

“An exploration of the methods used by external coaches when coaching IT professionals”

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Abstract

This study explored the research question:

Do external coaches use an alternative method to their norm when coaching IT professionals?

The aim of this research was to explore whether executive coaches work differently with clients who are IT professionals than with clients from other disciplines. The word 'method' in the research question describes how coaches work with clients and includes the model, style and tools. The literature was reviewed across the component parts of this aim. The data from experienced executive coaches working externally to organisations, when coaching IT professionals, combined with this literature helped answer the research question. Within coach development approach, models and ethics are usually addressed; however, there is little consideration given to the impact of differences within disciplines across organisations. No academic papers on coaching in the IT sector were found but there was some reference within practitioner literature which has been included. Semi-structured interviews with seven experienced external coaches, were carried out to collect the rich data needed. Thematic analysis allowed references to be gathered around four superordinate themes; Coaching Style, IT Professionals Pattern of Behaviour, Process and Relationship.

This research has shown clear differences in the method of coaching of IT professionals. Within the process of coaching, the relationship tends to develop after a critical moment in the coaching that then allows engagement of the client. The data reveals that this population are reluctant clients initially (Moore, Kambitsis and Seward, 2013). This reluctance is present both when "sent" by their organisation or self-referring. The preferred coach style identified by coaches for these clients is highly directive and challenging rather than emotional and non-direct. This research has identified an alternative framework for coaching for these clients.

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Disclaimer: The views (separate from quotes and facts) expressed in this document are strictly my own and not necessarily the views of my supervisory team, examiners, or Middlesex University.

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1 Introduction

This study aimed to discover whether executive coaches work differently with clients who are IT professionals than with clients from other functions. It investigated, with a sample of coaches who have coached IT professionals, how their coaching might differ with this group. The outcomes of this research were designed to provide new insights into the coaching needs of IT professionals. It has been my experience and therefore it is my belief that IT professionals need a different type of support to other clients. There are few coaches specialising in the coaching of this sector which may indicate a need for support for coaches who may be avoiding the sector. Equally this low number of coaches could be because IT professionals are reluctant coaching clients and therefore do not present for coaching. This reluctance to present for coaching could be the result of a skewed view of the benefits of coaching by IT professionals and/or related to the personality of IT professionals. I want to understand why this is the case at some stage, however for this research I am focussing on the actual coaching intervention. I have turned to the literature to investigate these issues as well as talking to experienced executive coaches.

1.1 Why this research question and investigation?

This research is based on my professional experience of over 20 years in IT leadership roles and over ten years working as a specialist coach of IT professionals. This experience combined with academic study, particularly in the field of psychology and more specifically in Autistic Spectrum conditions, has led to my passion for developing IT professionals to fulfil their potential in the business of today. I have reflected in depth on my personal and professional journey as part of my earlier assignments for my professional doctorate. The reader will not have access to these assignments, so I have provided an overview of my work experience and learning as this journey has influenced my research topic in no small way. It is the culmination of the experiences in three segments of my professional life that has led me to the area of research discussed in this thesis:

- Teaching;
- Information Technology; and
- Coaching.

Regardless of the different careers I have pursued, my focus has always been people and how they are motivated, how they work together (or not) and the impact on the workplace. In fact, I am fascinated with what makes people do what they do. My field of interest has been the IT industry and the behaviours I have observed amongst those professionals and the consequent impact on the organisation. This led me to focus my coaching practice in this area, specialising in those making the transition from technical to managerial roles.

The teaching phase

Through this phase I worked with adolescents aged 11 to 18 years old. I also worked with adults in further education. I taught mathematics and computer science to both groups of students. My career progression was fast after a difficult start in a tough Birmingham comprehensive school that rekindled my interest in psychology. Many of the pupils in this school were from a local estate created for families moved from central Birmingham slums. The deep-rooted problems many of these children had, furthered this interest. Mathematics is not always the easiest of subjects to teach, let alone to engender a love of the subject. I loved helping these students reach their full potential, which started a real passion for developing people. This clearly contributed to my current research question through my need to further understand how people learn successfully and the individual differences that arise.

The IT phase

I moved from teaching to a role as IT support manager to a global firm of accountants. As an IT professional, in the early days I developed my technical and business knowledge through a combination of experiential learning supported by some specific technical courses. Each role gave me the opportunity for technical learning, through courses and by working with others more knowledgeable than myself.

On entering the profession, I had quickly realised that my previous theoretical knowledge, whilst helpful, only provided part of the story. My technical learning was not particularly deep compared to some of the niche experts that I worked with. On reflection I think there were two outcomes. Firstly, I compensated for this lack of depth with my people management skills; although I am not sure I valued those skills as highly as I should have done. Secondly, I realise that this broader technical knowledge allowed me the overview of IT provision that was to become essential in more senior roles. In a technical industry it is common to be managing individuals with greater and deeper skills than your own. I was promoted quickly to IT Manager for the region. This brought a lot of added responsibility, covering the technical estate and supporting users. I also became responsible for managing the IT strategy as well as overseeing several large projects. Although I worried about my possible lack of technical knowledge, I have learned that it helped promote me as a leader. I knew enough to have knowledgeable discussions, yet I was humble enough to lead from behind when appropriate. This also informed my understanding of the interaction between different functions within the organisation and led to a curiosity of why things often went wrong.

I then worked in several large corporates as well as a business school as IT Director and other roles at the same level, which broadened my experience across functions. I found that there appeared to be a real disconnect between functions impacting the success or failure of IT provision within companies from support through to strategy. Language may be an issue; not particularly technical jargon as even common English means different things to different people. I have witnessed many conversations in meetings where communication does not really happen; analysing what seems to go wrong implicates the way the message was delivered, and it appears IT professionals do not always recognise the impact of the message and the potential for misunderstanding. This will be discussed fully in Chapter 2 in terms of the literature as well as in the discussion chapter.

The coaching phase

My final position in IT was as Head of Operations with a team of some of the most experienced and talented technicians in their field. All the traits I had previously observed appeared to crystallise into a whole. This concentration of behaviours such as poor teamwork, poor communication, over-detailed explanations and difficulty in social interaction led me to see parallels with high-end Autistic Spectrum traits (or Asperger's Syndrome). I developed various coaching techniques that seemed to work well with these individuals. This has shaped both my current coaching model and identified my research project. My psychology degree followed by further courses on Autistic Spectrum conditions have deepened my knowledge of neuro-typical and neuro-atypical individuals. I have been able to apply this to my research area and my coaching model along with knowledge of personality types and traits. My coaching approach accommodates and values IT professionals, then uses bespoke one-to-one interventions to introduce techniques (such as roleplay and metaphor) to help clients to develop more easily accepted behaviours.

As can be seen a significant proportion of my career has been spent in the IT sector in business mostly large corporate organisations and this, combined with my teaching experience and psychology qualifications, has led me to a need to understand the situation of IT professionals in an organisation. It is important to understand that at no point am I considering that a majority of IT professionals are on the Autistic Spectrum (or have Asperger's Syndrome); the point of my study is that as IT professionals display a sufficiently high number of similar traits to those with Asperger's syndrome it makes it worthwhile using knowledge in this area to inform our coaching. My coaching clients are largely made up of IT professionals, giving me insight into what it is like to coach in this sector. Most importantly, I was unable to find existing research covering the area that really defines, what is clearly from my experience, a significant difference. This increased my determination to take the investigation further.

The research question is:

“Do external coaches use an alternative method to their norm when coaching IT professionals?”

By “their norm”, I am referring to their commonly used practice with non-IT clients. I explored this question through thematic analysis of semi-structured interviews with experienced coaches who have IT professionals as clients.

1.2 Scope of the research

This study explored the way executive coaches work with IT professionals and further sought to find out if they work differently than with non-IT clients and, if this was the case, how they work with IT clients. The very nature of executive coaching is that it is tailored to the individual’s needs and thus very different to other learning and development interventions. My research was confined to executive coaching for IT professionals, although I carried out a broader review of literature before narrowing down to satisfy the research question. De Haan *et al* (de Haan, Duckworth, Birch and Jones, 2013) consider that there are common factors of coaching that are likely to have the greatest impact on clients. These include coach personality, client personality, common coach techniques, relationship quality and client self-efficacy. The authors conclude that the quality of the working relationship between client and coach, the range of techniques used by the coach and the self-efficacy of the client are of central importance. As well as the factors identified by de Haan *et al*, there are others (Starr, 2008) worthy of consideration:

- The environment and context in which coaching takes place;
- The process that is undertaken;
- The theoretical underpinning of the process.

In addition to these factors, I also considered the behaviour and personality of IT professionals and as a comparison investigated any links between these and Asperger’s Syndrome. In order to identify an approach that delivers effective coaching outcomes, I have examined the patterns of behaviour in the IT profession in conjunction with coaching, learning and motivation theory. It is appropriate to examine learning theory and motivation theory based on my experience of working

with clients diagnosed with Asperger's Syndrome where the approach to learning and understanding their motivation are important. These areas of review are based on my experience working within the IT profession and with clients who either have Asperger's Syndrome or display a Broader Autistic Phenotype (displaying some of the traits of Asperger's Syndrome but not diagnosed) as described by Baron-Cohen (2008).

There appears to be a commonality of personality traits and behaviours that can help or hinder this target population including poor communication skills, weak central coherence and a deficit in mentalising (Roth, 2010). Weak central coherence manifests itself in over-reliance on detail, both in approach and in presentation to others. It is displayed frequently as an inability to pitch at the appropriate level of summary for the audience. The outcome is that the listener(s) "switch off" or do not understand the message. Additionally, it can lead to a failure to see the bigger picture. Mentalising encompasses the ability to put oneself into another's position. It is sometimes referred to as lack of empathy (Frith, 1991) and affects the efficacy of social interaction. Anecdotally, IT professionals have a specific persona in the eyes of other disciplines, which is often less than complimentary. Within organisations I have heard many individuals from other areas of the business describing IT professionals as rude and unable to explain things well. It seems that IT professionals lack the behaviours needed to interact successfully with colleagues across the organisation. Yet IT professionals have specific skills and personalities that make them especially good in their chosen field. This is an important aspect of working life with interdepartmental relationships being key to the success of a business (Capretz, 2003). It is important for organisations to improve the quality of leadership within IT, developing individuals to their full potential. This behavioural lack needs to be remedied for this community.

The types of people drawn to a career in IT via a technical route seem to have a degree of similarity. Early descriptions of computer workers include Kraft (1977) who talks of this population as preferring the company of electronic brains to human ones. In recent times we often hear terms such as computer geek or computer nerd.

I have heard reference to “brain the size of a planet” as well. Whilst this negative stereotype has been somewhat glamorised in many television programmes (usually detective genres), anecdotally this is not the case in the workplace as mentioned above. The rather negative stereotypes, in some cases, have persisted since the early days of computing in industry and commerce despite the vastly different computing scene of today.

IT professionals are a significant part of the knowledge economy and are driving much of the change in many organisations. This amount of business change requires a significant adjustment in the working practice of such workers. The old image of IT as a backroom activity with employees isolated from the rest of the business is no more; IT professionals need to work together with the rest of the business to achieve change (Klawe, 2001, Buchen, 2011b).

I aimed to bring these aspects together with the output from coach interviews to see whether there is merit in developing coaching methods that vary from the more traditional approach of coaching. My research is concerned with the development of strategies that lead to an effective outcome of executive coaching for IT professionals. An outcome must be effective for the individual, the coach and the organisation. Current research, Roelfsema et al (2012a) suggest that individuals within the IT profession score especially highly on a systematising quotient as opposed to an empathising quotient. This suggests they are also prone to display similar behavioural and personality traits to those on the Autistic Spectrum or have Asperger’s Syndrome (an Autistic Spectrum condition). My suggestion is not that these individuals are necessarily diagnosable, but that they have a bias towards the identified behaviours (a broader autistic phenotype) and then construct their own reality based on their environment and life experience. This Broader Autistic Phenotype (BAP) is discussed fully in Section 2.3.

Traditional coaching which is often said to focus on feelings and emotions and, having its origins in therapeutic techniques, is often seen as irrelevant to many IT professionals. Consequently, they tend to reject all training opportunities of this ilk.

They react in a similar way to teambuilding interventions. Even when attending quite targeted technical courses, IT professionals seem to have difficulty focussing on the course and more difficulty working at the common pace of other attendees. This resistance makes it very difficult to develop IT professionals into the more rounded individuals needed in today's organisations and to achieve promotion to more managerial positions.

The understanding of neuro-differences in the workplace has improved over the last ten years. For example, neurodiversity at a basic level means that the brain works in a different way for people who are autistic or dyslexic. With recent interventions like the government's Access to Work scheme there is more support for these groups of people if they ask for it. Unfortunately, anecdotally, it appears that little effort has been made to accommodate the behavioural differences of IT professionals and even less effort into building on them.

The anticipated output of this research was to provide a coaching perspective and model that enables executive coaches to work with IT professionals in a productive and effective way. It has demonstrated the factors that have led to effective outcomes in coaching and the adjustments that are needed for this client sector. As a coach I am aware that I use a largely different approach and different techniques when working with IT professionals. For instance, my approach must be far more direct and less facilitative. I have also found that the qualities IT professionals look for in a coach are different. It is common for them to request a coach with an IT background. Also, they are often unwilling to acknowledge that the intervention is coaching at all.

1.2.1 Assumptions

Research assumptions reflect what you think is true when you start the study and what you hope will lead to some conclusions. These assumptions are based on beliefs that may stand or be shown to be unsupported.

In designing this project, I had to make several assumptions including:

- Coaches of IT professionals modify their standard coaching approach for this sector. This assumption is based on my experience as a coach of IT professionals and papers others have written (Moore *et al*, 2013) on the optimal nature of training for IT professionals.
- There were executive coaches who have worked with IT Professionals.
- They would be willing to take part.

The first assumption was based on the premise that I realised my approach was modified when coaching IT professionals. I have also had conversations with other coaches who acknowledged that IT professionals reacted differently in coaching than clients in other disciplines. The interest in this topic was high so it seemed likely that I would be able to secure enough participants. The coaching organisations involved were also very interested in the potential for this investigation, which gave me access to a wider audience for discussion.

1.2.2 Delimitations

Delimitations are a way of describing how the scope of the study has been narrowed. They are the conscious inclusions and exclusions in investigating the research problem (Bloomberg and Volpe, 2016). As previously stated, the purpose of this research was to explore the way coaching is delivered to and received by IT professionals in order to establish what needs to be included in a modified coaching framework specifically for this cohort. Clearly there could be many components to this investigation; in order to focus the research, I did not include the following:

- Input from coaching clients. I had originally planned to include clients, however, in practice it proved difficult to gain access to clients other than my own. There was a reluctance on the part of coaches to “volunteer” their clients. Additionally, in the pilot client interview, I found that the ensuing data did not add value to this research question. Clients are not in a good position to judge or assess good coaching as they are in it and not observing it.

However, this aspect could be framed slightly differently and form future research possibilities.

- I focussed on executive coaching rather than other types of coaching such as Life Coaching, Career Coaching or Leadership Coaching (although leadership may be covered within executive coaching).
- I restricted the client sector to Information Technology. Whilst there are commonalities with other STEM professions (Scientists, Technologists, Engineers and Mathematicians), I felt from my own experience in IT that this group was sufficiently nuanced to narrow the research in this way.
- Whilst in my literature review I have referred to links between Asperger's Syndrome and the IT Profession, I am not restricting my research to coaching clients who are diagnosed with Asperger's syndrome. My concern was with the IT profession with their typical behaviours rather than a clinically diagnosed subset. I am interested in the traits not the diagnosis.
- My participants were almost an equal split of men and women. The coaching interventions they described referred almost exclusively to male clients. It would be valuable to carry out future research regarding the gender of the coach. Also, it was interesting to see why female clients were not described. I have referred to this in Chapter 2 as a possible question of diagnosis.

There is further information on the process of securing participants follows in Section 3.10.

1.3 What is coaching?

Coaching in general is described in Bachkirova, Cox and Clutterbuck (2018) as “a human development process that involves structured, focussed interaction and the use of appropriate strategies, tools and techniques to promote desirable and sustainable change for the benefit of the coachee and potentially for other stakeholders”. This brings together theoretical approaches, modes of coaching and coaching models, all of which I will address in later sections of the next chapter.

The general coaching intervention in organisations could be seen as a developmental journey around performance improvement or a facilitation of personal growth and change. Bluckert (2005) says that the emphasis often is linked to the professional background of the coach. For instance, those coaches from HR or organisational development emphasise learning and development; those from results-based disciplines, such as sport or business, focus on performance or skills-based development and coaching psychologists see coaching in terms of behavioural change. It is important to consider this alongside the results of interviews with coaches, as the coach's potential bias in terms of approach to coaching may impact their views.

Leary-Joyce (2012) defines executive coaching as "two people engaged together in raising the awareness of one of them and therefore their ability to act." Bozer, Joo and Santora (2015) define executive coaching as "... a one-on-one relationship between a professional coach and an executive (coachee)". They further define the purpose as "... to enhance the coachee's behavioural change through self-awareness and learning ...". For this research I kept the definition of executive coaching as open as possible, accepting participant coaches who focus on learning and development and/or on behavioural change.

Ducharme (2004) differentiates between therapy and executive coaching. She suggests that executive coaching is more issue-focussed, examining the needs of the executive. Unique to coaching is that data can be collected from third parties in the organisation, such as managers and colleagues. Kilburg (1997) also refers to this data collection as providing an initial assessment and as a benchmark for success. Therapeutic interventions, however, rely on self-reports of internal states, particularly as measures of success. Kilburg (2000) also maintains that the most important difference is the level of analysis. He considers that therapeutic interventions tend to delve more deeply into issues than typical executive coaching interventions. This differentiation between therapy and coaching may also have an impact on the outcome of the research, particularly in interpreting the data. I have investigated this further in Chapter 2.

One may wonder about the assumed importance of a definition of coaching, let alone the sub-categories of the activity; however, as suggested by Passmore and Lai (2019), it is essential for practice. Having an explicit definition of a service makes it clear to clients what they can expect. They go on to say that such a definition is needed for research in order to understand what is being studied and finally they consider it essential for coaching education and qualification. I was nervous of pigeon-holing anyone into too rigid a definition and we do need for coaches to develop, aligning to different definitions as they progress.

1.4 Summary

The research question is:

Do external coaches use an alternative method to their norm when coaching IT professionals?

Planning and defining the subject of my research followed a process of refinement, endeavouring to prevent myself from gathering extra dimensions as I become more and more excited by the work I was about to undertake. Throughout the early stages of this research journey I have gradually refined the research question and objectives. This has been essential to provide focus and to tailor my research to the benefit of the receiving audience of coaches, those who train coaches, supervisors and buyers of coaching.

This chapter has introduced the approach to my research thesis. My working focus is as a coach, both at executive level and those with diagnosed neuro-diversities at any point on organisational hierarchy. My previous working experience has contributed to my passion for working with people and helping them to realise their own goals. Working in the IT sector has provided me with a first-hand view of the frustrations and disappointments of some IT professionals. They frequently struggle to integrate with non-IT professionals, yet those I have coached have reported that this becomes easier with the right techniques. Other coaches have talked of the difficulties when working with IT professionals and expressed interest in the outcome of this study

(Carole Pemberton, 2016, Private Conversation). Given the assumed importance of IT to our organisations it just makes sense to have an optimal approach to the coaching of IT professionals.

1.5 How this thesis is organised

I have organised the thesis as follows:

Chapter 2 – Literature Review. In this chapter I will investigate the literature on coaching IT professionals, expanding this to include areas relating to the research question that may inform the outcome of this study. I will include a consideration of supporting theories to coaching and the behaviours of IT professionals. I end by re-stating the research question and listing the aims and objectives.

Chapter 3 - Project Design: Methodology, Research Approach and Activities. This chapter will lead initially to my research paradigm and process. I will continue by discussing the activities I undertake during the data-gathering stage of the study.

Chapter 4 – Project Findings. I will detail the findings from the one-to-one interviews that I plan to carry out.

Chapter 5 – Discussion of Findings. The findings will be discussed in conjunction with the knowledge gathered during the literature review.

Chapter 6 – Conclusions. As a result of the literature review, data collection and subsequent analysis of findings I expect to present recommendations for coaching as well as talking about potential outputs and further research.

Chapter 7 – Reflection. I will look back on my doctoral journey to explore what has happened to my learning along the way.

2 Chapter 2 – Review of Knowledge and Information

2.1 Introduction

The purpose of this study is to explore, with my participant coaches, their experience of coaching IT Professionals. I seek to understand how their experiences might have altered their coaching approach for this group of clients.

My research question is:

Do external coaches use an alternative method to their norm when coaching IT professionals?

This question examines the premise that both the form of coaching, and the mode of coaching are influenced by the behaviour of the client (IT professionals). This has commonality with that displayed by those with Asperger's Syndrome (Roelfsema *et al*, 2012a) as opposed to the general population, or at least the traits of this syndrome as discussed by Moore *et al* (Moore *et al*, 2013) a practitioner-based report. A broad study was carried out by Ruzich *et al* (Ruzich, Allison, Chakrabarti, Smith, Musto, Ring and Baron-Cohen, 2015); this covered parameters such as age, gender and occupation and found that there was a significantly higher number of IT professionals on the autistic spectrum. Baron-Cohen *et al* (Baron-Cohen, Wheelwright, Burtenshaw and Hobson, 2007) found that this group of participants presented a systematizing cognition rather than an empathy-based cognition. The implications of this personality are discussed later in this chapter. What I wanted to investigate is whether this effect was real and in what ways it plays out.

Whilst the available literature in coaching is an important element, my focus is also on Asperger's Syndrome and the behaviours of IT professionals thus psychology can be argued to be a core subject as well. I have included literature concerning adult learning and motivation.

The focus relates to the relationship between these aspects whilst covering enough background knowledge to support the investigation. This background knowledge was gathered largely from a systematic search of books by academics, supported by peer reviewed articles.

I searched various databases and catalogues including PsycINFO, Sage Journals Online, Wiley Periodicals, EBSCOhost, Emerald and Springer. The search terms used included “IT professionals and Autistic Spectrum”, “coaching IT professionals”, “coaching style”, “IT professionals and personality”, “IT professionals and behaviour”. These yielded good results in areas such as IT and Autistic Spectrum but less in behaviour and personality of IT professionals. Linking coaching to IT professionals as a search term returned nothing. As a result, I adopted a snowballing technique as follows:

The research literature on coaching and IT professionals was identified in two stages. In the first stage several keywords and phrases (e.g. coaching, Asperger’s Syndrome, efficacy of coaching, IT professionals’ behaviour, Autistic Spectrum, personality and IT professionals, learning, motivation, coaching style, coaching approaches) were used alone and in combination to search the databases and catalogues mentioned. The second stage of the process involved working through the search results to identify a subset of relevant articles from the first stage, and adding other works identified in the references of these articles using a snowball technique. I focussed on 21st century for recent research pieces and practitioner writing in the field, however I used books written in the 20th century for some of the background theory (McClelland, 1987, Frith, 1991). I also accessed some older research where relevant.

Whilst examining these aspects, it became clear, that apart from investigation into behaviours amongst IT professionals and connections with Asperger’s Syndrome, I was unable to find any academic papers relating to coaching this community. Fillery-Travis and Cox (2018) discuss gaps in coaching research and consider that the multidisciplinary nature of coaching influences this gap in that funding for collaborations between university departments is scarce. It seemed that this missing link in relation to my research question could only be supplied by interviewing coaches of IT professionals to see if there was a different approach.

Clearly, as indicated in my research question, I was looking to see if coaches do change what they do with this client group and, if so, what is that difference.

According to literature (Dingman, 2006, Starr, 2008) discussing coaching in general there are several elements that can change the coaching engagement including the relationship formed and the process of the coaching undertaken. These are discussed more fully in section 2.6 and 2.7.

These all must be considered when coaching particularly in early sessions when the relationship is forming, however, some require greater consideration for this research; relationship and process. To coaching process, I added style of coaching which addresses elements such as coach/client match and background. Theoretical underpinnings of coaching provide a backdrop to examining the relevant literature. This formed a basis for my literature review with the addition of the literature which examines the behaviour of IT professionals followed by literature on Asperger's Syndrome. I reviewed these two aspects first as they set the scene for my target client group. Before moving on to the theory comprising coaching, I investigated efficacy of coaching. Relationship interweaves all these research areas. This allowed me to look at the factors that are impacted by the behaviour and characteristics of IT professionals.

This research investigates the different needs of this IT population and if, and how those needs differ from other coaching populations in terms of coaching within organisations. I explore the variations in coaching models and approaches used by coaches with these clients, understanding what is and what is not successful.

It should be stated at this point that my research is concerned with the coaching process and not the organisational contexts, other than where they have led to issues for the client. Clearly the organisational context provides different experiences for IT professionals, as it would with other disciplines. For example, IT professionals working in a technical company **may** have a more sympathetic environment. This does not necessarily follow; in technical companies the empathy required may not actually be there as a result of the behavioural commonality of the workforce. This could be a route for future research, but my focus for this study builds on my expertise and concentrate on the process of coaching.

2.2 IT professionals: behaviours and personality

When considering the behaviour of IT professionals, several academics refer to the common personality and behaviour of IT professionals. I examined an article by Klawe (2001) who identifies the poor communications skills and poor teamworking of this group of professionals. She goes on to cite positive attributes such as intelligence, diligence and good organisational skills. Whilst she discusses the value of “Nerds” to the IT industry she also asserts the need for “non-nerds” because IT has an impact on all areas of work. This article makes a case for attracting “non-nerds” to study computing and dispelling the myth that you must be gifted in mathematics and science to pursue an IT career. The article does not extend its message to the development of IT professionals in the workplace, but it does give rise to considering this.

Hunter (2009) considers that the computing industry needs a wider range of people, suggesting that IT professionals need to be “ethically aware, excellent communicators and effective team members.” She looks at four main types of people who are attracted to IT professions: people with Asperger’s Syndrome, Geeks, Hackers and those whose behavioural preferences fall into the Myers-Briggs ISTJ category (see table 2.1 p 38). This does give a flavour of the personalities that may be involved as well as the organisational difficulties that may be encountered. It also highlights a potential mismatch between many IT professionals and the behavioural needs of the organisation. This can explain how many of the investigations into personality types of IT professionals have been driven by the ineffectiveness of IT project teams and the high failure rate of projects (Gorla and Lam, 2004). Gorla and Lam investigated the relationship between the personality composition of teams and team performance (2004). They looked at the effect of the team leader’s personality, team members’ personalities and the heterogeneity of personalities on the performance of team. Whilst they acknowledged differences between small and large project teams, they found that heterogeneity of personality was not necessary;

all the four personality dyads should be represented; extrovert-intuitive, extrovert-sensing, introvert-intuitive and introvert-sensing. Given the following findings relating to IT professionals' typical personality type of ISTJ, it can be challenging to select team members from IT disciplines with the right technical skills as well as a variety of personality dyads.

Whitley (1996) uses the Jungian dimensions of personality: introversion – extroversion (IE), sensing – intuiting (SN) and thinking – feeling (TF). He considers that introversion, sensing and thinking relate to aptitude for working with computers, attitudes towards computers and computer-related behaviours. Whitley's (1996) research based his hypotheses on the IE and TF dimensions. This certainly plays to the typical personality traits of IT professionals (ITSJ) and work by Myers Briggs relating prevalent career choices by personality type (Myers, 1995).

Despite the traditional psychologist's view of personality as fixed and apart from environmental and social contexts several studies have used the MBTI-approach to investigate personality in the IT industry. The Myers-Briggs Inventory (MBTI) is a psychometric instrument commonly used to assess personality preferences across disciplines and is based on the Jungian dimensions. It describes the different personalities that can occur from the various combinations of four main behaviour preferences. (See Appendix 1 for a summary of these). It is reported by many researchers that there is a significant preference for the ISTJ personality type (Lyons, 1985, Whitley, 1996, Capretz, 2003). There is widespread agreement amongst researchers in this area that "T" (thinking; 81%) is the most prevalent characteristic and "F" (feeling; 19%) is the least (Whitley, 1996, Capretz, 2003) (Hunter, 2009). Capretz (2003) concludes that IT workers act on what they think rather than on what someone else feels. This can lead to poor communication by IT professionals. In a comparative study of two IT project teams, John Bradley and Frederic Hebert (1997) found that a balance of personality types within teams are needed for successful project outcomes. They concur with Hunter (above) that cross-functional teams are important for the delivery of innovative solutions to complex problems. This adds to

the need to coach IT professionals effectively to work alongside very different personality types.

With such a high proportion of IT workers falling into the ISTJ category, particularly the “T” group, it is easy to see how difficult it is for them to progress into management positions. The same would be true of positions where they must interact with other disciplines. Typically, people whose preference is “I” prefer solitary activities and therefore find communication difficult. Type “J” people tend to be orderly and controlled and can be frustrated by people who are rather more chaotic.

This is supported by Thompson *et al* (2008) who developed a Five Factor Framework to support the coaching of middle managers. In this it is recognised that many people who are promoted from technical roles can struggle with their impact on others and how to adjust to what is needed. The skills and behaviour required can be at odds with their natural traits and working life can become difficult. This is compounded when organisational career paths position people-management roles as more senior on the ladder.

Moore *et al* (2014) refers to IT professionals as having high IQ (Intelligence Quotient) but low EQ (Emotional Quotient). This is based on work by Baron-Cohen *et al* (Baron-Cohen and Wheelwright, 2004a) who developed a questionnaire for assessing an individual’s position on the empathising/systematising scale. They found that both those with Asperger’s Syndrome and IT professionals (amongst other STEM (Science, Technology, Engineering and Mathematics) professionals) tended towards the systematising end of the dyad. Extreme systematising brings its own specific behaviours such as poor interpersonal skills and a preference for systems over people (Lawson, Baron-Cohen and Wheelwright, 2004).

Attwood (2015) maintains that computers provide a solitary pastime and an escape from people. “One of the reasons why computers are so appealing is not only that you do not have to talk or socialise with them, but that they are logical, consistent

and not prone to moods”. “Thus they are an ideal interest for the person with Asperger’s Syndrome” (Attwood, 2015). They are also predictable, reinforcing the preference for consistency mentioned by Baron-Cohen above. This is backed up by a practitioner article by Moore (2014), “Even the Odds” refers to coaching “Super Geeks” in the STEM occupations having high IQ/Low EQ (Intelligence quotient/empathy quotient). She describes the group as gifted thinkers who are excellent at solving complex problems but struggle with interpersonal interaction and poor communication. Moore is director of Top Stream a coaching organisation which focusses on coaching gifted individuals working in the STEM professions. Whilst this is not an academic research document, it is based on other research and practitioner experience.

Moore (2014) considers that poor **communication** may be demonstrated by lack of awareness of the impact of the message. The “how” of delivery is not considered and excessive detail is often used. This community tends to be articulate to a high degree. Within organisations I have heard many individuals from other areas of the business describing IT professionals as rude and unable to explain things clearly. Extrapolating from research and practitioner comment, it seems that IT professionals can lack the behaviours needed to interact successfully with colleagues across the organisation impacting their “customers” adversely as well as their immediate colleagues. As a result, communication can be poor and open to misinterpretation. This leads to ineffective working practices and a potential disconnect when delivering projects.

Their structure and use of **language** tends to be very literal and bare (Attwood, 2015). Frequently IT professionals just state the facts, unaware that the meaning has been missed. Conversely, they can sometimes give extremely detailed accounts when explaining to others, going into excessive detail on technical minutiae and losing their audience along the way. The issue is one of using the appropriate language for the recipient.

Difficulties with **social interaction** (Gillberg, 2002) affect both the IT team and the greater organisational community. It seems that these individuals do not perform

well as a team and simply do not recognise the value of teambuilding exercises. Gillberg (2002) and Attwood (2015) amongst others have observed a lack of “small talk” which can make them appear unfriendly to some other disciplines. My experience has taught me that the relationships built with others in an organisational setting are paramount in ensuring that joint initiatives work well.

2.3 Asperger’s Syndrome

Before examining the relationship of Asperger’s Syndrome to IT professionals it is helpful to define the difference between Asperger’s Syndrome and Autism. Autism is a spectrum condition (not a continuum), in which all autistic people will share certain difficulties, but it will affect them in different ways. Generally, the differentiator for Asperger’s Syndrome is that individuals have no significant delay in development of language and cognition, but they still have social communication difficulties (National Autistic Society, 2019). Overall the National Autistic Society defines two key areas for the diagnosis of Asperger’s Syndrome. Those with Asperger’s syndrome will experience “persistent difficulties with social communication and social interactions”. Additionally, they will display “restricted and repetitive patterns of behaviours, activities or interests”. (National Autistic Society, 2019).

Ehlers and Gillberg (1993) estimated that autism occurs in 0.7% of the population in the ratio male: female of 7:3. There is some concern over the numbers of females reported with Asperger’s Syndrome as this may just reflect low diagnosis rates in females.

Social communication and interaction

In his studies on this area of the spectrum, Asperger in Nixon (2013) noted that many of his patients were highly verbal yet often using language idiosyncratically, coming across as odd and impacting two-way communication. They would frequently talk at

length about topics they were interested in. Literality and poor understanding of metaphor make communication difficult. Inability to understand irony and jokes make social interaction difficult. This is obviously old research; however, it is still held as relevant as a background to more recent studies.

According to Simon Baron-Cohen, Asperger's Syndrome (AS) is characterised by "abnormal social communication and imagination development, together with unusual obsessional interests and repetitive behaviour"(Baron-Cohen, 2008). It differs from classic autism in that in Asperger's Syndrome the IQ is at least average and there is no delay in language development in childhood.

A strong bias for detail in Asperger's Syndrome was first proposed by Uta Frith (1991) as a core deficit in autism. Most people recall overall form and meaning when processing information from the environment. She described this as reflecting central coherence, an ability to see the bigger picture. She found that individuals on the Autistic Spectrum attend to detail above overall form and meaning, which demonstrates weak central coherence. Having sat through many IT presentations to non-IT teams, I have been struck by the excessive detail recounted by my technical colleagues and the glazing of eyes from their audience. I recall an exasperated CEO asking a Network manager about a new IT system who partway through the lengthy description interjected "Yes? But does the damn thing work?"

Social interaction can range from aloof and withdrawn to actively social but odd. Inappropriate interruptions are common as often people on the autistic spectrum find it difficult to read emotional expressions. The NAS (National Autistic Society, 2019) suggests that this group finds it difficult to perform well in interviews and to develop good relationships with colleagues. As mentioned earlier in this chapter, some technology firms such as SAP are recruiting individuals on the autistic spectrum. It is not clear how they identify the pool they recruit from; however, they say that they make sure the selection and interview process is tailored to the individual's preferences. They also claim provide support and training on the social and interpersonal skills needed to get the best out of this population.

Baron-Cohen (2008) explains the social and communication difficulties as delays and deficits in empathy. There are two components to empathy: firstly, a cognitive component; understanding what someone else is feeling and further understanding the emotional impact of their actions or words. The second component is an affective component, experiencing the appropriate emotional reaction either oneself or in comforting another. This can lead to an apparent lack of feeling and inappropriate behaviours in many situations. Systematising as a skill in analysing or constructing systems is clearly aligned to IT occupations due to the systems-approach required. Many things can be described as systems; collections, social systems, numerical systems, etc. An assessment tool has been created (Wakabayashi, Baron-Cohen, Wheelwright, Goldenfeld, Delaney, Fine, Smith and Weil, 2006) to assess individual positions on the empathising-systematising dyad (Emotional quotient/Systematising quotient questionnaire).

A common view of the reasons behind social impairment is a difference in social cognition otherwise termed Theory of Mind. This basically describes the inability to indicate mental states to others and oneself in order to explain behaviour. It is often cited as impacting empathy (Baron-Cohen and Wheelwright, 2004a). An alternative or maybe additional view of the social motivation difficulties in those with autism is the social motivation theory of autism, Chevalier *et al* (Chevallier, Kohls, Troiani, Brodtkin and Schultz, 2012). This theory states that motivational deficits have an impact on the development of social cognition and could be thought of as a precursor to deficits in social cognition. Chevalier *et al* (2012) have suggested an integrated model based on social orienting, seeking or liking and social maintaining. They also include biological mechanisms. At the behavioural level for individuals with Asperger's syndrome, they consider that all three components are disrupted. In social orienting, potentially beneficial or rewarding information is prioritised in attentional terms. 'Wanting' and 'liking' are components of reward and it is suggested that adults make extra effort to obtain social rewards. If there is a difference in this area then the usual rewards may not be motivating for individuals with Asperger's syndrome. Recent research (Supekar, Kochalka, Schaer, Wakeman,

Qin, Padmanabhan and Menon, 2018) has documented deficits in children with autism in a crucial reward circuit called the mesolimbic reward pathway that is buried deep within the brain. It is considered that this difference inhibits interaction between those with Asperger's Syndrome and neurotypical individuals as there is no reward. Social maintaining includes the behaviours that help people establish, maintain and enhance their relationships with others. Again, as a deficit in those with Asperger's Syndrome it makes the formation and development of relationships difficult.

When looking at this theory it is important to stress again that I am not suggesting all IT professionals are autistic, but that they often have similar behavioural and personality traits to those who are diagnosed with Asperger's Syndrome. This makes them good at the job they do. This is often referred to as the Broader Autistic Phenotype which refers to first-degree relatives (parents and siblings) of those diagnosed as on the Autistic Spectrum, who display a significant number of mild autistic traits. They have a milder manifestation of the same characteristics (Baron-Cohen, 2008). It is widely accepted that autism is strongly heritable (Bailey, LeCouteur, Gottesman, Bolton, Simonoff, Yuzda and Rutter, 1995). There is a strong genetic link both for autistic spectrum conditions and the Broader Autistic Phenotype. It is said by Baron-Cohen (1998) that this Broader Autistic Phenotype can be characterised by deficits in social understanding (folk psychology) but strengths in understanding inanimate objects (folk physics). These terms refer to the idea that cognition has a domain-specific structure (Barkow, Cosmides and Tooby, 1992), some of which are a result of natural selection. These two domains reflect social versus inanimate events as an attentional bias in the infant brain which support the infant's learning. Gerds and Bernier (Gerds and Bernier, 2011) indicate that this Broader Autistic Phenotype should be accommodated in the same way as Asperger's Syndrome; despite the apparent mildness of traits the impact on daily life and work can be great.

Technology firms such as SAP (Bryant, 2013) are recruiting individuals on the autistic spectrum. It is not clear how they identify the pool they recruit from; however, they make sure the selection and interview process is tailored to the individual's preferences. They also provide support and training on the social and interpersonal skills needed to get the best out of this population.

2.4 IT professionals and Asperger's Syndrome

"It seems that for success in science or art, a dash of autism is essential ... an ability to turn away from the everyday world ... to rethink a subject with originality, and create new untrodden ways..." (Asperger, 1944).

In investigating the potential links with Asperger's Syndrome, I turned to one of the leading experts in this field. Baron-Cohen (1998) has investigated the predominant behaviours in the STEM professions (Science, Technology, Engineering and Mathematics).

Studies by Baron-Cohen (1998) have examined the predominant behaviours of scientists within the categories of social, communication, imagination, attention to detail and attention switching). These behavioural traits are typical of the autistic spectrum. Using a self-assessment screening instrument, the Autistic-Spectrum Quotient (AQ), they (Baron-Cohen, Wheelwright, Skinner, Martin and Clubley, 2001b) showed that scientists, particularly mathematicians, computer scientists and engineers scored particularly highly. This supports earlier research showing links between Asperger's Syndrome and occupations in maths, physics and engineering. Baron Cohen (1998) suggests that up to 40% of men and 20% of women in these occupations display at least moderate traits.

I have used this EQ/SQ (Empathy/systematising quotient) assessment on some of my clients who have not been diagnosed as on the Autistic Spectrum and their results indicate a strong preference for systematising.

Baron-Cohen (1998) found that Autistic Spectrum conditions occurred significantly more often in families in IT occupations. This is supported by a study (Baron-Cohen and Hammer, 1997) which shows that relatives of individuals on the Autistic Spectrum may display the Broader Autistic Phenotype previously mentioned; IT professionals may not be diagnosed with Asperger's Syndrome but live within families where siblings or parents have the diagnosis, so they may have similar behavioural traits and also have a career in IT. Research indicates that individuals working in IT and Technology have a greater number of autistic characteristics, (Robinson, Ruthenberg and Vibhakar, 2013), which are of great value to technical roles. Roelfsema et al (2012a) have also shown that there are a higher proportion of people displaying these traits within the field of IT and Technology. However, when rewarded for these skills the individual often is promoted to a management position which requires a very different focus on people skills and "the bigger picture". Without effective development their cognitive style may fail them.

Commentators such as Silberman (2001) refer to high numbers of people with Asperger's Syndrome amongst IT professionals working in Silicon Valley. He also suggests an increasing number of children on the autistic spectrum in that community. This is acknowledged by Buchen (Buchen, 2011a) in her article "When Geeks Meet" where she refers to scientists and engineers not necessarily having an Asperger's Syndrome diagnosis but increasingly acknowledged as displaying the same traits. She cites research by Baron-Cohen *et al* (Baron-Cohen, Wheelwright, Stott, Bolton and Goodyer, 1997) which considers that there is a genetic element to Asperger's Syndrome and that there is an increased incidence of this in areas of high technology such as Silicon Valley. His theory is not without his critics and many, such as Happé (Happe, Ronald and Plomin, 2006) and Frith (Frith, 1991), feel that the research has not been sufficiently rigorous and relies heavily on self-reporting by participants. They also consider that the research only applies to those with Asperger's Syndrome and not necessarily others on the Autistic Spectrum. Whilst acknowledging this, my research refers to Asperger's Syndrome rather than Autistic Spectrum overall, so Baron-Cohen's assertion is appropriate for this research.

Baron-Cohen (1998) and Attwood (2015) both suggest that people with Asperger's Syndrome display an aversion and inability to interact with their peers. Burgoine and Wing (1983) consider that they can become absorbed in a narrow range of interests usually related to things rather than people. Simon Baron-Cohen (2000) says that this group of people enjoy experiences that are predictable rather than unpredictable. It is very difficult to control the social world but easy to control technology. These behaviours describe someone who not only has difficulty understanding people but do not want to interact (Attwood, 2015).

There seems to be a body of opinion and evidence that Autistic Spectrum conditions are more prevalent in IT occupations. Roelfsema et al (2012a) suggest a two to four-fold increase in Autistic Spectrum conditions in high technology regions. This is supported by Wei et al (Wei, Yu, Shattuck, McCracken and Blackorby, 2013) who analysed data from a sample of Autistic Spectrum conditions in special education where a disproportionate number enrolled and then participated in IT occupations.

There appears to be a commonality of personality traits and behaviours that can help or hinder this target population. These include poor communication skills, weak central coherence and a deficit in mentalising (Roth, 2010). Weak central coherence manifests itself in over-reliance on detail, both in approach and in presentation to others. It is displayed frequently as an inability to pitch at the appropriate level of summary for the audience. The outcome is that the listener(s) "switch off" or do not understand the message. Additionally, it can lead to a failure to see the bigger picture. Mentalising (Roth, 2010), encompasses the ability to put oneself into another's position. It is sometimes referred to as lack of empathy or a deficit in Theory of Mind (Baron-Cohen, 1988) and affects the efficacy of social interaction. This is an important aspect of working life with interdepartmental relationships being key to the success of a business.

Hunter (2009) concludes that there are similarities between the behaviours of computer geeks, people with Asperger's Syndrome and those with an ITSJ

personality. Table 2.1 in section 2.4 identifies these similarities collated from other researchers. Examining the output of researchers and practitioners in this field has yielded commonality of the behaviours and personality of IT professionals, citing a Myers-Briggs(Myers, 1995) type of ISTJ. The common behaviours referred to are poor communication, poor social interaction and a tendency to become absorbed in a narrow range of interests. The next section builds on this, comparing the findings to literature concerning Asperger’s Syndrome and IT professionals.

.Table 2.1: Common Behavioural Characteristics of People with Asperger’s Syndrome, Computer Geeks, and People with ISTJ Personality Type

Asperger’s Syndrome	Computer Geeks	ISTJ Personality Type
Lack of desire to interact with peers	Reclusive	Introverted
Poor non-verbal communication	Poor communicator	Poor communicator
Communication disinterest in others	Communicator, unsociable, self-contained	Poor team member
Diligent	Diligent	Diligent
Often intensely absorbed with technology	Technically skilled	Well suited to technical work
Lack of empathy	finds human relationships difficult	Preference for things rather than people
Dislikes sudden change	Well organised environment	Prefers ordered

Table 2-1 (Hunter, 2009) Common behavioural characteristics of people with Asperger's Syndrome, computer geeks and people with ISTJ personality type

As a result, communication can be poor and open to misinterpretation. This leads to ineffective working practices and a potential disconnect when delivering projects. In that case, how do adults learn in general, and how does this affect those with the traits under discussion.

The coaching and development organisation “Topstream” focusses on coaching IT professionals and has run masterclasses for coaches where they provide information for effective coaching in this sector. Moore, a director of Topstream (Moore *et al*, 2013) has written about her experience of working with “supergeeks”, referring to their strengths and how to build on them. Moore considers that IT professionals

display several characteristics in common, such as an aptitude for understanding rules based systems which supports the empathising- systematising dyad described by Wakabayashi et al (2006). She also describes this population as having great attention to detail which is supported by the literature covering the behaviours of those with Asperger's Syndrome (Frith, 1991). Although not an academic peer-reviewed piece of research, it is an experienced practitioner-based paper and is therefore valuable.

From the literature concerning the behaviour of IT professionals and knowledge of Asperger's Syndrome (sections 2.2 and 2.3) it can be seen that IT professionals have a high tendency towards Asperger's Syndrome or at least Aspergic traits. What I intended to investigate were the ways it plays out in terms of my professional role, difficulties that are brought to coaching and the impact on the coaching interaction. I started by looking at the general format of coaching and how this effect may interact with the efficacy of coaching.

We already know from the literature (Baron-Cohen, 2008) that this client group struggles with relationships and change, so these are clearly areas that we may want to explore further in Coach Style and Process of coaching and the factors that lead to effective coaching. As found by Hunter (2009), IT work today needs people with excellent communication skills. She further states that great communication is essential for working as a team, especially when that team is multi-disciplinary. It is also important for those in roles that support IT-users and work with clients (either internal or external).

Coaching is a particular way of delivering learning and so it is important to address this point given the impact of Asperger's Syndrome on learning is well documented. Baron-Cohen (2008) compares the lack of concordance between educational formats and learning preferences of those with Asperger's Syndrome (Appendix 2). These preferences do not only apply to development and training but also to the workplace generally with inevitable implications for management style. It is logical to assume

that these preferences will have an impact on coaching as well. Given this logic I turn to the theories of learning and motivation.

2.5 Learning and motivation

Learning theories help to explain what happens when people learn. Cox (2015) has explored the link between coaching and adult learning theory and finds that the theory of andragogy (described and defined below) confirms that link. It has been proposed by several commentators including Baron-Cohen (2008) that those with Asperger's Syndrome have a different learning style and therefore require a different approach. Clearly I have not done a deep analysis of this area, as this could be a focus for future research. I have examined theories of motivation, given the reports that IT professionals can be reluctant to ask for coaching. Merriam and Bierema (2014) suggest that the traditional theories are:

- Behaviourism – a change in behaviour.
- Humanism – learning is about the development of the person.
- Cognitivism – learning is a mental process.
- Social cognitive theory – learning is social and bound by context.
- Constructivism – learning is creating meaning by context

These are utilised by the teacher, or in the case of this study the coach, and it would be useful to consider how we encourage learning in our coaching. Taylor, Marienau and Fiddler (2000) have created a useful table which indicates one's orientation to learning according to various criteria (see Appendix 3). Beneath this layer of theories are other theories of learning such as andragogy, experiential and transformative.

Andragogy is considered a constructive approach, which could therefore have an affiliation with coaching interventions where the coach and client are joint parties in the development of new learning. Experiential learning also supports executive coaching in that the exercise is frequently based on the client's experience in his working life and this combined with the coach's experience brings new learning. Transformative learning resonates with the client group forming the basis for this

research particularly. In coaching we are often trying to develop new ways of working and for IT professionals this is pertinent as we are helping them to relate better in the workplace. Hence I have chosen to look at these theories more closely.

2.5.1 Andragogy

Andragogy is thought of as one of the first theories of adult learning, promoted by Malcom Knowles (Merriam and Bierema, 2014). According to Cox (2015) this theory is a constructivist approach, where adults combine their experience and create new learning. Knowles suggested six characteristics of adult learner

1. As people mature they become more independent and self-directing. However, this does not mean that adults necessarily have these qualities. Blaschke (2012) describes heutagogy, which is based on andragogy and acknowledges such self-determined learning, giving reference to life-long learning. Additionally, it is considered that the environment should be adult-oriented and that there should be mutual respect and trust. This is a further consideration for IT professionals; as commented on already, their environmental requirements may be different. Incidentally, the same is true for other individuals with neuro-differences. The attributes of respect and trust are seen as elements of effective relationship by other researchers such as de Haan *et al* (2008b). Further, as commented on by Moore *et al* (2013) IT professionals value authenticity and honesty.
2. It is considered that an adult's life experiences are invaluable for learning. These act as a reservoir of supporting knowledge and as a catalyst for learning.
3. It is assumed that adults choose to learn in relation to the developmental tasks and the social roles of adult life. Thus, the adult is "ready to learn". This contrasts with the personalities of those with Aspergic traits as discussed earlier in the chapter. Their perception of their social roles may well be different.

4. The fourth assumption, although related to the first three, suggests that adults are motivated to learn in order to deal with an issue or problem.
5. Andragogy suggests that adults are motivated to learn through internal motivators such as self-esteem, personal fulfilment and to improve quality of life. This contrasts with pre-adult learning where the learning can be completely directed. This certainly “fits” with coaching where clients have elected to be coached. Whether the same is true for those clients who are sent for coaching may be questionable and the coach would therefore require greater skill. Equally there is learning that the employer requests, for example specific technical learning.
6. As adults we need to know why we need to learn something, which goes together with point 4 above. Motivation will be much stronger if clients can see why it is important to learn something. Sometimes our role as coaches starts with helping clients become aware of the need to know, which can present a challenge. This seems especially true if the organisation is demanding behavioural changes and I will discuss this further in Chapter 5.

Considering these aspects of andragogy in relation to coaching and IT professionals, there are clear links to what may motivate a client to seek coaching. This assumes that clients recognise what they need to learn, which can be challenging for many IT professionals who, because of their Aspergic traits, may be “blind” to behavioural issues.

2.5.2 Experiential learning

Experience has been considered to have a role in learning since the Greek philosophers and educators. A key figure in this philosophy was John Dewey (1963), an educator and philosopher in the 1930s, who saw learning as a lifelong experience that involves adapting and applying previous experience to new situations. He did recognise that not all experiences are good and suggests that some experiences can impact the growth of ongoing experiences (Dewey, 1963). For the introverted,

negativity can impact their experience that could be a barrier to learning. IT professionals, as discussed (in 2.2, 2.3, 2.4) can be subject to negative experiences in the workplace which may impact their learning in any form. There are several models around experiential learning of which maybe the best known was developed by Kolb (1984).

Figure 2.1 The experiential learning cycle and basic learning cycle style

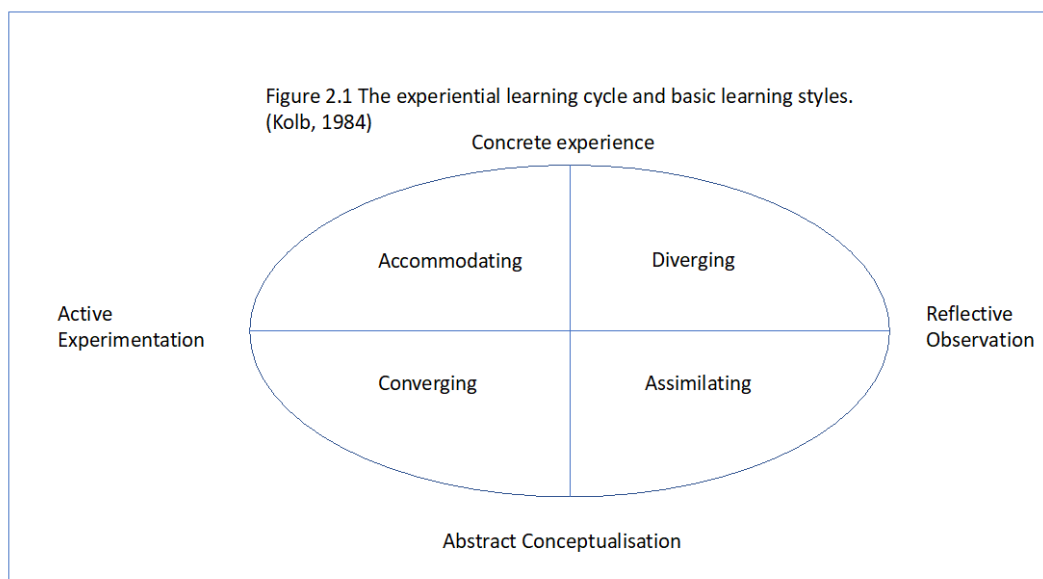


Figure 2-1 The Experiential Learning Cycle and Basic Learning Style.(Kolb, Boyatzis and Mainemelis, 1999)

Kolb (1984) considers there are four stages that learners go through in this process. As shown above, the stages are concrete experience, reflective observation, abstract conceptualisation and active experimentation. To learn effectively Kolb considers that learners must be able to engage in each aspect of the model. Some clients will struggle with engagement on some of these stages. For example, Kolb suggests that for reflective observation the learner should practice focussing on thoughts and feelings rather than acting upon them. Abstract conceptualisation should involve shades of grey which is difficult for IT professionals and those with Asperger's Syndrome, as discussed in sections 2.2 and 2.3. Several commentators have built on Kolb's model developing different aspects of the cycle such as the process and types of experiential learning.

Cox (2013) is one of these commentators and has built on Kolb's learning cycle relating the stages and transitions to coaching.

Figure 2.2 The experiential learning cycle

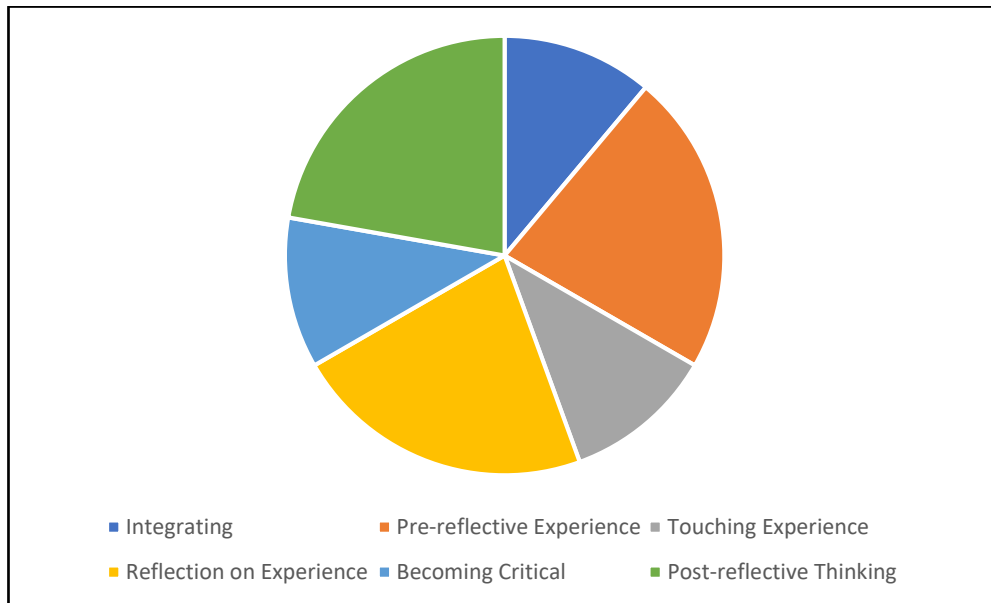


Figure 2-2 The experiential learning cycle (Cox, 2013)

The three larger sectors align with Kolb's four stages. Pre-reflective experience occurs prior to each coaching session influencing what the client brings to coaching. The second stage is reflection on experience via a transition of touching experience. The transition is an attempt to consider the feelings between these two reflective stages in the same way as found in Kolb's cycle of learning. Again, feelings are highlighted and from the sections on IT professional behaviour we see that this client base struggles to identify their feelings.

Reflection on experience, the second stage, has synergy with stage 2 of Kolb's cycle, articulating experiences along with the client's perceptions and emotions. Based on the behaviours and personality types of IT professionals discussed previously, the depth of this reflection may give rise to difficulties and disconnection. It is suggested that they do not employ a particularly reflective style, at least where emotions and feelings are concerned. In terms of concrete experience however it may be logical to assume that they will error check in an iterative way until the experience or solution is acceptable to them.

In transition to the third stage of Cox's (2013) learning cycle the client is expected to take a critical position in order to achieve post reflective thinking. This stage adds to thinking to include logical and cognitive processing (mindfulness for example). The cycle completes through integration so that the new experience can become learning and update the pre-reflective experience.

Again, this model places some emphasis on thoughts and feelings which would prove problematic to the client group concerned. However, Cox sees coaching as the facilitation of understanding and supporting ongoing action. The coach should challenge existing learning to make sure the client is open to development. In this manner the cycle, in many respects, would support IT professionals in coaching who prefer a direct approach and readily accept challenge. It may be that some modification to the model may be needed. Experiential learning theory leads well into transformative learning as this also has an experiential component.

2.5.3 Transformative Learning

The theory of transformative learning was proposed initially by Mezirow (1997), who articulated it as the process of effecting change in a frame of reference. The frame of reference is built from the experience that adults have acquired and then used to define their world. These frames of reference shape our actions. It follows that adults generally reject ideas that don't "fit" within this frame. Transformative learning can lead us to develop a frame of reference that is more inclusive and integrative of experience. We often use the phrase "experience broadens our horizons", which can be extrapolated to include learning as a method for gaining experience and vice-versa. These definitions demonstrate the potential overlap of experiential learning in order to achieve experiential learning.

Readiness for transformation enters this arena too, and many commentators refer to the need for some conflict or interruption to daily life to deliver this readiness. This "readiness for learning" concept has been part of education literature since the 1960s when it was discussed as fundamental to the education of children. Once readiness is achieved, Mezirow (1990) considers there are several phases to people's

transformation. The first stage is for the individual to explore the feelings relating to the dilemma followed by critically examining the assumptions around the dilemma. The client (or student) then needs to recognise the shared nature of discontent and the process of transformation which Cox (2015) considers can lead to the turning point for transformative experience. The individual, having accepted this will need to consider alternatives to amend the framework and then plan a course of action to enable this change. Once done the new perspective becomes integrated into the client's life.

Both Cox (2015) and Mezirow (1997) consider that support of these stages is a key role for the coach (in Cox's case) or educator (in Mezirow's case). Taylor (Taylor, 2008) finds that there are new alternative versions of transformative learning theory and research is now moving towards a more holistic consideration. He suggests that the growth of research in transformative learning has become more dominant than andragogy. An understanding of how adults learn is clearly important for honing our coaching skills, however, Taylor (2008) considers transformative learning to be an educational philosophy and as such educators must examine their own philosophy and may have to be prepared to transform themselves.

I was unable to find literature focusing on learning and IT professionals. However, based on the behaviours discussed in sections 2.2, 2.3 and 2.4 the difficult areas of all these learning theories will be the transitions pertaining to feelings and emotions. Yet given the role of the coach as supporter put forward by Cox (2015) and Mezirow (1997) it is fair to conclude that this is not insurmountable.

2.5.4 Motivation

In thinking about the population under consideration in this research, I must think not only about how we may learn, but also how we are motivated to learn. This is inevitably informative when deciding on the coaching intervention for any group, but especially for a group with the traits discussed in section 2.2. There are many variables affecting motivation (Merriam and Bierema, 2014), for instance you may

be economically motivated to take up higher education but be unable to because of family commitments. There have been several theories of motivation over the years and I have considered some of these. Arguably the foundation theory of Maslow's Hierarchy of Needs (1943) is one of the classic theories. Developed in 1943, figure 2.3, below shows an adaptation of the pyramid of needs that he identified.

Maslow (1943) suggested that individuals possess a set of motivational systems unrelated to rewards. These divide into:

- Basic needs which motivate if unmet and these needs become stronger if they remain unmet for long. Examples are hunger, thirst, warmth.
- Emotional needs such as love, safety, esteem. Humans need to feel secure and protected. They also need to be part of a group, having effective relationships. Finally, they need to feel self-esteem and a sense of achievement and prestige.
- The third group is self-actualisation. At this level humans realise their full potential and feel self-fulfilled. This is a level of personal growth.

Maslow (1943) noted that only one in a hundred people become fully self-actualised because society rewards motivation mainly based on esteem, love and other social needs. If this is indeed the case, it could exclude individuals who display traits of Asperger's Syndrome. These individuals can ignore basic needs when focussed on a topic. Equally they do not appear to have the need for belonging to a group and/or having effective relationships. This may lead to real problems in achieving full potential, or maybe what they consider to be full potential is different to others. I will consider this further in Chapter 5, "Discussion".

Figure 2.3 Maslow's Hierarchy of Needs

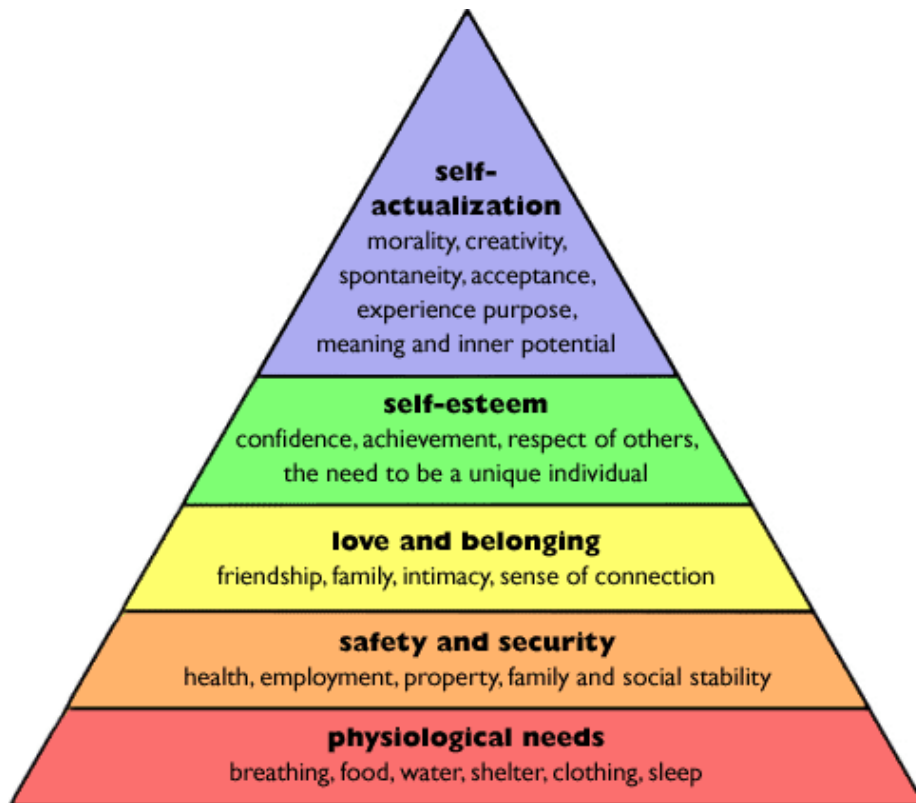


Figure 2-3 Maslow's hierarchy of needs adapted from (Maslow, 1943)

Herzberg (1966) developed an influential two-factor theory of work motivation. This divides motivation into two contexts: the work motivator factors and the hygiene factors which relate to context. The first set includes achievement and recognition, whereas the second set are such as company policy and supervision. He considered that absence of hygiene factors (status, security, work conditions, pay) leads to dissatisfaction, yet presence of them does not necessarily lead to motivation. For instance, if an employee is working below minimum wage he will not be motivated; however, a pay rise does not have a lasting effect. He concluded that motivators (being able to achieve, being recognised, given responsibility, growth and learning in the job) work more powerfully. It can be seen there is some synergy with Maslow (1943), although the two-factor theory is more focussed to the workplace. Again, as with Maslow's Hierarchy of Needs, it is likely that the motivating factors could be different for IT professionals, particularly those connected with work rather than context. There may be some contextual factors such as a quiet environment, lighting, etc that can affect those with Asperger's Syndrome but not necessarily those presenting the traits.

McClelland (1987) suggests four main motive systems; achievement, power, affiliative and avoidance modes. Although this is less recent, McClelland's work is significant in motivation theory and thus relevant to consider. It is also a useful structure to contrast with the motivation of IT professionals.

The achievement motive

Bozer *et al* (2014) found that amongst other coach characteristics, an understanding of human motivation is necessary to the efficacy of coaching. They consider that coaching clients are motivated by achievement in the organisation, both as a result of coaching in order to sustain the coaching intervention but also generally within the workplace. To understand the achievement motive, McClelland (1987) states that we should understand the incentive for achievement. His studies find that people who are high in achievement motivation tend to seek positions that offer challenge rather than those where there is no prospect of improvement.

The power motive

McClelland (1987) considers that the power motive leads to more openly competitive and assertive activities in men than women, thus there may be gender differences in this motive. A need for power is thought to be connected to a need to have an impact on others and can lead to a desire to be dominant over others. This motive again is likely to be different amongst many IT professionals. The predominant preference to work alone can reduce competitiveness in that the interaction between individuals is reduced.

The affiliative motive

McClelland says that this motive is to do with the goal of being with another. Condon (1979) talks of characterising amiable relationships between people. Again, McClelland's theory shows the influence of Maslow (1943) particularly with his affiliative motive which, interestingly, is probably the most difficult one for the population examined in this study as discussed in Chapter 5. Given the problems IT professionals are likely to have with relationship-building and social interaction, it is

unlikely that there will be an affiliative motive in their armoury. McClelland's (1987) achievement and power motives have synergy with Herzberg's (1966) two-factor model of motivation in the workplace.

Change can be related to motivation; in our coaching interventions we are seeking change from our clients. Prochaska and Norcross (2001) discussed six stages of change based on a transtheoretical model:

1. Precontemplation – no intention to change behaviour in the foreseeable future.
2. Contemplation – people are aware that a problem exists and are thinking of tackling it but have not started.
3. Preparation – individuals are intending to act in the next month but have not taken any action in the past year.
4. Action – individuals modify their behaviour, experiences and environment to overcome an issue.
5. Maintenance – people work to maintain their change and avoid falling back into previous behaviours.
6. Termination – the change process is complete and can be defined as total confidence or self-efficacy.

Whilst an application of these stages is within therapeutic practices, there are parallels with the business world and executive coaching, although there may be differences in the length of time taken to achieve each stage. There are many other models of motivation theory which vary between rational economic, socio-psychological and human relations. In the business world the focus tends to be on the first of these, however, one cannot assume that this is the motivation of all members of that organisation.

Considering this section overall in relation to IT professional behaviour and Asperger's Syndrome, there is much within accepted theories that may cause problems. For example, McClelland (1987) talks of the achievement motive, yet what constitutes achievement varies from one individual to another and will almost certainly be different for the client in this study. The power motive relies on

competition, yet this may not be a factor for many IT professionals, especially those in a very technical role. This does not mean that the models must be avoided, rather they should be considered with caution. The affiliative motive is predicated on the formation of relationships (McClelland, 1987) and therefore not a natural choice for motivation of this client group as social interaction and relationship formation may be difficult for these clients (Baron-Cohen and Wheelwright, 2004a, Moore *et al*, 2013)

2.6 Coaching Process and Style

Coaching process and style consider the way coaches coach and why they might coach in a certain way. When coaches are new to coaching, they frequently follow a documented approach, but anecdotally coaches say that they modify their approach with experience, developing a more individualistic style.

I have looked at comparisons between psychotherapy, counselling and coaching as it is often said that coaching has grown out of the other two. Several researchers have mentioned this (Heron, 2001), and it has impacted coaching process and style. De Haan and Burger (2014) consider that four main themes of psychotherapy have influenced coaching. **Analytical (psychodynamic) coaching** is based on the works of Freud, and Jung, who state that understanding comes from the inside. The coach takes the role of a “companion on the journey” (de Haan and Burger, 2014). **Directive coaching**, conversely, tries to improve from the outside. The coach takes a strong lead either coming up with solutions or structuring the conversations in the coaching sessions. The key methods associated with directive coaching are the GROW method and a solution-focussed methodology (Jackson and McKergow, 2007). **Person-centred (humanistic) coaching** moves the focus to understanding from the inside. This is a counselling approach to coaching with the client at the centre of the coaching. **Paradoxical coaching** attempts to upset or surprise from the outside.

They consider that personal preferences and limitations of the coach will draw the coach to certain approaches. These themes fall into two camps, two start from the inside and the other two the outside.

Heron (2001) developed a coaching intervention model with six categories. These categories look at coaching behaviours in a broad sense.

Figure 2.4 The Heron Model of Coaching and Counselling (De Haan and Nilsson, 2017)

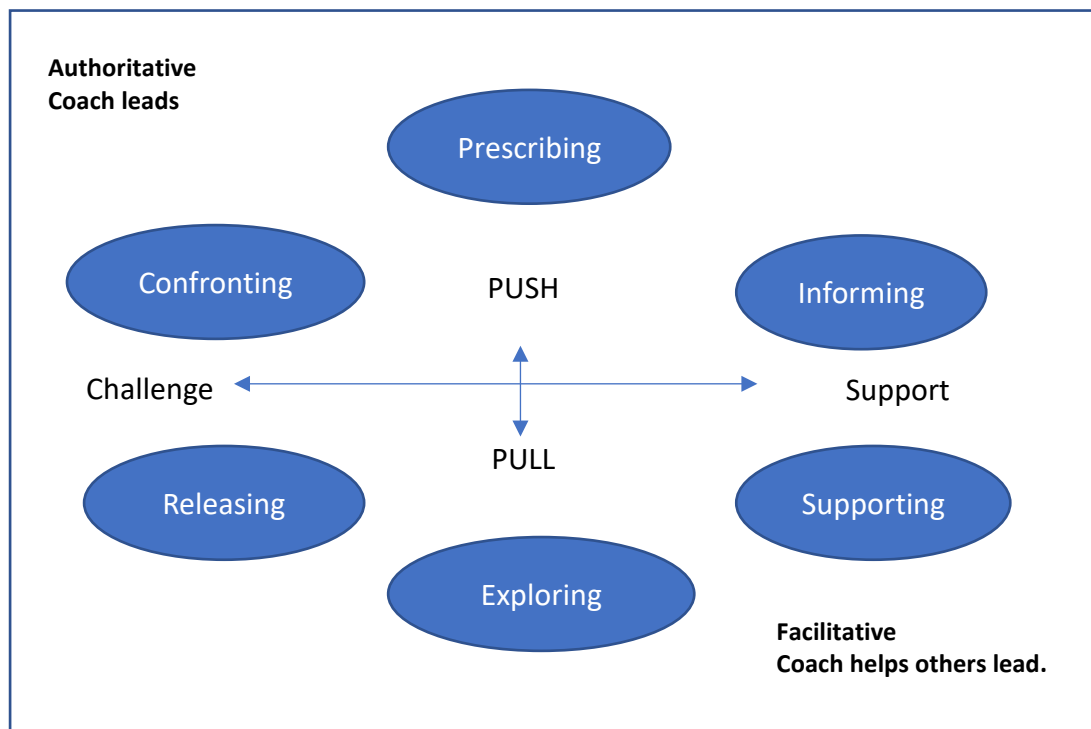


Figure 2-4 The Heron Model of Coaching and Counselling (De Haan and Nilsson, 2017)

This model extends from highly directive to highly facilitated (top left to bottom right) and challenging to supporting (left to right).

Heron (2001) described the six classes as:

- **Prescribing:** giving directions and advice. The coach directs the experience sometimes in all aspects from goal setting to solution proposal.
- **Informing:** The coach gives information and knowledge to the client. This could be requested by the client or just given spontaneously.
- **Confronting:** The coach challenges the client's assumptions.

- **Cathartic intervention:** The coach helps the client deal with emotions that are blocking their progress.
- **Catalytic interventions:** Support the client through self-discovery to self-directed learning.
- **Supporting:** Developing client's self-esteem, and self-confidence.

De Haan and Nilsson (2017) consider that although there have been many studies of optimal coach behaviour, few of these are backed by sufficient evidence. With reference to Figure 2.2 they align Push vs Pull with Directive vs Non-directive and Challenging vs Supporting, the latter concerned with addressing weaknesses vs supporting strengths. As with de Haan and Burger's (2014) links to psychotherapy, Heron's classes provide a useful framework to align my participants' views to. The potential to combine these classes to form a particular style is very interesting and may support the tailoring of interventions to the client.

Passmore and Lai (2019) have also looked at the comparison between coaching and counselling, suggesting there are three differentiating aspects between them. The initial motivation of the client to seek counselling is different from coaching in that the focus of counselling involves matters pertaining to personal well-being as opposed to coaching where it is usually to restricted agreed goals. The time contracted for counselling is usually longer and not fixed. Coaching is more typically an agreed number of sessions. However, recent research by Campagna (Campagna, 2020) suggests that long-term coaching is more prevalent than previously thought and is equally beneficial.

Dingman suggests that executive coaching comprises the following:

1. Formal contracting between coach and client (and maybe organisation).
2. Relationship building.
3. Assessment of client.
4. Feedback and reflection.
5. Goal setting.
6. Supportive implementation and evaluation.

She also refers to other academics that include some or all these stages in the coaching process albeit with different titles. For instance, Kampa-Kokesch and Anderson (2001) combine Dingman's formal contracting stage with relationship building under the heading of relationship building. They also speak of assessment but include feedback and reflection within that stage. They do not explicitly mention goal setting but talk of intervention and follow-up spilling into implementation with evaluation as a separate final stage.

Dingman (2006) presents three models as options of the effectiveness of executive coaching. The first positions self-efficacy as a mediator of executive coaching outcomes, whilst the second positions self-efficacy as a moderator of executive coaching outcomes and the third positions the coaching relationship as a moderator of coaching outcomes. In the first model self-efficacy influences the strength of the outcomes. Conversely, in the second model self-efficacy explains the outcomes. Dingman's third model considers the relationship as strengthening the outcomes. She presents a summary of Alternative Executive Coaching Processes that significantly includes some component of establishing the client relationship. This gives rise to a synthesis of six stages or components of coaching that are derived from her examination of processes. Again, relationship is cited as key; and in many of the supporting models contracting and relationship is a single component. She comments that coaches emphasise the importance of connecting with the client as documented in Hall *et al* (Hall, Otazo and Hollenbeck, 1999).

Carter *et al* (Carter, Blackman, Hicks, Williams and Hay, 2017) looked at elements of effective coaching relating to coaching style; they found that difficulties with the coach formed one of the categories of barriers to effective coaching. These fell into two sub-categories: perception of coach skills and qualifications (credibility as a coach) and coaching manner or style. In the former, characteristics such as coach not being qualified, not sensitive to the client and inflexible were cited. In the latter category, coaching manner or style, comments such as coach not committed to the coaching, coach not involved or supportive, coach vague and/or nervous. Whilst

most of the literature on coaching focusses on successful coaching, this research looked at unsuccessful coaching behaviours or relationships. This is one of the few studies looking at coaching from the clients' point of view, however there are some limitations acknowledged by the authors. As the clients to approach were selected by coaches, it could be that only successful coaching engagements were selected. Additionally, there was no representation of clients who had not undertaken coaching.

O'Broin and Palmer (2010) have explored the key aspects in forming a relationship between coach and client. They have looked at both points of view. They consider that little research has been carried out that solely looks at the qualities and characteristics that coaches and clients regard as important.

Their work identified the key aspects identified by coaches and clients to be; coach attitude and characteristics, bond and engagement and collaboration. Coach characteristics deemed to be helpful included coach self-awareness, highlighted by coach and coachee along with coach self-management. In other studies, coach's awareness of others has been noted as important. De Haan (2008b) reports on helpful coach characteristics such as listening, understanding, attentiveness and responsiveness rather than coach self-awareness.

O'Broin and Palmer (2010) also noted that adapting to the client was important to coaches and clients. They also identified the characteristics of the bond or engagement to be open listening, trust, and rapport. This study is interesting as it delves beneath the importance of the coach/client relationship to the qualities identified as essential to that relationship. Askeland (2009) considers that as coaches we can never be neutral in the relationship as the coach has power and influence and is, in turn, influenced by the flow of responses between coach and client. This clearly has implications for the coach client relationship which has shown to be very important in the coaching process and style.

2.7 Effective Coaching, what is it?

Considering the personality preferences of this client group, along with the learning preferences described within the section discussing Asperger's Syndrome, it seems natural that the factors relating to efficacy of coaching could be specific for IT workers. Given the importance of IT workers in the business world, it is sensible to investigate what the factors for successful coaching interventions are for this group. As previously mentioned, I specialise in coaching this community and my style is very different to a traditional coaching approach. Through this research my experiences suggest that there is a specific technique to coaching IT professionals in order to allow them to take their place in more senior roles. Establishing this will assist coaches when working with people in this sector.

I have looked at research by several leading figures in the coaching arena to ascertain if there is a common view on the factors in coaching that impact coachees. The nature of executive coaching is that it is commonly tailored to the individual's needs and thus very different to other forms of learning and development. This is not so with team coaching, however, there is tailoring involved in team interventions.

Erik De Haan considers that there are common factors of coaching that are likely to have the greatest impact on clients (de Haan *et al*, 2013):

- Coach personality.
- Client personality.
- Common coach techniques.
- Relationship quality and self-efficacy.

He goes on to say that moments of insight occur at critical incidents (or critical moments) in the coaching (de Haan, 2019).

In looking at what clients say about their coaching Duckworth and de Haan (2009) used the Working Alliance Inventory. This well-established tool provides a reliable measure of the client-therapist relationship. They modified this to use it in the client-

coach dyad. It covers three areas; task, bond and goal. In their investigation they used MBTI as a descriptor of personality. Their representation of this suggests potential interrelationships between these factors.

Figure 2.5 Graphical Depiction of the various common factors of coaching efficacy studied as independent variables (de Haan *et al*, 2013)

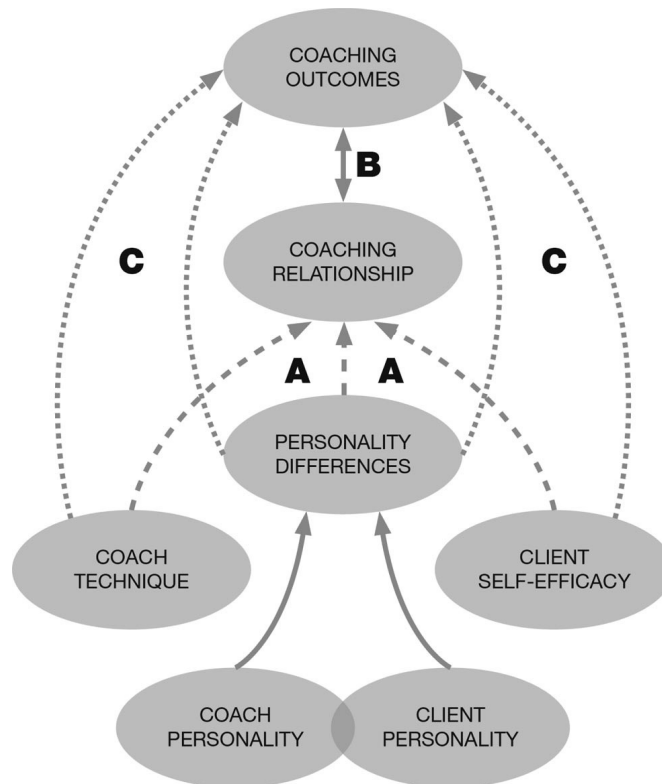


Figure 2-5 Graphical Depiction of the various common factors studied as independent variables (De Haan, Duckworth, Birch and Jones, 2013)

This study (de Haan *et al*, 2013) majors on the coaching relationship as the key predictor of outcome and effectiveness. It reviews the importance of the working alliance between coach and client, the self-efficacy of the client, the personality of the client and the match between client and coach. The authors consider that the client coach relationship mediates the impact of self-efficacy and the range of techniques on coaching outcomes. The suggestion from this study is that “the client-coach relationship is the key factor in determining how clients perceive the outcome of coaching”. The authors (de Haan *et al*, 2013) conclude that the quality of the working relationship between client and coach and the self-efficacy of the client are of central importance. This relationship mediates the impact of self-efficacy and

range of techniques on the outcomes. They further suggest that matching the personality types of the two parties are less important. They based the analysis on the interventions described by Heron (2001) as detailed earlier. Three of these interventions yielded a significant positive correlation. The strongest was to help the client make discoveries; in second place was challenging the client's thoughts and actions and the third was the coach supporting the client. They found that the other three interventions; providing information, helping to release emotions and being advised or told what to do by the coach had no positive correlation and the latter could almost seem negative for the client. The analysis (de Haan *et al*, 2013) alongside MBTI type is particularly interesting. Clients with an extraversion (E) preference found releasing emotion led to significant progress on both step changes and outcomes in comparison with those with an introversion (I) preference. Clients with a sensing (S) preference wanted more support from the coach as well as step changes than those with an intuition preference (N). A feeling (F) preference also valued more support, releasing emotions and step change than clients who had a thinking (T) preference.

Looking further at what constitutes helpfulness for coaching clients I turn to another piece of research by de Haan *et al* (de Haan, Culpin and Curd, 2011). This concerns itself with examining how aspects of executive coaching make a difference to the clients. They found that clients have a high appreciation of coaching, valuing the relationship between coach and client. They suggest as a result of this enquiry, that technique and approach are lesser predictors of helpfulness than by relationship, understanding and positive expectations. Their research concludes that whilst coaches spend time perfecting their coaching models and specific behaviours and also find coaching interventions such as those described by Heron (2001) relevant, their clients do not. They consider that certain qualities are seen as important by clients; openness, flexibility, kindness and availability. Their findings appear to support the "bespoke" of coaching mentioned by experienced coaches.

In an earlier study Day *et al* (Day, de Haan, Blass, Sills and Bertie, 2008) also suggest that clients find the relationship with the coach and the qualities of the coach were

the most important factors for clients. Dingman's (2006) views differ to an extent from those of de Haan *et al* (2011). She still majors on relationship being the lynchpin to successful coaching outcomes, however the component parts of her approach are different as discussed in earlier.

Jowett *et al* (Jowett, Kanakoglou and Passmore, 2012) use the 3+1Cs (Closeness, Commitment, Complementarity and Co-orientation) relationship model to explore the coaching relationship. This qualitative study noted closeness (mutual respect and trust) as important to the relationship. They also comment on the coaching relationship as fundamental to executive coaching, essential to the effectiveness of that coaching. Their findings suggest that if the quality of the relationship is (Jowett *et al*, 2012) "positive, effective and harmonious", then as long as all other aspects of the coach's profile are in order (qualifications, experience, etc) and the client is open to coaching then it provides a solid basis for being open about weaknesses and needs.

Further studies looking at the connection between self-efficacy and coaching relationship agree with Dingman. Baron and Morin (2009) suggest that the coach client relationship plays a large part in the association between the number of coaching sessions and the development of the client's self-efficacy. In fact, they further assert that it is a pre-requisite for effective coaching. They consequently suggest that there should be adequate time built into the coaching process to allow for development of this relationship. Baron and Morin (2009) highlight the fact that little research has been done into the personal characteristics that should be considered in matching coach to client. They also investigated the correlations within the relationship, finding that just the ability to facilitate learning and results was significant. The number of sessions was significant as it provided a greater opportunity to develop the coach client relationship. It would suggest that one skill a coach needs is the ability to form relationships with clients effectively and efficiently.

Baron and Morin's (2009) comments on the lack of investigation into personal characteristics is somewhat mitigated by reference to research by Lorna Stewart *et al* (Stewart, Palmer, Wilkin and Kerrin, 2008) who considered the impact of personality on coaching using the Five Factor model of personality traits from the client perspective. The study's focus was on the effectiveness of personality traits as a predictor of successful outcome, particularly the transfer of coaching. They found that there were positive correlations between the impact of coaching and three of the five traits in this model (Emotional Stability, Conscientiousness, and Openness to Experience). However, their conclusion was that this correlation was relatively small and therefore not a safe predictor of coaching success. Scoular and Linley (2006) also looked at personality but from the perspective of client coach matching. They found that dissimilarity produced a better coaching outcome. Their study was based on Myers-Briggs Type Indicator (MBTI). A later study by Bozer *et al* (2015) found that the coach-coachee match had little significant effect on the coaching outcomes. It seems that at the time of writing, work on personality of both coaches has not really delivered concrete recommendations for coaching practice at a macro level. From a different perspective, Boyce *et al* (Boyce, Jackson and Neal, 2010) have examined the coaching relationship processes and the mediation of the relationship between coach-client matching and outcomes. Their findings suggest that the coaching relationship fully mediated compatibility and credibility with coaching outcomes. Further they found that the relationship processes of rapport, trust and commitment positively predict coaching outcomes.

In a study of researching coaching (Fillery-Travis and Cox, 2018) the authors consider that there is a gap in coaching between the process and the outcome. They say that little research has been done into the interaction between the coach and client within the session. They consider many activities occur during coaching that, in their view, need further research. These include listening, questioning, challenging as well as reflecting, paraphrasing and responding or relating a story.

Carter *et al* (2017) looked at effective coaching from the clients' point of view. This gave rise to the identification of certain barriers to coaching. They consider that a

possible reason for barriers not being mentioned could be that coaches see them as the presenting issues for coaching.

So far, the research shows coach/client relationship as an important factor of coaching efficacy with consideration also given to coach personality. Research (Scoular and Linley, 2006) suggests that a coach would need a dissimilar personality to their clients in order to deliver successful coaching. They based their research on the use of MBTI. In a similar vein, Bozer et al (2015) found there to be no advantage of matching personalities between coach and client in terms of personality. It will be interesting to see if this arises in the coach interviews. Given the behavioural traits of IT professionals discussed in section 2.5 below, it may not be helpful for the coach to have such traits. However, coach credibility has also been suggested as important which matches my own experience. I have a background working in the IT industry and anecdotally clients have suggested that this is important to them. In the literature, credibility is discussed, but only in terms of credibility as a coach; whereas I am keen to explore whether, for this group, it is important to have credibility within the IT industry. The coaching relationship has been shown to be paramount in effective coaching. IT workers have difficulties with relationships and interpersonal skills. Relating these two factors, underpinned by an understanding of Asperger's Syndrome may well contribute to the effectiveness in coaching practice within an occupation that is key to the business world.

2.8 The general format of coaching

I have investigated the literature relating to IT professionals' behaviour and links to Asperger's Syndrome. I will continue by looking at what the literature says about the components considered to add to the definition of coaching, covering:

- Theoretical approaches.
- Contexts and modes.
- Coaching models.

Cox, Bachkirova and Clutterbuck (2014) set out a structural analysis of a coaching engagement grouping the main aspects of the engagement into logical components. They claim that these elements within this structure can significantly impact the coaching engagement, along with the process that is undertaken and the theoretical underpinning of the process.

Figure 2.6 A Structural analysis of the coaching engagement

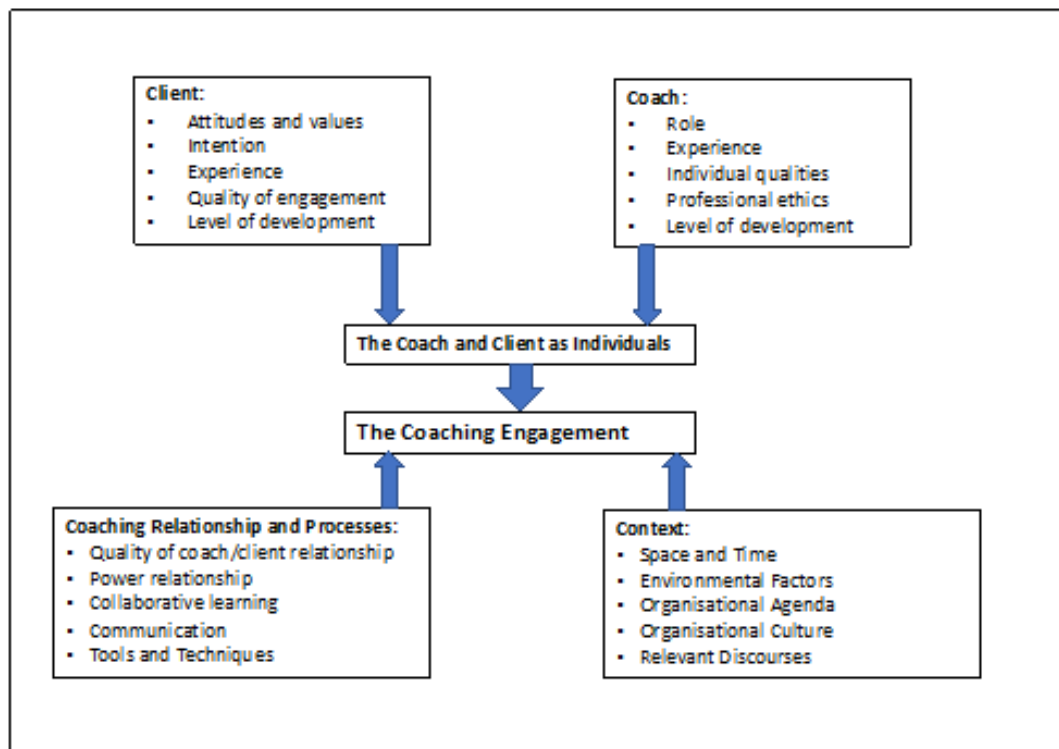


Figure 2-6 A Structural analysis of the coaching engagement (Cox et al, 2014)

Cox *et al* regard all these components as equally important, playing a significant role in coaching. Considering their components briefly, I first look at the coach as an individual. The aspects listed by Cox *et al* are a foundation to the engagement when combined with the client as an individual. It is important for IT professionals to find their coaches to be credible, not only as a coach but within the IT sector as well.

Because of the bespoke nature of coaching it seems to follow that experienced coaches are needed for all clients. The quality of the engagement by the client is one of the factors listed. Experience dictates that this is very important for IT

professionals but can be quite difficult to achieve. In section 2.2, I examined the literature concerning the traits of IT professionals which converged around poor interpersonal skills and difficulty in social interaction (Gillberg, 2002, Moore *et al*, 2013). This, alongside a communication deficit, indicates why establishing a quality engagement can be tricky to start with and often hard to sustain throughout the engagement. Attitude may also be an issue for this group of clients as they are frequently reluctant coachees. Much is made in coaching training of the match between coach and client, however, studying the diagram above it appears that the engagement is underpinned by the relationship and process combined with the context of the coaching. Research by Bozer *et al* (Bozer *et al*, 2015) found that overall the coach-client match has little impact on coaching outcome although in some aspects, such as a gender match factors, self-esteem can be affected. The context of coaching is important for this group; as shown in Appendix 2, the environment for learning can be very specific. Elsewhere in this chapter I have considered the areas of coaching that impact a coaching framework setting them against the needs of the clients in question.

2.8.1 Theoretical approaches in coaching

There are several theoretical approaches documented. These describe how learning and development change can occur and how to adapt this for coaching. I have summarised some of these to demonstrate the ways individual approaches may or may not be effective for IT professionals. I have examined theoretical approaches as a foundation for coaching. These are frequently “taught” on courses for coaches and I wanted to see their relevance to the IT profession. I chose a broad range, from the more therapeutic style to more direct and challenging approaches.

The Psychodynamic Approach (Lee, 2018) is linked to psychotherapy and focuses on the unconscious mind. Cognitive Behavioural Coaching (Palmer and Szymanska, 2003) combines the use of cognitive, behavioural, imaginal, and problem-solving techniques and strategies. The Solution-focused approach (Grant and Cavanagh, 2018) considers that solutions are constructed with the client in the coaching. The NLP (Neuro-linguistic programming) (Grimley, 2018) approach to coaching rapport which is well supported by psychology, philosophy and techniques.

The Psychodynamic Approach

This approach focusses on the role of unconscious processes in human behaviour and the dynamic relationship between different aspects of the mind. This is clearly linked to a key theme of psychotherapy and hence to forms of counselling. There have been many influential contributors to this approach; Sigmund Freud, Jung, Klein and Winnicott. Graham Lee (2018) suggests there are four main assumptions underlying this approach. Firstly, he suggests that human behaviour is influenced by unconscious motives, meaning that the coach will be curious about things that may be hidden for the client. He also considers that a lot of human behaviour is unconsciously shaped by past experiences, meaning that the coach will prompt the client to talk about such experiences. Different parts of the mind can conflict with each other, meaning that the coach will be looking for inconsistencies in what the client is saying. Finally, there can be unconscious communication between people meaning that the coach occasionally attends to their own emotions for clues.

Lee (2018) considers that the psychodynamic approach gives great depth to coaching and is especially useful for leadership, developmental and team coaching. A psychodynamic approach, coming from the therapeutic camp can dwell heavily on feelings and research shows that this group is far more systematising than empathy-centred (Baron-Cohen and Wheelwright, 2004a, Lawson *et al*, 2004) and thus unlikely to respond well to an approach that majors on feelings.

Cognitive Behavioural Coaching

Cognitive Behavioural Coaching (CBC) has been defined by Palmer and Szymanska (2003) as “An integrative approach which combines the use of cognitive, behavioural, imaginal, and problem-solving techniques and strategies within a cognitive behavioural framework to enable clients to achieve their realistic goals”. The main goals of CBC are that firstly clients achieve their realistic goals. It is also considered that self-awareness of barriers to achieving goals is enhanced. Clients should develop

effective behavioural and thinking skills. Building self-confidence is important culminating in clients becoming their own coach.

Williams *et al* (Williams, Palmer and Edgerton, 2018) consider that Cognitive Behavioural Coaching can be an effective intervention with clients who have unhelpful thinking and self-defeating behaviours.

The Solution-focussed Approach to Coaching

The solution-focussed approach, like many others, has its roots in therapy but was adapted in the 1970s for use in coaching. Grant and Cavanagh (2018) consider that solution construction sits at the heart of coaching given that all forms of coaching look for solutions to the client's issues and problems. They suggest that there are two fundamental principles:

- A constructionist philosophy, considering that it is the way that coach and client construct the problem through their discourse.
- This approach sees the client as basically capable of solving their problem.

This approach provides techniques that help the coach to remain curious in their conversation with the client. Innovation and flexibility are both key to the Solution-focussed approach. As suggested by Jackson and McKergow (2007), the primary emphasis is on defining the solution state and also the possible routes to achieve it.

The Neuro-Linguistic Programming (NLP) Approach to Coaching

Bruce Grimley (2018) considers that the coaching process following an NLP approach focusses on three key points. Firstly, do clients know what they want? Secondly can they keep their senses open in order to know what they are currently getting. Finally, are clients sufficiently flexible to keep changing until they get to where they want?

NLP has a focus on rapport which is well-supported by psychology, philosophy and techniques. Using metaphor is one technique under this heading. There are two main models, the Meta model which works well for coaches who like detail and the Milton model for those coaches who look at the bigger picture. The techniques offered by NLP help clients to express beliefs and attitudes. NLP places an emphasis on goal

setting but also the need for congruence in the client's life. Clean language is a technique developed by psychotherapists Grove and Panzer (2005) to reduce the subtle influencing of clients by the therapist's language (Tompkins and Lawley, 1997). This technique is frequently used by NLP practitioners, but its techniques are also used outside this approach.

The theoretical approaches to coaching underpin the engagement that coaches undertake. Considering these approaches with the client base under discussion and the literature discussing their behaviour and personality, it is easy to see that not all approaches are appropriate. Equally the approaches must "fit" the coach's personality too. In practice many coaches develop a mix of these approaches to service their clients. This can be different for individual clients or a fixed approach. For example, I use elements of a challenging approach using techniques from Gestalt and NLP with nearly all my clients.

2.8.2 Modes of coaching

This section refers to the purpose of coaching as identified in their titles. The modes of coaching cover aspects such as developmental coaching, transformational coaching or skills and performance coaching. The context considers the subject matter of the coaching such as leadership coaching or life coaching. I describe Skills and Performance Coaching, Developmental Coaching, Transformational Coaching and Executive and Leadership Coaching. I have chosen to summarise these modes because they are central to coaching in business. Additionally, they are all appropriate to the client base under discussion. Sessions with these clients can often involve very focussed goals, often set by the organisation. Other engagements can be less focussed.

Skills and performance coaching

Skills and Performance Coaching (SPC) relate to areas of human functioning that frequently have performance standards set by others. Tschannen-Moran (2018) states that SPC differs from other modes of coaching in that it involves meeting the

requirements of others rather than the client. Sports coaching is a typical example; however, it can apply to others such as engineers or teachers. They can only develop their skills within the context of physical laws in the case of engineers and the standards of their profession in the case of teachers. Tschannen-Moran (2018) describes SPC from the point of view of the coach as “assisting people to improve their ability to function in relationship both their own performance standards as well as to externally defined dynamics”. It is therefore concerned with helping clients achieve their best performance within the constraints of their discipline or organisation. This could be seen as contradicting other definitions of coaching such as that put forward by Fillery-Travis and Cavicchia (2013) who consider that the learning for the client is not imposed by an external element such as the organisation. Yet workplace coaching might always encounter some constraint from the organisation when the organisation is funding the learning. This can be a difficult balance, especially with this client group where conversations show that either they can disagree with the intended purpose of coaching or have a clear view of what they think they need (often erroneously) (Coach Participant private communication).

Developmental coaching

Jackson and Cox (2018) consider that development means “... growth of intellectual, emotional or some other capacity over time ...”. It follows that developmental coaching would support the client to make changes in order to grow and mature. It differs from skills coaching in that the duration is longer term, the goals often emerge, and the objectives evolve during coaching. Typically, the interventions may last more than six months and can major on personal rather than business issues. There are links with theoretical traditions such as:

- The person-centred approach.
- The cognitive-behavioural approach (see section 2.5.3).
- The narrative approach.
- The cognitive-developmental approach.

Although developmental coaching focusses on helping people achieve personal growth, it also takes account of the presenting issue. In their work with MBA students, Hunt and Weintraub (2004) describe an intervention to develop MBA students to lead through coaching. The MBA students were coaching undergraduate students and as such had the ability to help and guide but not to evaluate or judge. They claim that developmental coaching is underpinned by the notion that clients learn more if they define their own goals. This does however rely on the client's perception of what is needed and their understanding of the needs of the organisation. The clients considered in this research have been shown to be typically introspective and prefer to work alone. Additionally, they tend not to have a high degree of empathy thus denying them a view of interaction with other's needs. So, although the sentiment of following a client's lead is clearly ideal, for this group it is going to be difficult.

Transformational coaching

Smith and Hawkins (2018) define transformational coaching as a method of helping clients to change their assumptions and beliefs. These can lead to set responses when under pressure. The model typically used is the CLEAR model which is discussed in section 2.7.3. This mode relies on the client being amenable to changing their core assumptions, otherwise the client can feel it to be intrusive. It is especially useful when there is insufficient time for a gradual development.

Smith and Hawkins (2018) consider that transformational coaching focusses on the truth that needs to be spoken, disconnections that need connecting and finally the shift that needs to be supported.

This is applied to all parts of the system including the organisation, this way personal change and organisational change are linked. Transformational coaching is powerful when the clients either need or want to achieve a radical shift in the way they operate. It aims to support a quantitative change in the client's approach to situations. Transformational coaching relies on a client's ability to change their mindset. One of the personality markers of the client group is an inflexibility and

resistance to change. Additionally, IT professionals are often reluctant to engage in coaching and this may not be the mode of coaching best suited to them. Of course, as with every mode, there will be aspects that could be useful and “borrowed” to form a complete coaching intervention, bespoke to the client.

Executive and Leadership Coaching

As discussed in Chapter 1, there are various definitions of Executive Coaching. Stokes and Jolly (2018) define it as covering work with executives from middle management upwards. Occasionally it may include less senior individuals who are thought to have high potential. This is clearly a broad group of clients and their needs will vary greatly; however, it can be narrowed by focussing it on the group of clients moving towards leadership or management roles. Stokes and Jolly consider this narrower focus to be the case, considering leadership a skill rather than a role. Leadership is often about emotions and relationships as opposed to management which has a task element to it. Of course, within management roles relationships with team members are clearly important as are relationships upwards in the organisational hierarchy.

Experienced executive coaches can combine elements of various modes of coaching depending on their client’s needs. My experience with IT professionals indicates the factors that Stokes and Jolly (2018) consider specific to executive and leadership coaching, in the main, apply to my clients regardless of hierarchical position. Those skills pertaining solely to leadership do not always form part of the intervention in these cases. Whereas Stokes and Jolly do not consider that this mode of coaching should be used as a remedial action, others such as Kiel *et al* (1996) who suggest that clients may seek coaching to help remedy behaviours that are hindering their work life. They further suggest that this coaching can be very positive where clients seek coaching for remedial work and less so if they are “sent” by their organisations.

When specifically aimed at taking up a leadership position, the executive coach’s goal is to enable this to happen. In this case the coach is likely to have a relationship with the client and the organisation. Kilburg (1996) describes executive coaching as “a helping relationship formed between a client who has managerial authority and

responsibility in an organisation and a consultant who uses a wide variety of behavioural techniques to improve his or her professional performance and personal satisfaction and consequently improve the effectiveness of the client's organisation within a formally defined coaching agreement". This supports Stokes and Jolly (2018) in their definition of "an executive coachee". Similarly de Haan et al (de Haan *et al*, 2013) describe executive coaching as a relationship-focussed development intervention. They too perceive executive coaching as a form of leadership development.

2.8.3 Why do executives typically have coaching?

There are many differing views on why executives seek out coaching. Of course, some executives are "sent" for coaching by their managers and/or HR departments. This situation will clearly impact the way they approach the intervention in terms of potential reluctance. One reason may be to enhance their skills to make progress in their careers by taking more responsibilities (Kiel *et al*, 1996) or by gaining promotion (Witherspoon and White, 1996). It would be reasonable to assume that these candidates would be open to coaching and work hard to gain benefit from the intervention. Sometimes executives seek coaching to help them reverse behaviours that are affecting their work life (Kiel *et al*, 1996) such as a leadership style suited to a hierarchical organisation when the organisation has a much flatter structure. Again, these candidates could be expected to have a more positive approach to the coaching intervention. Thirdly, some executives are referred by their senior managers or HR departments for help to modify behaviours not suited to the organisation, or where such behaviours have an adverse effect on others; I would expect these clients to be less positive about coaching, depending on the way their organisations have positioned it.

Ducharme (2004) maintains that executives have unique needs as a result of their lifestyle and require special consideration when choosing an intervention. She discusses the high level of stress arising at this level. The stressor varies but can be work-life balance, work-related anxiety, inappropriate working conditions and

deficits in coping with workplace change. This can result in procrastination, poor reactions to criticism, fear of confrontation or poor decision making. It will be against this potential backdrop that we should position any coaching intervention. The definitions and expected outcomes of executive coaching as defined by other researchers are interesting, however, a focus on leadership excludes those at an earlier position in the hierarchy who, in the case of this client group, will nearly always need some behavioural development as well.

2.8.4 Summary of coaching modes

I have reviewed the literature on four modes of coaching in this section. These four modes are considered within the organisational context, although reference has been made to sports coaching as an analogy within Skills and Performance coaching. All these modes of coaching are applicable to coaching IT professionals, however the delivery of them will be important. For instance, although on the face of it transformational coaching seems less appropriate, the links to neuroscience can make the mode appealing to those clients (Rock and Page, 2009). The scientific nature of coaching in this way satisfies their need for facts.

2.8.5 Coach Maturity

When considering the impacting factors on coaching success, it seems that the maturity and experience level of coaches plays a part. Many commentators have discussed the maturity of coaches and its effect on the coaching they deliver. According to Clutterbuck and Megginson (2011), several authors have suggested models that show the evolution of coach maturity which seem to suggest that as coaches mature they become more aware of the client's environment and the way they interact with that environment. It is agreed by such authors that this must happen step by step. Of course, not all coaches will mature at the same pace and, further, not all will achieve the highest levels. Bachkirova and Cox (2007) say "What is particularly important in relation to development of coaches is that each stage enriches individual capacity for reflection and effective interaction with others". Otto

Laske (2006) suggests that the relative maturity of the coach and client impacts the relationship between them.

Clutterbuck and Megginson (2011) describe four levels of coaching that they call models-based, process-based, philosophy or discipline-based and systemic eclectic. These four levels represent the maturity levels of coaching in their view. They have developed an interesting table reflecting this which I have reproduced below.

Table 2.2 A comparison of the four levels of coaching maturity in coaching conversations

Coaching Approach	Style	Critical Questions
Models based	Control	How do I take them where I think they need to go? How do I adapt my technique or model to this circumstance?
Process based	Contain	How do I give enough control to the client and still retain a purposeful conversation? What's the best way to apply my process in this instance?
Philosophy/ discipline based	Facilitate	What can I do to help the client do this for themselves? How do I contextualise the client's issue within the perspective of my philosophy or discipline?
Systemic eclectic	Enable	Are we both relaxed enough to allow the issue and the solution to emerge in whatever way they will? Do I need to apply any techniques or processes at all? If I do, what does the client context tell me about how to select from the wide choice available to me?

Table 2-2 A comparison of the four levels of coaching maturity in coaching conversations (Clutterbuck and Megginson, 2011) p5

2.8.6 Coaching Models

The contexts and modes have given rise to well documented coaching models. Bluckert (2018) considers that Gestalt methods and principles underpin all coaching contexts. Before discussing some of the coaching models commonly available, I would like to consider coach maturity as this appears to have a big impact on the use of coaching models. The models I have examined range from GROW which is often the starting point for new coaches to those models that employ a more direct flavour such as FACTS (Blakey and Day, 2012).

The GROW Model

This model is frequently used as a basis for coach training on both internal and external coach short courses. GROW has a clear structure which can support both the client in telling their story and the coach in interpreting the flow. With its clarity comes a very useful framework for the new coach whereas experienced coaches will draw on others according to the client's needs.

Table 2.3 The GROW Model

G	Goals – for the sessions. What do you want to achieve short-term and long-term?
R	Reality – who/ what/ where/ how much? Tell me your story.
O	Options -what's possible? What options and thoughts do you have to take forward?

Table 2-3 The Grow Model

Downey (1999) suggests that the model should be enhanced to "TO GROW" with "TO" standing for topic which is the initial understanding of the issues to be explored – the presenting issues. This would seem valid in that whilst perceived wisdom places the client at the centre of coaching, the presenting issues will and should influence the shape of the coaching intervention.

Co-Active Coaching

Figure 2.7 Co-active coaching

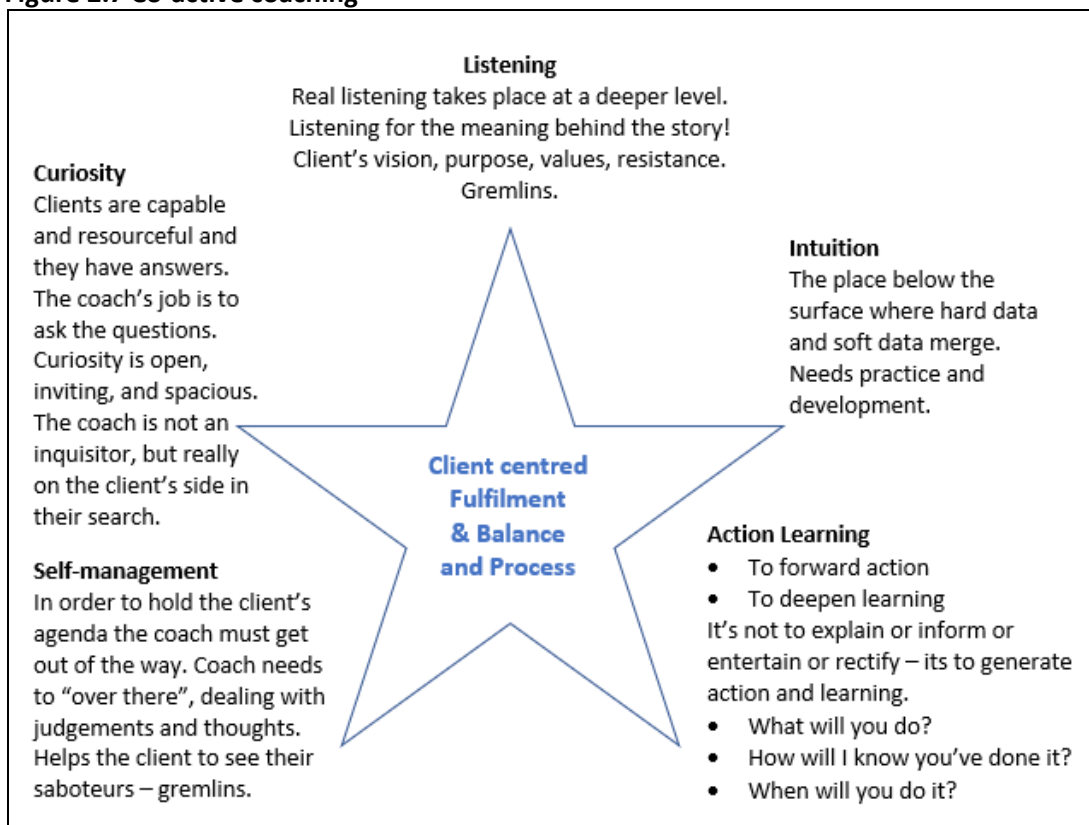


Figure 2-7 Co-active Coaching (Whitworth, Kimsey-House, Kimsey-House and Sandahl, 2011)

This model provides a contrast to the GROW model. This is a skills-based model presenting a comprehensive overview of the skills needed by the coach. It starts at the centre of the star with the client's agenda positioning the client at the heart of the intervention. The aim of the co-active coach is to build a partnership with the client to fulfil the client's agenda. This is built from the skills listed at the points of the star, these are referred to as the five contexts.

Listening, of course, is key to all coaching, but in co-active coaching it is divided into three levels. Level one is normal conversational listening, i.e. listening from the perspective of the listener, which is not coaching. Level two is being absolutely attentive to what the client is saying without forming judgments. Level three includes level two listening but adds attention to the environmental and surrounding issues; it picks up body language, emotion and the environment itself. External stimuli may cause a change in the client's demeanour.

Intuition increases as listening increases. In this model it is suggested that intuition is treated as another dimension alongside observing direct experience.

Curiosity allows the coach to ask open-ended powerful questions whilst remaining congruent with the client. These can be questions like "What would you do if you knew you would succeed?" or "What do you do when you are your most successful?" In this way, the coach is being unthreatening yet challenging.

Action/learning - Whitworth *et al* (2011) and others, suggest that coaching is about forwarding the action and deepening the learning. In this way the coach gives responsibility and accountability to the client for his own growth and change. This ensures that real development and growth take place.

Self-management – Whitworth *et al* (Whitworth *et al*, 2011) refer to self-management as the coach managing their own gremlins (as a coach) so that they don't interfere in the coaching process. This has an impact on the coach's boundaries in that it may be better to refer the client on if there is an issue the coach can't deal with.

The FACTS Model

The FACTS model is built on a challenging coaching approach. Its authors, Blakey and Day (2012) observed that clients were increasingly asking for challenge in order to resolve difficult issues. They suggest this was a response to the economic downturn in the period of their observations (the first decade of the 2000s). It is not a sequential step model such as GROW but an integrated suite of thinking which can overlap.

Table 2.4 The FACTS Model

Feedback	Effective feedback that is challenging and inspires.
Accountability	In terms of the client there are 3 levels of accountability: <ul style="list-style-type: none">• Personal – the individual sphere• The accountability of the client for his impact on others.• The client is accountable to all stakeholders; the wider organisational context.
Courageous goals	Transformative goal setting – goals with emotion and hence inspirational.
Tension	The creation of constructive tension to facilitate goal achievement.
Systems thinking	The belief that everything in the world is connected and that it is the relationship between things that leads to desirable or undesirable outcomes.

Table 2-4 The FACTS Model after (Blakey and Day, 2012)

2.9 Summary

Four elements clearly impacted my research question:

- Behaviour and Personality of IT Professionals.
- Asperger’s Syndrome.
- Coaching process and coach style.
- Efficacy of Coaching.

Underpinning these themes are learning and motivation, theoretical approaches, contexts and modes and coaching models. The four themes with this underpinning form the conceptual framework for the review of knowledge. I will comment on these fully in Chapter 5 (Discussion), when I combine current knowledge with the data gathered from experienced coaches. There is a significant amount of literature in all four of these areas, as well as some covering IT professionals and Asperger’s Syndrome. However, there seems to be a paucity of research linking the four together to contribute to the coaching framework for this area of work. This is reflected in the low numbers of coaches reported as specialists in the field.

Development interventions frequently lead to behaviours varying from “that was a waste of time” to opting out and spending the whole time “escaping” to access email. Non-technical management courses tend to focus on emotions and feelings – the “how we do things”. Traditional coaching similarly focusses on feelings and emotions

and, having its origins in therapeutic techniques, is often seen as irrelevant to many IT professionals. This makes it very difficult to develop IT professionals into the more rounded individuals needed in today's organisations. Their poor social interaction skills cause problems with relationship building. As a result of a tendency to be over detailed in their delivery (Frith, 1991). Baron-Cohen *et al* (2001a) also say that those with such traits will dislike change. This is due to poor attention switching/strong focus of attention.

2.10 The Research Question, Aims and Objectives

My research question is:

“Do external coaches use an alternative method to their norm when coaching IT professionals?”

Further questions are:

- ***“What are the common elements that lead to effective coaching outcomes for IT professionals?”***
- ***“Do coaches use a different approach and/or different techniques when coaching IT professionals? “***

Research Objectives

In order to answer these research questions and meet my research aims I have established the following objectives:

- Critically examine the literature covering Coaching Process and Style; Effective Coaching; IT Professionals, their behavioural and personality differences; Asperger's Syndrome and IT professionals.
- Explore through interviews with coaches their experience of coaching IT professionals.
- Assimilate information from other researchers relevant to the research question(s).
- Develop a modified coaching framework, demonstrating how this has contributed to the research.
- Consider what constitutes effective coaching for the IT profession.

- Examine the factors that impact the development of a good relationship with clients from this client group.
- From the literature and interviews determine the approach to executive coaching that leads to better outcomes for this community.
- Explore techniques and tools that support the coaching intervention for IT professionals.

The aim of this project is to ascertain whether coaches of IT professionals use a different approach and how this impacts the efficacy of their coaching. The research examines first-hand accounts from experienced coaches and assesses how this shapes the coaching intervention. The primary objective is to raise awareness of the different needs when coaching IT professionals and how this may affect a more traditional coaching model. This leads to a second objective, which is the development of an alternative coaching framework along with techniques that coaches have developed and successfully employed.

2.11 Value of the project to coaches and to the Literature.

Given the perceived importance of the IT sector to organisations, it is important to look at the coaching of these individuals. In preparing my research proposal, I was unable to find research covering the perceived components of the questions. I have examined the current research in each of these areas in Chapter 2, the Review of Literature. Additionally, I have reviewed existing coaching models as a benchmark to assess any significant differences. It would be interesting to understand why this has not been studied before. It may simply be that the needs of specific sectors are accommodated by individual coaches. Additionally, this sector is not always keen to take up any development that is not technically focussed, particularly in middle management. In my experience it is less usual for this demographic to engage in coaching. Indeed, I have also found that IT professionals try to avoid development in non-technical skills. As a relatively young industry, it could be the case that other aspects of coaching have seemed more pressing. Differentiation from therapy and

counselling, establishing general coaching models, qualification are possible foci initially.

A question this raises is one concerning the previous background of executive coaches; how many coaches come from an IT background? Do any coaches specialise in this sector? Is there a different approach between male and female coaches? Do IT professionals need a further different approach if they are male or female? These questions are beyond the scope of this research but will be considered in Chapter 5 regarding further research.

Accepting the importance of the IT sector, it is important to understand any variations in the traditional coaching processes when coaching IT professionals. I hope that my learning about the ways that others coach IT professionals will be useful to coaches who may only occasionally work with IT professionals. In addition, that the learning will be valuable to those who manage IT professionals. This will inform coaching practice and assist coaches who do not have a close knowledge of IT working processes. Further to this we need to understand the needs of this population to ensure that the coaching received by IT professionals is effective and appropriate for all parties; client, coach and organisation.

The purpose of this research is to explore the way coaching is delivered to and received by IT professionals. The aim is to establish what needs to be included in a modified coaching framework specifically for IT professionals. In deciding the research question(s) and identifying the objectives, I was mindful of who the audience would be for the research outcomes. Considering the coaching profession, I decided that all coaches who work with IT professionals would be assisted by the research outcomes. Equally they could support coach supervisors, who may not themselves coach IT professionals. After completing this DProf project report I see opportunities for publishing journal articles and talking to groups of coaches both internal and external. I have already presented posters at two conferences aimed at coaching practitioners.

3 Project Design: Methodology, Research Approach and Activities

3.1 Introduction

As identified by Crotty (1988) the account of the research processes gives credibility to the research. To achieve this credibility, in this chapter, I have examined the components of my paradigm through epistemology and ontology, theoretical perspective, methodology and method. This chapter presents these considerations from my position as a learner and researcher and shows my journey to this point, describing how I linked my own preferences to the research methods I have undertaken. I go on to explain my understanding of the different levels of my chosen approach. I also examine the choice of research methods and how those choices relate to the outcomes I generate.

This chapter also details how the research was carried out. It provides the reader with an account of the selection of participants, the interview process used, and the method of data analysis carried out. It will also explain any variation from the planned activity. In carrying out research, it is essential to take an appropriate ethical stance. The ethical framework adopted is also explained and the rationale for the approach selected is detailed.

To understand current practice when coaching IT professionals, it was important to go to coaches themselves to ascertain their lived experience of working with IT professionals (Creswell, 2013). The purpose of this was to discover whether coaches approached engagements with IT professionals differently and if so, what those differences were. A phenomenologically inspired approach was adopted as I wanted to find the lived experience of coaches when working with IT professionals. This approach allowed me to gather rich data without any bias from the interviewer.

3.2 The Research Design

At the highest level one must decide whether to adopt a qualitative, quantitative or mixed approach. Having examined the literature and existing knowledge around my research questions I also re-appraised my choice of a qualitative research approach. I found this to remain appropriate for this study. Prior to embarking on an examination of the various approaches and perspectives, I needed to think what type of data would yield the best interrogation of my research question. I decided, given the nature of coaching, that a qualitative approach would allow me to gather rich experiential data in relation to my participant's coaching of IT professionals. It also seemed to me that a quantitative study would diminish this richness and thus lose data by constraining the participants (Creswell, 2013).

Qualitative research is said to be based in a constructivist position (Costley, Elliot and Gibbs, 2011, Bloomberg and Volpe, 2016) as it is concerned with the experiencing and interpretation of the sociocultural world. As a researcher using a qualitative approach:

- I entered the experience of others to achieve a rounded understanding as opposed to a reductionist understanding more typical of quantitative research.
- I developed an understanding of the context of coaching IT professionals
- I interacted with the participants. My participation in the process added to the data collected without influencing individual results.
- I took an interpretivist approach to the data collected.
- I interacted with the participants. My participation in the process will add to the data collected without influencing individual results.
- I took an interpretive approach to the data collected.

A qualitative methodology places an emphasis on discovery and description. The objectives centre on the interpretation of the meanings of experience. Quantitative research relies on the testing of hypotheses to establish facts and normally use an

experimental or quasi-experimental design (Gray, 2014) and usually involve large numbers of participants. The key features of a qualitative approach are:

- Understanding the processes leading to events and actions.
- Developing understanding in context.
- Interactivity between researcher and participants.
- Maintaining flexibility of design.

Proceeding with a qualitative stance will allow me to discover if coaches are modifying their approach with IT professionals.

The nature of work-based research puts the researcher within the research in one capacity or another. If the researcher is researching in their own workplace, then as a member of that workplace they are researching themselves too. In my own case, I am researching my area of practice and as a member of a community of practice then the same must be true. I have considered my own approach to coaching IT professionals as well as the practice of others. Costley *et al* (2011) differentiate between the two dominant paradigms in social science; positivist and interpretivist. Interpretivist researchers feel it is important to collect data about language, ideas, feelings and meanings to understand human behaviour and interaction. The choice of research topic also reflected my natural nominalist ontology and constructivist epistemology.

Different disciplines tend to favour different designs for research based on the nature of the questions being asked. For instance, a natural scientist asking about the natural world will use positivism to explore the natural laws that operate. When we are looking at human beings, because of free will, we are much more complicated, so it is not possible to use positivism unless you have a large sample. Being located in a particular paradigm is to look at the world in a particular way. Others within the social sciences have delivered proposals for classifying different paradigms.

Burrell and Morgan (1988) and Guba and Lincoln (2011) are well recognised alongside Arbnor and Bjerke (2009) for their classifications of research paradigms/designs.

Arbnor and Bjerke describe three methodological views:

- An analytical view where the whole knowledge is independent of the observer.
- A systems' view where the whole knowledge depends on the behaviours of individuals as parts of systems.
- An actors' view where knowledge depends on the individuals involved.

In the analytical view it is presupposed that reality is full of facts and is independent of individual perceptions. The systems view considers that reality consists of fact-filled systems structures on objective reality and opinions of those structures in subjective reality. The actor's view assumes that reality is a social construction filled with stable structures maintained by the actors. It is dependent on human beings in a world where the creator of knowledge also is one of the constructors. This view supports my choice of a qualitative approach and the research question as well as my ontology and epistemology discussed below.

Burrell and Morgan (1979) introduced different assumptions covering research paradigms in social science. Although it is a much older design it provides a useful reference.

Table 3.1 Assumption about the nature of social science

	Subjective	Objective
<i>Ontological assumptions</i>	<i>Reality is interpreted by the individual. It is socially constructed (nominalism).</i>	<i>Reality is external to the individual. It is a “given” (realism)</i>
<i>Epistemological assumptions</i>	<i>Knowledge is relative. Researchers should focus on meaning and examine the totality of a situation (anti-positivism).</i>	<i>Researchers should focus on empirical evidence and hypothesis testing, looking for fundamental laws and causal relationships. (positivism).</i>
<i>Assumptions about human nature.</i> <i>Methodological assumptions</i>	<i>Humans possess free will and have autonomy (voluntarism). Understanding the world is best done by analysing subjective accounts of a situation or phenomena (ideographic).</i>	<i>Humans are products of their environments (determinism). Operationalising and measuring constructs, along with quantitative analysis techniques and hypothesis testing, will uncover universal laws that explain and govern reality (Crotty, 1988) (nomothetic)</i>

Table 3-1 Assumption about the nature of social science from Burrell and Morgan (Burrell, 1979)

Using this chart they defined interpretivism as an explanation within individual consciousness “social roles and institutions exist as an expression of the meanings which men attach to their world” (Burrell and Morgan, 1979).

Using this classification, my research paradigm fell in the subjective column, which as previously stated is linked with my constructivist epistemology. Because I sought build on existing components of coaching, it also aligned with status quo in Burrell and Morgan’s model, which places it in the interpretive quadrant in the diagram shown in figure 3.1 below. As I have previously indicated, I did not seek to create a

completely new model of coaching or approach to coaching. I did expect to use existing elements of coaching and modify them according to the data I collect.

The four paradigms of Burrell and Morgan (1979) are functionalist, interpretive, radical structuralist and radical humanist. The functionalist paradigm involves providing explanations of the status quo, social order, social integration, consensus, need satisfaction and rational choice. It tries to explain how the elements of a social system interact together.

The interpretivist paradigm looks for explanation within individual consciousness and subjectivity. This explanation is within the frame described by Silverman (1970) "social roles and institutions exist as an expression of the meanings which men attach to their world" (Silverman, 1970). Costley *et al* (2011) comment that many of those involved in the theory of work-based learning consider the interpretivist paradigm is the better alignment for this type of research. The radical structuralist paradigm takes the view of society that focusses on the structure and analysis of economic power relationships. The radical humanist paradigm looks for radical change, focussing on overcoming ideology, power and psychological compulsions and social constraints.

Figure 3.1 The four paradigms of Burrell and Morgan

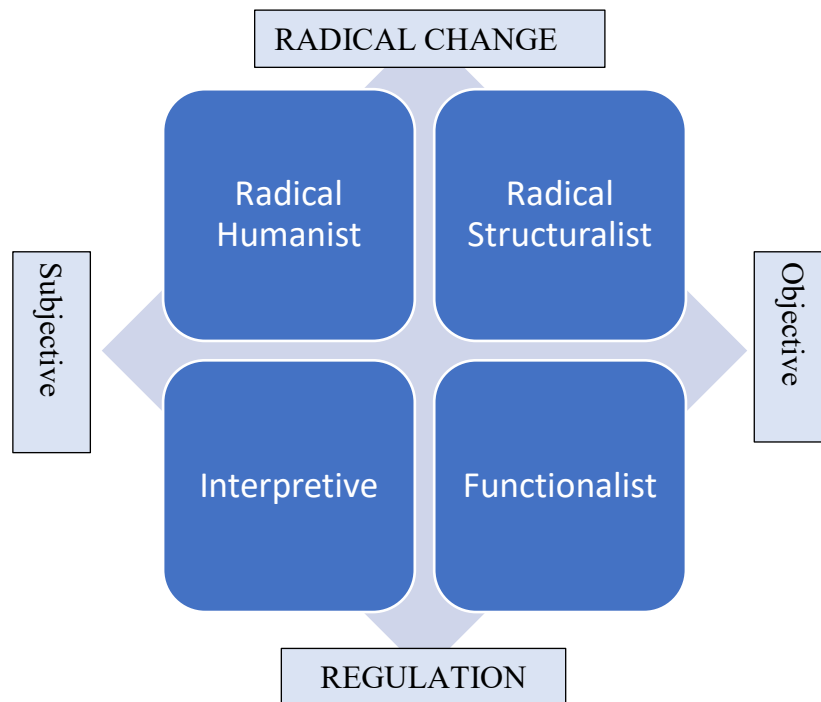


Figure 3-1 The four paradigms of Burrell and Morgan (Burrell and Morgan, 1979)

Although this model is over 30-years old and there are newer approaches, it still provides a useful model to study when considering the most appropriate design for a piece of research. It confirms my situating the research within interpretivist approach.

The nature of the research may also influence the epistemology and methodology. Goles and Hirschheim (2000) examined the research paradigms prevalent in Information Systems research. They consider that most of the research in the field of IT seems guided by positivist philosophical assumptions. They address whether a single paradigm has implications for research in this field. Their research examines paradigmatic pluralism especially as it might relate to pragmatism. As a result of their research Goles and Hirschheim (2000) suggest that paradigmatic unity in a field that is so complex in its nature is fundamentally undesirable. Their conclusion was that “paradigmatic pluralism” supported the diversity of research in this sector. I have

retained a single paradigm as my research question is generally convergent in its required output.

Constructivism considers that truth and meaning do not just exist but are created through one's interaction with the world (Creswell, 2013). In the social sciences this is clear, where multiple valid accounts of the world are held. The terms constructionism and constructivism are often used rather interchangeably; however, there is a basic difference between constructionism and constructivism. Constructivism describes the individual engaging with objects in the world and making sense of them to create meaning (Crotty, 1988). It could be considered that constructivism is individual meaning making as opposed to the collective meaning making described by constructionism. Social constructivism is often combined with interpretivism (Creswell, 2013).

3.3 The Research Process

Ontology is the study of being; concerned with "what is" or with the structure of reality. Ontology and epistemology are the foundation for the research paradigm. Crotty (1988) considers that ontology and epistemology sit side by side, informing the theoretical perspective. The theoretical perspective contains a way of understanding *what is* and a way of understanding *what it means to know*, i.e. ontology and epistemology. There are many interpretations of ontology throughout history and to delve too deeply into these would be a research topic on its own. In Table 3.1, Burrell and Morgan (1979) define ontology as "*Reality is interpreted by the individual. It is socially constructed (nominalism).*" This is within a subjective framework as I have already discussed, my research is subjective not objective. This definition of ontology is clear and supports both my own philosophy and my research, which is based on the views of my participants and their interpretation of their coaching practice. For that reason, I worked with the explanations in Table 3.1, whilst bearing in mind Crotty's position on the importance of theoretical perspective.

The epistemology explains the nature of knowledge, the possibilities, scope and general basis. There is a range of epistemologies. One is objectivism which contends that meaningful reality exists apart from conscious operation. For example, a lake on a moor exists whether anyone is aware of it or not. Constructionism disagrees with this notion and suggests that meaning is not discovered but constructed and constructionism is commonly applied in qualitative research. Whilst my education and early career might have positioned my ontology in a positivist perspective, embedded in science, this has transmuted over the years to a nominalist ontology. Scientific research traditionally keeps a distinction between objective empirically verifiable knowledge and subjective un-verifiable knowledge. From the descriptions above, my ontology is realist and my epistemology is constructivist.

3.4 Methodology

The philosophical stance underpinning the methodology is the **theoretical perspective**. The theoretical perspective linked to constructionism is interpretivism. Interpretivism is an attempt to understand and explain human and social reality. Crotty (1988) suggests that “It looks for culturally derived and historically situated interpretations of the social life-world”. This perspective considers that natural reality (scientific) and social reality are different and consequently need different methods. According to Costley *et al* (2011) methodology is made up of the principles for acquiring knowledge.

I followed the **interpretivist** tradition as a result of my ontological and epistemological positions, not just because of the nature of the research topic. In fact, the choice of research topic also reflects my ontology and constructivist epistemology. My research depends on the expertise of the participants as well as my own. The nature of the research proposed largely dictates an interpretivist perspective. Armsby and Costley (2000) comment that many of those involved in the theory of work-based learning consider that the interpretivist paradigm is the better alignment for this type of research.

Arbnor and Bjerke (2009) consider that methodology is the understanding of how methods are constructed. This allows us to develop the operating paradigm. Within coaching the output always depends on individuals working independently and together. It seems that coaching is ultimately social constructionism between coach and coaching client. The primary source of my research data will come from coaches' interpretation of their interventions with IT executives.

3.4.1 Hermeneutics, phenomenology and symbolic interactionism.

I chose to look at these three methodologies as they are all examples of an interpretive paradigm.

Phenomenology requires us to suspend our usual understandings and have a fresh look (Gray, 2014), in this respect it is a challenging methodology. This is as true for the researcher who must set aside their own beliefs and personal attitudes (bracketing) in order to see to the heart of the research topic without deflection. This may lead to a reinterpretation of existing objects or practice. It considers that whilst culture can be helpful, it can keep us fixed in the status quo and restrict our access to new knowledge. This is confirmed by Costley *et al* (2011) who suggest that phenomenological approaches allow understanding of subjective experience, bracketing off assumptions and conventional wisdom. They (Costley *et al*, 2011) go on to say that these approaches can highlight limitations in current thinking with a view to developing alternative perspectives. This underpins the key purpose of my proposed research and will ensure the outcomes are effective. This research will provoke coaches to think about the IT profession as clients and potential commonality of a coaching approach for that client group. Phenomenology is grounded in people's experience of social reality. Value is given to both the researcher's interpretations and to the subjects of the research. My participants are experts in their field. This ascribing of value is therefore particularly relevant.

Symbolic interactionism explores the understandings in culture as a matrix that guides our lives. Methodologically it is the actor's interpretation of actions, objects

and society that must be studied and then acted upon; thus, the researcher must take care that it is only the actors' perspectives that are recorded. Symbolic Interactionism focusses on meanings as central to human behaviour, which are revised according to experience. Methodologies such as ethnography and grounded theory are associated with symbolic interactionism. Ethnography makes use of observation in the main rather than constructing meaning through conversation. Grounded theory sees theory growing out of data from observations of practice.

Hermeneutics is a synonym for interpretation in contemporary use. Originally it is to do with the understanding of texts, however it now covers other types of expression such as interviews (Costley *et al*, 2011). It seems to depend on the nature of the research which hermeneutical approach to take. Hermeneutics is a sharing of meaning between people or communities.

In deciding which of these methodologies, if any of them, supported my research, I considered my perspective (Crotty, 1988, Gray, 2014), I am following an interpretivist paradigm as previously stated. This is based on my ontology and epistemology as well as the direction of my research. My perspective lies in the constructivist/phenomenological spectrum. Different paradigms are optimal for different contexts of research for instance, technological research a natural sciences approach is best, if there are people-related areas, then a more subjective approach may be needed as well.

I examined hermeneutics, phenomenology and symbolic interactionism to decide which was the best fit for my research. Phenomenology fits well because it asks us to disregard existing practices and take a fresh look at how coaches work with IT professionals. Phenomenology provides challenge and new perceptions which provides a great backdrop to this research. There are limitations to this approach. Phenomenological research relies on personal accounts of experience which are inevitably subjective. It also assigns value to the researcher's and the participants' roles. Subjectivity can be a limitation of the research and checking for data saturation and hence commonality of findings across clients can mitigate against this.

Hermeneutics shares meaning making between individuals or communities and in modern senses of the term seeks to understand and interpret them. It presents less balance between participant and researcher which fits less well in this research. I have also discounted symbolic interactionism which excludes the experience of the researcher. As a coach I am used to bracketing myself so that I can focus on the client and their thoughts which allowed me to be focussed on what my participants are telling me without my opinion getting in the way. My aim was to discover whether coaches of IT professionals modify their approach, and if they did what were those modifications. I had to adhere to and interpret the data involved without allowing bias to creep in through my own views. Again, as I am accustomed to working with clients in this way it was a business as usual approach for me.

To summarise, I have chosen to use a qualitative research approach for this research as it will give me a deep and holistic knowledge of the research topic. My research perspective is interpretivist and my methodology is phenomenological.

3.5 Method of data collection

3.5.1 Critical Incident technique

I had originally set out to use the Critical Incident Technique (CIT); Day *et al* (2008) consider both clients and coaches to be active participants in the relationship, and therefore a critical moment can occur in the course of their interaction. As identified before (2.7) critical moments occur during the coaching process which can take the client forward (de Haan, 2019). We now know from this that they can take the client forward and this is what I looked at.

However, following my pilot interview, I looked at all the rich data around the critical incident and beyond I found that I was able to gain so much rich data outside of this technique. I realised there was great value to be got from exploring the whole interaction and asking about the critical incidents. Therefore, I decided to adopt a more general interview technique allowing the coaches to talk about their whole interaction. Obviously there are also some limitations in these techniques:

- The critical incident technique can result in the data appearing disconnected from the whole account.
- The critical incidents are reported by coaches themselves which may create a bias.
- With interviewing, outcomes depend on participant memory which can distort what happened.

Using the whole interview method, whilst still asking about critical moments I mitigated the first two bullet points. In interviewing several coaches, I was able to mitigate potential memory recall bias.

3.5.2 Interviews

I chose the interview as the primary data collection method in this research. I believed it to be the most effective method because it can elicit rich, thick descriptions as discussed in 3.5.1. Also, I was able to re-phrase questions to delve deeper into the participants' mindsets. This is a common research technique and can be used in many circumstances. As I was inviting experienced participants, their expertise will be a valuable part of the outcome and structured approaches can be too restrictive with these outcomes in mind. Although open interviews can be difficult to manage, as a coach I am experienced in one-to-one conversation with people and used those skills in the enactment of my interviews. These skills mean that I was able to follow the flow of conversations and even direct that flow without imposing my own views. I am used to establishing rapport and trust quickly enabling participants to express themselves freely.

Cohen and Manion (2011) suggest that interviewing serves several purposes. Particularly relevant to my proposed research is the gathering of information about an individual's knowledge and values, and to explore the research questions. Creswell (2013) amongst others, suggested that the main benefit of collecting data through in depth interviews is that they allow the researcher to elicit the participant's perspective of an event or experience. Even at this level of the research methodology there are links to the epistemology of the researcher in their choice of interview type.

Roulston (2010) considers that unstructured and semi-structured interviewing are linked to a constructionist epistemology, where the researcher and participant are working together to create meaning around the research topic. This is consistent with my own epistemology and my choice of method. My peer participants are knowledgeable in the field of coaching and I intended to fully incorporate their knowledge in the fulfilment of my research outcomes. There can be drawbacks to using interviews; not all participants are equally cooperative or articulate. Additionally, they are not neutral methods of data gathering. They are a result of interaction between researcher and participant. By using largely unstructured interviews I avoided imposing my views or bias.

Seidman (2013) comments that the intent to understand the experiences of people and the sense they make of these experiences should be at the root of interviewing. As a coach I am intrinsically interested in people and the meaning they make of their experiences through language. The phenomenological approach to interviewing emphasises the importance of making meaning of experience. In turn meaning making is heavily reliant on language supporting interviewing for data capture.

I used very lightly semi-structured interviews asking coaches to talk about their experience of coaching IT professionals to talk about their experience of being coached. To avoid introducing bias I used generic probes:

- What happened next?
- What was the outcome?
- What led to this?

This ensures that the discussion with the participant remains true to their lived experience. However, I also asked for clarification where appropriate. This approach ensured that the critical moments were gathered in an inductive way rather than as a separate activity. I asked participants to reconstruct their experience and reflect on its meaning. This attention allows them to consider the meaning of their experience of coaching or being coached which added richness to the data collected. As stated by Roulston (2010) phenomenological interviews are relatively unstructured with perhaps one or two initial questions. Probes can then be used to support the flow of the interview.

3.6 Summary of Research Design

Figure 3.3 summarises the research paradigm, perspective, methodology and method for the research design. I am following the **interpretivist** tradition as a result of my ontological and epistemological positions (nominative and subjective respectively). Having examined phenomenology, hermeneutics and symbolic interactionism, a phenomenological methodology supports this nature of this research. Finally, I am using a semi-structured interview for the method as this will allow the subsequent collection of rich data.

Figure 3.3 Summary of Research Design

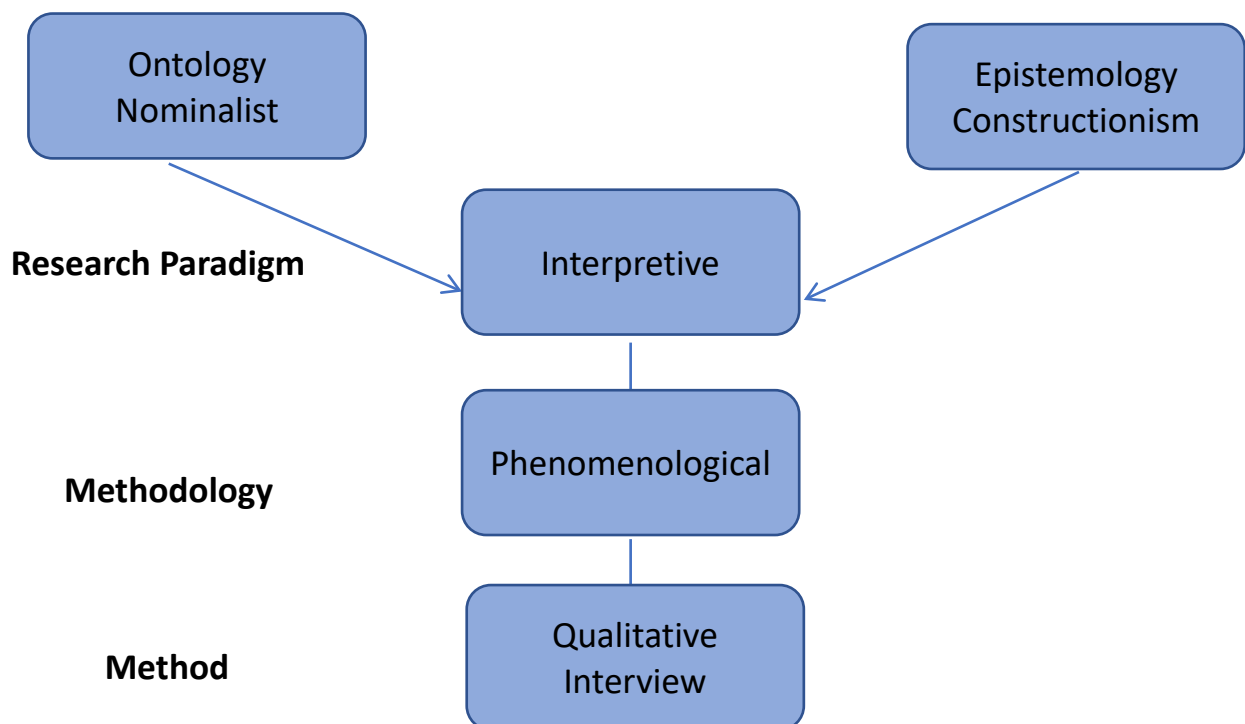


Figure 3-2 Summary of Research Paradigm

3.7 Data analysis

3.7.1 Thematic analysis

Qualitative data analysis involves bringing order, structure and meaning to the raw data which is an inductive process, leading to the identification of themes that transverse the data (Merriam, 2009, Bloomberg and Volpe, 2016). These themes can “just emerge” or the researcher may have discovered themes as a result of the literature review, or a combination of these. In order to properly define and subsequently populate these themes the researcher must look carefully at the data to uncover insights into the research question. This method did not allow me to draw conclusions about overall populations, but it did fit the aims and objectives of my research.

Through my analysis I was sought to identify common threads in order to establish the sub themes and check for any emergent themes within the coaches’ accounts.. Although my original plan was to use a critical incident technique, as previously said, the interview yielded very rich data, so I allowed any critical moments to emerge. By identifying critical moments in the data, I aimed to identify where changes in behaviour occur for the client and hence affect coaching. De Haan (2008b) describes a critical moment in the coaching relationship as “... a moment that defines the relationship ...”. He continues by saying that “a critical moment says something about the coach and the coaching”. More generally Day *et al* (2008) suggest that critical moments are usually:

- “Unexpected and unforeseen by the coach;
- Associated by the coach with heightened emotions for the client and the coach;
- Experienced as tension provoking in the relationship between coach and client;
- Associated by the coach with feeling doubt or anxiety about how to proceed or respond in the moment. “

They go on to say that “Coaches often reported that their clients were experiencing insight and learning during or after these moments”. These changes could be around engagement and commitment to the coaching intervention or something deeper such as a new awareness of other people’s needs. I examined what was happening just before these critical moments and what the outcomes were.

One approach to identifying themes is to closely examine the experiences claimed by each participant to identify emergent patterns showing convergence and divergence as well as commonality and nuance across participants. The other approach is to elect the themes in advance. These come about through reading the literature and identifying themes. I adopted an integrated approach to these two options, establishing themes from the literature review such; “coaching relationship” and “client behaviour” as well as “behaviour of IT professionals” and “Asperger’s Syndrome”. I did not rely solely on elective themes and subordinate themes as I wanted the coaches’ experience to have a high profile. Subordinate themes emerged from the interview data.

The analysis process took a cyclic form with several “passes” of the data both to establish themes or validate the elected themes thus making sense of the data overall. This helps to have a good feel for the data. Coding the data is similarly cyclical needing several reviews of coded data to ensure the best structure possible. Overall the process followed was similar to that documented by Tesch (1990).

Stages of analysis

1. Reading and re-reading – including listening.
2. Initial reading of interviews to look at elective themes.
3. Noting emergent themes.
4. Coding the data set and then examining the codes to consolidate the themes.
5. Find the most appropriate description for the themes
6. Looking for connections across themes
7. Looking for patterns across Interviews

Based on Tesch’s eight steps (Tesch, 1990)

My interviews were semi-structured in that I gave the participants an initial focus to talk around, just prompting if the narrative went “off track”. This provided very rich open data which has enabled an open analysis. I carried out my initial thematic analysis manually, as in the transcription process this allowed me to immerse myself more fully in the data. Once I had a “feel” for the subordinate themes I moved to NVivo to store my transcripts and allocate themes and codes. NVivo is a qualitative data analysis computer software package, designed for qualitative researchers working with very rich text-based and/or multimedia information. It allows deep levels of analysis on small or large volumes of data are required. It also has powerful analysis tools and allows for comparison across themes and creates models and charts to present data.

3.8 Ethical Considerations

Gray (2014) defines the ethics of research as “the appropriateness of the researcher’s behaviour in relation to the subjects of the research or those who are affected by it”. In practitioner research this can cover a wide range of people connected to the research. Gray (2014) offers four guiding principles for working ethically with participants:

- Avoid harm to participants.
- Ensure informed consent from all participants.
- Respect the privacy of the participants.
- Avoid the use of deception.

As I planned this research, I faced various ethical issues at every stage. Within my coaching practice I am bound by the terms of accreditation to abide by the International Coaching Federation (ICF) Code of Ethics (ICF, 2008), which apply specifically to Coaching Practice. As a Member of the British Psychological Society (BPS), having carried out several undergraduate research projects, I abide by the BPS Code of Ethics and Conduct (2018). I also was mindful of the Middlesex Code of Practice for Research (2011). These three codes ensured I was behaving ethically

from a coaching perspective, a psychological perspective and a research perspective. There is a need to remain compliant for my future practice needs but more importantly protect all the participants in my proposed research project. The psychological perspective helped me to examine the way I was linking IT professionals to Asperger's Syndrome and thus ensure there was no risk of harm to those clients. The Middlesex University Code of Practice for Research (2011) incorporates many of the same ethical considerations as those referred to but as a code of practice goes further to cover the process of research including record keeping. The principles of this code state that all researchers must conform to the code of practice and have their proposed research approved by the Ethics Committee before it is started.

Researchers also must comply with the Data Protection Act (2018) (Department for Digital and Office, 2018) as well as their professional association's code of practice. All data related to participants, including interview mp3s, transcriptions, corresponding emails, and notes will be retained by me for five years after the completion of the project in compliance with the Middlesex Code of Practice for Research (2011). At the end of that period, all material, other than the completed project paper will be deleted, shredded, or otherwise destroyed. All data stored up to that date will be stored anonymously and will not be able to be traced to the participating coach. Anonymity of participants and their clients is ensured. This was all detailed in the consent form (Appendix 4) given to participants.

As discussed by Costley *et al* (2011) these ethical codes have their limitations and can only be a guide to practice. Having worked in the teaching profession as well as being a coach I find ethical practice is something one lives and breathes; consulting a code can inhibit fluent delivery.

The British Psychological Society Code of Ethics and Conduct (BPS, 2018) applies to research and practice with guidance falling into 4 categories of respect, competence, responsibility and integrity.

3.8.1 Respect

The statement of values within the domain of respect asserts that researchers should value all individuals and remain sensitive to the impact of perceived authority over participants. Additionally, one must maintain regard for people's rights of privacy and self-determination.

At a broad level, all organisations involved in the research should provide headline consent and agree a communication exercise with those employees to be approached where appropriate. I have not needed to disclose the identity of any participants and this was stated as part of the one-to-one communication. Formal informed consent was sought before interviews are carried out. I sent all participants an information sheet (Appendix 5) to read before agreeing to take part. I followed this with a telephone conversation.

It was made clear in the participant information sheet (Appendix 5) that there are circumstances for disclosure such as legal or safety disclosures. These did not occur. Privacy was achieved by coding responses that did not disclose individual identity. All data held electronically was password protected and my computer also requires a password. All audiotapes were deleted once they had been uploaded to my computer. The invitation to participate (Appendix 5) was followed up by gathering informed consent (Appendix 4) from those participants who agreed to take part. Informed consent included the statement that participants have the right of withdrawal at any time and that any research data that can be directly attributable to them would be destroyed.

3.8.2 Competence

I have a breadth of experience in the IT profession and in coaching which gave me credibility with my participants. I ran some trial interviews to make sure the process worked which added to the fluency of my interviewing. My choice of methodology placed me within the research process and so how I conducted myself in participant

contact was important. Showing a genuine interest in understanding what they told me was important but not difficult as their input was fascinating.

3.8.3 Responsibility

Research should not harm any of the participants (BPS, 2018) Research should not, for instance, cause mental distress such as ridicule or embarrassment. Neither should it cause any negative emotional reactions. I agreed to make myself available to all participants for further discussion or debriefing if requested.

3.8.4 Integrity

Communication regarding the research programme should be clear and honest (BPS, 2018). The boundaries of the research intervention should be clear. The participants must be aware of what the data captured will be used for as well as their rights of withdrawal at any point. I made sure this was covered when I briefed my participants. Participants were told who to contact if they feel there has been any unethical aspect to the process. They were also offered a follow-up debriefing session.

3.8.5 Bias

Involvement in research may lead to bias (BPS, 2018). It was important not to let my own views detract from the views of the participant and I took care not to let discussions become leading. I carried out preliminary studies of the interview data and analysed it as I collected the data. This allowed me to add more participants if needed.

Robustness of data can also be an issue when using a single type of data. I crosschecked with my own experience and positionality and additionally included my coach supervisor is an experienced coach. This provides triangulation to improve reliability and hence robustness. I talked to organisations that specifically screen for candidates with Autistic Spectrum to provide further information about common

behaviours and traits. This added to the robustness of my findings. I also included members of my research group at the stage of thematic analysis.

Bias can be introduced through the interviewer applying different standards of interview within the participant set. The free form of my interviews mitigated this potential bias as far as is possible. Researcher bias can be another limitation. As a coach specialising in work with IT professionals, I was concerned to avoid looking for the “answers” I have found in my own work. In framing the participant information carefully, I set the parameters of the research carefully. I gave the participants enough time to consider their accounts prior to interview. Finally, I provided very little structure to the interviews to avoid “guiding” the participants. These were all mitigating factors.

One issue which can arise when asking participants to recall events is that memory can distort reports. Whilst many false memories arise from the participants childhood, there is evidence that they might happen in adulthood Goodman *et al* (2006). Their research indicates that conversations between adults can unintentionally affect people’s memories. They assert, however, that this can be mitigated by confidence in memory. Given the right interaction between me and the participant, their confidence in what is being remembered reduced errors. I developed a standard protocol for the interviews, whether they were face to face or Skype. This ensured consistency of approach.

My main concern was that I would become over-involved in the interviews, so I really monitored my interventions closely. I also reviewed the interview with each participant for their feedback on the process. Although I was not carrying out research within my own organisation, there was still the possibility of insider bias as a practitioner-researcher. My concern as previously alluded to, was that I would only see what I wanted to see what I wanted to see, unconsciously or consciously. In part I used the “analysis and explore” features within NVivo, but I also asked a colleague to review one of my interviews and suggest the emergent themes that occurred to

her. Finally, my supervisors also looked at my analysis. This provided additional triangulation to my interpretation of my data.

3.8.6 Trustworthiness

In this context, trustworthiness refers to the research itself rather than the researcher. Lincoln and Guba (2000) consider that the trustworthiness of qualitative research should be assessed from the perspectives of:

Credibility (validity) assesses whether the findings are accurate and credible. It isn't concerned with the conclusion but rather the means of getting there, the validity of the methodology and interpretation. In this research I was clear about my assumptions at the start. I gathered data from multiple sources to enhance the picture of the phenomena being considered. Through my literature review and data collection I remained open to evidence that contradicted my expectations. I then reviewed my findings with my research group, who are all experienced coaches, and my supervisors, who are also experienced in the field.

Dependability relates to the reliability and replicability of the research. Whilst this is common in quantitative studies it cannot usually occur with qualitative research. For qualitative research it is important to ensure that the findings are consistent with the data collection. The aim is not to eliminate inconsistencies but to recognise them when they occur. To achieve this, I asked colleagues to code some interviews. The coding was generally consistent with just minor differences which I was able to reconcile. **Transferability (Lincoln, 2000)** is the way the reader can see whether this phenomenon can be applied to another context. To an extent this research achieves this through the richness of data but further realises transferability by the multiple "prongs" of IT professional behaviour, coaching efficacy and Asperger's Syndrome literature. Considering Asperger's Syndrome for instance, not all IT professionals are on this spectrum and equally not all individuals on the spectrum work in IT.

3.9 Project Activity

This section is intended to describe the project activities undertaken for the methodology described above. It explores the practical activities carried out to develop and complete the research methods and interviews used. The main **purpose** of my inquiry was to understand the way experienced coaches worked with IT professionals.

3.9.1 Participants

In choosing my coach participants I had to consider whether there were executive coaches who have worked with IT Professionals and if so would they be willing to take part. I had imagined it would be a straightforward task to recruit coaches who had experience of working with IT Professionals. However, in practice this wasn't the case, and it was a concern that I would be unable to collect enough data to provide a reasonable outcome.

I set some key criteria for my research participants which focused on the elements that were important for the coaches taking part, i.e. level of experience and IT experience. Additionally, I had information on gender, and I secured coaches with more than five years' experience of executive coaching to ensure the research participants had a deeper understanding of the coaching process. In practice the participant coaches had considerably more than 5 years' experience.

Table 3.2 Participant criteria.

Participant	➤ 5 years' experience	Coached > 5 IT professionals	Interview online	Interview in person	M/F
C1	✓	✓		✓	F
C2	✓	✓		✓	M
C3	✓	✓		✓	M
C4	✓	✓	✓		F
C5	✓	✓	✓		F
C6	✓	✓	✓		M
C7	✓	✓	✓		F

Table 3-2 Participant criteria

Throughout the interview the participants offered additional facts about their background and coaching practice which were not part of the core interview. This meant that I did not have the comparable information on all the coaches so only used the data where I had it for all the participants. Post hoc I reviewed the information from the interviews and the next table shows this additional data. This additional data demonstrates the breadth of experience of these participants. Their coaching of IT professionals fell within their respective specialisms.

Table 3.3 – Additional participant data

Participant	Professional bodies	Focus of coach practice
C1	ICF	Leadership
C2	AoEC, EMCC Global	Leadership
C3	AoEC, AC	Brainwise leadership
C4	WABC, EMCC, IAC	Business coaching
C5	AC	Neuro-coaching
C6	EMCC	Leadership

C7	AoEC, AC, EMCC Global	Middle management
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Table 3-3 Additional participant data

Table 3.4 Professional bodies

ICF	International Coach Federation
AoEC	Association of Executive Coaches
EMCC	European Mentoring and Coaching Council
AC	Association of Coaching

Table 3-4 Professional bodies

I did not seek information on accreditation as claims to be an accredited coach can be ambiguous. Belonging to a professional body does not indicate accreditation; many organisations ask for no requirements and those that do rarely ask for proof. Training can be accredited but coach accreditation is a separate process for which evidence is required. Given the experience of the participants it did not seem of benefit to investigate their accreditation.

Ten participants were contacted by email in the first instance with a brief description of the research aims and a request to have an initial telephone conversation to discuss their participation. I also gave them a synopsis of my background and why this research was important to me. I outlined the structure and method that I would be applying. I was pleased with the outcome of the telephone conversations and the level of interest shown in this research question. As this is a qualitative research project, the selection of participants is purposeful (Patton, 2015). Purposeful selection allowed me to gain insight of the phenomenon being investigated i.e. potential modification of a coaching framework for IT professionals. Given that I applied the criteria detailed above, my sampling is criterion based, a sub-category of purposeful sampling.

3.9.2 Data Collection Process

The data was collected by semi-structured interviews via Skype which were recorded and then transcribed using an intelligent transcription approach. This method of transcription avoids a verbatim transcription but still captured most of the interview (Golota, 2019). It is not summarised or paraphrased, the intent is to clean up the language – removing stutters, repetitions, filler words (e.g. um, er, huh), false starts etc. The focus is on producing a readable, well-spoken transcript that remains a true and accurate transcription of what the participants has said. In order to immerse myself fully into the data I transcribed the interviews manually, uploading the recordings to my computer and using an Infinity foot pedal. I then listened to each recording again and made margin notes regarding the tone of voice and emphasis.

Figure 3.4 Overview of data collection process

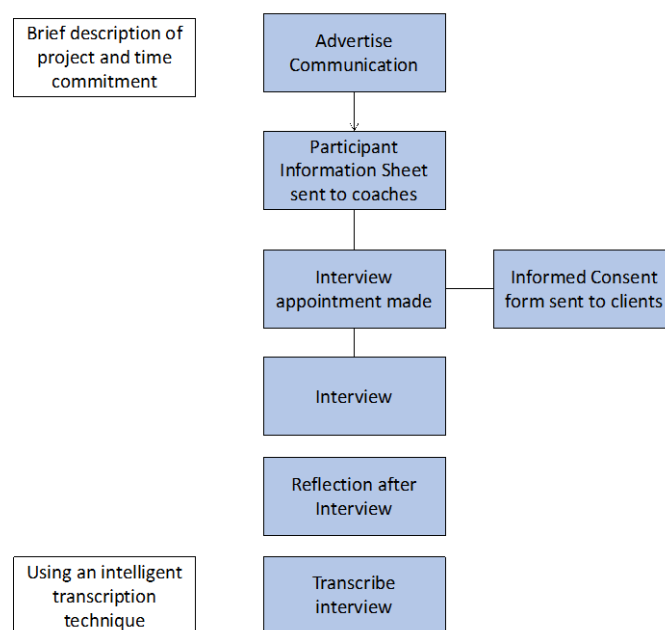


Figure 3-3 Data Collection Process

Participants were assured that:

- They were free to have a copy of the recording and the transcript. I asked their permission to record the interviews before starting.
- All recordings and data will be destroyed at the end of the Professional Doctorate process.

- The naming convention of all files stored would ensure anonymity.
- There would be no reference to clients mentioned in interviews.
- They could withdraw at any time.

On this basis I obtained consent from the participants (Appendix 4).

3.9.3 Pilot Work

I piloted a series of interviews with one coach and two coaching clients in the UK to test process so that I could see whether my chosen approach would yield enough depth of exploration and rich meaningful data. The interviews were focussed on eliciting data on the participants' lived experience of coaching IT professionals or as an IT professional being coached. The first pilot interview with a coach yielded rich results, giving me a lot of material for analysis so I continued interviewing coaches using a semi-structured interview but not critical incident technique.

This also allowed me to test the level of information I was giving to participants. Whilst the approach to interviewing and the resultant interviews appeared to fit my requirements, I gave the first participant far too much information about my research and the resulting data seemed to be an answer to my research question rather than experiential data. The pilot also allowed me to standardise the start of the interview, asking:

“I would like to hear your account of a coaching session with one or more IT professionals”

This pilot interview with a coach allowed me to resolve any difficulties and move on to interviewing further participants with this improved approach.

3.9.4 The Interviews

All the coaches had received a Participant Information Sheet from me (Appendix 3) in order to help them reflect on their relevant experiences prior to the interview. They had all given considerable thought to the research question and were highly

interested in the practice of coaching IT Professionals. All the interviews flowed extremely well, and the coaches were all enthusiastic, feeling the research question made connections that some of them had not previously considered. As described in the previous chapter, the interviews were very loosely semi-structured comprising of a request to describe two or three coaching engagements. When critical moments emerged, I probed to ascertain what happened before the incident and what followed. Some prompts were used where participants either “dried up” or talked about non-IT clients.

The light structure I used for my interviews allowed the coaches’ experience to emerge fully. I did, however, start each of the interviews in the same way, by reiterating elements of the brief and emphasising confidentiality for all aspects of the process. My aim at this point was to reassure the coaches I was talking to. I also ensured that I had their permission to record the interviews and subsequently transcribe them. None of the coaches had any questions or concerns.

A limitation could be the interviewing technique needed to ensure that participants are encouraged to give rich and deep descriptions of the coaching assignments. In section 3.7.1 I have described the interview process, explaining that as a coach myself I am very used to conducting such interviews effectively. In fact, treating the interviews almost as the information gathering section of a coaching assignment should work well. After all our work as coaches depends on us gathering clients’ thoughts and experiences without influence and therefore coaches are skilled in this approach. I stopped interviewing after seven interviews because no new data was emerging. Three of the seven coaches were men and four were women which provided gender balance. All participants worked in the UK.

3.9.5 Data Analysis

After each interview I listened to the interview recording to immerse myself in the conversation to review the tone of the meeting and to consider the interaction between myself and the participant. I then transcribed the recording drawing out my

own thoughts and reflections as well as identifying any emergent subordinate themes. I then read through each transcription before a second analytical reading. This ensures that the participant is central to the analysis and forms the first steps to avoiding bias. During this manual process I highlighted areas of initial interest along with some margin notes of things that stood out for me such as “avoidance of social connection”, “direct”.

My subsequent analytical readings added to the emergent subordinate themes. At this stage I listed the themes separately and reviewed them without any interview text to identify patterns. This process allowed me to cluster themes around a super-ordinate theme such as Coach Style with sub-themes of Direct, Concrete, Stimulating and Giving Responsibility. I was also able to refine my description of each theme.

Initially, the quotes seemed too large but repeating the analysis of each interview several times has helped refine them where appropriate. In my initial analysis I was thinking very holistically and became more analytical with subsequent reviews of the data. Some of the larger quotes were very integrated and more difficult to pick apart. In these cases, I was able to tag them in more than one theme. It was important not to lose context when refining quotes. In order to make sure my findings were consistent with the data I asked colleagues to code some interviews. The coding was generally consistent with just minor differences which I was able to reconcile. The aim is not to eliminate inconsistencies but to recognise them when they occur.

3.10 Summary

In summary, this chapter provides a detailed account of the research methodology applied. The methodology was qualitative in order to explore the way coaching is delivered to and received by IT Professionals in order to establish what needs to be included in a modified coaching framework for coaching IT Professionals. There was a purposefully selected sample of 7 coach participants who included men and women.

My data collection method was individual interview. I reviewed the data against the literature to see what was there fitted the literature as well as including themes that emerged. Additionally, I included peer review of findings and interpretation. The research was carried out in an ethical manner (ICF, 2008, Middlesex, 2011, BPS, 2018) with due concern for participants. It is intended that this research will be of help to the coaching community when coaching IT professionals.

4 Project Findings

4.1 Introduction

This chapter presents the findings from the interview data relating to the question: ***“Do external coaches use an alternative method to their norm when coaching IT professionals?”***

This study explores the experiences of a group of coaches when working with clients from the IT sector. Do coaches use a different approach and/or different techniques when coaching IT professionals? Further, if they do, is this purely in response to client behaviour or/and because the outcomes are more effective? It was with these questions in mind that I conducted the interviews with seven experienced coaches, four female coaches and three male coaches. It was anticipated that this study would lead to a better understanding of the most effective approach to coaching IT professionals.

I begin this chapter by presenting an overview of the general impressions arising from my conversations with these coaches. The chapter will continue with an account of the superordinate and subordinate themes identified, with reference to the frequency of quotes within each. Each superordinate theme and subordinate theme will be illustrated by coach’s quotes.

4.2 The coaches’ voice

The interviews with coaches were centred around their experience when coaching IT professionals. The participants were all experienced coaches who have established a robust working approach. There was much commonality amongst coaches as demonstrated through the subordinate themes emerging from the interviews. All the coaches said that taking part in this research had made them look again at their coaching process for these clients. In each case, they explicitly stated that they considered their approach to be different in some way to that used with non-IT

clients. As will be discussed in the next chapter, their approach was more focussed and straightforward. Some coaches did comment that they had experienced working with clients from different disciplines that required similar approaches, such as engineers and some finance executives, however for the purpose of this research I focussed on IT professionals.

4.3 The themes

Thematic analysis captures patterns across qualitative data sets. Braun *et al* (Braun, Clarke, Hayfield and Terry, 2018) view themes as reflecting a pattern of shared meaning, organised around a central concept. The theme brings together data that may otherwise appear disparate. I had defined the themes that might be important as a result of the literature review based on the research question. However, I felt it was important to consider those themes that emerged from the interviews and then consider any themes arising from the literature. I reviewed ten hours of transcribed interviews using a process of identification of themes. I reviewed each transcript in turn, highlighting areas of the transcript that illuminated the coaches' lived experience of working in this sector. Each transcript is only identifiable through a code, not by the coaches' names. The interviews allowed the coaches to reflect not only on the actual coaching interventions, but also their role as coach.

In the first instance I analysed each interview, highlighting all comments concerned with coaching IT professionals. After several sessions of reading the transcripts, I had a large collection of highlighted comments. In order to ensure that I had identified the comments in context, I listened to the recorded interviews again. I grouped similar comments together, refining my grouping until I had references under the four superordinate themes: Coaching Style, Coaching Client Behaviour, Process and Relationship. These had been decided from the literature review and no new themes arose from the data. I then further subdivided the comments into subordinate themes as shown in table 4.1 below. These subordinate themes emerged from the data.

Figure 4.1 provides an indicative comparison of all the subordinate themes. It presents the number of quotes in each of the four themes.

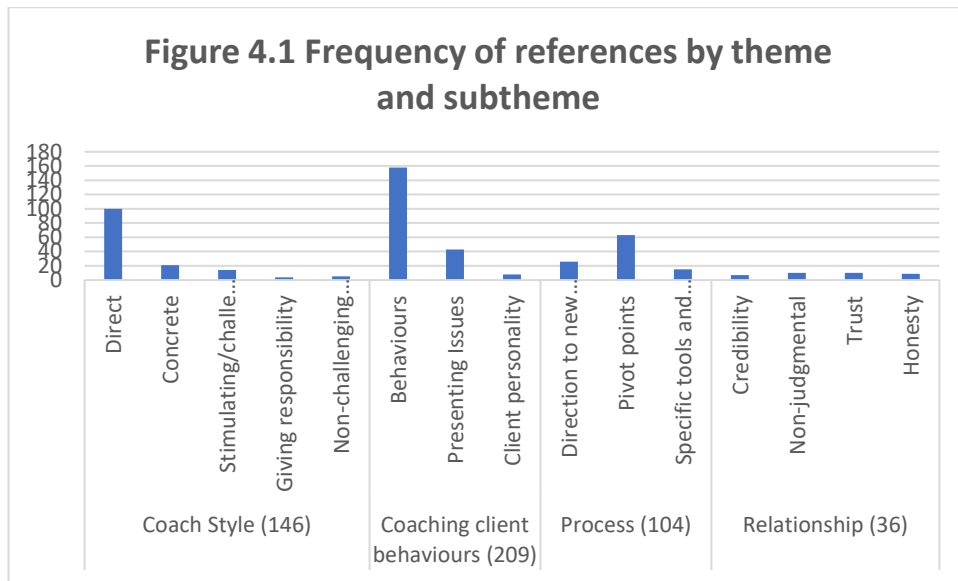


Figure 4-1 Frequency of references by theme and subtheme

Coach Style and Coaching client behaviour were the most heavily supported themes. Within coach style the most widely reported style was direct. All behaviours were very frequently referenced. Captured within the process theme, critical moments were referred to across all interviews.

This chapter introduces the four themes established and their subordinate-themes identified in the coach interviews. The findings were organised according to these themes which were derived from the interviews. The interviews yielded data indicating an insightful understanding of the coaching given to IT professionals. Within this chapter and chapter five I include many examples of quotations from interviews to illustrate my findings and support my interpretation.

Theme 1 – Coaching Style

Participants referred to a style incorporating directness, concrete approach, as well as being stimulating and even challenging. Some coaches also indicated that they gave more direct responsibility for their actions to clients than they would do to clients in other professions. They all differentiated their style with IT professionals as opposed to other professions.

Theme 2 – Coaching client behaviour

This was a heavily reported theme, not unsurprisingly because of the nature of the enquiry and not least because the coaches described themselves as behavioural coaches. Coaches discussed positive and negative aspects of behaviour amongst these clients. Because the reasons for coaching were exclusively behavioural, the presenting issues are included as a subordinate theme of Process.

Theme 3 – Process

This theme incorporated the critical moments referred to by coaches. They were heavily referenced in all interviews. Direction to new behaviours featured and there were descriptions of the process followed. Critical moments refer to often unexpected points in the coaching where there is a change for the client and sometimes the coach and their relationship. I included critical moments in the Process theme as they occurred during the process of the coaching engagement.

Theme 4 - Relationship

Although significant, there were far fewer references to relationship per se by coaches. I will discuss this in the next chapter. Coaching style and client behaviour were identified and explored by every interviewee. Coaching style was dominated by comments around directness of approach. This theme was subsequently referred to by coaches as key in leading to critical moments.

Client behaviour was a key theme and there was consistency over the coaches' views in this theme identifying common behavioural traits across their clients. I have included personality within the client behaviour section as the two seem to have some commonality. Personality can be a determinant of behaviour. Presenting issues as a category is also included in this theme because the client interventions discussed all had behavioural issues to address.

In total 495 quotes were extracted from the coach interviews across all themes. As can be seen from Figure 4.1, the themes of coach style and client behaviour were heavily subscribed, with process also playing a large part. Relationship was less heavily populated, however the comments recorded were significant in what they referred to such as trust and credibility, terms identified in the literature review.

Each of the themes will be presented along with the related sub-themes. The responses from each participant contain rich descriptions of their accounts of coaching these clients. Therefore, in this chapter I will define the themes and subordinate themes and then show the overall responses. Initially I will show how the responses relate to each theme. To describe the critical moments, I have left them as a separate sub-theme. In the discussion I have chosen this course of action because the critical moment identified was the same across participants and refers to multiple themes.

The four themes were identified as important to the coaches, along with subordinate themes which I allocated to each category. Table 4.1 lists the themes and subordinate themes. It also presents indicative quotes to illustrate the themes and the frequency of references in each superordinate theme.

Table 4.1 Themes and Subordinate themes, number of references and typical quotes

Theme	Subordinate theme	Typical Quote	Number of refs	Number of coaches
Coaching Style				
	Direct	<i>So, I stopped and then said, this is what I understand the situation to be that you are in. I have been told that you and you know this that your behaviour presents serious issues to your senior colleagues and others. The degree of patience is running out and unless you show some change you are going to get sacked. You know that don't you.</i> C2	100	7
	Concrete	<i>I use metaphor a lot. The Donkey and carrot metaphor was useful for this client. The idea is to make sure that any information is within the grasp of the audience. We worked on a presentation he had to deliver basing it on this metaphor.</i> C6	21	5

Theme	Subordinate theme	Typical Quote	Number of refs	Number of coaches
	Stimulating or challenging	<i>I think the core of our work was around me challenging his sense of himself. C2</i>	14	5
	Giving Responsibility	<i>The undercurrent was you've got a choice, carry on playing with me stay at this level or show up differently and he got the point. C2</i>	4	2
	Non-challenging behaviour	<i>I think I may have a tendency with IT or analytical logical people to go very heavy on data and stop short of then pushing through the boundary of so how does this show up in your behaviour? C1</i>	5	2
Coaching client behaviour				
	Behaviours	<i>So that was the issue, so everyone walked in and then they would get to the situation where people weren't prepared to listen to him because they knew he was just an argumentative type of person so then of course you just lose credibility in what you are putting forward because everyone has already dismissed you before you have opened your mouth you know oh god you're that argumentative person C5</i>	158	7
	Presenting Issues	<i>He was given to me in effect as a problem, close to being sacked if he didn't change his ways. Coming from a technical discipline, a technical profession, probably he needed a more of a behavioural response. C2</i>	43	7
	Client personality	<i>To me they are the people who are inherently uncomfortable with ambiguity, particularly ambiguity of other people they are very fearful of contact and intimacy. C3</i>	8	4
Process				
	Direction to new behaviours	<i>I just gave him a very directive thing which was the next steering committee meeting I want you to put down your report and just take a risk of taking five minutes to look around the table and then we'll see what happens. C3</i>	26	7
	Critical moments	<i>That made quite a significant difference, he was quite surprised at the difference that made. At the end of it we, he, so at the last session he said I really need to formulate</i>	63	7

Theme	Subordinate theme	Typical Quote	Number of refs	Number of coaches
	Development of new behaviours	<i>what I have been doing as a process in my own head C5</i> <i>When he first met me, it appeared as though he was just there to get the tick in the box. In fact, he said that his reason for agreeing to see me was that he wanted promotion and thought it was a necessary evil. I suggested that he tried some of the techniques and suggestions and we could see if he also found the process helpful. He reluctantly agreed. C7</i>		
	Specific tools and techniques	<i>But I actually gave him an NLP technique and he said it was amazing and it was the one where you use the visualisation of memory to feel good, confident. C5</i>	15	5
Relationship				
	Credibility	<i>Having said that I have realised that I have built up a degree of knowledge of different functional areas that is actually quite useful. C2</i>	7	4
	Non-judgmental	<i>I think part of it comes from my background in that I think I don't threaten C3</i>	10	3
	Trust	<i>He was a smart guy and what happened there, it was I think trust, somehow that challenge made him trust me. Its counterintuitive, even a bit crazy that that challenge made him trust me. C2</i>	10	4
	Honesty	<i>I was really careful to be honest C5</i>	9	4

Table 4-1 Themes and Subordinate themes, number of references and typical quotes

Figure 4.1 gives the reader an opportunity to compare the strength of each theme and subordinate theme. Strength is measured by the number of quotes in each subordinate and superordinate theme. It shows the relative size of the superordinate and subordinate themes arising from the interview data (n=495) taken from Table 4.1 above.

Figure 4.2 Relative proportions of themes and subordinate themes

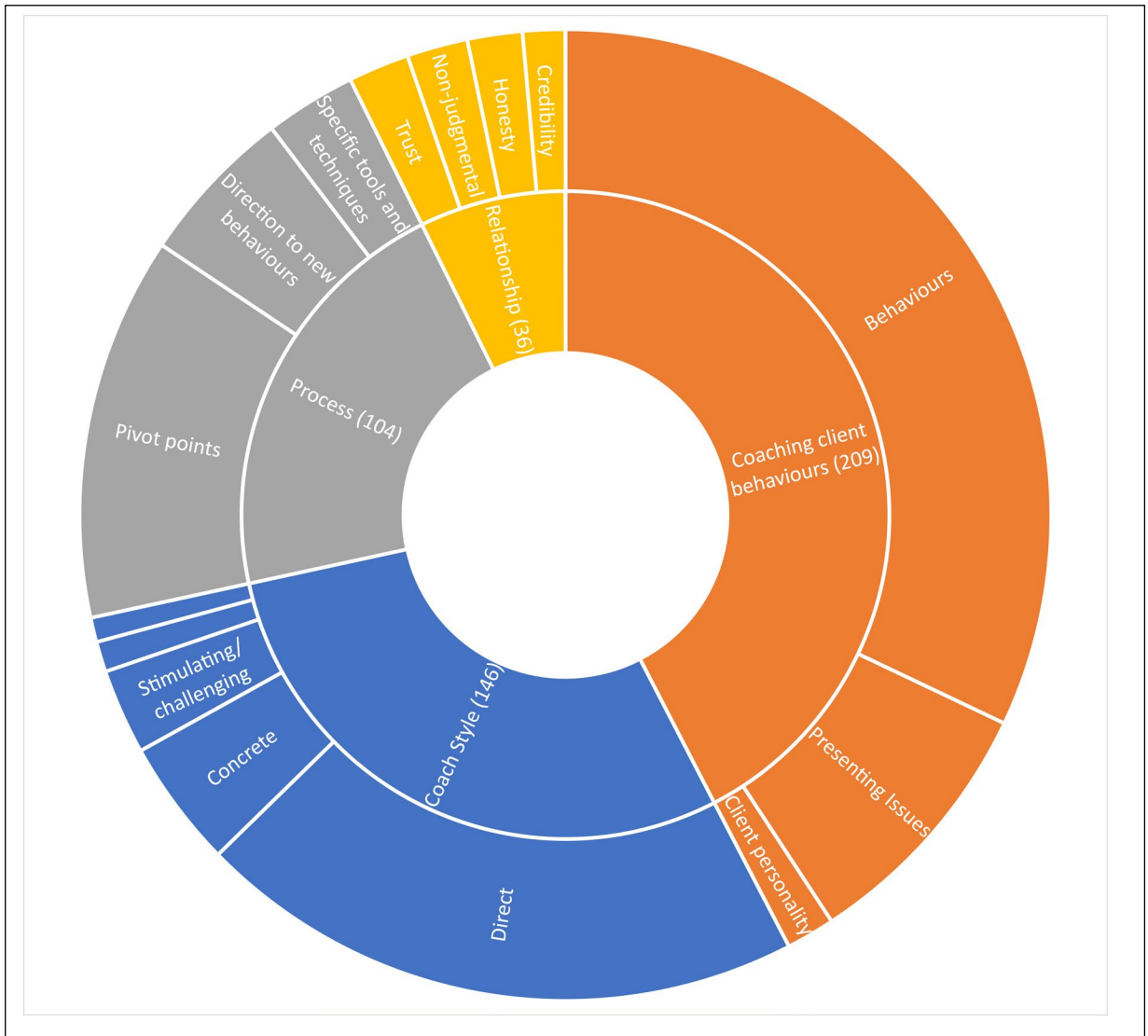


Figure 4-2 Relative proportions of themes and subordinate themes

The figure above shows the difference in proportions between the numbers of references in each theme and subordinate theme. By far the biggest sector is coaching client behaviours representing nearly half the references. Also, of note is the relative size of the sector reflecting a Direct coach style. Conversely the Relationship sector is the smallest of all sectors. This will be picked up further in Chapter 5.

4.3.1 Coaching Style

Coaching style, as described in Chapter 2, is defined by Heron (2001) as ranging from highly-directive to highly-facilitated and challenging to supporting. There are six descriptions of the coaching style in his model positioned between the above-named dyads. Thus, coaching style covers the stance taken by the coach at some point between the above parameters.

This theme captures the qualities that coaches reported as important in establishing this approach with these clients. All the seven coaches talked about the style they used that was specific to these clients. Coaching style was a heavily populated theme referred to by all seven coaches when asked to talk about key critical moments and their experiences coaching IT professionals.

The quotations within coaching style fell naturally into four subordinate themes: Direct, Concrete, Stimulating and/or Challenging coach behaviour and Non-challenging coach behaviour. Figure 4.2 shows the breakdown of sub-themes within the superordinate theme, Coach Style as indicated by the number of quotes within each sub-theme.

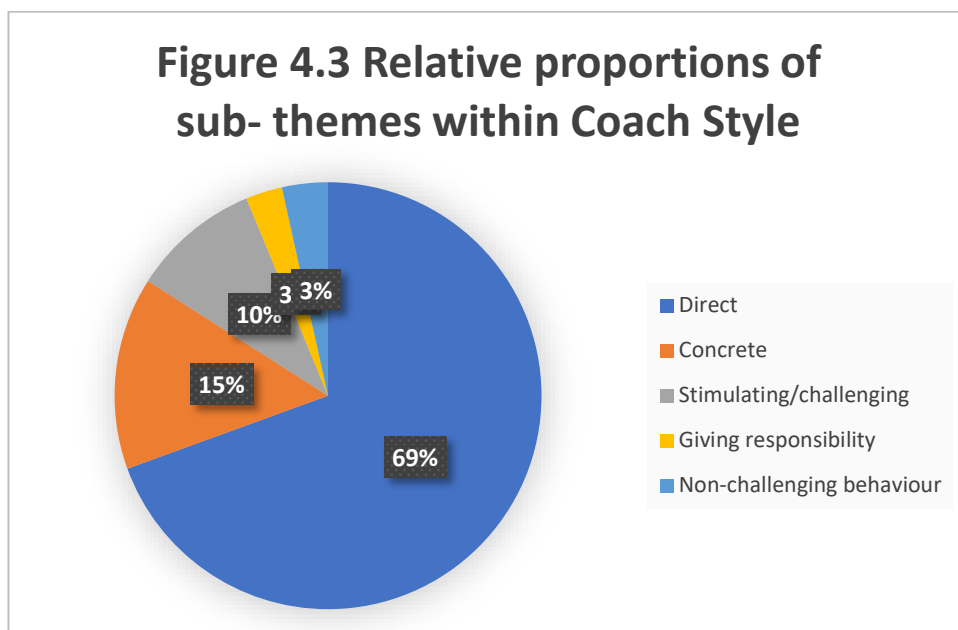


Figure 4-3 Relative proportions of sub-themes within Coach Style

Most coaches differentiated between IT professionals and other clients. The following quotes illustrate the overall coaching style they used.

Coach 4 *“But I was quite direct about it. I do think that IT people know that they are in control of the computers, which is they don’t seem to feel in control when working with other human beings. Maybe that sounds a little one-sided. I take baby steps with IT clients and in every case try and get them to relate to something that they are familiar with and that they have some feelings for. In the one case – his sons – with the woman, she didn’t have children, but she had animals, so I would ask her about the animals. As a coach, I am always looking for something for my coaching client to relate to that they can make the connection.”*

Coach 3 *“Coaching is about asking questions; I ask a lot of questions. I do think with IT people sometimes I need to be more directive. Directive doesn’t mean giving advice, but it might mean offering more interpretations to the individual than perhaps I do with my other clients.”*

Coach 2 *“I certainly take a modified approach when I am with the technology guys and girls who are less confident interpersonally than I do with let’s say a very bullish partner in a law firm. I have to modify it considerably and modify my expectations as well about what is achievable.”*

Some coaches talked about their style as non-conforming to the expected coaching approach.

Coach 2 *“I really brought him in and focussed and ... enough in some respects it broke almost every rule in the coaching book. But it turned out to be a really major breakthrough with him. So really kind of pulling*

him and focussing him onto something very concrete. Then feeling like, so it was an interesting blend between prescriptive and non-prescriptive if you see what I mean, So, my stance was we are going to work on this and I'm really going to ask some quite heavy questions and we are going to something concrete."

Within the coaching style theme, comments were collected around five subordinate themes allowing me to be more specific about the aspects of coach style that came to light. This will ultimately support a richer framework for coaching IT professionals.

Direct Subordinate theme

The dictionary definition of "Direct" in this context is:

"(of a person or their behaviour) going straight to the point; frank. 'he is very direct and honest' (Lexico, 2019). I have used this definition.

Coaches talked about "telling the client" what to do, describing their approach as direct. They included giving a direct opinion on the coaching situation and client behaviours. All seven coaches referred to being direct in their approach. The following quotes are examples of this directness.

Coach 2 *"OK you have got a choice here, you can carry on like this with me and I'll earn my money and you'll be able say you've got a coach and you won't change anything, and you'll be sacked."*

Coach 3 *Sometimes meeting anger with anger – fire with fire can neutralise that. Just knowing when to use that comes down to experience.*

As shown in Figure 4.2, this by far the largest category within coaching style and coaches referred to the difference between their approach with these clients and that with their non-IT clients. The comments interviewees made were sometimes

brutal and always very direct. I will discuss this fully in the next chapter; however, I suggest this may be a direct response to the coaching client behaviour.

Coach 3 *As a leader you have different styles that run through from directive coaching, supporting, then delegation.*

Coach 2 *"I'm here as you know to coach you. You take it seriously, here's where we go but first of all I need you to engage with this and I need you to trust me" and there was an extraordinary change in his demeanour and attitude after that.*

Coach 3 *The undercurrent was "you've got a choice, carry on playing with me stay at this level or show up differently" and he got the point.*

Some coaches talked about "directing" their clients rather than drawing them out in the way they would work with non-IT professionals, especially in the initial stages.

Coach 3 *I just gave him a very directive thing which was "the next steering committee meeting I want you to put down your report and just take a risk of taking five minutes to look around the table and then we'll see what happens."*

Concrete subordinate theme

The dictionary definition of "Concrete" in this context is:

Existing in a material or physical form; not abstract.

'Our own proposal is concrete and has specific policy actions.' (Lexico, 2019)

Although concrete and direct styles may seem very similar, I have distinguished between the two in that the examples of a direct approach describe a behaviour or style often brutally so. There were many occasions where the coach approaches the client in non-emotional, practical terms. The coach often gives the client something specific and clear to do. In these cases, the coach was being really clear and

congruent. A concrete approach is not necessarily direct but purely focusses on issues more simplistically and factually. The focus described by several coaches is on achieving a concrete outcome.

Coach 5 *Let's keep it quite factual let's not cross too many "how do you feel?" type questions.*

Coach 6 *We talked about common purpose, identifying low hanging fruit and projects and shared initiatives that would enable him to build relationships with those of the less receptive board members.*

Clarity of communication was a key attribute in these cases. Five coaches reported a concrete style and referred to the need to focus the client on a particular contained activity.

Coach 5 *So, I named it, I just grabbed one of the things that he was moaning about and just thought we need to do something concrete.*

Coach 3 *So when I suggest to him just look at people it is kind in that it's a scientific experiment, trust me.*

Coach 7 *I think my approach is technique driven – concrete suggestions to specific problems.*

Stimulating or challenging subordinate theme

Five of the seven coaches reported when they directly challenged the client regarding their behaviour or actions. One coach described this as "*calling the client out*". Again, this has shades of directness but extends the approach to expecting the client to change. A direct approach "tells" the client to do something. Challenging expects the client to intuit what to do.

Coach 2 *Part of our work was about challenging that degree of judgment, judgmentalism.*

Coaches referred to the value of being challenging. They also commented on this being a different model of coaching than that more traditionally applied.

Coach 6 *I think most of the value comes from challenge actually, rather than the older model of just questioning the whole time.*

Coach 3 *I can be right and also from your perspective you can be right.*

Five coaches mentioned being stimulating and challenging. One referred to the contradiction of this style compared to more traditional coaching models.

Coach 2 *It's counterintuitive, it's crazy that challenge made him trust me.*

Another coach referred to challenging a client whilst reassuring them they could still retain their identity.

Coach 6 *We just challenged all of those points and said look you're the same person.*

Giving Responsibility subordinate theme

There were occasions when the coach allowed the client to take responsibility for the direction of coaching. This was not heavily referenced and only two coaches made mention of it. It could be thought that this contradicts the direct and challenging coaching approaches. The way responsibility is given may be more important as shown in this quote:

Coach 5 *It was like how are you structuring it to get this outcome? What's the outcome you want how are you structuring it to get the outcome.*

This coach is less direct but still asks the direct questions, but certainly indicates the coaching client as responsible for his own outcomes.

4.3.2 Coaching Client Behaviour

This theme captures the behavioural characteristics a client displays, as reported by coaches. Six of the coaches described themselves as behavioural coaches in the main. The category includes unwanted behaviours as well as presenting issues. Unwanted behaviours take account of behaviours that are detrimental to the organisation such as rudeness and poor teamworking. The presenting issues subordinate theme encompasses the reasons why clients have been referred or refer themselves for coaching. Additionally, the theme covers issues of client personality. There are many parallels with individuals with Asperger's Syndrome highlighted by these results amongst others.

Coach 3 *They are very black and white.*

Coach 2 *He ranted at me for two sessions about why he was right and the Chief Executive was wrong.*

Client behaviour was mentioned by all participants across the subordinate themes. This encompassed a range of behaviours. Clients consistently had preconceived ideas of what they needed. They commonly presented the answer to the coach.

Coach 3 *He also came in with his own ideas, he'd been there done it, he spent a lot of the first meeting telling me what he wasn't going to do in coaching rather than what he was.*

Coach 3 *So his solution was that he needed me to teach him about body language.*

The pie chart, (Fig 4.3) shows the split in subordinate themes within coaching client behaviours expressed as percentages of the superordinate theme. Six coaches

classed their coaching interventions as largely behavioural in nature, so the behaviours subordinate has the most references.

Figure 4.4 Breakdown of sub-themes within Coaching Client Behaviour

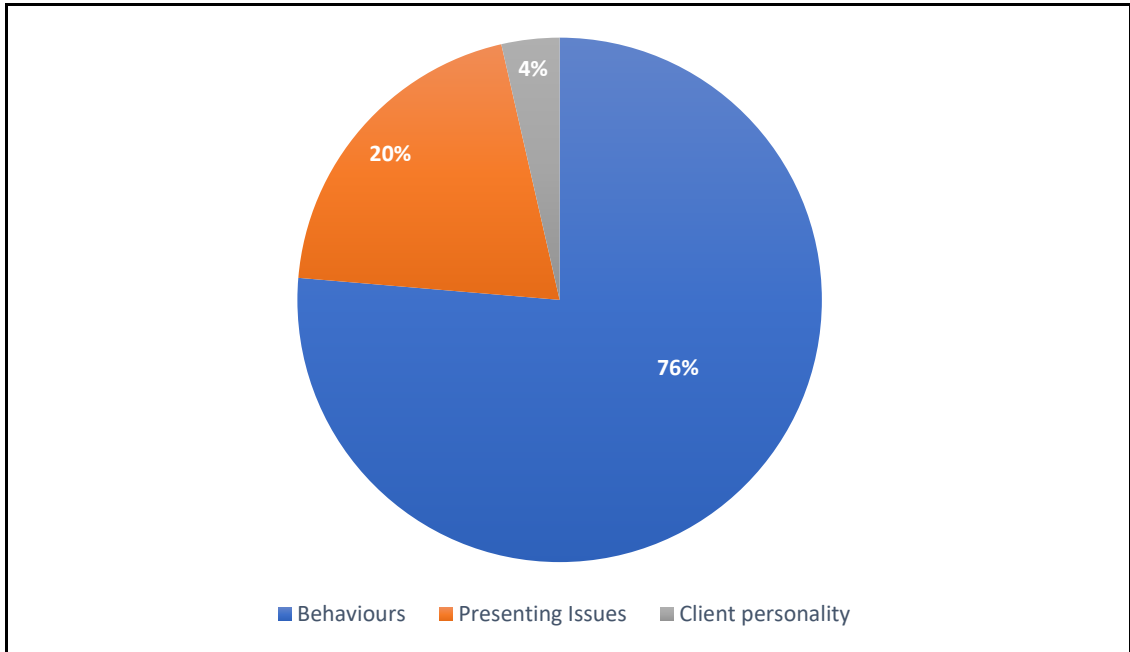


Figure 4-4 Breakdown of sub-themes within Coaching Client Behaviour

Behaviours

All coaches talked about the behavioural characteristics of their clients. They commented when they had seen similar behaviour in other IT professionals.

Coach 4 *It has been my personal experience that IT people and I'm risking generalising here, but I am trying to home in, often have very poor people skills.*

Coach 6 *He seemed to be interested in a very sort of measured almost theoretical way but not fully engaged or alive to the alternatives that we were discussing*

Equally all coaches talked about more difficult behaviours, which sometimes contributed to the presenting issues. Clients were reluctant to change their behaviours initially, presenting a notion of "Why should I?"

Coach 2 *He was curious about himself, curious about the process of learning but from a very challenging point of view in a sense 'why do I have to think any differently from the way I think now?'*

There was reference to coaching clients in this group being reluctant or even defiant about the coaching process. One coach mentioned a client using humour as a deflection from the work in hand.

Coach 1 *He is open to experimenting and he uses humour to mask deeper social connections so he's great at piss-taking and throwing out jokes and just when we're getting to an important point.*

Coaches mentioned some reluctance to take part in the coaching. Engagement was sometimes questionable.

Coach 2 *On the face of it he was fine, but I did not feel after the first session he was bought in at all. He'd agreed but I wasn't at all sure he meant it. Second session we got down to work and I think I had the same feeling.*

Clients were described as persistent in their desire to succeed once they are engaged.

Coach 3 *They are very dogged in pursuit of the answer and if they have got something that they think works that they can apply and if it works, they'll keep trying it and move very quickly.*

Of course, it is important to remember that the behaviours are described by the coaches. However, given their experience and training these coaches are well-qualified to make these interpretations.

Presenting Issues

Coaches reflected on the main factors leading clients to coaching. Whilst most clients were sent by their organisation, some clients were self-presenting. The reasons clients were sent for coaching often referred to inappropriate behaviours or actions.

Coach 7 *He was sent to me because his interactions with others in the organisation were not effective and often led to angry exchanges.*

Coach 5 *So that was the issue, so everyone walked in and then they would get to the situation where people weren't prepared to listen to him because they knew he was just an argumentative type of person so then of course you just lose credibility in what you are putting forward because everyone has already dismissed you before you have opened your mouth, you know, 'oh god you're that argumentative person'.*

Coach 2 *He was given to me in effect as a problem, close to being sacked if he didn't change his ways.*

Clients who had self-referred often said what they thought was needed. They did not consider they had any problematic behaviour. They shared the question and the answers.

Coach 3 *This may be something that you find is typical of the IT guys, that they have already worked out their answers before they come in even if it is completely wrong, they have an answer.*

Client personality

Although there is little distinction between behaviour and personality by the coaches, four out of the seven coaches mentioned the personality of their clients as a group of IT professionals. It was suggested that the type of personality traits that lead people into IT means you get a preponderance of a personality. This is a little "chicken and egg", in that our career choice will probably always be influenced by

our personality. However, looking at the presenting issues, the problems seem to arise in the areas these personality types struggle with. Personality is a much-debated term but is usually accepted as including intelligence, physique, skills, emotional and social qualities. Most psychologists agree that personality is expressed through behaviour and hence there was reference to personality within behaviour. This also explains the lack of distinction between the two categories. The following quotes show that there was not always agreement on traits.

Coach 3 *To me they are the people who are inherently uncomfortable with ambiguity, particularly ambiguity of other people they are very fearful of contact and intimacy.*

Coach 7 *His openness allowed me to spot any irritation quickly and address it with him. This helped him cope with irritation better.*

Coach 6 *I find them a little less open and a little less rewarding as clients than say lawyers, marketers and others.*

4.3.3 Process

Process covers what the coach and client are doing together, capturing what happens during the coaching session. The critical moments in the coaching process are recorded within this theme so they are collected together in order to discuss in Chapter 5. Critical moments indicate a change arising from a critical moment. For each incident, the participant is asked to describe the context, what happened, what they did at the time and their perspective on the outcome. Specific tools and techniques are also captured where they arose within this superordinate theme. All coaches talked about what they and their clients were doing together. In many cases this comes about through coach style and client behaviour as you would expect. There was consistency amongst all coaches regarding direction to new behaviours and especially across critical moments where they were preceded by at least a

degree of confrontation which led to modified behaviour. This confrontational aspect was mentioned by all coaches.

The pie chart (Fig 4.5) shows the split of numbers of references within this category as a percentage of the superordinate theme.

Figure 4.5 Breakdown of sub themes within Process

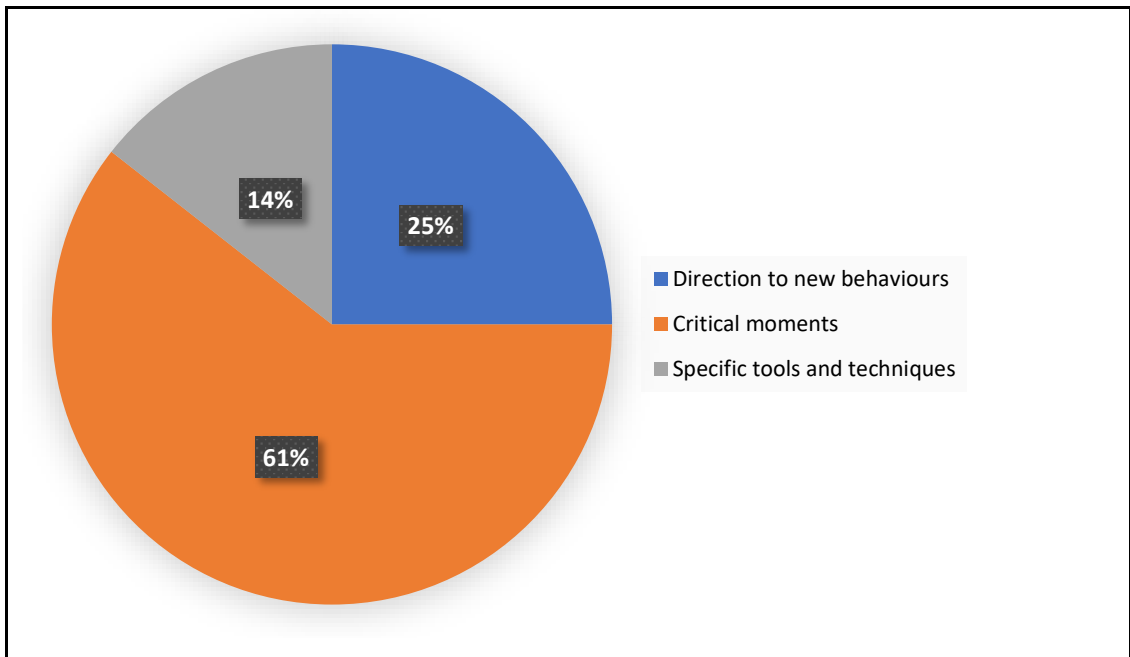


Figure 4-5 Breakdown of sub-themes within Process

Direction to new behaviours

This subordinate theme collects comments made by coaches where they usually use a direct style and **tell** the client to behave in a different way or to do something which leads to different behaviour. All coaches reported this type of activity and referred to clients being willing to experiment. They all refer to times when they adopted an authoritative style, push rather than pull. They give directions, taking responsibility for all aspects of the coaching, including goal setting and design and possible solutions.

The following quotes describe an instruction to the client to change his behaviour in meetings. Generally, the client had just delivered his report in great detail without stopping or making eye contact with other attendees.

Coach 3 *I just gave him a very directive thing which was the next steering committee meeting I want you to put down your report and just take a risk of taking five minutes to look around the table and then we'll see what happens.*

Coach 5 *I gave him a methodology and a structure, it wasn't something that came naturally to him.*

Some of the coaches described giving information to their clients.

Coach 5 *I made sure we were going to do one thing and we were going to do it thoroughly because he just wasn't going anywhere otherwise.*

Coach 7 *He did disclose to me that he had been diagnosed with Asperger's Syndrome. His diagnosis was quite recent so I spent some time explaining the way this might impact his working life.*

Critical Moments

I have included critical moments in the Process category as I wanted to examine them in the context of the themes of the interviews. All coaches not only referred to critical moments but referred to similar experiences. This category marks a turnaround for the client, commonly around the development of new attitudes or behaviours. All coaches commented on confrontation preceding the critical moment. This confrontational approach varied amongst the coaches. Some used an emphatic approach where others were stronger. There will be some repetition of coach references in this section because aspects of other themes and subordinate themes trigger the critical moment. These critical moments both improved the coach/client relationship and led to the client making progress.

Figure 4.6 The process of the critical moment

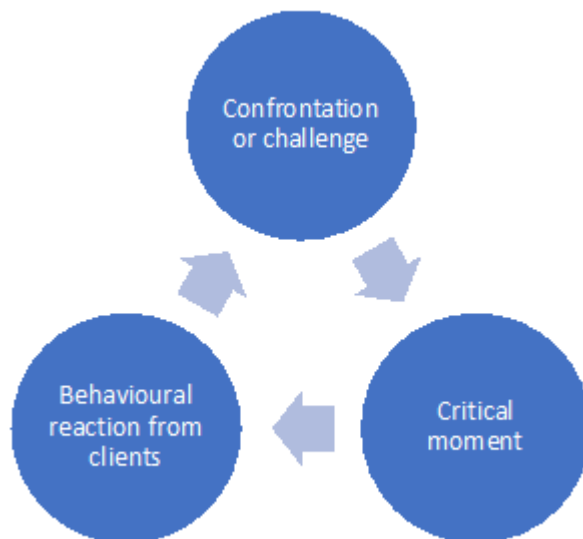


Figure 4-6 The critical moment process

Coach 4 *One client who was constantly angry – well they should just know that. I said I'd like to ask you a question. When did you make the decision that it is OK and that you have the right to emotionally vomit on other people? He stepped back as if I had slapped him. He said, "do I do that?" I said absolutely. That opened up a different conversation. He said, "well I just get busy and they should know these things". I said, "would you tolerate someone treating you that way?"*

Coach 2 *So, I stopped and then said xxx, this is what I understand the situation to be that you are in. I have been told that you and you know this that your behaviour presents serious issues to your senior colleagues and others. The degree of patience is running out and unless you show some change you are going to get sacked. You know that don't you. OK you have got a choice here; you can carry on like this with me and I'll earn my money and you'll be able say you've got a coach and you won't change anything and you'll be sacked. Or you can take this seriously because I'm here to help you, doesn't matter to me this that and the*

other, I'm here as you know to coach you. You take it seriously here's where we go: but first of all, I need you to engage with this and I need you to trust me and there was an extraordinary change in his demeanour and attitude after that.

Other coaches were less confrontational but still extremely direct:

Coach 6 *I just thought I'd push it a bit and probe beneath the surface and I just said to him what is really going on here? I'm just getting a sense that you are interested in this, but it's not really the root of your particular problem, we've contracted to talk about influence and impact and all of that and whilst you are engaged I just don't feel that it is lighting your fire. There's a piece of the jigsaw missing. It was quite interesting really to see his reaction because at first, he didn't really know how to respond to me and we batted it around for a little bit and talked around it. Then the conversation changed tack completely and I think it was that question what is really going on here beneath the surface.*

All coaches described the outcomes of these critical moments.

Coach 2 *What I saw emerge was a greater degree of self-awareness about his own judgmentalism.*

Coach 2 *To begin with he changed his demeanour with his chief executive. He was actually quite a clever influencer.*

Coach 3 *It was quite a shock to him to discover that if you actually sat in their position it didn't look like that at all. So he was completely surprised by that.*

Coach 3 *The big breakthrough point was when he realised he wasn't deficient in some way.*

Coach 4 *She finally reached a point where she could have a conversation.*

Coach 5 *That made quite a significant difference, he was quite surprised at the difference that made. At the end of it at the last session he said I really need to formulate what I have been doing as a process in my own head*

Coach 6 *She thought about it and came back the next week and said you were right I was being unduly negative and internalising this sort of misogynistic or sexist attitudes that prevail out there.*

Coach 7 *He was surprised at how well this works both in terms of people listening through the meetings and contributing to it. He has said it still feels fake but because it works he is happy to do it.*

Specific Tools and techniques

This subordinate theme was identified despite there being fewer mentions of techniques. Although this is not a large subordinate theme it was important to capture where coaches reported on such things. These techniques will be added to the final suggestions for coaching in this sector.

Coach 3 *Using pictures, imagery, storytelling etc to try and say actually, when you look at things that way, you see it differently.*

Coach 2 *The second session I got him doing some two-chair work.*

Coach 7 *I use metaphor a lot. The 'donkey and carrot' metaphor was useful for this client. The idea is to make sure that any information is within the grasp of the audience.*

The use of analogy was important for two of the coaches, i.e. relating to a similar situation. This has the advantage of diffusing something clients may be anxious about.

Coach 7 *We worked on this by having conversations about a variety of subjects, some he knew about and some I knew about. I was able to demonstrate how I might tackle these situations without feeling left out and then worked on strategies that he could use.*

Other coaches asked the client to consider another situation in their lives that they could learn from.

Coach 4 *In every case try and get them to relate to something that they are familiar with and that they have some feelings for.*

4.3.4 Relationship

Reading the literature regarding efficacy of coaching, I was expecting this to be a more heavily populated theme. Leading me to this view were several studies that list client relationship as the most important driver of coaching efficacy. This could indicate a key difference within this population. However, clearly relationship still has an important place in this area of coaching. Most coaches reported on the qualities that contributed to a successful coaching relationship. Despite not being a heavily referenced theme, coaches talked most frequently about trust, credibility, honesty and being non-judgmental as key components of an effective client relationship.

The pie chart (Fig 4.7) shows the percentages of numbers of quotes in the subordinate themes within Relationship.

Figure 4.7 Breakdown of sub themes within Relationship

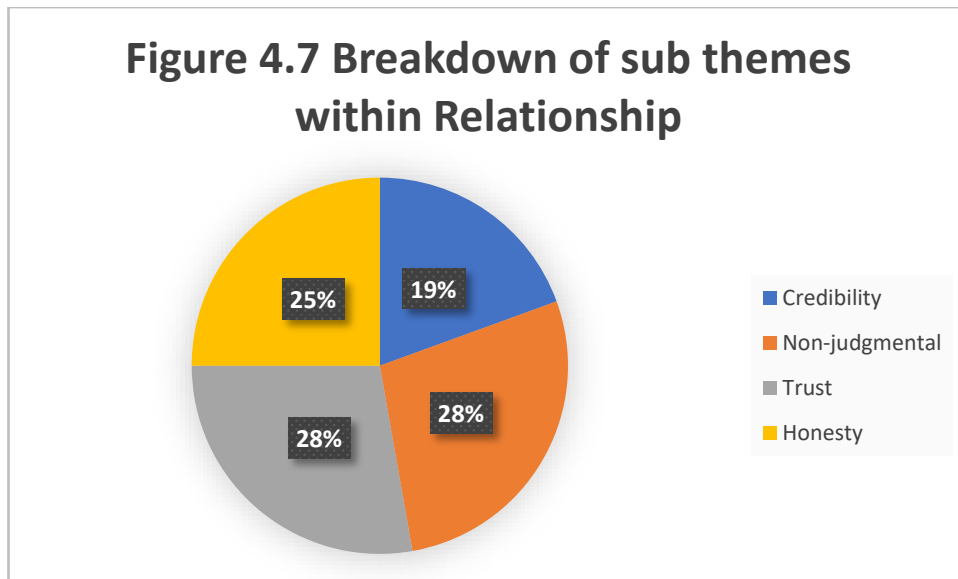


Figure 4-7 Breakdown of sub-themes within Relationship

Credibility

Four coaches thought this was important to the coach client relationship. It seemed that credibility could apply to coaching expertise but also to knowledge of the IT sector. This knowledge did not have to be very deep but enough for the client to feel supportive and their issues in the organisation understood.

Coach 7 He talked about credibility and said for a coach to be credible the “tricks” had to work. He called the techniques formulae.

Coach 2 I have built up a degree of knowledge of different functional areas that is actually quite useful.

Non-judgmental

Four coaches thought it was particularly important not to judge the clients or even appear to be judgmental when working with IT professionals. Although important for all coaching, it seemed more important for engagement with this group as they are particularly sensitive to criticism. It seems to affect the relationship adversely. This does seem to contradict the directness referred to in Coaching Style, however directness does not necessarily indicate criticism. Non-judgmental in this context has more to do with not having preconceived ideas about the clients, such as, if you work

in IT you must be a geek. Equally it means not giving an impression that the client can't change.

Coach 2 *I'm respecting you rather than judging him and telling him to do better*

Coach 4 *Because as coaches we don't judge we are just there to witness; it makes my clients safe.*

Trust

Trust is implicit in any relationship but particularly so in a professional relationship where such a personal service is being provided. Of the five coaches who talked about relationship, four spoke about trust as important for their relationship with the client. This was the most widely reported component of the relationship theme.

Coach 3 *But you have to win their trust first.*

Coach 7 *Trust between coach and client is key to me. The clients, eventually, share a lot and have to be confident that their thoughts and feelings are safe.*

Honesty

Three coaches saw honesty as an important aspect of building client relationship. Mostly it was part of being direct, but one coach talked about being honest when you don't have expertise.

Coach 5 *So I said I don't think I know of any publishers that can publish your type of book. That's really not my expertise, I was really honest with him.*

Some coaches combined honesty with being direct.

Coach 2 *That was the breakthrough moment that was achieved effectively saying this is the truth and I don't really care. I'm not here to try and bend over backwards to change you, only you can change if you want to.*

4.4 Summary of Findings

The factors that coaches felt important and/or different in their coaching interventions with IT professionals fell naturally into the themes derived from the literature review. The subordinate themes emerged from the data collected in the interviews. Some themes were referred to more heavily than others; for instance, “Coaching Client Behaviours” was heavily referred to, occupying almost 50% of the whole data set. There was a great variety between themes, in some cases surprising. The references theme had a low number of references and I will discuss the potential reasons for this in Chapter 5.

5 Discussion of Findings

5.1 Introduction

The purpose of this study was to explore with a sample group of coaches who had coached IT professionals whether their experience of this coaching differed from that with clients from other disciplines. The aim of this work has been to provide an understanding of the effective coaching of IT professionals and create an initial coaching framework for coaches working with IT professionals to improve the quality of coaching for these clients. The coaches interviewed in this study were all highly experienced coaches and I wonder if the results would have been different with new or inexperienced coaches who may follow a more formulaic approach to coaching. In this chapter I consider the impact of the findings on the four areas that constitute the themes of my analysis. This discussion considers the findings described in chapter 4 incorporating the literature review. The implication of the findings should add to the understanding of the optimal way to coach IT professionals.

As a basis for my investigation of differences in the coaching of IT professionals, I looked at a selection of theoretical approaches, contexts and modes of coaching and coaching models. This served as a good foundation to continue with my literature review which led me to look at the coaching process and effective coaching. The catalyst for this study was my experience with IT professionals as a coach, manager and colleague. This was amplified by my work with adults in the workplace who have been diagnosed with Asperger's Syndrome. I therefore also investigated the literature relating to the generic behaviours of IT professionals and the behaviour of those with Asperger's Syndrome in order to draw comparisons. The data collected through interviews validated these areas of review and further gave rise to subordinate themes to add granularity to the findings.

Figure 5.1 shows the themes and their subordinate themes with the numbers of references in each indicated by font size and colour.

Figure 5.1 The themes and subordinate themes

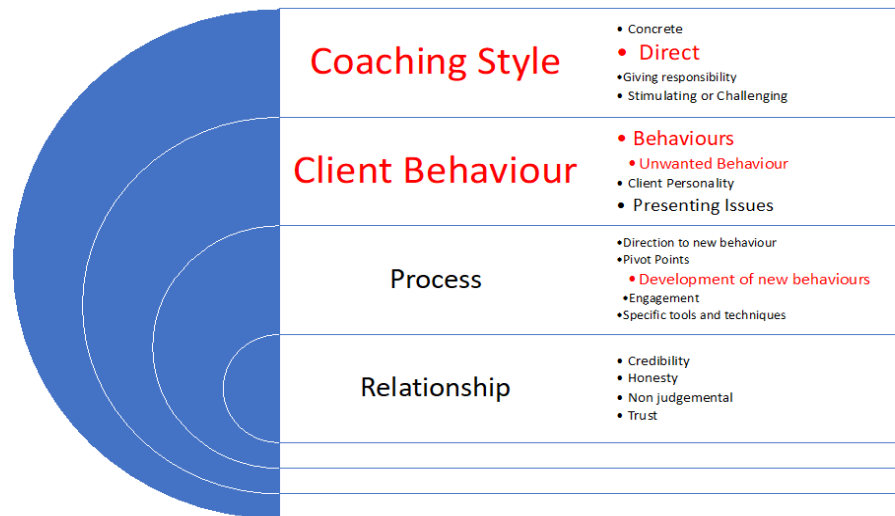


Figure 5-1 The themes and subordinate themes

The text size indicates the relative number of references and the text in red show the predominant themes and subthemes. It can be seen from Figure 5.1 that Coaching Style and Client Behaviour are overarching themes; however, that does not mean that Process and Relationship are any less important as demonstrated in the overlap in the literature.

I will move on to a discussion of the themes and subordinate themes in relation to findings and literature. I follow this by addressing learning and motivation as this client group appear to have specific learning styles and motivators which should be considered. Finally, I summarise my discussion.

5.2 Coaching Style

The data analysis showed Coaching Style to be one of the larger categories with coaches referring to directness, a concrete approach, being stimulating and challenging which became the subordinate themes. All the coaches claimed to use a different style with IT professionals than with many other clients. The direct approach was heavily referenced as a subordinate theme of the Coaching Style theme and coaches talked about directing their clients rather than drawing them out as they would with other clients. The other subordinate themes (Concrete,

Stimulating, Challenging) were less heavily referenced but are important to give a complete picture. These had synergy with Heron’s (2001) assertion, ranging from highly directive to highly facilitated and challenging to supporting. Heron (2001) talks about six classes of coaching which despite the two dyads referred to (Highly directive - Highly facilitated; Challenging - Supporting) all appear in the interviews with coach participants. The five sub-themes defined in the data analysis (Concrete, Direct, Giving Responsibility, Non-challenging, Stimulating or Challenging), can largely be mapped to Heron’s classes.

Table 5.1 Heron’s classes of coaching style mapped to the research theme.

Heron	Coaching Style – subordinate themes
Prescribing	Concrete
Informing	Direct
Confronting	Direct and Challenging
Cathartic (dealing with emotion)	This could map to non-challenging but really occurs through the other themes.
Catalytic/ releasing – guiding through self-discovery	Giving responsibility
Supporting	Coaches didn’t mention supporting specifically, but in selecting the optimal style and approach this comes about.

Table 5-1 Heron's classes of coaching style mapped to the research themes

Coaches talked about giving their clients concrete things to do in a simple and factual way, in Heron’s (2001) terms “prescribing”, with clarity and congruence. The value of being challenging regarding the client’s behaviour or actions was ascribed value by the coaches. Again, this is included by Heron as “confronting”. The coaches talked of “giving responsibility” to the client with the comment that this is done in a very direct way rather than passively. Heron supports this view in his category “Catalytic/releasing” which appears to allow for direct and stimulating action.

I find it interesting that the bias is towards “Highly directive” and “Challenging” rather than “Highly facilitated” and “Supporting”. It is important to remember that these are styles of coaching so for instance I am not suggesting that coaches are not supportive of these clients, they just do not apply an overtly supportive, nurturing style.

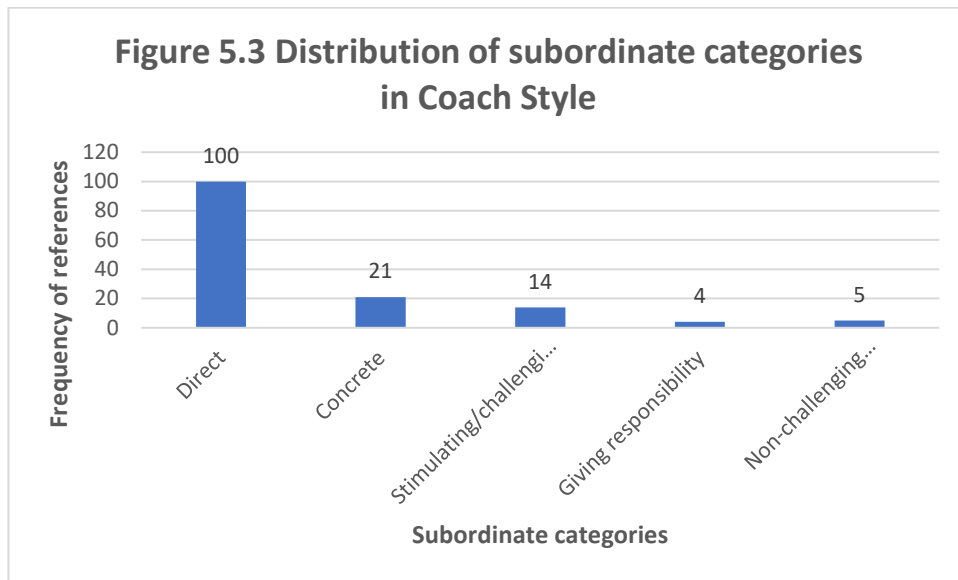


Figure 5-2 Distribution of subordinate categories in Coach Style

I have included this in the discussion as a reminder of the strength of reference to a directive style. It suggests that a coach does not just place themselves solely in one position, but they report varying their style to some degree depending on the client.

It is frequently said that each coaching engagement is a uniquely crafted intervention (de Haan *et al*, 2011). The implication of this is that each session would be different regardless of employment sector or any other attribute. This is certainly something I have heard from many of my coaching colleagues. However, analysis of the transcribed interviews has shown many areas of a common style of coaching in the IT sector such as a direct approach, straight talking. The process also seems very different and will be expanded in section 5.6. Relating to coach style, the individuality of sessions seems to be far less when coaching IT professionals with the traits described compared to interventions with other clients.

5.2.1 Theoretical approaches

I examined a selection of theoretical approaches in the literature in order to compare with the preferences of IT professionals and their coaches as well as to provide a foundation to my study. I chose these based on the spread of coaching approaches based on different psychological schools of thought. I also took account of those mentioned by my participants.

The coach participants did not refer to any approaches in their accounts, however they did refer to techniques stemming from them. All but one of the participants described their work as behavioural. One of the participants talked about using “Clean” language which I have also used. Clean language is a technique developed by Grove and Panzer (2005) to reduce the subtle influencing of clients by the therapist’s language (Tompkins and Lawley, 1997). The same coach as mentioned earlier also used an NLP technique which asks the client to visualise a time when something worked well and to recall that when faced with a difficult situation. This may be rather counterintuitive given the research on the behaviour of these clients, who on the Jungian dimensions lean strongly towards “thinking” rather than “feeling” (Whitley, 1996), however once this works for the client they accept it as a technique. The Jungian dimensions of personality are three dyads; introversion – extroversion (IE), sensing – intuiting (SN) and thinking – feeling (TF). Individuals give answers to questions which place them at one end of each, giving an indication of their personality preferences.

The Psychodynamic Approach, with its roots in psychotherapy and counselling, may have some support from the coach’s point of view for its insight into the working of the human mind. Yet with its foundation in investigating previous experience as a foundation of behaviour, it does not sit well with the personality of this client group, who, from research (Gillberg, 2002, Baron-Cohen, 2008) is shown to have difficulties establishing relationships. They are therefore likely to avoid talking about things from the past. None of the participants referred to this approach or mentioned using it. Neenan and Dryden (2013) consider that **Cognitive Behavioural Coaching (CBC)** assists such things as:

- Dealing with troublesome emotions
- Overcoming procrastination
- Becoming assertive
- Tackling poor time management
- Persisting at problem-solving
- Handling criticism constructively
- Taking risks and making better decisions.

Whilst some of these are issues that may cause difficulties for IT professionals, they do not in themselves tackle the behaviour issues that arise for this sector. The main goals of Cognitive Behavioural Coaching that underpin the issues above would also be difficult for this group of clients, for example, enhancing self-awareness of barriers to achieving goals (Palmer and Szymanska, 2003).

The Solution-focused approach (Pemberton, 2006) would seem appropriate for a community whose work is based on delivering solutions. This approach places the construction of solutions at the heart of the coaching with a focus on the client being involved in the construction of the solution. Further than this, the approach helps the client articulate various pathways to the solution in order to decide which one would best satisfy the need. This type of analysis is “bread and butter” to this client group and should be a good approach. There is reference within the participant interviews to these clients being solution-driven, however the challenge is in their recognition of need in the first place. The coaches’ accounts allude to the need to be direct and almost diagnostic concerning the issues that need addressing. This could suggest that this approach is not necessarily effective, however, considering the interviews with the coaches, I suggest that we all, as coaches, are influenced by more than one approach in our tailored and personalised offerings to clients.

Summary

Based on the coaches’ comments the psychodynamic approach does not fit with any of their accounts. Equally it is not supported by the literature such as the practitioner account from Moore *et al* (2013) which emphasises using a very matter of fact

approach to start with, even when addressing behavioural issues. The psychodynamic approach relies heavily on feelings and introspection. Several of the coaches referred to the avoidance of examining feelings by their clients, often accompanied by an inability to self-analyse their behaviours. This suggests that the psychodynamic approach is not one to use, especially in the early stages of the engagement where coaches have talked of using a transactional approach.

Cognitive Behavioural Coaching may well be a useful approach for IT professionals. It has an emphasis on increasing self-awareness of barriers which the coaches did not mention. This technique is very goal-oriented, with the client identifying their own goals. The coaches interviewed described the early stages of coaching as aiming for low hanging fruit, picking concrete issues that had very clear and quick solutions. Their clients liked to see that “things” worked or they would not continue. From the coaches’ descriptions, many of the clients did not demonstrate great self-awareness and often did not know why they were being sent for coaching. Where they self-referred they often gave a reason that did not fit with their needs. For the reasons discussed it does not seem an optimal approach for IT professionals.

IT professionals are likely to be solutions driven by the nature of the work they do. The coaches, when talking of early wins discussed identifying an end point that could be achieved by an easily identified path. Coaches talked of a direct and concrete approach which this approach aligns with this approach. As the coaching intervention progresses, with this approach, the coach must be innovative, offering different pathways with the client. This constructionist approach which means the client is ultimately involved in the solution, is very appropriate for IT professionals. Thus, a solutions-based approach seems the best fit of those reviewed.

However, the coaches described all aspects of their coaching as bespoke to the client and although they use a particular style as described with IT professionals they do not use the same approach with other clients. They were all very experienced coaches who had addressed the various approaches through their training and further reading. It appeared that they had taken this knowledge to create a more integrated approach to suit the client, i.e. they use what works for that client. Some

coaches did use elements of an NLP approach such as visualisation and Clean language. There was reference to techniques from the Gestalt approach such as the two-chair method. The solutions- driven approach was particularly strong especially in the early stage of the coaching where coaches were trying to “pick the low hanging fruit”.

5.2.2 Modes of Coaching

The coach participants in this study made little specific reference to modes of coaching. This is not to say that coaches are unaware of the various modes, rather they personalise their coaching interventions to the client in an integrated manner. Without exception, the coaches in the study did say that they focus on **executive and leadership coaching**.

In Chapter 1, various definitions of executive coaching are included. For example, Bozer *et al* (Bozer *et al*, 2014, 2015) define executive coaching as “.. a one-on-one relationship between a professional coach and an executive (coachee)“. They further define the purpose as “ .. to enhance the coachee’s behavioural change through self-awareness and learning ..”

Stokes and Jolly (2018) suggest that executive coaching covers work with executives from middle management upwards, however other high potential individuals at a less senior level may be included. Given the personality of IT professionals already discussed in Chapter 2, it could be that many of them do not fall into this category as people management is contraindicated by that personality. In my experience with clients and working in the IT sector, it is often very difficult for this group to gain promotion. This could be attributed to their difficulties with social interaction and poor communication skills (Moore *et al*, 2013, Attwood, 2015), both of which hinder relationship building. Stokes and Jolly (2018) further suggest, in common with other commentators, that executive coaching is as a skill rather than a role, which is often about emotions and relationships. These are both factors seen as difficult areas for those with Asperger’s Syndrome and to an extent those with similar traits. The road to leadership can be more convoluted for this group or at least longer than for other disciplines in the organisation. Given its dominance in the coaching intervention, I will discuss the issues around relationship later in this chapter.

Developmental coaching, again, was not explicitly referred to by the participants. It is considered by Jackson and Cox (2018) to mean “..the growth of intellectual, emotional or some other capacity over time..”. In many ways this would also come under the umbrella of executive and leadership coaching, however in this mode, coaching is likely to last more than six months which currently is seen as less likely for organisations to fund. In practice, however, recent research (Campagna, 2020) is suggesting that long term coaching is far more commonplace than acknowledged. One element of developmental coaching is interesting in that it takes account of the presenting issue as an agent for change. The participants frequently referred to the presenting issue for the coaching intervention. This issue came from either client or organisation, for instance, the client posing a problem to the organisation or the client self-presenting and saying what they felt they needed. However, coaches went on to say that clients either did not agree with the presenting issues supplied by the organisation, or if they presented their own issue, this frequently turned out not to be the real issue.

Within most of the participants’ interviews there was mention made of changing clients assumptions and beliefs which is the way Smith and Hawkins (2018) define **Transformational Coaching**. However, they indicate that this mode relies on the client being amenable to changing their core assumptions which is not always how coaching engagements with IT professionals start out. Transformational coaching encompasses the organisation and the personal need for change and is well-suited to executive clients in this respect. It also works well when the overall engagement is short. It should not be dismissed for these clients because of the previous two points, however if it is used it is probably better left until after the relationship with the client is formed. None of the coaches interviewed mentioned following a specific mode of coaching but they did use techniques from them.

5.2.3 Coaching Models

In the literature review, Chapter 2, I looked at coach maturity in connection with the use of coaching models. This was prompted by my own experience, in that as a new

coach many years ago I used the GROW model as a framework for my coaching interventions. However, I no longer use any model in this way, instead using a more integrated approach based on my clients' needs. In discussion with coaching colleagues I found their experience to be similar. None of the participants in this study referred to any coaching models, which is not entirely unexpected given the experience level of this group of coaches. Experienced coaches, particularly those who, in Clutterbuck and Megginson's (2011) definition are "system eclectic" can deliver a more integrated intervention and are not constrained by specific models or processes. They consider that experienced coaches bring a fluency to their coaching, an ability to think in the moment rather than following a set pattern. This view certainly holds true for the participants in this study; whilst some referred to models and processes none solely used any one of these.

The coach participants' accounts identify real needs emerging in the second or third sessions, often after a provocative intervention by the coach. The clear structure of the GROW model provides consistency for clients. However, the findings show that the relationship building required for this group to tell their story in enough detail can be daunting and slow down progress leaving both coach and client frustrated. Goals are usually defined at the start of the engagement but with this population the findings suggest that the actual needs can take longer to surface with more superficial goals identified early on.

The coaches in this study referred to a directness of approach, with elements of concrete questioning. Given the potentially poor communications skills of IT professionals, it seems that if questioning is very open-ended or esoteric then the client will "shut down".

The co-active coaching model is less of a step by step guide for coaches but really a skills basis for coaches. The aim of the co-active coach is to build a partnership with the client to fulfil the client's agenda, placing the client at the centre and building a partnership with the client from the coach skills:

- Curiosity
- Intuition
- Self-management

- Action learning
- Listening

These are useful skills for all coaching.

Coaches talked about the benefits of challenging their clients, saying that in some cases the strongest challenges contributed to real turning points in the engagement. The FACTS model (Blakey and Day, 2012), with its basis in challenging coaching would appear to be useful as a way of working with IT professionals. There are aspects of this model such as the accountability levels and the creation of constructive tension to achieve goals that fit very well with the style of coaching the participants found successful.

In summary, the findings show that experienced coaches tend not to use any one model; their coaching aligns much more closely to the eclectic systemic coaching described by Clutterbuck and Megginson (2011) in Table 2.2, providing a more fluent style of coaching which they consider enables transformational change to take place.

There was considerable commonality between the seven coaches interviewed in terms of style with all coaches referring to a direct approach. All coaches commented on this as characteristic of the coaching in this sector. The degree of “directness” varied from “brutal” to “telling” the client to do certain things. This is illustrated by a coach telling his client to go to his next meeting, put his report down and take five minutes to look round the table and see what happens. The impact on this client was reported to be “huge”; he said, *“I never realised the CEO and the Finance Director really hate each other, don’t they?”*.

Many coaches also mentioned a concrete approach using phrases like “matter of fact” and keeping it factual. In most cases this style was an initial approach, which allowed the coach to gain the trust of the client and then move on to deeper issues of behaviour. One coach said his approach was “pretty scientific” which he felt avoided clients feeling everything was their fault. Coaches talked about challenging their clients as a valuable approach and preferable to a questioning approach.

Coaches mentioned that this challenge deepened trust between coach and client. Conversely the coach who did not pursue any behavioural aspects to the intervention did not challenge their clients.

Whitmore, in his foreword to *Challenging Coaching* by Blakey and Day (2012) refers to giving coaches permission to break some of “the golden rules” of coaching to be appropriately challenging. Blakey and Day themselves comment that clients seem to like to be challenged. There was only one coach who referred to not challenging their clients and it was interesting that this coach did not address behavioural issues within her coaching interventions. This was the only coach who reported not addressing behavioural issues.

Executive coaching engagements commonly focus on skill development such as learning to deal with change, clarifying goals or improving listening skills. However, the situation is frequently more complex. Kilburg (2000) suggests that in such situations there is an interaction between the complexity of the organisation and the underlying psychological processes of the client. Kilburg (1997) also notes that some executive coaches are not comfortable with therapeutic or psychodynamic approaches to executive coaching but that the emphasis of the coaching intervention is frequently behavioural. Six out of the seven coaches confirmed their coaching came from a behavioural stance. The seventh coach reported an “aha” moment when reflecting on her coaching, realising that she routinely stopped short of any behavioural input. She went on to assert that she intended to address this going forward. Others equally remarked that they avoided a therapeutic approach with many of their clients, not just with IT professionals.

To summarise, I have been suggesting that coaches do modify their style when coaching IT professionals. Within this theme there is a strong preference for a direct style with a degree of challenge. The coaches all reported this type of approach, showing great strength in the level of directness displayed. I am interested that my participants are all experienced coaches and the same may not have been true with new or less experienced coaches.

5.3 Coaching Client Behaviour

It was not surprising to me that coaching client behaviour was the most heavily populated theme. I say this because many of my coaching colleagues refer to the behavioural aspects of the coaching as paramount. The participants in my research endorse this view except for one coach. This coach has since decided that her coaching interventions would be more valuable if attention was paid to the behavioural dimension of coaching. The distinctive behaviours shown by coaching clients in the IT sector are of interest to me in that I think they have the potential to inform the optimal approach to be taken by executive coaches.

In considering the behaviours discussed I am drawn to research carried out in the field of Autistic Spectrum, high level autism and Asperger's Syndrome. Research by Baron-Cohen et al (Baron-Cohen *et al*, 2001a) and Martina Roelfsema et al (Roelfsema, Hoekstra, Allison, Wheelwright, Brayne, Matthews and Baron-Cohen, 2012b) demonstrates the prevalence of Asperger's Syndrome in STEM (Science, Technology, Engineering and Mathematics) with 40% of men and 20% of women in these professions showing Asperger's Syndrome traits at least. Those showing traits rather than having a diagnosis are referred to as having a broader autistic phenotype. Whilst some of these traits can hinder progression and contentment in the workplace, they can also contribute to success in fields that capitalise on such traits. Hans Asperger says "It seems that for success in science or art, a dash of autism is essential .. an ability to turn away from the everyday world .. to rethink a subject with originality, and create new untrodden ways .." (Asperger, 1944). This supports the view that many of the typical behaviours of this sector lend themselves to the needs of the roles they occupy. Put simply, it is what makes IT professionals good at what they do.

Thus far the descriptions of the coaches' interventions have a strong emphasis on behavioural change. Reluctance and lack of engagement were talked about with all coaches. In fact, it was specifically referred to in cases where the client was sent for coaching. This would be especially likely if that was positioned through negativity. One example of this was an organisation sending a client for coaching as a last resort

prior to dismissal. In this case the client still did not understand what the problem was and was very resistant to the coaching intervention.

Coaches discussed this as something that was much less common with clients from other disciplines. As discussed by Goldsmith (2003) behavioural coaching can be a waste of time if the coaching client does not want to change or is at all reluctant about the coaching. In some respects, this is rather a “so what” statement but is one that can be easily overlooked when starting a coaching engagement. It is paramount to identify any signs of reluctance and deal with them as early in the coaching engagement as possible

Kraft (1977) talks about IT professionals as preferring the company of computers to humans. This was also referred to by coaches as a comfort zone for their clients. This harks back to typical behaviours such as difficulties with social interaction as described in Chapter 2 and later in this section. Other references were made to the need for a very logical approach.

This initial attitude leads to limited self-efficacy, a key factor associated with coaching effectiveness (Dingman, 2006, Bozer *et al*, 2015). It has also been mentioned that IT professionals are quite secretive about being coached and do not want colleagues to know the intervention is happening. This also provides a clue to the personality of many IT professionals it is easy to consider that they have no feelings, however as mentioned by coach participants the opposite is true. Where individuals have such traits, it can be a deficit in exposing those feelings. One of the coaches interviewed mentioned this apparent lack of feelings.

Coach 4 *It felt like he had a computer for a brain; his logic is perfect, and he never feels anything.*

Various behavioural traits emerged from the interviews, both desirable and unwanted. On reading the quotations from this theme they clustered around three areas: Social Interaction and Communication, Thinking and Emotion.

Social interaction was commented on by the coaches interviewed as being poor and often unhelpful. This is supported by the data gathered through this research and several coaches gave examples of poor social interaction in their interviews further citing lack of awareness of others' thought processes. Clients often have difficulty working out what is going on as they are poor at interpreting non-verbal clues. They have difficulty grasping what others are thinking. Social interaction refers to the two-way interaction with others. Both Baron-Cohen (1998) and Attwood (2015) have commented on individuals with Asperger's Syndrome having an aversion to interacting with their peers. It follows that those with a broader autistic phenotype may also display this aversion.

Moore (2014) talks about this sector being gifted thinkers who are excellent at solving complex problems but who struggle with interpersonal interaction. The coaches interviewed all spoke about their clients' lack of awareness of others. This manifested itself in several ways. Some coaches talked of their clients being unable or unwilling to develop relationships with colleagues. Others referred to quite flippant behaviour which they thought was a cover-up for other feelings such as frustration. Clients came over as superficially friendly and evasive which caused others to mistrust them or even avoid them. There seemed to be an element of disliking judgement and often misinterpreting what others were saying and regard it as judgement.

Referring back to coaches' comments regarding their clients preferring computers, Silberman (2001) agrees with Kraft (1977) on this point, explaining that this preference is because you do not have to talk to computers, or socialise with them. Individuals with these traits appreciate the logicity and consistency of computers.

Coach 4 *"It is as if they would be more comfortable being a computer."*

IT professionals may appear arrogant as they can have their own way of talking. As suggested by Klawe (2001) IT professionals are often poor communicators and poor team players. The language can be very precise and detailed. This presents difficulties

when working alongside colleagues in other disciplines, who find it difficult to engage with this characteristic. Presenting to clients in a client service role such as IT consultancy also leads to problems resulting in same lack of engagement resulting. IT professionals frequently find it difficult to present at the right level for the audience. This would go on to impact relationships with others. They frequently have a literal understanding of language and find “small talk” very difficult which inhibits social interaction. One coach talked about her client’s inability to speak about anything outside his own subject knowledge whereas people who have good communication skills can intuit how to join in conversations despite lack of knowledge. This equally would impact relationships with others on a social level. This is discussed by Baron-Cohen and Wheelwright (2004a) in relation to Asperger’s Syndrome (AS) as delays and deficits in development of empathy. They suggest there are two aspects to empathy:

- a cognitive component. Where there is difficulty understanding what someone else is feeling and understanding the emotional impacts of their actions or words.
- The affective component. This defines empathy as the emotional response to the affective state of someone else (Baron-Cohen and Wheelwright, 2004a)

The affective component of empathy should include all appropriate emotions in response to other’s feelings. Importantly the emotional response must be a result of another’s emotion to be classed as empathy. Coach participants talked of their clients lacking empathy for others, or not understanding the impact of their actions on other’s feelings. I have also experienced this with clients, one client talked of colleagues being “fluffy”.

The cognitive aspect involves understanding the other person’s feelings. It also refers to role-taking, taking another’s perspective i.e. putting yourself in the other person’s shoes. The cognitive aspect of empathy is often referred to as theory of mind (Frith, 1991). This clearly is a disadvantage in the workplace when reactions of such clients can be inappropriate. Also, in dialogue with one or more other people, it is common for IT professionals not to notice when their audience does not understand them, or the detail is too great.

Coach participants suggested that in extreme cases clients' jobs were under threat when their behaviour had become too much of a burden for the organisation. They reflected that much of the work that followed was to help the client to see the effect their behaviour was having on those around them. This frequently took the form of very "straight" talking. This lack of social awareness considerably affected influencing within the organisation. Lack of influencing skills was reported by all the coaches but can be attributed to lack of social interaction rather than a skills gap. This is a more fundamental deficit which needs addressing at a deeper level than pure skills training. This is a real strength for IT professionals who are detailed and deep thinkers. They clearly have a strong preference for logic, data facts and rationality. However, decision-making is not always easy, and they can find change challenging. Coaches discussed the notion that IT professionals frequently assert that the way they see the world is how it is. They contend that they are very black and white. This is something that coaches address in their sessions to move away from right and wrong to the idea of perspective, allowing both points of view to have validity. This can take a long time to absorb for many clients and one of the coaches talked of it being typical autistic behaviour. I will re-visit this in my next chapter.

IT professionals often get very "bogged down" in the detail and can be extremely perfectionist, which hinders completion of projects, reports or products. Coaches spoke of poor presentation skills that centred on an inability to flex to the needs of their audience. The level of detail they provide beyond the needs of most audiences even other IT professionals. An aversion to looking at their audience means they can miss the non-verbal clues that others respond to readily. Additionally, there is a strong tendency to "plough on regardless" even when a strong verbal message is given. This strong bias for detail was first proposed by Uta Frith (1991) as a core deficit in autism. She found that generally people remember overall form and meaning when processing information from the environment, however those on the autistic spectrum (or displaying a broader autistic phenotype) attend to detail above overall form and meaning. They then go on to share that detail with others, hence the over-detailed presentations. Whilst this could be considered a deficit in such circumstances, it is, of course, a real advantage in the work of an IT professional. It is

important that coaching IT professionals should develop the ability to judge context so that our clients know when to present less detail and what that looks like.

Several coaches mentioned that these clients can be very rigid in their thinking and may become very angry, especially if they believe that others do not “get it”. Anger is a common reaction in this sector as a result of the frustration felt by IT professionals when their colleagues appear to struggle with what they think of as an obvious concept. One of the coaches referred to the client being ignored because he was so argumentative. Another coach mentioned that clients can appear to lack emotion or have extremes of emotion that make it difficult for them to interact with the rest of the organisation. With an understanding of the typical personality/behaviour of this client group, it is much easier firstly to engage with the client and secondly to develop techniques to help them interact in the workplace. A lot of the emotional issues tie into empathy as discussed above. For these clients, in part, this can be attributed to their preference for thinking rather than feeling (Capretz, 2003).

Self-protection was evident, with clients using humour as a deflection or retreating into technology. One coach referred to her clients presenting flippant behaviour when initially challenged on behaviours and actions. Coaches reported clients almost paying lip service to the coaching session. They mentioned clients being defensive and not keen to face facts. Hunter (2009) suggests there are four main types of people who are attracted to IT professions: people with Asperger’s Syndrome, Geeks, Hackers and those whose behavioural preferences fall into the Myers Briggs ISTJ category. Several studies have used an MBTI approach to look at personality in the IT industry and generally agree that ITSJ is the predominant personality type in the industry. These Jungian dimensions represent introversion, thinking, sensing, and judging. Myers (1995) suggests that people with a thinking preference are logical and analytical. This links well to the view of Simon Baron-Cohen et al (Baron-Cohen and Wheelwright, 2004b) that IT professionals have a natural preference to be systemising rather than empathetic. This strong systemising shows itself in various ways and not all clients will present with the same characteristics. The use of

empathising-systemising theory as opposed to executive dysfunction theory and weak central coherence theory (Baron-Cohen, 2008) presenting these behaviours as strengths rather than something missing, broken or undeveloped. This can provide a good starting point for coaching. Capretz (2003) asserts that IT professionals predominantly act on what they think rather than what others feel. This might well link to the thought that many of these clients may be impervious to context which is used in thinking, communication and social interaction. In their coaching, coaches reported many instances of their clients being insensitive to any other point of view, even ploughing on in the wrong direction in part due to this lack of context. One coach talked of doing “two-chair” work in order to help the client see things from the other person’s point of view. This is a technique from the **Gestalt approach** (Greenberg and Dompierre, 1981) and is useful in resolving conflict as a basis to achieving consensus. Amongst the attributes found in those with Asperger’s Syndrome or the broader autistic phenotype is poor imagination which would be expected to reduce visualisation ability (Baron-Cohen *et al*, 2001b). However, I feel it emphasises that when looking at generalisations of behaviour it is important to remember there will still be individual differences. Seeing another’s point of view is difficult for those displaying traits of Asperger’s Syndrome. Coaches mentioned their clients being amazed when relationships amongst colleagues were revealed. In Table 2.1, the behavioural characteristics of those with Asperger’s Syndrome, Computer Geeks and those with an ISTJ personality type (Gorla and Lam, 2004, Gauld and Goldfinch, 2006) refer to “lack of empathy”, “finds human relationships difficult”, “preference for things rather than people”. One of the issues for those with Asperger’s Syndrome is a deficit in mentalising, the ability to put oneself in the position of another person (Baron-Cohen, 2002). From these views, it seems likely that seeing things from other peoples’ perspectives may be difficult and any coaching to assist with this would be beneficial.

Coaches spoke of clients disliking ambiguity especially when this relates to other people. They often tend to prefer the safety of the machine. This supports their need for certainty and control. One coach gave the example of planning a complex project which gives them certainty. However, it was also mentioned that IT professionals are

particularly resistant to change and find it difficult to change direction, even in a course of action they have planned. Coaches commented that this lack of flexibility can impact both relationships and effective completion of business projects. One coach talked about showing that most behaviour comes from emotion rather than rationality, yet it can be predicted once you understand the rules. He went on to say he thought that IT professionals fail to develop a theory of mind; this in its simplest term is developed at the age of about 5 years old and allows us to express empathy. According to Jung (1971) extraverts are oriented toward the outer world, and therefore tend to focus their perception and judgment on individuals and objects; introverts are oriented toward the inner world, and consequently focus their perception and judgment on concepts and ideas.

5.4 Relationship

De Haan *et al* (2013) consider that “the client-coach relationship is the key factor in determining how clients perceive the outcome of coaching”. Dingman (2006) in her *Alternative Executive Coaching Processes* also cites relationship as key, with coaches emphasising their need to connect with the client. There is no doubt that coaches need a good relationship with their clients and many coaches have an early “chemistry” meeting with clients to make sure (as far as is possible) that the indications of a good relationship are there. However, I suggest that this may be different with many IT professionals. All the indications from the literature and the data indicate that this group of clients struggle with relationships along with poor interpersonal skills. Consequently, initial meetings may not be characteristic of future coaching relationships. This is referred to by some of the coach participants who talked about the need for a very direct approach early in the coaching engagement. This would indicate that initial client coach relationships may not be very good, and greater perseverance, especially by the coach may be needed.

The coaches interviewed for my research also referred to relationship as important, but it seems that the larger theme of Coach Style is seen as a more important predictor of coaching efficacy for this client base. I think for the current study the

style is representative of “how” coaches build and maintain their relationship with this client group, hence quotations are split between the same themes. O’Broin and Palmer (2010), in their research into the formation of coach/client relationships, suggest that coaches adapt to their clients in forming a relationship which ties in with the definition of style in this research. Askeland (2009) in her research into coaching theory suggests that what happens between coach and client is co-created; both are influencers. It follows that this is the case with establishing a relationship and demonstrates the link between Coaching Style (as the “how”) and Relationship (as the “what”). I think that this may not always be equal but will vary throughout the engagement. As Askeland (2009) says “We can never be neutral in the coaching relationship as the coach has power and influence and is influenced by the interactive flow of responses between coach and client”. The coach references divided into the four subordinate themes of credibility, non-judgmental, trust and honesty. These are very specific relationship characteristics that appear to mediate an effective relationship.

Coaches reflected credibility in two ways; firstly, coaches emphasised the benefit of knowledge of the functional areas that their clients work in. Clearly, they are not saying they are experts in the field, but they are able to talk knowledgeably about the pressures of this sector. They feel that it speeds up the process of engagement. Secondly coaches talked about credibility as coaches. One client had said that for a coach to be credible their ideas had to work. The preference of IT professionals for rules and rationality contributes to the need for coaches to be credible on their terms. Moore (2013) places having credibility at the top of the list for coaches to consider. In my own coaching, my client base is divided between IT professionals and clients from a variety of work backgrounds who have neuro-diverse conditions such as dyslexia, dyspraxia etc. I have found that IT professionals expect a knowledge of their profession whereas those in other occupations do not.

Very few people would tolerate a judgmental coach, however, despite direct and often “brutal truth”, all coaches still avoided being judgmental. This is important for IT professionals as they are frequently unable to see things from another’s

perspective. This can lead to erroneous interpretation and withdrawal by the client. Any feelings of being judged typically drive such clients further into their comfort zone behaviours, which would inhibit interaction and reduce the quality of communication. Many IT professionals have gone through their careers feeling they are being judged by others which is emphasised by some of the strong feeling expressed by those organisations asking for coaching for their IT professionals. There were several references to mistrust by colleagues in other areas of the business as well as exasperation caused by their apparent argumentative behaviour.

The impact of research on empathy (Baron-Cohen and Wheelwright, 2004a) and social motivation (Chevallier *et al*, 2012) allows coaches to build up an understanding of potential problems in this area. It is probable that even with having similar traits to those diagnosed with Asperger's syndrome, IT professionals will encounter difficulties in forming and maintaining relationships. Additionally, it is sensible to consider what may motivate these clients to find relationships rewarding.

In summary, it is important not to see the lower numbers of references to relationship lead to the assumption that this is a less important theme. The links with coaching style, the how, combine to make these two categories key to consider. This demonstrates how important it is not to focus solely on numbers of reference; the richness of the coaches' experiences demonstrate a more connected understanding across categories. As the literature tells us, relationship is very important in the interaction between coach and client (de Haan, 2008b); with this set of clients it can be difficult to form an effective relationship (Attwood, 2015). Considering the issues that arise with people with Asperger's Syndrome can be helpful in planning the relationship formation with IT professionals. I will discuss this further in the conclusion to this thesis.

5.5 Process

Several of the coaches I interviewed regarded much of their work with IT professionals as remedial, especially when those clients were "sent" by their

organisations. In these cases, the organisations had reached an end point with some clients and their behavioural issues and it was a case of change or be sacked. Several of the coach participants were “sent” for behavioural issues. Quite naturally this meant the clients were reluctant and sometimes unable to see there were any issues with their behaviour. Whilst this relates to the process of coaching it will impact relationship too as this reluctance makes the initial relationship building difficult. As Keil *et al* (1996) state, many such clients seek coaching themselves and in these cases have a more positive attitude to coaching, however as commented by one of the coaches, often such clients often arrived at the first session with their own solution. In these cases, clients will say what they need and how to tackle the issue. One example discussed was a client asking to learn body language, yet the actual need was an ability to build relationship and develop social interaction.

Coaches talked about giving their clients a process or methodology to work to. Again, as in other themes the focus of the process was around the clients’ behaviours within the organisation. All coaches referred to directing their clients to new behaviours. This plays to the preference of IT professionals to work clearly and follow logical steps (Moore *et al*, 2013). Moore *et al* state that this group has an aptitude for working within rules-based systems. IT professionals who have Aspergic traits find it very difficult to do more than one thing at a time, neither do they like change, so following an upfront process will be beneficial to their coaching. Therefore, a clearly structured approach will satisfy the need for “rules” to follow as well as a protection against sudden change.

Tools are exercises and techniques outside the coaching framework, that are used by coaches. Some of these tools are the two-chair technique, visualisation and the use of metaphor. Coaches mentioned using techniques to enable the clients to use the right side of their brain such as imagery and storytelling. The two-chair method helped clients see another perspective. This method originates and is used in Gestalt and is designed to allow the client to work through interpersonal or internal conflict. It helps the client see the situation from a different perspective and gain insight into feelings and behaviours. The client sits facing an empty chair. They are asked to

picture a person with whom they are experiencing conflict. The client is encouraged to explain their feelings, thoughts, and understanding of the situation. After the client has shared their point of view, they move to the other chair. Then they are asked to respond to what was just said, from the other person's perspective, having taken on their role. This requires a degree of trust between client and coach, but coaches have reported it as highly effective in working with IT professionals. Linking this to the personality of many IT professionals indicates that these techniques are helpful in tackling issues such as empathy and understanding how others may feel.

Other coaches use role play working in reverse. The coach plays the client in various situations which enables the client to "see" themselves as others might see them. This offers clients a different perspective and often marks a critical moment for them. Clearly, this can only be used once the relationship is formed. Another technique involves drawing parallels between two situations. One coach describes using this with a client who is frustrated because colleagues "don't get it". This coach asked the client how he worked with his small sons, and he responded that he did not expect them to know everything, so he was patient with them. The coach encouraged him to bring this to mind when working with colleagues. The aim was to recall the patience he exhibited, rather than to talk to their colleagues as though they were children. This is based on a Neuro-linguistic Programming (NLP) technique concerned with visualisation of a good memory and then using that positive feeling in other situations. In this case the coach is paralleling a similar situation where the behaviour is positive.

The use of metaphor, especially visual metaphor was widely described and is also linked to NLP as well as reflective thinking. One simple metaphor described was to help when explain something, particularly when in a meeting or presentation. The visualisation or metaphor is one of a donkey encouraged forward by hanging a carrot on a stick in front of his nose; The donkey will only carry on moving forwards if the carrot is in sight. The metaphor represents taking colleagues through explanations slowly and carefully, never moving too far ahead. This may seem counterintuitive for

these clients however it is like modelling in computer systems and it can therefore be helpful.

Another technique used with IT professionals is more accurately an approach in that it is the use of Clean Language (Grove and Panzer, 1989). Not all the coaches I spoke to use this approach and certainly do not use it exclusively. At its simplest the premise is that the coach introduces nothing of themselves. A set of neutral questions are posed using with the client's own words to direct their attention to some aspect of their own experience. Grove and Panzer (1989) explain this as "We create an environment in which the client can discover where it is he needs to go Information evolves internally out of the clients experience." The advantage of this technique with these clients is that ambiguity is eradicated, and they are in control whilst still addressing deep behaviours.

Many of these techniques and processes owe their origins to a variety of backgrounds, again indicating the work of experienced coaches who develop their own "toolkit" of techniques over the years applying the most appropriate techniques for the client's needs. Of interest is the indication that the coach participant who had not tackled behavioural work, equally did not report any techniques.

5.5.1 Critical Moments

Cox (2015) talks of a turning point (critical moment) as when the client recognises when their discontent and transformation process is shared. This aligns to the turning point (critical moment) identified by the participants. The trigger for this was a very direct approach delivered by the coach almost shocking the client into a state of realisation of their need for change. This is certainly not a traditional coaching approach. De Haan (de Haan, 2008a, de Haan, 2008b) has demonstrated that moments occur in coaching that are turning points in the process. Although this subordinate theme was captured within the Process superordinate theme, I have addressed it separately in order to properly emphasise the findings. Of course, turning points can be positive or negative, sometimes leading to the breakdown of the coaching relationship.

Three attributes of a critical moment emerge:.

- The coach behaviour preceding the critical moment.
- The change in client behaviour affected by this critical moment.
- The client's experience of the critical moment that can enable learning.

What I did find surprising was the commonality of all three critical moment attributes amongst the coaches' accounts of their coaching interventions. The coaches reported that their behaviour before the critical moment was very direct and challenging. The client was frequently shocked by the coach behaviour and clearly thought about their actions. The coaches followed this up by discussing what had happened and reinforcing the positive behaviour that resulted. It is important to remember that this study has used the coaches accounts of their work with IT professionals and it would be interesting to extend this research by interviewing coaching clients. The clients may have very different views and in research (Llewelyn, 1988) it has been shown that the experience of psychotherapists and clients finds that clients are more concerned with solutions and psychotherapists with the transformation of their clients. Although this is a different discipline, de Haan has shown a great deal of commonality between psychotherapy and coaching (de Haan and Burger, 2014) as discussed in chapter 2. Day et al (2008) suggest that coaches find these critical moments as "anxiety provoking and challenging". This was not reported by the coach participants and it would be interesting to carry out further research to investigate this outcome. There could be some relation with Askeland's (2009) findings concerning the co-creation of outcomes, yet a natural imbalance due to the more powerful position of the coach. It may be that coaches feel anxious if the turning point is primarily actioned by the client.

The critical moments centred around two subordinate themes:

- Change in coaching client behaviour
- Coaching client engagement with coaching

The focus of all but one of the coaches was behavioural change for their clients so this outcome is not surprising. The coach behaviour leading to the critical moment is in all cases quite extreme. One talks of delivering the “brutal truth” to their client. Others are extremely direct in their delivery telling the client that they either engage with the coaching or walk away. The critical moments all followed a similar process:

Figure 5.3 Generic critical moment process and coach example of critical moment

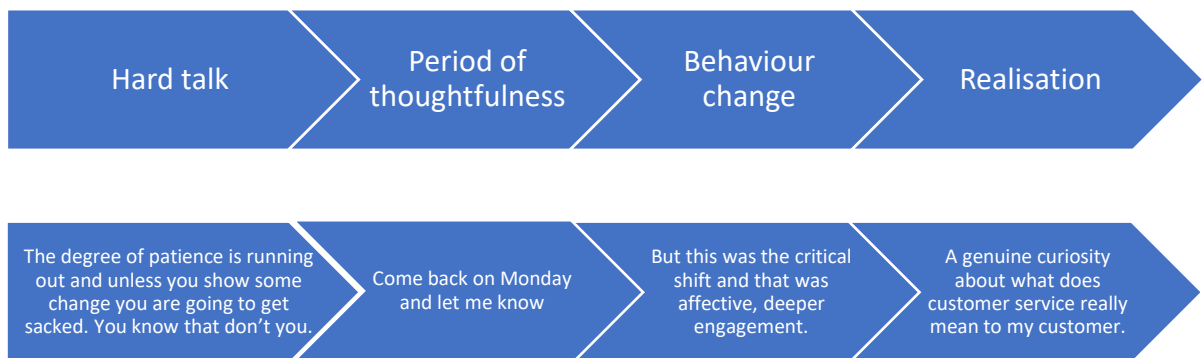


Figure 5-3 Generic critical moment and coach example of critical moment

The top process is generic and derived from the articulated experience of the coaches. The second process shows the language that was used at each stage and the coach’s description of the client outcome. In each case the “hard talk” was just that, a clear concise message varying only in its strength . There was always a period of thinking on the part of the client stretching from a moment to several days. This aligns with the personality preference for thinking (T). This is made possible by the starkness of the hard talk and therefore its clarity. The coaches’ commented that this would not be the case with their other non-IT clients. This was followed by a behaviour change, the degree of change clearly varied depending on the client. In the example the coach talked of a deeper engagement with the client which appears to be a necessary precursor to engagement for this IT professional. Finally, there was some sort of realisation demonstrating increased integrity and genuine interest. The important point to this is that this critical moment enabled the coaching relationship to start working, allowing the client to move on and realise their goals.

5.6 Relationship, critical moment and contracting

As discussed in section 5.4 the importance of an effective relationship between coach and client should not be underestimated. Efficacy of coaching was shown to be highly dependent on coaching relationship as discussed by several academic commentators (Dingman, 2006, Baron and Morin, 2009, de Haan *et al*, 2013). De Haan (2019) links several factors of coaching that impact clients to moments of insight or critical moments. These factors include personality of coach and client, coach techniques and relationship quality. Dingman (2006) talks of formal contracting between coach and client and relationship building as two important elements of executive coaching, whereas Kampa-Kokesch and Anderson (2001) combine these two as an integrated element. This indicates that Kampa-Kokesch and Anderson are considering not only formal contracting but the psychological contracting that some coaches include in a coaching session. De Haan (2019) found that coaches talked about managing the boundaries of the relationship through contracting and “maintaining the continuing psychological contract” (de Haan, 2019).

Whilst relationship assumes a high level of importance when considering effective coaching, the literature around the behaviours and personalities assert that this particular aspect is problematic (Klawe, 2001, Gillberg, 2002). It seems appropriate to extrapolate that psychological contracting is equally difficult and could be a prolonged process, especially when “sent” for coaching. Participants mentioned additional difficulties with such clients. They were extremely reluctant to engage and the critical moment that occurred was major and largely initiated by the coach.

De Haan (2019) found that many coaches talked about managing the boundaries of the relationship through contracting. He refers to this as the alliance forged between a coach and client. Critical moments can occur when this alliance is challenged or when trust comes under stress.

The participants in this research, in 5 out of 7 cases talked about a critical moment occurring early in the coaching intervention. In all cases this led to a deeper relationship going forward. Following this moment, the psychological contract became more embedded. This led me to conclude that the contracting can continue throughout the coaching intervention, punctuated by major or minor critical moments. Hence in the ensuing outcome to this research I talk of initial and sustained contracting occurring either side of a significant critical moment.

As previously referred to many clients are “sent” for coaching, especially when there are behavioural issues. In some of these cases the result is a reluctant client who does not engage with the coach. The participants in this research referred to this in terms of engagement being more difficult and the coach led critical moment being major. In these situations, where a client is sent for coaching because of behavioural issues they may be feeling unfairly criticised and some can be very hurt. Their initial reaction therefore may be one of anger and disbelief. Participants said that clients who self-referred or asked for coaching also presented difficulties seems to have a fixed idea of what was needed i.e. the question and the answer. This also presented contracting difficulties requiring a more fluid approach to contracting.

5.7 Learning and Motivation

Many of the coaches I interviewed spoke about specific interpersonal approaches or styles such as very direct, use of “Clean” language, staying very focused. This group tends not to like “chattiness”. For this group, the environment should have no distractions, lighting that suits the particular client and there should be no intrusions (Baron-Cohen, 2008, Bissonnette, 2013). This is not always easy to achieve as coaches tend to work at the client’s place of work and so we are at the mercy of what is available. It is interesting, considering the following paragraph, to read that andragogy expects the clients to be motivated internally. This aligns with Mazirow’s theory of readiness; my experience is that “readiness” must sometimes be prompted, particularly with the clients referred to in this study. According to the

coaches, many of the clients are totally unaware that they have any need for coaching, especially when they have been sent for coaching by their organisation.

There is inevitable overlap between the theories of learning that I have examined in Chapter 2, the literature review. Andragogy suggests that as people mature they become more independent and self-directing. However, this does not mean that all adults necessarily have these qualities; this will depend on their journey through life and unsurprisingly the maturation process varies considerably both in terms of time and quality. Cox (2015) considers that in addition, the environment has to be adult-oriented and that there should be mutual respect and trust. At this stage we should clearly consider the environmental needs and approach suggested as necessary for clients with Asperger's Syndrome or the broader phenotype.

Considering Kolb's Learning Cycle (1984) which has four stages that learners go through in the process of learning. These stages are concrete experience, reflective observation, abstract conceptualisation and active experimentation. To learn effectively Kolb considers that learners must be able to engage in each of these stages. For inclusion of feelings Kolb (1984) makes things difficult for this group of clients who through my experience and research dislike considering feelings and emotions in particular, meaning that this reflective stage of Kolb's learning cycle (Figure 2.1) may have to be considered carefully. Not only do they find considering their own feelings difficult, they seem unaware of others' feelings due to their lack of empathy as discussed in Chapter 2 (Roth, 2010, Chevallier *et al*, 2012). Equally, the phase of abstract conceptualisation, with its shades of grey, is a difficult concept for these clients, at least initially, and would make this abstraction difficult as several coaches referred to their need for a "black and white" approach. This is supported by the literature concerning IT professionals and those with Asperger's Syndrome. It is important to remember that within the Asperger's population everyone is as different as they are in the general population. Additionally, when discussing IT professionals, we are not saying they have Asperger's Syndrome but that they may just display the traits to greater or lesser extent. My third contention is that Asperger's Syndrome is not always a disability; certain aspects can make life difficult

for those with the diagnosis, but many of the qualities are an advantage, especially in the STEM professions.

Many of the coaches described their IT clients as not being ready for coaching or having a firm idea of what was needed. They distinguished between clients who were “sent” by their organisations being very resistant, and to those that self-referred who arrived with a view of what was needed, both issue and solution. Both these presentations prove difficult in practice. The former group are reluctant to take part and the latter are reluctant to see a different route. Thus, the coach must initiate their readiness on some occasions which, at the very least can be alien to more traditional or inexperienced coaches as well as being a difficult stage to achieve.

Several stages of transformation identified by Mezirow (1997) in connection with transformative learning also present issues for this group of clients, as experiential learning and focus on feelings and emotions is very tough for IT professionals. Additionally, any reflective practices can be problematic so as we can see, although transformative learning is important for such clients, the route to achieving it must be carefully and knowledgably navigated. Cox’s (2015) assertion that coaching is a constructivist intervention leading to a new “truth” for the client is demonstrated by this study’s findings, as all participants refer to developing or building the relationship with the client. They also highlighted the differences compared to other clients; in that it was often more challenging in the early stages. Because of this, I suggest that the balance of the parties involved in constructing the truth varies considerably throughout the intervention, certainly to a greater extent than traditional coaching approaches and models would support. The coach often takes a greater leading and directing role in the early stages at least.

The environment where coaching takes place needs planning. Many people prefer a quiet room when coaching, however this is much more important for this group of clients. Frequently they also prefer an orderly space with little clutter, although this can vary. Lighting is also important, many IT professionals do not like harsh fluorescent lighting. Of course, these factors are sometimes outside the control of

the coach, but an awareness can be helpful. Considering Maslow's hierarchy of needs (1943), I suggest that, as executive coaches we don't often think about these needs, especially the basic ones. Although this model was developed many years ago, the elements included in the hierarchy continue to be cited. This model is well worth consideration, especially when considering the learning preferences of many IT professionals. The basic physiological needs are still taught to trainee teachers and form the basis of much neuro-diverse coaching. These neuro-diverse clients are guided to ensure their basic needs are satisfied in order to enhance concentration, memory for instance. In terms of safety and security, things can become a little more complex for our target audience. In the literature Baron-Cohen (2008) considers that those with Asperger's Syndrome will focus to the point of forgetting to eat and drink.

Common to all the accounts from coaches in this study was the motivation resulting from challenge. Looking to the various theories of motivation allows us to consider potential issues when coaching IT professionals. This is based on the findings from literature and the interviews with coaches around IT professionals' behaviour and personality. It may not be possible to alter this state but acknowledging it will help and allow learning to take place. Taking Herzberg's (1966) model into account, whilst he suggested that certain hygiene factors should be taken into account they do not necessarily motivate employees. They may however de-motivate them. The issue highlighted by some of the participants was that this group of clients see little wrong in their behaviour. Another aspect of these hygiene factors is that they can act as a distraction to the coaching intervention and often must be tackled before the real issues can be approached. This could be considered as a first stage of the coaching intervention. Some of those interviewed referred to tackling "low hanging fruit" first. Similarly, the third level, love and belonging, is an area to cover in the context of relationships with colleagues at work. Self-esteem, the fourth level as for any other client can be low and, again, partly due again to issues with relationships and social interaction. Finally, the need for self-actualisation, a high-level need, that on face value would not be any different for IT professionals than for other disciplines. However, the characteristics referred to in the literature surrounding emotion and social interaction (Burgoine and Wing, 1983) and the preference for predictability

(Baron–Cohen, 2000) may limit self-actualisation. For instance, spontaneity will be inhibited by the need for predictability. This accompanied with a tendency towards systematising versus emotions can mean that these clients have not examined their feelings and come to understand them.

With McClelland's (1987) accounts of human motivation, achievement, power and affiliative motives are described. Achievement is common to all three theories discussed but what constitutes achievement can differ between individuals. These clients often feel misunderstood according to coaches and their behavioural traits surrounding relationship can hinder their understanding of what is going on. However, coaches talked about a disconnect between clients and their organisation in that they are more motivated by their own thoughts than those communicated by managers. Again, this is hindered by relationship and this time by communication as well. As discussed by Ganta (2014) when we consider a task to be important we will act with a high level of dedication to its completion.

Most coaches spoke of their client denying they had a problem and were therefore resistant to the coaching intervention. This maps effectively to the Prochaska and Norcross (2001) change model where the first stage of change is often no desire to change – precontemplation. As mentioned by coaches, these clients (if sent for coaching) often see no need to change their behaviour. Those that seek out coaching, as mentioned in earlier chapters, arrive with a definite idea of what they need and often how to achieve it. Their model describes six stages of change; precontemplation, contemplation, preparation, action, maintenance, and termination. This adds strength to the findings of this study in that such denial is an authentic stage of the coaching process. Prochaska and Norcross consider that people in this stage attend sessions due to pressure from others; in the case of the clients discussed who fell in this category, they were sent by their organisation often after comment by others resulting from their behaviour. Clearly before change can take place, these clients must move to the next stage of change, contemplation. Some of the clients started out in this stage having diagnosed not only their problem, but the solution as well as mentioned above. This stage, for

these clients poses the same difficulties as reflecting, discussed earlier in the chapter. Preparation happens once acceptance of the problem has taken place and may start with small changes as a result of this preparation. In the case of the clients discussed, this only happened after challenge – the turning point (critical moment). The final stages correspond to the rest of the coaching intervention and represent the ideal outcome. Maintenance and thus termination may be difficult for those IT professionals who are diagnosed with Asperger's Syndrome as we are asking them to take on new behaviours and relate to others in a way that is not natural to them.

5.8 Summary

It appears that there are four main factors affecting the coaching of IT professionals – coaching style, relationship, coaching client behaviour and coaching process with others clustered beneath these headings. Results suggest that all four factors along with their sub-themes need to be addressed differently when coaching these clients. This study highlighted the adaptation of coaching to suit the client by the experienced coaches taking part. However, this process could be accelerated if the needs of the clients expressed through these themes was considered earlier in the coaching journey. Equally, new or less experienced coaches would benefit from an adjusted framework to support them when coaching IT professionals.

I consider that there is a gap that would benefit from formalising, in the development of coaches, around the different needs of particular disciplines. Naturally this learning can come about through experience, but the ability to work with this important sector of the workforce more quickly could only be beneficial. This would allow coaches to be supported in developing a good relationship with these clients. Understanding the prevailing behaviours of IT professionals along with some of the reasons for it, would allow a more tailored approach. Coaches would also be “ready” for their clients’ reactions to coaching and react appropriately.

The reasons that coaches presented for a coaching intervention varied according to who had “sent” them. Those for whom coaching was arranged by their organisations were invariably “sent” for behavioural issues such as poor relationships, excessive

impatience and anger. Those who self-presented usually asked for specific skills coaching having decided what the solution was to their problems, for example body language. Both presentations come with their own problems. Often clients sent by their organisations for behavioural reasons are resentful and uncooperative, resulting in very slow relationship-building and less effective coaching. Understanding the behaviour/personality of these individuals can help prepare for the clients' different reactions to coaching. Clients who self-present will have made up their minds what they need, which is not always what the solution needs to be. Coaches commented this was common amongst clients in this sector. This would echo their strengths in that IT professionals are good at sifting information to reach a solution and so it would be logical that they develop their own solutions. Of course, it is unlikely in this event that the solution is the right one, and in fact the question may be wrong as well.

The coaching style emerging from the interviews suggests that coaches should be concrete, direct, stimulating/challenging and giving responsibility. One of the subthemes was non-challenging but, as previously mentioned the only response to in this category was from a coach who does not address behavioural needs. I have retained the reference because the point it makes links behavioural coaching in this sector links to challenging rather than non-challenging. Specific skills and techniques are suggested by these coaches and can often be a useful icebreaker for such clients. This fits with the need for concrete suggestions and satisfying this need can then open the way to deeper behavioural coaching.

6 Conclusion

6.1 Introduction

In this chapter, I shall start by summarising my conclusions and continue by considering the implications for coaching practice. I will discuss how I might disseminate this research and potential research in the future.

“Do external coaches use an alternative method to their norm when coaching IT professionals?”

I developed this question as a result of my own experience with these clients and anecdotal comment by other coaches. In this study, I wanted to have the empirical data to back up the development of an appropriate coaching framework. This chapter starts by summarising the key factors in my research, continuing by following the stages that culminate in a coaching framework appropriate to this client group:

1. Underpinning knowledge to support coaches.
2. Initial contracting and coaching.
3. Sustaining coaching.
 - Coach style
 - Relationship.

At the end of this introduction to the conclusions of my research I present the resultant coaching framework. I also include a word map to help the reader gain a flavour of the input from coaches. I continue by describing each of the stages within which I include suggestions for coaches to use when coaching IT professionals. I end the chapter by addressing how my research has answered the research question and potential future research. I add how I plan to disseminate this research. Appendix 7 brings together guidance for coaches of IT professionals. This is the first guidance based on empirical evidence of which I am aware.

I was able to gather rich data from my participants using semi structured interviews with high consistency amongst the responses. My data collection was phenomenologically informed, relying on the coaches' interpretations of their

interventions with IT professionals. This enabled me to say with confidence that coaches' interventions with IT professionals are sufficiently different to existing models to propose an altered framework for coaching in this sector. This also makes it important to include in any suggestions, the anticipated behaviours of these clients.

One critical moment did emerge from the analysis which was persistent in its consistency across coaches. Of course, not everything in a coaching intervention can be a critical incident as there are small learnings that effect simple incremental changes. However, these do not always challenge our perspective of things and in working with this group of clients, coaches are looking at fundamental changes in behaviour as well as changing their world views. Therefore, we may need to realign these clients' perspectives as the data shows that this group of clients often just do not "get it". The incremental learning achieved by most of the adult population has passed many of them by as a result of their behavioural traits. Their world view can be different from the norm, very literal, low value placed on interpersonal relationships, poor interpretation of communication and poor delivery of the same. In order to effect quite small changes (to you and me), this group of clients might have to change their fundamental views. Therefore, in coaching IT professionals we are looking for transformational changes.

As coaches we might need to think differently, considering the sort of learning we are producing in our client; is the normal incremental learning all that we do or is it transformational learning we are looking for in this arena? We run a risk of short-changing this group of clients which is supported by the critical moment reported by the coach participants in this study. Leading up to this all the coaches reported that they had strongly challenged the client, either in terms of their engagement or their world view. In each case, this led to improved engagement and realisation that their world view may be skewed. This commonality was notable and as coaching practitioners it may be wise to consider this point and build on it when coaching this group of clients.

The primary objective is to raise awareness of the likelihood of different needs of some IT professionals from other coaching clients, and how this may affect a more traditional coaching model. This leads to a second objective which is the development of an improved coaching framework along with techniques that coaches have developed and successfully employed. It was anticipated that the coaches' experience would highlight material differences in the process such that a modified framework for coaching IT professionals could be developed. The final objective, therefore, was to reflect on the research findings and examine whether a modified framework could offer support to coaches who have not worked with this sector previously as well as providing an enhanced offering to IT clients.

The following diagram is a word map pulling out key words from the client interviews; these illustrate the themes chosen as a framework for my research. The fourth theme "process" surrounds the other themes as the process, in many ways, guides the intervention. Other figures such as Figure 5.1 show the frequency of the response and give an idea of coaches' focus, this figure is intended to give a flavour of the language used in each theme.

Figure 6.1 Word map derived from coach interviews

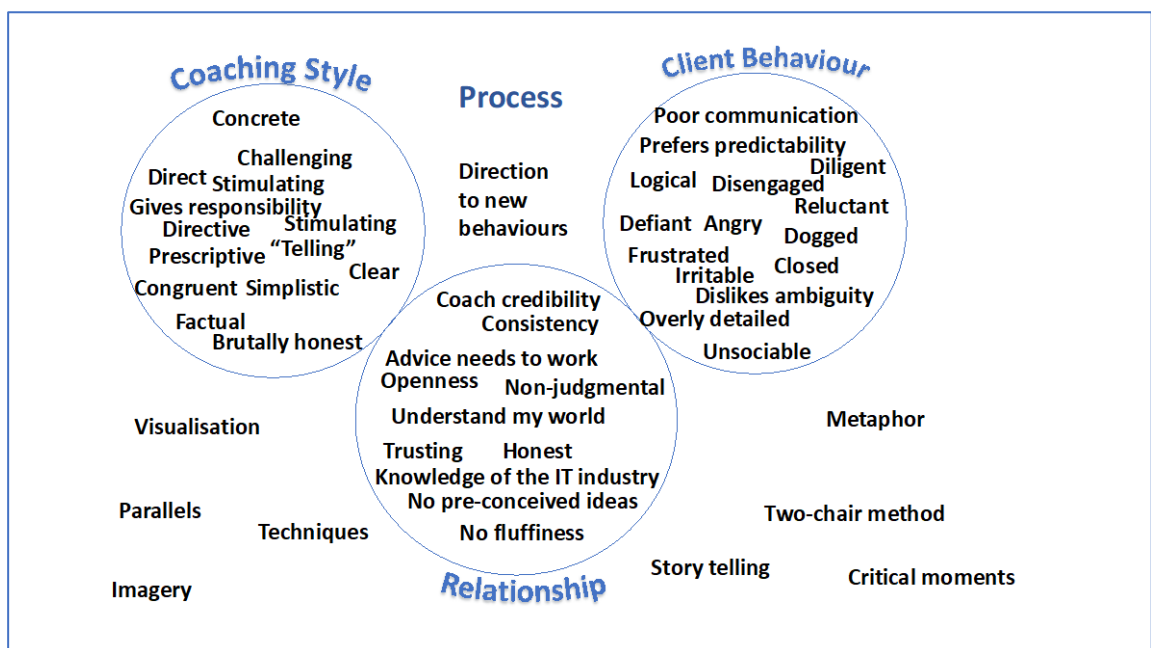


Figure 6-1 Word map derived from coach interviews

The outcome of this research is best described in a diagram – a framework for coaching IT professionals derived from the literature and the findings from my research. The sections of the figure follow the diagram.

Figure 6.2 Coaching IT professionals – a framework

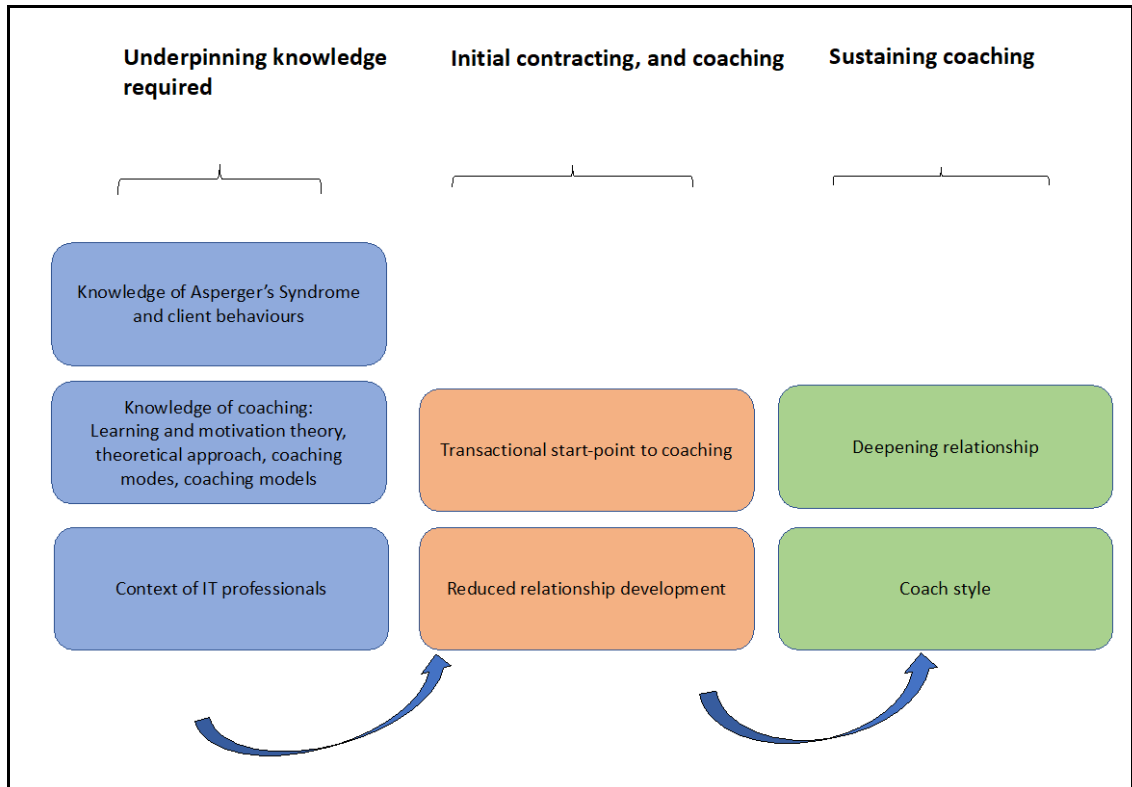


Figure 6-2 Coaching IT professionals a framework

6.2 Underpinning knowledge required.

This comprises knowledge that comes from the literature discussed in chapter 2, forming a bedrock for coaching. Areas such as coaching approach, modes and models of coaching along with learning and motivation are topics covered in coach training and should be present in all coaches' knowledge. In order to work effectively with IT professionals, coaches need to understand their context and have some knowledge of Asperger's syndrome in relation to these clients' behaviours. This section refers to:

- Learning and motivation.
- Theoretical approaches to coaching.

- Modes of coaching.
- Coaching models.
- The context of IT professionals.
- Asperger's Syndrome.

Within this study the existing knowledge has been examined in the contexts of the behaviours and personality of IT professionals, Asperger's Syndrome as well as the data resulting from the coach interviews. The context of learning and motivation has much to do with the environment where coaching takes place. Along with these traits, this group may have specific preferences for learning delivery (See Appendix 2 for an expanded list). This appendix will be useful for coaches to consider for these clients. These were not explicitly discussed in the interviews, but are found in the literature (Baron-Cohen, 2008, Moore *et al*, 2013).

- Prefer to work alone in silence.
- Prefer to go at their own pace.
- Prefer conditions to remain unchanged (same seat, same lighting etc).
- Prefer lack of distractions.
- Become irritated by the intrusion of other people into their space.
- Become irritated by a chatty style of teaching.

Some of these preferences, such as "going at their own pace", are accommodated by one to one coaching as a matter of course, others need conscious consideration by coaches such as consistency of environment. This is not always easy or even possible for coaches to achieve, but just being aware that any "breach" of these needs may cause issues for the clients will help. As stated by Baron-Cohen (2008), it is typical for those with Asperger's Syndrome or the broader traits to prefer to work very methodically and to capture all the detail. This group sometimes need to follow one topic through to its conclusion which can also slow the pace.

Whilst many of these clients may have a low emotional quotient (Baron-Cohen and Wheelwright, 2004a), it does not mean they do not have emotions, rather that they find it difficult to describe them for themselves and others (Attwood, 2015). Thus,

their safety and security is important, however considering literature around social interaction (Moore *et al*, 2013, Bryant, 2013), social stability could be more difficult for them and is a good area for coaches to consider. The dislike of chattiness (Baron-Cohen, 2008) is within the scope of the coach to control. It is helpful with these clients to remain focussed and clear. Given the poor social interaction, any small talk is not appreciated and often not understood. It is important for coaches firstly to avoid any “chattiness” but also not to be offended at the lack of small talk and sometimes apparent remoteness of these clients.

The literature makes a strong case for parallels with Asperger’s Syndrome and the predominant behaviours of some IT professionals (Baron-Cohen, 1998, Roelfsema *et al*, 2012a). I cannot emphasize strongly enough that in this I am looking at common behavioural traits, I am NOT saying IT professionals have Asperger’s Syndrome. The behaviours of those with Asperger’s Syndrome cluster around several areas. Firstly, and especially relevant to coaching is the difficulty in forming effective relationships which is hampered by poor social skills. This in turn leads to poor communication skills, this population tend to go into too much detail both verbally and in writing. It can be difficult to complete things due to this desire for detail. Worth bearing in mind is the dislike of change especially without adequate preparation for it.

These factors might have to be considered when coaching IT professionals. They will impact on approach, mode and model of coaching. Given their difficulty acknowledging feelings, it is important not to use one of the more therapeutically informed approaches. IT professionals do have feelings but can find a more emotional approach difficult.

Suggestions for coaches

- Leave any discussion of feelings until the relationship with the client is fully formed.
- Be consistent, doing what you say you will do.
- Keep content of coaching factual.

- The coaching engagement will almost certainly be behavioural.
- The clients are often reluctant, tackle this first.
- Do not use a lot of small talk.

As discussed in section 5.6 motivation presents some differences for IT professionals. Many of the coaches talked about resistance to coaching and not being motivated to work with the coach. The Prochaska and Norcross (2001) steps of change have much to offer coaches in this sector. From the interviews we can see that clients often get stuck in the pre-contemplative state as their inability to see there is an issue to deal with may stop any progress. This first stage is demonstrated by the findings from some coaches who found their clients particularly reluctant. The findings around the critical moments give good guidance for coaches trying to engage these clients. In all cases, the coaches delivered a very strong message which “shocked” the client into action, obviously these are very experienced coaches who measured their words and tone of voice with care.

In summary, coaches of IT professionals displaying the traits of Asperger’s Syndrome should understand the prime motivators for this group that reflect their learning and working preferences.

Suggestions for coaches

- Agree the benefits of coaching.
- Be clear on what you as coach will do and not do.
- Explain what happens in coaching sessions.
- Explain what the client is expected to do – give responsibility.

Do not:

- Rush the development of rapport.
- Use a “feelings-based” approach.
- Do not be afraid to challenge.

In the case of theoretical approaches, coaching modes and models, all coaches should have at least a basic understanding. It is useful as an inexperienced coach to have a framework to help structure your coaching. Going forward coaches should feel empowered to use aspects of these so that they can adjust to individual clients. In the discussion I refer to the typical personality types and behaviour of IT professionals which helps to guide which elements of optimal approaches, modes and models are most helpful. With this foundation the coach can move onto the early stage of the engagement.

6.3 Initial contracting and coaching

As discussed in Chapter 2, Dingman proposes the following process for coaching engagements:

1. Formal contracting between coach and client (and maybe organisation).
2. Relationship building.
3. Assessment of client.
4. Feedback and reflection.
5. Goal setting.
6. Supportive implementation and evaluation.

There are other processes mooted by other commentators but in many cases they are variations on this theme as discussed in Chapter 2. If we consider that within contracting when entering a coaching engagement, many coaches talk of a chemistry session, which is viewed as a precursor to relationship formation and can be a point at which either party can withdraw from the coaching. Based on the interviews with coaches and my own experience, it appears that the test for chemistry must happen later in the engagement. As discussed in the coach interviews many IT professionals with their potential difficulties in relationship-building, will not usually make a connection early in the engagement. Equally, as a result of this they can give a poor impression to the coach as well, which could lead to the coach thinking the engagement just will not work. Generally, IT professionals are reluctant to accept coaching. If they are sent by their organisations, they rarely see the action as positive and will either not engage at all or only at a superficial level. If they elect to come for

coaching, invariably they will have “diagnosed” what they need and decided on the solution. In many cases the coaching relationship is only established after the turning point in the coaching which as described by several coaches follows very direct communication (in some cases quite forceful). Prior to this, coaches talked about tackling low hanging fruit, using standalone techniques such as metaphor and visualisation. Only after this critical moment can the relationship deepen and allow the coach to address the more deep-seated needs of the client.

Suggestions for coaches

- Clients can display reluctance to come for coaching.
- Do not rely on the “chemistry test” at the beginning of coaching.
- Tackle “low hanging fruit” initially.
- Be prepared for the client telling you what is needed and how to tackle it.
- Keep the communication direct and clear.

6.4 Sustaining coaching

The coach style has been derived from the typical client behaviours in conjunction with the data gathered from the coaches’ interviews for this study. The coaches’ interviews gave rise to subordinate themes such as:

- Concrete
- Direct
- Challenging
- Giving responsibility

This paints a picture of a style that maps to “highly directive” and “challenging” in Heron’s (2001) model of coaching. According to the coaches interviewed it was this style that led to the critical moments (turning points) in the coaching. These aspects of style are also congruent with the preferred learning style of the client group under discussion. As discussed in Chapter 2, the literature shows that they have difficulty in engaging with the traditional nurturing style and their preference for black and white thinking is supported by a concrete approach. This does not mean that discussions

on feelings and emotions cannot take place, in fact they must in order to achieve true transformative learning; but it is preferable to follow the styles listed above in the approach to this aspect of coaching. The coaches talked of being very concrete with these clients, especially at the beginning of the coaching engagement. They would give the client clear tasks to carry out. One example was around presentations and reducing the level of detail in order to “keep” the audience engaged. The coaches interviewed are all very experienced and as previously discussed tend not to use a particular approach or coaching model. Inexperienced coaches, or others who use a model will find that a solutions-focussed approach and a model such as the FACTS model (Blakey and Day, 2012) work well with IT professionals.

Suggestions for coaches

- Be very clear for your client, using clean language.
- Be direct, don't shy away from telling your client what to do.
- Use concrete tasks in the early days.
- If you have less experience with this client group, use a solutions-focussed approach and a challenging model such as FACTS.

6.4.1 Deepening Relationship

Many commentators on effective coaching cite the relationship between coach and client as a key factor in the client's perception of the coaching outcome (Dingman, 2004, de Haan *et al*, 2013). The coaching style referred to above indicates a direct approach which several participants indicated was needed early in the coaching programme in order to secure client engagement. Client engagement was referred to as an issue in the early stages of the relationship. The coaches added that this can cause the initial relationship to be poor, which is supported by the difficulties this client group has in establishing relationships. They do however value directness and a matter of fact approach, that will help the relationship initially. This directness should not be judgmental in any way. No-one likes being judged unfairly; however, IT professionals are often judged harshly, particularly with reference to their character. This is demonstrated in some of the anecdotal quotes such as “geek” and

“nerd” or “has no feelings or emotions”. This judgmentalism is offensive at worst and discouraging at best. There was reference to this in the interviews with examples of mistrust of the client from the organisation.

Credibility in the client’s field of work was also considered important in relationship building. Although coaches cannot often be experts in IT, it is clearly important to develop an understanding of the issues that this population are likely to face. These issues will be implicit in their roles but possibly exacerbated by their behavioural characteristics. It is therefore essential to understand the likely persona of this client population. Clearly coaches must be credible in their own field, but the strengths of this client population make it easy for them to spot any deficits or uncertainty. The coach needs to remember that building the relationship will take longer than with other clients, so it is important to take time to build trust. Coaches do need to consider potential reward system differences for their clients particularly taking account of the research by Baron-Cohen *et al*, Chevalier *et al* and Supekar (Baron-Cohen and Wheelwright, 2004a, 2012, Supekar, 2018) who put forward suggestions on the factors that affect relationship building and social interaction. These are issues of empathy, altered social motivation and a potential different mesolimbic development that affects the chemistry of response to social interaction. Of course, these are accounts pertaining to those diagnosed with Asperger’s Syndrome and those with traits will not be as extensively affected as well as being more open to development in these areas.

Suggestions for coaches

- Be direct and matter of fact, this will help initial engagement with the client.
- Do not be judgemental, important for all clients but this client group often react badly if they think they are being judged.
- The relationship may take longer to build, be patient.
- Be aware of the problems these clients face in their field of work.
- Understand their reward system, it may be different.

6.5 The coaching process supporting the framework

As already mentioned, the underpinning knowledge needed by coaches is well researched and there are multiple models available to support coaches, however these must be taken within the context of the coaching situation. A real learning from the interviews with participants is that we must leave room in our coaching for creating bespoke interventions. When coaching IT professionals, research shows that the incidence of Asperger's Syndrome is higher than the rest of the population (Baron-Cohen, 1998, Roelfsema *et al*, 2012a). Importantly commentators in this field have identified that the behaviours of IT professionals are often similar traits to those diagnosed with Asperger's Syndrome. This context impacts the optimal coaching intervention as shown both in the review of literature and in the interviews of coaches. This research has shown clear indications that can improve the coaching of this community.

Within the process of coaching, the relationship tends to develop after a critical moment in the coaching that allows engagement of the client. This population are reluctant clients initially. This reluctance is present both when "sent" by their organisation of self-referring as discussed earlier in this chapter. The preferred coach style identified by coaches for these clients is highly directive and challenging. An emotion-centred; more nurturing approach does not support engagement. As already stated it is possible to address feelings and emotions where this is relevant, but not until the relationship is fully formed. The relationship must be taken into context which for these clients should consider the prevalent behavioural profiles for the group. This has been fully discussed throughout this thesis, both in terms of research literature and coach experience.

From the data collected from the participant coaches it is possible to suggest a process for coaching IT clients who present with the behaviours discussed. Figure 6.3 suggests a process for coaching these clients. Initially the coach works transactionally with the client, mainly addressing concrete issues. This gives the client a sense of achievement and assists with deeper engagement. At some point the coach and client may experience a critical moment which could be a turning point for the

intervention leading to deeper engagement which allows the coach to then look at coaching behaviour. and ultimately a richer relationship. The intervention then proceeds to closure.

Figure 6.3 A coaching process for IT professionals

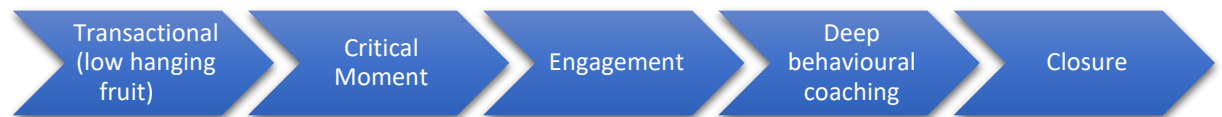


Figure 6-3 A coaching process for IT professionals

6.6 How does this answer the research question?

I undertook this research to answer the question

“Do external coaches use an alternative method to their norm when coaching IT professionals?”

I wanted to see if the experience of other coaches matched my own in that the coaching of IT professionals must be different to other sectors in order to be effective. Further than this I wanted to find out if there was any commonality between the coaches’ experiences that would indicate the benefit of a modified coaching framework. The outcome of the study shows that these coaches do coach this group differently to other sectors and that there is much commonality between them regarding style, relationship and process. Additionally, their descriptions of client behaviours concur with the literature (Klawe, 2001, Silberman, 2001, Baron-Cohen, 2008, Moore *et al*, 2013) and impacts the way IT professionals are coached. The congruence of the critical moment is startling and supports the need for such an incident to lead to transformative coaching.

It has been commented by fellow coaches that they have felt guilty when being direct and now feel this research might give them the permission they need. Coaches become frustrated working with these clients as it is counterintuitive for many

trained coaches to be direct. HOWEVER, for this sector it is not only appropriate but necessary.

I cannot stress too strongly that in this study I am not claiming that all IT professionals have Asperger's Syndrome, although the incidence is demonstrably higher (Baron-Cohen, 1998). I am however suggesting that many IT professionals appear to exhibit similar traits to those with Asperger's Syndrome and therefore we can learn from the research around development of and interaction with this group. The feedback from my interviews supports this suggestion. The behaviours and traits presented in the literature were reflected by the experience of the coach participants. This was not necessarily based on any deep knowledge of Asperger's Syndrome, but it is of interest that their accounts referred to similar behaviours. This helps to tie in the different aspects of my research.

6.7 Future research

Throughout this study I have iteratively refined and refocused the research I have been carrying out. For the purpose of this Professional Doctorate I have been mindful to prevent scope creep. Nonetheless as I have progressed, ideas for further investigation have emerged.

The findings in this research were restricted to the coach view and their interpretation of the client outcome. A useful extension to this would be to interview coaching clients in the IT sector to gain an additional perspective. I had originally intended to include clients in this study, however selecting clients became problematic and my method appeared not to lend itself to this client group. Clients found recall of their coaching sessions through a lightly structured interview difficult so there would be benefit for future research in designing a different approach to capture the experiences and needs of these clients.

To further this, interviewing coaching dyads should yield interesting results. It would have the benefit of giving both sides of the same coin and it would be interesting to examine the critical moments occurring in the sessions. It would allow for consideration of the client's view of coaching, not in any critical way but to establish the criteria that constitutes success for them. It would be important to remember

that clients will not necessarily use the same terminology to identify critical moments as discussed by de Haan (2019), they will use terms like an insight or a self-realisation. Relationship would be a particularly important area to focus on as relationship intimates the involvement of two people, whereas this research just explores the coach view.

Another consideration is to explore the way IT professionals learn and what motivates them which could be a relevant area to research. Whilst there has been a body of research looking at Autistic Spectrum and learning in children, there appears to be less investigation into the specifics surrounding IT professionals and learning. It seems from the findings that experienced coaches adapt to the learning needs of these clients in terms of their style, however no mention was made of coaching environment which can be important to these clients. Motivation was not discussed either, yet this would seem an important area for all clients but particularly for this client group who are likely to have different motivators especially those who have been sent for coaching.

Outside the scope of this is an investigation into the purpose of IT coaching within organisations. Many organisations expect managers to carry out some coaching. However, managers in IT sections of organisations tend to have come from a technical background and have the same behavioural issues as their team members. This makes internal coaching quite a challenge both in terms of manager as coach and formal coaching. Formal coaching presents its own challenges in terms of setting up and overseeing whereas manager as coach may present style and behavioural issues.

This study has been carried out in consideration of IT professionals, yet there are many others who share the same personalities and behaviours. Some of the participants referred to clients in other disciplines such as Finance and Accountancy. The literature in this area also points to the STEM (Science, Technology, Engineering and Mathematics) professions having similar personalities and behaviours. This

would be a distinct area of development for this research either through academic research or practitioner investigation.

6.8 How I will I disseminate this research

One of my drivers for carrying out this study was, if my finding supported it, to deliver an altered model of coaching when working with IT professionals. My extensive experience in the IT industry has led me to be passionate about improving the development of IT professionals beyond their technical capabilities. As a new coach I struggled to align more traditional models of coaching to these clients, however, my coaching only became effective when I had experience and really thought about the ways in which this population learn. Following this study, I am keen to share my findings and recommendations in several ways.

There is a key message that should preface any mode of presentation. Firstly, it is important to emphasise strongly that the message coming from this research is NOT that all IT professionals are on the Autistic Spectrum. Although the incidence is higher in the STEM professions, my research does not assert this as a blanket view of all IT professionals. The clear message is that a majority of IT professionals share common behavioural traits to those explored within the Autistic Spectrum, and therefore the approach to coaching should be adjusted. This should also preface any future training material that is developed and be made clear in all presentations. This is an important point for others who develop materials based on this research.

Writing

Written articles, both academic and practitioner based are a clear way of disseminating the findings. The positioning of such articles is important in order to achieve a broad reach across academia, professional bodies and organisations. I will approach, Coaching at Work, the (British Psychological Society (BPS) Coaching

Psychology Special Interest Group, and the National Autistic Society in the first instance.

In Appendix 7 page 214 I outlined a guide for coaching IT professionals which includes a coaching framework and guidance on coach style and relationship. I will continue to develop this into a document to support coaches and their supervisors.

Presenting

I plan to present my research at relevant or appropriate coaching conferences. This will also allow me to disseminate my coaching to a wide audience. Another outlet I am exploring is to run a webinar on the topic and findings of my research. This could be something that I do via one or more of the professional bodies.

- Contribute to training for new coaches. It would be helpful for inexperienced coaches to understand that it is acceptable and in fact more effective to break the traditional mould of non-directive coaching and give an alternative perspective to their clients.
- Given the altered framework of coaching, it would seem sensible to include this information in the training of supervisors.

6.9 Recommendations for a wider group of stakeholders

This section considers the relevance of this research to other groups who may benefit from the outcomes. I believe that it is important to raise the awareness of these findings with all the following organisations using the methods described in 6.8 as well as through networking across the profession.

The professional coaching bodies generally focus on a mode of coaching such as business coaching or executive coaching. The key exception is the ICF who represent a broad church of coaching. They also perform an accreditation function based largely on traditional ways of coaching. This approach could be an issue for those

coaching IT professionals and other clients with similar traits, even impeding their accreditation. It would be interesting to pose a question about this given the findings of my research.

In a similar way most of the supervisory bodies hold a traditional world view of what should be delivered in coaching and why. Contrary to other helping professions where supervision follows the therapist specialism, the model of coaching supervision is different. Thus, in coaching supervision, supervisors could end up coaching someone who works to a completely different theoretical underpinning. There is potential for the supervision to be ineffective if this is the case. The findings from this research should be disseminated amongst supervision trainers to enable them to incorporate this into their teachings.

Buyers of coaching, both external and internal need to be aware of these findings so that they can select coaches in a more appropriate way, tailoring coach selection to their organisational needs as appropriate.

Autism/Asperger's organisations work in several different directions. They carry out and sponsor research, support people on the spectrum and the families of those people. Some such organisations work to recruit and support this population in the workplace, working along employing organisations. The outcome of this research can support their recruitment of coaches and the advice they give organisations.

I currently work as an associate with **Genius Within**, an organisation that arranges coaching in the workplace for those with neuro-differences. This research is pertinent to clients on the autistic spectrum as well as those displaying similar behaviours.

7 My Personal Reflections

7.1 My personal journey

I would love to say that I progressed steadily throughout the performance that is a doctorate. Sadly, instead of a smooth journey it was more of a lurch through this tortuous process, yet it became strangely addictive. I just don't know what gave me the determination to cling on despite the rollercoaster that is life; maybe because of it? Maybe I am an addict to learning as many of my friends have said; if this is the case then it certainly is extreme learning.

During this doctoral journey to this point, life has thrown its usual curved balls. I have persisted through personal illness, mourned the loss of beloved pets and, I hope, supported my children who although adult are still my children. I relocated my elderly mother from Wales to be close by and then had the heartbreak of persuading her into a home. My beloved son emigrated to Australia and yes I was the weeping Mum at the airport. I finally had to endure through the breakdown of my long marriage. But, please don't be sorry for me, life has had highs too. The biggest high is the love from my friends old and new and the support of my children. Reaching the end of my writing up is a huge high, not quite there yet, but very nearly. This doctorate has been my scaffold through good and bad times and for that I am grateful. Part of the scaffold has been the support of supervisors and peers, who have dragged me kicking and screaming to this point. One huge learning has taken place. I have learned to accept constructive criticism and act on it – about fifty-five years too late but, as they say, better late than never.

7.2 My research journey – the evolution

The process of carrying out this research and writing this thesis has been a real learning experience. I think this journey happened because of a conversation with Carole Pemberton, a former doctoral candidate at Middlesex. I was talking about my work with IT professionals and my understanding of Autism when she suggested that I investigate this further. She nudged me towards a doctorate and to a conversation with Annette Fillery-Travis, who was also interested in my thoughts. I applied to the

university, muttered about Autism, IT professionals and coaching and they gave me a place. That was it. I was trapped.

Having a vague idea proved to be the easy bit; narrowing down the focus to something fit for doctoral research was another. I also had to face the fear that I may be delusional and that coaching this group differently was of no value to the wider coaching community, or the client. This has taken the duration of this doctoral project to get over. One critical point was the lack of literature on coaching the IT profession or any of the STEM professions come to that. The support of my supervisors and coaching buddies kept me going and in fact this was the greatest factor in getting, almost, to the point of finishing the project. My first iterations involved both quantitative and qualitative elements, pandering to my comfort zone of quantitative research. My focus was too embedded in autism rather than coaching and subsequently became too wide. I moved forward and dropped the quantitative element, which in any case would only have repeated research carried out by others more eminent than me. Additionally, my idea of asking clients to answer a questionnaire to indicate their preference for systematising over empathy (Baron-Cohen and Wheelwright, 2004a) could raise ethical considerations.

By the time I had PAP approval, my aim was:

To identify the impact of individual differences displayed by the IT profession on the effective outcome of coaching interventions.

Although this remains an outcome of this study the direction of attack has been different. I have started my investigation from the coaches' perspectives, using experienced coaches of IT professionals as my participants. This change has also resulted in an altered coaching model to support those coaching IT professionals. My suggestions have not been without a degree of trepidation as this model flies in the face of more traditional models. However, I felt strongly about supporting this community of professionals as well as fellow coaches, so I continued. My plan had been to interview coaching clients although not matching dyads. I did interview two clients; however, this did not result in enough rich data, so I decided for this research at least, to talk to coaches and not clients. This unearthed another fear – would

anyone want to take part in this research? I felt quite apologetic in asking busy coaches to take time talking about their experiences with IT professionals. Again, one of my research buddies came to my rescue by introducing me to some of her colleagues who gave willingly of their time. The coaches who took part also spurred me on by their interest in what I was doing and their agreement that the process of coaching IT professionals needed to be different.

Establishing the methodology was another “breakpoint”. I did struggle with terminology such as paradigm, ontology, epistemology and so on. My supervisors spent endless sessions trying to drum it into me and I think at last, I am there. Without this support, I would have given up. My method also developed and changed. My data gathering remained as semi-structured interviews, in fact barely structured at all. I had planned to use a critical incident technique, however, although this was not abandoned totally, the focus of my analysis became a thematic analysis with any critical moments emerging. I wanted my interviews to be as free flowing as possible without guiding my participants to only look for critical moments.

During the research process I have learned so much about carrying out qualitative research in order to yield valid outcomes. Mainly I learned to drop my scientific, quantitative approach and value this rich data collected from a small number of participants. This was a slow realisation, I yearned for tens of participants or more for a while before I acknowledged the value of a small rich set of data that achieved data saturation. I think this was my “so what” phase. The findings seemed inconsequential at this time. Again, my supervisors and research buddies kept me going through this quandary.

Throughout the research process as can be seen, I have gained much from workshops with my DProf coaching research buddies. Their feedback based on experience has been invaluable as has their encouragement that I had something worthwhile to say. Through the interviews with other experienced coaches I learned that my own approach to this group of clients was not unusual and I felt validated in my coaching. Through presentations of research posters at two conferences I have felt validated

in my research from the reaction of other coaches and academics and seeing my ideas afresh. There have certainly been times when I have felt I was getting nowhere and others when my primary thought was “so what”. The three factors above, supervisors, research buddies and coaching colleagues thankfully have kept me going through these times of doubt.

7.3 My writing up journey – the exposition

I have separated out this stage of the journey because it is so huge. So many times, I have thought a chapter is complete only to share it with my supervisors who gently disagreed. I have been close to giving up several times through the writing up process and I am not sure I was discouraged from giving up by reading a dissertation on why so many do just that at the writing up stage (Bloomberg and Volpe, 2016).

I feel as though during this process I learned how to write academically, painfully. I learned of grammatical faux pas such as dangling participles, which I had never heard of before. Learning to write and justify what I was saying was a novelty for me too, as was expanding on things. A long career in business, mostly in the IT sector, trained me to write very concisely and factually, so writing in a more expansive manner was difficult. I am grateful to my supervisors for working so hard to drag me through this process, even though I stamped my feet a bit at their comments. Writing the discussion was a challenge, I seemed to be stuck in a mindset of “this is the question, here is the answer, the end”. As ever, my supervisors and research buddies pulled me out of the trench I was stuck in. By talking it over and answering their questions I gradually saw how to discuss the findings properly. At this point it also helped me to read other theses, in order to see the way fellow doctoral candidates tackled the discussion chapter. I also learned that much of the writing up process is cyclical and I have been back to my review of literature time and time again. I have obsessed over word count; I was stuck at 29,000 words for what seemed an eternity and I seemed to be deleting more than I added. Eventually, I took a deep breath and just wrote having been given the advice to “just write” and do not worry about the writing being perfect as it can be honed later.

I am nearly there now, just one more piece to add to the review of literature.

7.4 Epilogue nearly.

So, how do I feel now? Exhausted, relieved and maybe a small sense of loss for the journey that is done; yet excitement too for the journey that is about to start.

Those of you who suffered my writing from Part 1 of the doctoral process will know that at the core of my being is Welshness and for the Welsh through the centuries learning has been at their core. My family, from those that stayed in Wales to those who went to Patagonia, all learned throughout their lives. I am no different – without learning, there is no life.

This quote from my favourite poet sums up how I feel about this product of my endless journey of learning. Of course, he is a Welsh Poet.

“Don't be too harsh to these poems until they're typed. I always think typescript lends some sort of certainty: at least, if the things are bad, then they appear to be bad with conviction.”

Dylan Thomas

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9 Appendices

9.1 Appendix 1 Summary of Myers Briggs Type Indicator of personality type

Appendix 1: The Myers-Briggs Type Indicator (MBTI) of Personality Type

Summary of MBTI Behaviour Preferences	
<p>Introversion: (I)</p> <p>Inwardly oriented; Prefers solitary pursuits or small, known groups; Most comfortable with detailed knowledge based on concepts and ideas; Reflective.</p>	<p>Extroversion: (E)</p> <p>Outwardly oriented; Prefers people and things; Comfortable with new groups, enjoys interaction; Most comfortable with breadth-of- knowledge and quick action.</p>
<p>Sensing: (S)</p> <p>Perceives information through senses; Relies what is real or experienced; Practical Realistic, and Observant; Prefers factual, precise and concrete data; Best suited to practical, hands on approach, based on common-sense. Typified by a “specialist”.</p>	<p>Intuition: (N)</p> <p>Perceives information as a whole, through associations; Looks for meaning and possibilities beyond the immediate; Relies on creativity and imagination; Best suited to complexity and exploration of theoretical ideas or new possibilities. Typified by a “generalist”.</p>
<p>Thinking: (T)</p> <p>Makes judgements objectively, dispassionately and analytically; Logical and consistent. Uses formal reasoning methods and ignores personal factors. Typified by a “scientist”.</p>	<p>Feeling: (F)</p> <p>Makes judgements subjectively and according to human or societal factors; considers personal values; Does not rely on logic but concerned with ethics and justice; Empathetic.</p>
<p>Judgement: (J)</p> <p>Prefer orderly and controlled experiences; Rely on plans and orderly existence; Reluctant to deviate from goals set according to initial judgements; Decisive.</p>	<p>Perception: (P)</p> <p>Willing to respond to changing situation with change of goals or strategy; Comfortable with flexible arrangements and keeping options open.</p>

Figure 9-1 The Myers Briggs type indicator (MBTI) of Personality type. (Bradley and Hebert, 1997, Capretz, 2003)

9.2 Appendix 2 Preferred Educational formats

Educational formats typically:

- Involve large social groups
- Are noisy
- Expect the student to edit what the lecturer is saying into short-hand notes
- Expect the student to switch topics after 55 minutes
- Expect the student to do two things (listening and writing) at once
- Expect the student to sit in any available place
- Expect the student to concentrate even with whispering from other students.

In contrast many students with Asperger's syndrome may:

- Prefer to work alone in silence
- Prefer to go slowly and methodically
- Prefer not to have to edit (for fear of losing important detail)
- Prefer to error-check, to be sure that a fact is a fact
- Prefer conditions to remain unchanged (same seat, same lighting etc)
- Prefer lack of distractions
- Prefer to see all the logical steps or evidence for each statement. Rather than accepting assertions in the absence of explanations
- Prefer, once they start a topic, to stay on that topic for many hours, often ignoring drinks or lunch or even to go to the bathroom
- Become irritated by the intrusion of other people into their space
- Become anxious if other people talk to them unexpectedly
- Become irritated by human errors in hand-outs
- Become irritated by a chatty style of teaching
- Become irritated by the whispering students in the row behind them who want to talk about irrelevancies

(Baron-Cohen, 2008)

9.3 Appendix 3 Relationships of dimensions of teaching and orientation to learning (Taylor et al, 2000)

<p>When your belief in learning is: Stimuli in external environment Internal cognitive structuring Affective and cognitive needs Interaction of person, behaviour and environment Internal structure of reality by individual</p>	<p>Your orientation to learning is predominantly: Behaviourist Cognitivist Humanist Social learning Constructivist</p>
<p>When you identify the purpose of education as: Producing change in desired direction Develop capacity and skills to learn better Becoming self-actualised, autonomous Modelling new roles and behaviour Constructing knowledge</p>	<p>Your orientation to learning is predominantly: Behaviourist Cognitivist Humanist Social learning Constructivist</p>
<p>When you view your role as a teacher is to: Arrange environment to elicit desired response Structure content of learning activity Facilitate development of the whole person Model and guide new roles and behaviour Facilitate learners' negotiation</p>	<p>Your orientation to learning is predominantly: Behaviourist Cognitivist Humanist Social learning Constructivist</p>
<p>When your view of the learning process is: Changes in behaviour Internal mental process A personal act to fulfil potential Interaction with and observation of others in a social context Construction of meaning from experience</p>	<p>Your orientation to learning is predominantly: Behaviourist Cognitivist Humanist Social learning Constructivist</p>
<p>When your efforts with adults are: Toward meeting behavioural perspectives Competency based Toward skill development and training Toward cognitive development Learning how to learn Correlating with intelligence, learning with memory with age Framed by andragogy Toward self-directed learning Toward socialisation and social roles Framed by mentoring Orientation to the locus of control Framed by experiential learning Toward perspective transformation Toward reflective practice</p>	<p>Your orientation to learning is predominantly: Behaviourist Behaviourist Behaviourist Cognitivist Cognitivist Cognitivist Humanist Humanist and constructivist Cognitivist Social Learning Social Learning Constructivist Constructivist Constructivist</p>

Figure 9-2 Relations of dimensions of teaching and orientation to learning. (Taylor et al, 2000)

9.4 Appendix 4 Informed Consent

Informed Consent Form for Coach participants.

The purpose of this document, in accordance with the requirements of Middlesex University's Code of Research Ethics is to make explicit the nature of the proposed involvement between the researcher and the person or organisation agreeing to supply information (the participants) and to record that the research subjects understand and are happy with the proposed arrangements. The researcher in charge of this study is Jane Short of Coaching Visions Ltd, who is a Doctoral student registered with the Institute of Work Based Learning at Middlesex University. She is being supervised by Dr Annette Fillery-Travis (Head of Department) Complaints about the conduct of the research or principal researcher may be addressed to Annette Fillery-Travis, the academic advisor and point of contact for university regulations at the above address.

The study is:

"What are the common elements that lead to effective coaching outcomes for IT Professionals?"

The Research: The purpose of the research is to inquire into what happens in coaching interventions with IT Professionals.

Use of data: The aim of the study will be to present the research in appropriate contexts, academic and professional, through publications, conference presentations, teaching etc.

I will refrain from using any data that the participants consider sensitive (e.g. when there may be a danger of identifying participants or working partners, individual or organisational clients).

The participants will be given an electronic pdf version of the final thesis on request. To comply with research guidelines, data generated will be kept securely in paper or pdf electronic form for a period of three years from the data gathering period or submission and reward of the degree, whichever is the earliest. The materials in the final thesis are the copyright of the author; they are not to be reproduced in whole or in part without the author's permission, and if quoted or reproduced they must be attributed to the author.

Anonymity of participants: All information acquired will be treated with appropriate confidentiality. Unless specifically agreed otherwise, references in publications, talks etc to individuals or organisations etc will be anonymised and features which might make identification easy will be removed. It is also understood that, as participants, you are free to withdraw from the project at any time and your data will be deleted from the data collection process and results of the study until the data has been absorbed into synthesis.

9.5 Appendix 5 Participant Project Brief

Coaching IT Professionals – Should We Do It Differently?

Who am I?

This research is based on over 25 years' experience in IT leadership roles and current experience as a specialist coach of IT professionals. I have worked in different roles from senior development positions to IT directorships and Head of Operations for large UK and multinational companies. These companies cover organisations such as Ashridge Business School (IT Director), Centrica plc (Business Systems Manager) and Nokia (Head of IT Operations).

This combined with both coaching qualifications and as a psychologist has given me insight into the behaviours and needs of IT Professionals and has contributed to my decision to do a Professional Doctorate in this area.

Why is this important?

IT and Technology Professionals are a significant part of the knowledge economy and driving much of the change in many organisations. The sheer amount of business change requires a significant adjustment in the working practice of such workers. The old image of IT as a backroom activity with employees isolated from the rest of the business is no more; the two must work hand in glove.

There is a significant body of research and anecdote referring to the different persona prevalent in the IT profession. This is what makes IT Professionals technically good in their chosen field but can stand in the way of them deriving the maximum benefit from the coaching development that is on offer.

My research will investigate the different needs of this IT population in terms of coaching within organisations. I plan to deliver a coaching framework specifically aimed at the IT profession, which will ensure effective outcomes for the client, coach and organisation.

How can you help?

I am interviewing IT Professionals who have either volunteered or been sent for coaching from a professional coach. During the interview, I will be exploring your experience when being coached and moments when the coaching made a real difference to you.

I prefer to carry out these interviews face-to-face, but a Skype call would be possible. Overall the interview will last about an hour. I am happy to come to your workplace, otherwise I will organize a convenient location. I would like to record the interview so that I can analyse the data thoroughly. I would be grateful if you can agree to this. Before the interview, I would like you to reflect on one or two coaching sessions where there were moments that made a real difference and what prompted these moments. Consider also the purpose of your coaching sessions

The recording and transcription will be anonymous and there will be no reference to individuals at any time. You will be able to withdraw at any time and the content of our session is entirely confidential.

Jane@theshorts.biz [07889827476](tel:07889827476)

9.6 Appendix 6 Transcript of interview 3

The following is a transcript of one of the participant interviews. The highlighted areas show the references I have used either in part or as a whole.

Coach 3

JS Thank you again for agreeing to take part. Everything you say will be completely confidential. Your name won't be associated with it in any way. If you decide either part way through the interview or later on after you have thought about things, you are welcome to contact me or say that's it I've had enough I don't think this is the right thing to do. I will be applying by usual ethics. If during this session, you have mentioned a client's name then just tell me and I'll just strike that from my transcript. I am really looking at a couple of clients that you have coached and things that have happened during the coaching and how you have progressed. Particularly looking at things that have led to turning points in your coaching or critical moments.

C3 I'll just talk in terms of coaching style and typical clients. I think I talk about myself these days as a brain wise leadership coach. The reason I talk about that is because it captures the two bits. First of all, I do focus on the leadership end of things. I'm not just working with CEOs and things like that, it's not that grand it's more the aspect that I work on with people is less their technical performance in their current job but the leadership aspects and often it's is dealing with people transitioning from a role of senior manager into function leader or then function leader into general manager etc. Those people where the leadership part of their job becomes the more important part of their job. And I say brain wise because probably in the last ten years since I have really focussed on it, I've more and more modified the way I work with people to recognise what I understand about the way the brain works. I studied a lot of psychology, a lot of traditional psychology and most of that is supported by brain study there are some bits where it is kind of like, its more effective if you do it this way. Interesting that often leads to a little bit more directive style also because of my background as in that I came out of business and consulting you long career in that and did my own leadership work with my own coach and coaches I should say over a period of time I have probably seen my role as a coach slightly differently. I don't know whether you are familiar with the situational leadership model or the idea of you know as a leader you have different styles that run through from directive coaching, supporting, then delegation. I apply that model in my way of coaching. In the sense that I see my job as a coach is to help people make a transition from here to here. Initially I can be quite directive and then we get into the true coaching as it everyone defines it, non- directive and then there is a stage towards the end of our contract where I am really there as a supporter, encouraging – say "yes, sounds that has gone really well." And then the delegation is the point at which we say I think we are done. I have that model in my head for my coaching.

I'll give you two examples who fit the bill, at two slightly different levels. The first being an IT director, quite a well-established and successful IT Director. The coaching was really about him making a decision about whether he was capable of and whether he wanted to try and take on the CEO role. You know it was a do I just accept I am as high as I can go or do I want to make another step. Not surprising that that one was very much on the leadership aspects and nothing at all to do with being an

IT guy particularly It has some interesting insights about where his blocks were. Not unique but what everyone would have expected about an IT Director trying and step into a CEO's role.

The other one I have got would be a more classic IT programme manager. He was quite senior he ran quite big large scale IT programmes and I coached him around the fact that he didn't have much impact or influence in steering committees and the executive committee and therefore his potential route to IT Director was probably going to be blocked if he didn't do something about that. Do those seem suitable?

JS I think both of those sound really interesting. They are different in their own right.

C3 Let's deal with the programme manager first, because he was really a simple character, nothing's completely straight forward, but if you like it was a very straight forward piece of coaching. He was very open. The real turning point, I can't remember how we came into it but it started I think at the beginning because his view was he needed to learn about this may be something that you find is typical of the IT guys, that they have already worked out their answers before they come in even if it is completely wrong they have an answer. So, his solution was that he needed me to teach him about body language. So that was his opening thing when we first were first coaching. He said I hope you are going to help me understand how to read body language. I don't know what he was expecting hmm, I don't think we need to do that but anyway. After a little while, I just gave him a very directive thing which was the next steering committee meeting I want you to put down your report and just take a risk of taking five minutes to look around the table and then we'll see what happens. When I next saw him he was bouncing, he was full of, because it was a trivial thing, it had never occurred to him to look at people, even though he was asking me to teach him about body language he didn't do the exercise about looking at people he came back and he was bouncing and I remember him saying the one that really struck me; I never .. the CEO and the Finance Director really hate each other don't they. I was like yes, they do. But he had never noticed it before because he had never looked at them and he realised that actually had complete capability, because he wasn't on the autistic spectrum. I am always clear with my clients that there are a small group of people for whom that doesn't work because they actually have some mechanical difficulties with doing that. But for most of the other people who say can you teach me body language it is just look and allow yourself to look. He was a good example. We obviously went on and did some more coaching to build on that, but the big breakthrough point was when he realised he wasn't deficient in some way. He had just never done the right thing. His attention had always been elsewhere, he had his attention on what he was saying or if they were presenting he would be looking at the slides that they were presenting and working on the content. So, he was so focussed, very focussed. I'll stop and let you ask any questions but that is the bit I remember as the turning point. I can't remember much about how we took it on from there, except that it was very easy. It was kind of like he was on a roll and we quite quickly moved on to the supporting end where he was doing things and saying, "I tried this and this seemed to work" and all I could say was yes, well great.

JS When you first met him did you know him before you started coaching him?

C3 No, no I didn't. I knew the client; I knew the business, but I didn't know him.

JS When you first met him how did you build up that relationship?

C3 One of the things that made it fairly easy was that he was pretty open and there's a lot of people that I coach are. He hadn't been sent to it; he had chosen to come to coaching. And he had this idea that he needed to learn about body language. So he understood that he wasn't reading signals very well, he didn't understand the politics, he didn't understand what was going on other than he was kind of a bit lost by this. But he jumped to the wrong conclusion, that he somehow needed to learn a textbook approach to ... So he was very up in his head. Now, can I answer your question about how did it break down? I think part of it comes from my background in that I think I don't threaten what I mean by threaten is I don't look like I'm a naturally soft and bubbly. I'm not treating him as if I am an alien. I come from his world. One of the things I over stress when I am with clients like that I spent 15 years as an IT consultant and I was an accountant before that. I am as geeky and technical as they come so I don't have any judgement around I am naturally soft and warm and cuddly. I probably don't attempt to be overly soft which is probably why I emphasise the brain wise it is kind of like this is scientific, this is quite simple and straight forward. I am quite matter of fact. I am definitely not, I couldn't if I wanted to, I'm not, I really meet them where they are. I don't start with let's have an image of this. I may do that work later but I start with it's pretty scientific. What we are doing is pretty much about how your brain works it's all science. So when I suggest to him just look at people it is kind in that it's a scientific experiment, trust me. Often with clients I talk about attention and the fact that even with our visual, what we see is what we are paying attention to, it's not an objective everything that is out there. So I am a quite sciency approach to it. You do earn the right to be more touchy feely. My clients see my CV and can see that I don't look like I come from a therapy, HR. They get quite scared when they see psychotherapist on the background. I am just a business guy who now coaches.

JS And have you found that useful with your clients?

C3 All of them, yes. I think you tend to get the clients that work for you just somehow the world works like that. I wouldn't want to say that I stay sciency all the time but for a lot of them it's the reason they go to me. Almost my subterfuge I get them to do other types of work, but they relax quicker because I'm a normal guy. They get that I don't look down on them for being a weird techy geek or if I refer to it jokingly it's from the inside. It doesn't have that sense of judgement which is very helpful with the IT guys. I don't see them as weird; they are perfectly normal. It's a conversation we never have because I know they are normal. In my leadership career I was lucky enough to, towards the end I had a period in which for various odd reasons I had to lead a business unit that included a hundred pensions actuaries. Pensions actuaries are very specialised. I know nothing about their work but it really helped to do that because you realise you can have an expectation that a pensions actuary is completely weird and make IT people look hugely social but it's not true, they range just the same as everyone else. So, he was a good example and I think that is how I built the trust and that allows you to do other work. His experience of having a breakthrough meant he was very open to whatever I wanted to suggest he should do.

C3 If I talk just a bit about the other person as I realise that there is a similarity. The IT Director thinking about being a CEO. Where are the similarities? The similarities as I now, I wouldn't have expected this but talking it out loud. He also came in with his own ideas, he'd been there done it, he spent a lot of the first meeting telling me what he wasn't going to do in coaching rather than what he was. I don't do this and I don't do that. Don't expect me to change from this to the other. He kind of laid out his boundaries and ground rules which I am pleased to say we knocked through later down the road. Initially he wanted to do it without changing at all. I don't do people I don't want to do crowds. I don't want to have to get involved in the politics. He had a whole load of notes that he wasn't going to do. I suppose the breakthrough with him that I remember early on, maybe the second session where I always try to get them to work to something small and specific. There was a negative interaction he had had with one of his colleagues which was regular. Half of his message that he talked about why he would never go to any general management position was he picked too many arguments with his colleagues. And having had one of these things I think quite early on, the second session I got him doing some two-chair work. You know where he told me the story about the other person and we put that other person into an empty chair in the other part of the room. Then I move him into that empty chair so he is the other person and looking at it. His experience of discovery, that while he thought he had always been able to see the other side because he thought about it, his experience was that when you physically move and sit looking at yourself from another chair it looks so different, it was quite shocking to him. The commonality with the other case was he was completely surprised that the world didn't work the way he tried to work. He was a clearly bright guy the same as all people who worked in IT. He worked for a very large organisation and he was a real, where the HR Director said to me we've had various IT Directors over the last 15 years and he is the only one that has succeeded. He is the only one that can fix this problem. He was very good at his job, but as a result he believed that he could intellectually work out everybody else's position and it was quite a shock to him to discover that if you actually sat in their position it didn't look like that at all. So he was completely surprised by that. That also then facilitated us doing more work together around. I said there may be a few other things that you are completely certain of are maybe not as fixed as you think they are.

JS That's a really useful technique, the two-chair one.

C3 Yes, I use the two chair method quite a lot, particularly in IT, it's interesting I wouldn't have .. I still but my caveat, I'll come back about personality, but maybe because of the types of personalities that's often one that regularly comes in quite early. I need to shake the belief that how I see the world is how it is. That's one thing I don't think is unique to IT people is my contention but it's certainly something that is common in the IT world because coding and if you go right back to their roots where they start a coding thing. However senior they get the all started somewhere in a junior level role. The one thing IT has is certainty. Things are this or they are that. They are very black and white. And I think that's one thing you have to shake quite early which is, just because you think something is true doesn't mean it is true. Also, even more fundamentally than that things are not either or and perspective makes a difference. I can be right and also from your perspective you can be right. It's not that one has to be wrong if the other is right. That's something that takes a long time for lots of people to get their heads round. This is a typical Autistic Spectrum behaviour. In their own way, any of the technical professions, accountants, you get that, there's

probably more variety but there are plenty of people, particularly in my later years I was running a tax group, some of the tax consultants are very similar as are some of the technical people with the banks, the fund managers clearly on the same spectrum as the IT guys. That's why I make my comments I don't think its IT guys uniquely, there are people who are more comfortable looking at the certainty of the numbers on a computer screen cos that's safe.

JS Yes, I just chose to focus on IT because my background is in IT.

C3 Absolutely and I think it is a great thing to do actually because it's no harm if those things make the links. What I see is a lot of effectively those personality traits that lead people into a career in IT mean that you will get a heavy overlap between and these types of personalities. To me they are the people who are inherently uncomfortable with ambiguity, particularly ambiguity of other people they are very fearful of contact and intimacy. They prefer the safety of the machine. It's either this or its this, it's not going to surprise you. It's not going to do something you didn't expect and they can control the world in their head. When they plan something and they think about it even if it is a really complicated project but it's under control. People are never under control; people do unexpected things in their world. Especially if they are not from the IT world. That's actually one of the things I suppose, why do I like and more and more emphasis the brain-wise. It's because I think that's something that I tune into. The idea of predictability is because once you have shown them the new rules so if you can convince them that actually that most behaviour comes from emotion not from rationality you can show them that behaviour is pretty predictable and that the argument they got from this other person actually shouldn't necessarily be a surprise. Once you sit them in the chair and see how I was coming across to them, the fact that they got irritated really isn't shocking and you kind of.. So, I do a lot on, a bit like with that project manager. If you focus on the right things, if you put your attention in the right place you won't be surprised. That's very calming for them. They get very confident as a result of thinking so it's not that these people are behaving irrationally, well they are behaving irrationally, but they are behaving very predictably. It's not random, so they start to realise the responses they get are not random at all they are very predictable. They are just not rational they just were emotional. Once you choose to focus on the emotions, not to be emotional but to say I wonder how he feels about that it opens up, again what I find is that all very intelligent people, once they have got something that is working they are very quick on putting it into practice. Both of those people would fall into my category of clients where it was really easy, once they went with something, they did it. They didn't go, that's an interesting idea and then the next time you see them they haven't tried it. They were people who were making a note and saying right the next meeting I'm going to do this and they would do it and they would report back. They had a great willingness to follow through. They are very dogged in pursuit of the answer and if they have got something that they think works that they can apply and if it works they'll keep trying it and move very quickly.

JS One of the issues with AS is that they go into great detail. Have you found that?

C3 I have to say less so. I haven't seen an overly detail issue, but this is probably the level I coach at. Even at senior manager level, if you get bogged down in detail you would struggle to manage the workload etc. You might not be so successful. But I am also wondering if I'm much less knowledgeable. People learn what is appropriate in context, the job becomes something where they know the level of detail that this

conversation requires and a more social conversation is less easy to judge. The strange answers come when people have stopped concentrating. It is quite hard work for a lot of the people at that level. They have to concentrate and maybe is genuinely where I say I am no threat to them, that I understand where they come from. To do the coaching work I really have to concentrate too. I wasn't a natural people person who did this, I had that same transition for myself. I still have to concentrate to judge a room and to judge what is there. If I am just switched off I can get it wrong. So I really get where they are coming from.

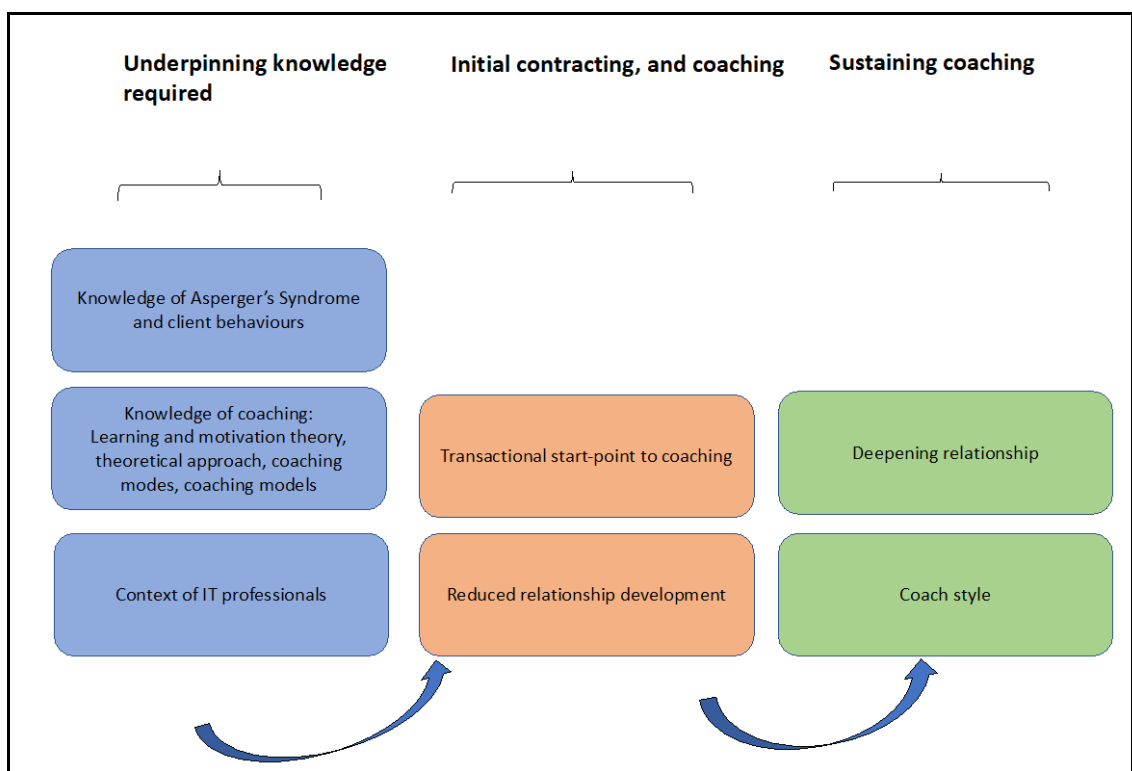
In both those examples probably what made it a turning point was a dramatic experience of this stuff works. It's worth going with. It is very hard, it's always the need for that because the big challenge is getting people to stop believing that everything is rational and that what I am thinking is the truth. I don't get how this other person can see it differently because this is how it is. That shift that almost that you get in childhood development that stage where you get the theory of mind. Some things do not quite work at that point and they really have an intellectual version of I think I understand where the person is going but it is so biased by their own view that they really struggle to get that something can look completely different from another person's point of view. I suppose that's why in many ways we have fancy words in business we talk about EQ rather than IQ which is basically just theory of mind to a greater or lesser extent. I see that, all of my clients are from what you call the high IQ industries and I think therefore that is what I see, a lot of a high IQ people suffer from that. They have got so over-reliant on using their analysis they just can't let go. They have to learn the "both and instead of, either or". This part of the brain only has got right and wrong it doesn't do both and, they have to learn to use the other side. Once I have their trust many of the things I do is trying to get them to use the right-hand side of their brain. Using pictures, imagery, storytelling etc. to try and say actually when you look at things that way then you see it differently. But you have to win their trust first.

9.7 Appendix 7 Guidance material for the coaching community.

This guidance material presents a framework of coaching for this sector, the process of that coaching and a list of guidance points relating to the key stages of the framework. It is a foundation for the future development of training and guidance materials for coaches.

It is important to emphasise strongly that the message coming from this research is NOT that all IT professionals are on the Autistic Spectrum. The message is that a majority of IT professionals share common behavioural traits and that as such the approach to coaching should be adjusted.

The Framework of Coaching



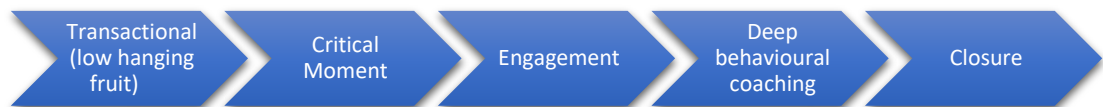
Underpinning knowledge – this comprises knowledge from the literature detailing coaching models, coaching modes, theoretical approaches to coaching. It also includes learning and motivation theory. These form the backbone of coaching and all coaches need to understand them, for all clients. Additionally, to work effectively

with IT professionals it is important to understand their context and have some knowledge of Asperger's Syndrome to understand their potential behaviours.

Points in initial contracting and coaching—this is often a shallow connection at first and the initial engagement is particularly concrete and tactical. This early relationship may have to be very matter of fact and a distance maintained between coach and client. It is during this phase that critical moments can occur, as the coach pushes for a better engagement.

Sustaining coaching – this consists of the coach style and the client behaviour followed by the subsequent relationship. The coach style tends to be direct and matter of fact in order to work well with clients of this personality type and behavioural tendencies. The initial relationship may well be shallow, but with an understanding of the predominant behaviours and personality type as well as a critical moment, a significant relationship can be built.

The process of the intervention



Initially the coach works transactionally with the client, mainly addressing concrete issues. This gives the client a sense of achievement and assists with deeper engagement. At some point the coach and client may experience a critical moment which could be a turning point for the intervention leading to deeper engagement which allows the coach to then look at coaching behaviour. and ultimately a richer relationship. The intervention then proceeds to closure.

Guidance points

Points to consider regarding coach style
<ul style="list-style-type: none">• Be very clear for your client, using clean language• Be direct, don't shy away from telling your client what is required• Use concrete tasks in the early days• If you have less experience with this client group, use a solutions-focussed approach and a challenging model such as FACTS

Points to consider regarding dealing with client behaviour
<ul style="list-style-type: none">• Leave any discussion of feelings until the relationship with the client is fully formed• Be consistent, doing what you say you will do• Take a behavioural stance to the coaching engagement• Research shows these clients are often reluctant, tackle this first• Do not use small talk
Points to consider concerning relationship
<ul style="list-style-type: none">• Be direct and matter of fact, this will help initial engagement with the client. This means being unemotional and try to mirror the client's demeanour to an extent• Do not be judgemental, important for all clients but this client group often tends to be more defensive• The relationship may take longer to build, be patient• Be aware of the problems these clients face in their field of work• Understand their reward system, it may be different