the following section suggests, some of those consulted were plagued by financial concerns and thus chose to discontinue using the *I.D. System*TM.

With limited financial resources, some of the research participants indicated that the ongoing use of the *I.D. System*TM was not feasible. The costs associated with using the system had a significant influence on the organisational budget, and often involved a reconsideration of priorities.

Financial concerns were particularly voiced by those who have experienced substantial staff turnover. Without stability within the team, there seemed little advantage in directing limited funds toward the *I.D. System*TM. This sentiment is reflected in the following excerpts:

“Why I haven’t done it with the current group is because there have been a lot of staff changes, and it gets a bit pricey... I haven’t had it done again... because of costs, and because of the staff turnover that we’ve had”;

“I talked to [my co-worker] about doing this again, and we thought it mightn’t be a bad idea at some point. But we’ve had a lot of changes over the last year and it’s just a waste of money until I get a more stable environment again. But we both agree it’s quite a useful tool... particularly with our longer term staff.”

In this epoch of greater professionalisation within the third sector (that is, the non-government, non-profit sector), the *I.D. System*TM may serve to enhance workplace relations within non-government, non-profit organisations. However, as alluded to by one research participant, the system may remain out of the clutches of these organisations because of the associated costs:

“We sort of had to work out how it could be available to churches, charities and community groups because it’s quite expensive.”

Time Constraints

Some research participants advised that the complete benefit of the *I.D. System*TM can only be realised with sufficient time. However, with increasing workloads, this is often limited:

“I think probably the only negative response was probably because we have a fairly busy work schedule, just the time taken.”

Time is a valuable resource. While many research participants advised that engaging with the *I.D. System*TM was time well invested, lack of time to strengthen workplace teams remains a genuine issue for a number of firms. It is imperative that consultants representing *Link-up! International* are candid about the time required to apply the *I.D. System*TM, to thwart false expectations among clients.

It may also be useful to direct future research efforts to this area. Future research might explore the relationship between time investment and perceived gain associated with the *I.D. System*TM. It might also investigate creative ways to expedite the engagement process.

5.2.5.5 Ethical Considerations

To encourage clients to consider the responsibilities associated with the *I.D. System*TM, *Link-up! International* provides all clients with *The Principles of Ethics and Protocols for the Proper Use of the I.D.TM System* (Burgess, 2003c). The document reviews the importance of confidentiality, the need to correctly interpret *I.D. System*TM results, the danger of assumption, labelling and false judgement, as well as the place of the *I.D. System*TM within an extensive organisational system.

Despite the perceptible value of this document, the research material suggests that the operationalisation of ethics within the *I.D. System*TM remains somewhat ambiguous. It appears that personal information unearthed by the system can be used for good *and* evil, for the privacy and confidentiality of individual employees were not always respected. In fact, the research material indicates that it would be rather naïve to assume a collective and balanced morality amongst all those involved with the *I.D. System*TM.

Although not specifically asked to comment on ethical considerations, some research participants shared their uneasiness about such matters. A particular concern related to the *presumption* of collegial goodwill. Use of the *I.D. System*TM was mostly viewed in the spirit of enhancing mutual understanding about instinctive drive among staff. However, it also assumes a degree of munificence among team members. As one research participant explained, exposing personal vulnerabilities may generate negative repercussions:

“If the information is shared... it can expose people to weaknesses and if it’s not used in the right spirit, people can actually abuse that knowledge, I think. I am probably looking at an HR [Human Resources] perspective that if you know things about a particular person, that knowledge can be used for evil, if you like.”

Notwithstanding concerns around collegial goodwill, the availability of personal information also raises questions around confidentiality.

5.2.6 Comparison with Other Tools

Some research participants commented on other tools they had utilised in the past. One research participant stated:

“I’ve done a great many of these things, and interestingly it doesn’t seem to matter, what I do. I’d always end up high in the top right-hand corner or somewhere like that, always out there.”

Another spoke of using the MBTI (Myers & McCaulley, 1985) for management purposes:

“I did [the MBTI] at a management workshop; I was in New Zealand. I think I’ve done it once in Australia at something I was at, and the results again were not all that dissimilar.”

The two aforementioned excerpts allude to perceived similarities between the *I.D. System*TM and other assessment tools used within the workplace. However, most of the research participants suggested that a marked benefit of the *I.D. System*TM is its fundamental ethos and its extensive scope. Some also indicated that the *I.D. System*TM complements other assessment tools thus offering greater comprehensiveness.

5.3 Summary

Through a thorough consideration of the qualitative research material, it was possible to understand the inherent value of the existing *I.D. System*TM. Those consulted for this phase of the study suggested that the system was used by the firms they represented to achieve organisational aims in an expeditious manner. The organisations sought to enhance professional interaction, identify individual strengths and weaknesses, and improve the alignment between employee and professional role. These collectively allude to a desire to promptly reduce the negative impact of organisational change.

Exploring the benefits offered by the *I.D. System*TM, the research participants highlighted many. They spoke of improved communication with co-workers, improved communication with clients, an improved understanding of the self, an improved understanding of others, as well as opportunities for development – both at a personal level and at a team level. Opportunities for personal development were of particular benefit to senior personnel who prized the prospect of developing leadership qualities.

Some of those consulted had extended their use of the *I.D. System*TM beyond the professional domain. They recognised the potential of the system to strengthen

familial networks and improve personal well-being – physically, psychologically, emotionally and spiritually.

However, the research material suggests that the benefits proffered by the *I.D. System*TM are contingent on familiarity with it. To maximise the inherent value of the system, it needs to be embraced both at an organisational level and at a personal level so as to continually inform relationships.

Despite its many benefits, the research participants highlighted a number of limitations with the *I.D. System*TM. At a personal level, there is the risk that individuals may be stereotyped according to their *I.D.*TM profile – particularly during staff recruitment; there is also potential for individuals to abdicate personal responsibility for their behaviours.

At an operational level, the costs of using the *I.D. System*TM – both financially and the time required to effectively utilise the system, had caused some to discontinue their use of it. Another concern expressed pertains to the possible misuse of personal information, whereby the privacy and confidentiality of employees are breached.

When relaying these criticisms to *Link-up! International* the research team learned that most of these criticisms had been addressed in the last two years. For example, clients are now provided with comprehensible information asserting the explicit purpose of the *I.D. System*TM and the limitations of using it for the purpose of staff recruitment.

In addition, *Link-up! International* affirms to its clients the need to diversify team membership for the attainment of organisational goals, rather than seek semblance among employees. Further, *Link-up! International* actively aims to continue engagement with clients to ensure they continue to reap the benefits proffered by the *I.D. System*TM. Such efforts are complemented by additional supportive strategies, which include the provision of professional counselling services to clients.

6 Discussion

The present report is an important step toward understanding and harnessing the value of human instinctive behaviour (as opposed to learned behaviour), particularly in the workplace. It extends existing literature concerning team building and team dynamics and provides innovative knowledge in the field of organisational psychology. This is achieved by demonstrating the significance of the *I.D. System*TM, especially in the workplace environment.

The report has examined the value of the *I.D. System*TM in improving team performance. More specifically, the study validated the *I.D. System*TM; it validated a refined version of the system; it explored the relationship between the refined version and personality factors, leadership style and general health factors; and it explored the inherent value of the existing (non-refined) *I.D. System*TM.

Quantitative methods used to substantiate the *I.D. System*TM suggest that both the existing and refined versions are reliable and valid assessment tools for gauging individual instinctive drives. This finding meets an important requirement in the psychometric literature (R. R. Kline, 2005). The results also indicate that the *I.D. System*TM is multidimensional.

For reasons reported above, the probability of items cleanly loading on just four factors was intuitively remote. Nevertheless, because of the popularity of conducting factor analysis for construct validity in the psychology literature, Exploratory Factor Analysis (EFA) was conducted on both the existing and refined versions of the *I.D. System*TM. As suspected, the results indicated the elemental four-factor theory of instinctive drives did not load cleanly onto the drive towards or away from 'Verify', 'Authenticate', 'Complete' and 'Improvise'.

However, both versions of the *I.D.*TM survey did demonstrate additional strengths. For instance, through an investigation of test-retest reliability, their statistical and practical consistency became apparent, as well as discriminant validity and predictiveness. Further to this, they retain face validity.

An examination of the relationship between the refined *I.D.*TM survey and personality factors suggests that they are largely unrelated. However, there was an apparent overlap with regard to openness to experience. The former finding supports the discriminant validity of the scale, while the latter provides backing for its predictive validity.

An examination of the relationship between the refined *I.D.*TM survey and leadership style suggests that survey scores are largely discriminant from self-ratings of leadership style. However, one significant correlation was found between the drive to 'Authenticate' and the use of transactional-contingent reward leadership strategies.

An examination of the relationship between the refined *I.D.*TM survey and general health factors suggests that they are largely unrelated. However, within this examination involving few research participants, a higher drive to 'Authenticate' was significantly related to higher levels of reported health issues, such as sleep disorder and stress.

In comparing the statistical analysis of validity and reliability of the *I.D.*TM survey with well-known psychometric tools, it does appear to fare favourably, relative to the MBTI (Myers & McCaulley, 1985) and the DiSC® system (Mills & Associates, 2005). More specifically, when comparative data were available, the *I.D.*TM survey demonstrated superior reliability and validity.

The qualitative methods used to explore the inherent value of the existing *I.D.*TM survey also unearthed interesting finds. According to those research participants consulted for this phase of the study, the system was used by the firms they represented to achieve organisational aims in an expeditious manner. The organisations sought to enhance professional interaction, identify individual strengths and weaknesses, and improve the alignment between employee and professional role. These collectively allude to a desire to promptly reduce the negative impact of organisational change.

Exploring the benefits offered by the *I.D. System*TM, the research participants spoke of improved communication with co-workers, improved communication with clients, an improved understanding of the self, an improved understanding of others, as well as opportunities for development – both at a personal level and at a team level. Interestingly, some had extended their use of the *I.D. System*TM beyond the professional domain. They recognised the potential of the system to strengthen familial networks and improve personal well-being – physically, psychologically, emotionally and spiritually. However, the opportunity to benefit from the *I.D. System*TM appears to depend on the degree of familiarity with it.

Despite its many benefits, the research participants highlighted a number of limitations with the *I.D. System*TM. At a personal level, there is the risk that individuals may be stereotyped according to their *I.D.*TM profile – particularly during staff recruitment; there is also potential for individuals to abdicate personal responsibility for their behaviours. At an operational level, there were concerns with the associated costs of the system. While all research participants suggested that they would use it again, the operational costs of using the *I.D. System*TM – both financially and the time required for effective utilisation, had caused some to discontinue their use of it. In addition, criticism of the *I.D. System*TM pertains to the possible misuse of personal information, whereby the privacy and confidentiality of employees are breached.

However, as in any qualitative research, the research findings presented in this report must be considered with caution as the perspectives offered by the research participants may not reflect a representative sample. The cohort of research participants involved in the present project was selected via convenience sampling; consequently, there is no claim that they represent the experiences of all users of the *I.D. System*TM. Despite this, a wide range of individuals were selected from participating companies and companies that had stopped using the system, thus limiting bias. Further, qualitative research is context and time bound and most comments and criticisms directed at *Link-up! International* had already been identified and addressed by the company.

Despite some minor criticisms, overwhelmingly the respondents support the system by expressing its validity and value to themselves and their co-workers.

6.1 Concluding Remarks

In conclusion, it appears that the *I.D. System*TM attempts to give rise to the individual consciousness of innate behaviours. It reliably identifies a personal profile that can be used as a platform for dialogue with individuals and groups. Although its statistical construct validity remains limited, this may in fact be somewhat redundant. This is because the strength of the system appears to be embedded in the strategies directed at individual motivations to alter behaviours they would normally resist. Further to this, the system serves as an important catalyst. By exposing the essence of individual team members, teams, particularly those within the workplace, are able to engage in effective communication.

7 Appendices

7.1 Ethics Approval Number

UWS Ethics Protocol Number:

HREC 04/043

7.2 Invitation to Participate in Survey



Date

Dear:

We are conducting a study on predictability of team performance. This involves filling out the attached *Instinctive Drive System*TM questionnaire. An outline of the project is with this letter.

This study is conducted in collaboration with *Link-up! International* and the University of Western Sydney and has the approval of the University of Western Sydney Ethics committee.

The return of the questionnaire will be an indication of your consent to participate. Your anonymity will be protected by your personal details not appearing in any raw data or in any written reports. I am personally responsible for the security of the data and this will be kept at a secure location at the University of Western for the duration of five years after the study is finished.

I would be grateful if you would agree to participate by answering the attached questionnaire.

Yours sincerely,

Dr Anneke Fitzgerald
University of Western Sydney
Locked Bag 1797 PENRITH SOUTH 1797
Campbelltown Campus
Building 17, room 2.11
Phone: 02 4620 3414
Email: a.fitzgerald@uws.edu.au

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.



Date

Dear:

We are conducting a study on predictability of team effectiveness. An outline of the project is with this letter.

The interview will be taped for analysis purposes only and your anonymity will be protected by your personal details not appearing in any raw data or in any written reports. The tapes will be destroyed once they have been transcribed. I am personally responsible for the security of the data and this will be kept at a secure location at the University of Western for the duration of five years after the study is finished.

I would be grateful if you would agree and consent to participate by answering questions about how the *Instinctive Drive System*TM and program has influenced team dynamics and synergy at your work place.

Yours sincerely,

Dr Anneke Fitzgerald
University of Western Sydney
Locked Bag 1797 PENRITH SOUTH 1797
Campbelltown Campus
Building 17, room 2.11
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7.3 Interview and Focus Group Consent Forms



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.

7.4 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. Perceived influence of the *I.D. System*TM on individual performance:
 - a. What effect do you think an understanding of the *I.D. System*TM has had on your job performance?
 - b. Why do you say this?
 - c. Describe examples to exemplify your response.
3. Perceived influence of the *I.D. System*TM on group performance:
 - a. Which workplace teams / groups are you associated with?
 - b. Would you describe these as management teams / groups?
 - c. What effect do you think an understanding of the *I.D. System*TM has had on team / group performance?
 - d. Why do you say this?
 - e. Describe examples to exemplify your response.
4. Perceived influence of the *I.D. System*TM on leadership:
 - a. Describe any leadership roles you hold within this company.
 - b. Describe the qualities of a good team / group leader.
 - c. Describe examples to exemplify your response.
5. General questions:
 - a. What do you think of the *I.D. System*TM?
 - b. What do you think of its effectiveness in improving organisational performance?
 - c. *Link-up! International* provides follow-up support to those who have utilised the *I.D. System*TM; how effective is this support?
 - d. Describe examples to exemplify your response.
 - e. What other comments would you like to make about the *I.D. System*TM?

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