Voluntary Occupation Change: A Social Psychological Investigation Of Experience And Process

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Abstract

Despite a high incidence of change in adult careers, there has been relatively little research in this area. The research programme presented here aimed to explore the experience and process of career change, focusing on voluntary change of occupation. The programme comprised two studies. The first study was qualitative and exploratory. Interpretative Phenomenological Analysis was used to identify salient themes in the experience of eight women who had recently changed occupation. From the interpretation of their accounts, threats to identity and negative emotions appeared to contribute to their initial thoughts of changing occupation. The participants seemed to find a new occupation without a systematic search. Perceiving a clearly envisioned possible self in the new occupation and positive emotions about the new career both appeared to facilitate their decision making.

The second study built on these findings. Taking a quantitative approach, a longitudinal study was designed to test specific hypotheses and to investigate generalisability. Four questionnaires were emailed at one-month intervals to a sample of 315 working adults. Analysis supported the relationship between thoughts of changing occupation and threats to identity. In addition, perception of a possible self was related to action to change occupation. A structural model of the process of occupation change fitted the data and panel analysis on the longitudinal data supported directional relationships. A new framework for decision making in careers was proposed. The research programme contributed to theoretical understanding of occupation change, empirical evidence on the process of occupation change, methodological innovation with new operationalisations in this research area for threats to identity and perception of a possible self, and to application in career counselling.
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Niamh Murtagh

19th August 2009
To my mother
Angela Murtagh

And in memory of my father
Martin Murtagh

And my father-in-law
Douglas Gregory
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Chapter 1 Introduction and Overview

1.1 Why study Career Change?

For many decades, career research worked from the assumption of one career for life, which typically began with a choice in late adolescence and ran along predetermined lines with little change throughout working life. A vast body of literature has been published on career decision making by teenagers or college students\(^1\) but comparatively little research has looked at career decisions later in working life (Sullivan, 1999). However, the assumptions of career as continuous have been challenged in recent years.

In the UK between 1998 and 2003, 66% of the workforce changed jobs (McNair et al., 2004). Twenty percent of the workforce made two or more changes in this period (ibid.). OECD figures showed an average employment period of 8 years in the UK between the mid 1980s and mid 1990s, and presented evidence that more than 40% of British male workers over 25 were in their current job less than 5 years (The Economist, 1998). Changes have included not only jobs but also careers. The study by Arthur, Inkson and Pringle (1999) in New Zealand found that, of their sample between 25 and 47 years of age, 62% had changed occupation within the previous 10 years and concluded: “Non-linear careers appeared to be the rule rather than the exception” (p. 164). Bolles (2006), a major US writer on careers, suggested three career changes in working life and a recent report from the Skills Commission (2008) in the UK also suggested, on average, three different career areas in an individual’s working life.

Many commentators have ascribed the high incidence of changes in careers to recent trends in external labour market forces, such as technological advances, globalisation and privatisation (Kidd, 2002; Storey, 2000) but others have argued that the rate of change has not increased (Guest & Mackenzie Davey, 1996; Jacoby, 1999). Whether or not environmental events have altered the stability of careers, the data indicate that change is an essential feature of most careers (Ballantine, 1993; \(^1\)PsycInfo returned 3,694 references from peer-reviewed journals from 1959 to mid-2009 with the term “career” in the abstract and a study population of between 13-17 years or 18-29 years.)
Grzeda, 1999). The relatively recent focus on discontinuity as part of the experience of careers (Arthur et al., 1999; Bailyn, 1989; Sennett, 1998) has helped to alter perspectives on career research. Indeed, it has been argued that the career entry decision – the focus of much of the literature – should be considered merely as a one type of change amongst the many transitions throughout career (Kidd, 1998; Nicholson, 1996). Ballantine (1993) noted that mid-career change may be based on knowledge, experience and relationships: areas in which adolescents are likely to be lacking compared to adults.

Career change in adults is therefore an important research area. Arnold (2002) discussed how careers are now more problematic for individuals than they may once have been. His point that careers are characterised by less predictability, structure and stability than before seemed prescient in the global economic recession of 2008/2009. The changes in the nature of organisations from the 1990s have meant that, rather than the organisation taking responsibility for developing employees’ career, individuals are now required to manage their own careers (Arnold, 2002; Collin & Watts, 1996; Stoltz-Loike, 1996). Career change is risky: the individual has invested time and money in the old career, and status and self-esteem can be at stake in change. Specific competencies, such as knowing one’s values and one’s motivation, may be necessary for successful change (DeFillippi & Arthur, 1994). Research on career change may therefore be of great benefit to individuals facing change. There are potential benefits at societal level too. Sociologists see people as enacting not only their own careers (Weick, 1996) but also social structures in the career choices they make (Giddens, 1984, 2006). That is, careers are not fixed but are, to some extent, created by their occupants, and, in this creation, the social meanings and structures of careers are also influenced. Systematic research on career change then can inform perspectives on the structures of careers in society and of future careers.

In addition to building knowledge on career change in its own right, research on transitions can bring unique insights on the everyday experience of careers. If a career change may be seen as a rupture in the surface of experience, and compared to seismic plate action as a rupture on the earth’s surface, beforehand the general
topography may be described but afterward the underlying strata are exposed and may be examined in some detail. The rupture of career change may bring to light different layers of experience, of cognition, emotion, meaning and sense-making relating to the experience of work. Career change typically requires thought, reflection, perhaps planning, awareness of self, circumstances and environment. Change requires explanation and justification (Baumeister, 1991): how do you make sense of your story, to yourself and others? Career change then offers an ideal focus as a “microcosm of larger career dynamics” (Hall, 1996, p. 334).

Career changes can be of five types, as defined by Louis (1980): entry/re-entry, intra-company, inter-company, inter-profession and exit. Taking entry and exit transitions as special cases of change, inter-profession or inter-occupation changes represent the more radical transitions experienced in the course of working life. As such, inter-occupation changes may be more informative about the processes involved in change in general. Inter-occupation changes are therefore the focus of the current research. Career researchers have noted a growing interest in second and multiple careers (Feldman, 2002), together with a paucity of research and theory (Cohen, Duberley & Mallon, 2004; Feldman, 2002). The current research programme aimed to address that gap.

In order to position the specific focus of the research, it is necessary first to consider careers in their broader context. Careers are a property not only of individuals but also of society’s structures. Society’s institutions – commercial, educational, professional and economic – provide the frameworks in which careers take place (Barley, 1989; Thomas, 1989). The global and local labour markets provide opportunities and constraints (McMahon & Watson, 2008). Cultural norms and expectations influence career choices (Goffee & Nicholson, 1994), as do family (Hall, 2004), peers (McMahon & Watson, 2008), gender and social class (Gottfredson, 1981). Individuals make career decisions within a context, affected by environmental and social systems as well as their own psychological make-up. Career change may be triggered by external forces: the re-siting of a local industry to India or China, or economic recession, are examples of such forces. Rather than consider the broad swathe of possible influences on career change, the research
programme focused specifically on voluntary career change. In change that is subjectively experienced as self-initiated, psychological factors are more likely to be salient. The focus on the psychological necessitated sidelining other perspectives. In particular, there are social aspects to careers, including relatedness (Hall, 1996; Marshall, 1989) and the influence of others (Higgins, 2001; Ibarra, 2004): although of interest and value, these aspects were not explored. As such, the research adopted a framework of psychological social psychology, with a “focus…firmly on the individual”, rather than sociological social psychology (Wetherell, 1996).

1.2 Overview of the Research Programme

The overall aim of the research programme was to explore the experience and process of voluntary occupation change. The programme comprised two studies. The first study was qualitative and exploratory. Interpretative Phenomenological Analysis (IPA) was used to explore the experience of eight women who had recently changed occupation. From the interpretation of their accounts, salient themes suggested involvement of threats to identity and negative emotions in the initial stages of change, positive emotions and perception of a possible self in deciding on a new occupation, and a gradual, contextual and opportunistic approach to decision making. The second study built on these findings. Taking a quantitative approach, a longitudinal study was designed in order to test specific hypotheses and to investigate generalisability: four questionnaires were delivered by email at one month intervals to a sample of working adults. Multiple regression was used to test hypotheses on the cross-sectional data. Structural equation modelling further investigated the main relationships simultaneously and two equivalently well-fitted structural models were proposed. Panel analysis was conducted to test directional relationships on the main variables, and ancillary analyses investigated gender differences and the relative contribution of threatened aspects of identity. The empirical findings on identity threat, the role of emotion and decision making were supported theoretically. A model of career decision making was proposed. The research programme contributed to current knowledge empirically on the process of occupation change, theoretically in understanding the process, on methodology and on application in career counselling.
1.3 Structure of Dissertation

The dissertation is structured as follows. Chapter 2 presents an overview of the relevant literature, followed by a discussion of the epistemology and methodologies of the research in Chapter 3. The first study, the qualitative study, is described in Chapter 4. Chapter 5 presents the second, quantitative study and the results of cross-sectional analyses. Chapter 6 describes longitudinal and further analyses on the quantitative data. Chapter 7 summarises the research programme and its findings, discusses the theoretical implications and highlights the contribution to knowledge offered by the programme. The remainder of this chapter will outline in more detail the main contents of each chapter, in order.

Chapter 2 Review of Theory and Research

Chapter 2 begins by describing the meanings and definitions of “career”, and concludes that “occupation change” is a specific type of career change, and more accurately describes the current research than the term “career change”. However, the terms are often used interchangeably in the literature. Career change is a more general term and will be used as such. The chapter then discusses how career change is understood by the main career theories and concludes that these theories address a variety of factors pertinent to career but do not directly consider voluntary career change. In the qualitative study (described in Chapter 4), the salient themes related to the self-concept, to emotion and to perception of a possible self. Chapter 2 therefore reviews how these concepts have been dealt with, theoretically and operationally, in the career literature. It is concluded that, although the self-concept is used extensively in career theory, it is poorly conceptualised and weakly operationalised. Identity Process Theory is outlined as an extensive theoretical framework for the self-concept that may be pertinent in career research. The review of the literature on emotion suggests that definitions of emotion cannot yet be agreed but there is wide consensus on the function of emotions, as communications to the self and to others and linked with identity. There is growing agreement too that emotions play an essential role in cognition, specifically judgement and decision making. However, although the career literature acknowledges emotions as a
potentially important aspect of the experience of work, there is as yet relatively little research or understanding of the role that emotions play in career change.

A further gap in the career literature is identified on motivation in career decision making, and the concept of a possible self is described as potentially useful here. The evidence for the different experience of women and men in careers is described and it is concluded that this difference should be recognised in research on the process of career change. The large literature on career decision making is reviewed and a number of criticisms made of the dominant paradigm of rational decision making. Alternative perspectives on career decision making, which stress non-linearity, flexibility, emotion, context and chance, are argued to offer more insights into real-world decision making in careers. The contribution of existing models of turnover, that is, of moving job or career, is discussed and scope for further research identified. The chapter concludes by arguing for the need for further research on the experience and process of voluntary career change, paying particular attention to the experience of women.

Chapter 3 Epistemology and Methodologies

Epistemological assumptions fundamentally influence the approach to research and the methodology used. Chapter 3 reviews such assumptions underlying approaches to the study of careers, before explaining the research strategy and choice of methodologies for the current programme. A logical positivist approach is argued to bring benefits including causal explanation, identification of common patterns of behaviour, the potential for generalisation and the requirement for precision and comprehensiveness in operationalisation of constructs. Such an approach may be limited however, in that context and complexity may be minimised, and factors such as emotion and meaning may be sidelined. A phenomenological approach such as IPA offers complementary benefits, including a focus on the subjective experience of career. Context, affective and conative processes may be considered. A rich and holistic description of career experience is an intended outcome, which is of benefit to exploratory research. For these reasons, a mixed-method approach to the research was chosen, starting with an exploratory IPA study. The researcher’s personal epistemological stance as pragmatic realist is described, and a section on personal
reflexivity acknowledges how the researcher’s personal experiences of career change may have influenced the research.

**Chapter 4 Study 1 – A Qualitative Investigation of How Women Experience Occupation Change**

Despite the insights provided by extensive theory and research on careers, Chapter 4 argues that a number of questions remain regarding voluntary career change. An exploratory IPA study was conducted with eight women in the south-east of England, who had changed occupation in the previous three years. The salient themes emerging from the analysis were: identity as a motivating force, emotions around the old occupation, framing and reframing the context and the decision, taking action and self-regulation.

Alongside practical explanations for change, such as poor working conditions, psychological reasons were salient in all of the accounts. These psychological reasons appeared to relate to identity. Feeling unfulfilled, needing to grow, needing a “meaning and a purpose” and undermined self-esteem, for example, could be seen as a lack of support for valued identities. Such threats to the self-concept appeared salient in the participants’ motivation to change occupation. So too did negative emotions in the old occupation. How the participants framed their situation appeared pivotal. Barriers were often reframed in a way that enabled action: as a challenge, or as a temporary life phase, for example. The participants took action, often unrelated to careers, that became central to the occupation change achieved. Actions, such as pursuing an interest, appeared to facilitate career decision making in several ways, including by providing opportunities for experience which then led to the perception of a desired possible self. A variety of strategies for self-regulation could be seen in the accounts as the participants described their passage towards the new occupation. Of particular salience were the construction of certainty and continuity.

The discussion then considers how the major themes are supported by theory, and further research questions are generated. In particular, the proposal of threats to identity, and of negative emotions, as contributing factors in initiation of occupation change, and the contribution of perception of a possible self and of positive
emotions to achieving occupation change, require further empirical investigation. As the participants were women, future research could also explore whether the main themes and their implications are equally valid for men’s experience of occupation change. Finally, the discussion proposes the need for alternative research methods, to investigate if the findings generalise across a population.

Chapter 5 Study 2 – A Quantitative Investigation of Identity and Emotion in Occupation Change: Cross-sectional Findings

The overarching objective of Study 2 was to develop further understanding of the process of voluntary occupation change. To address this objective, a quantitative method was chosen as most appropriate for the second study, to make possible a wide research sample, testing of hypotheses and statistical generalisation. Working adults were targeted for recruitment, with additional recruitment of people who were currently in the process of career change. A longitudinal study was designed, to investigate both cross-sectional and causal relationships between key constructs as the process of change evolved over time. The study comprised questionnaires at four time points a month apart.

The study aimed to test hypotheses on threats to identity and negative emotions as contributing to the initiation of career change; systematic search behaviour as mediating between thinking of changing and acting to change; and positive emotions and perception of a desired possible self as influencing actions to change careers. Additionally, there were further objectives relating to the longitudinal aspects of the study design, to gender and to aspects of the self-concept: these are discussed in Chapter 6.

Multiple regressions supported threats to identity as positively related to thoughts of changing occupation, with partial mediation by negative emotions relating to the current occupation. The perception of a clearly envisaged possible self and positive emotions were both positively related to action to change occupation. A structural model was developed and demonstrated good fit when tested on an independent data set. Model comparisons were used to investigate main relationships and plausible alternatives. A well-fitted structural model was proposed.
The discussion reviews the contribution to knowledge of the study and its findings. Three further research questions arose from the analysis, concerning causal relationships, applicability of the model to women and men, and the contribution of threats to specific aspects of identity. These questions, together with patterns of change over time, were explored in Chapter 6.

**Chapter 6 Study 2 - Causal, Gender, Identity Threat and Temporal Patterns Analyses**

Chapter 6 presents further analyses on the data from Study 2, undertaken with the objective of extending understanding of the process of occupation change. Panel analyses were conducted on the longitudinal data to test whether the directional relationships proposed in the model in Chapter 5 were supported. Simultaneous structural model estimation was used to test applicability of the model to women and men. Identity threat had been operationalised using nine factors relating to the self-concept. Multiple regressions were conducted to test the unique contribution of each factor. Finally, the patterns of change over time were also investigated.

The analyses found moderate support for the directional influence of identity threat on occupational satisfaction. The data also supported a reciprocal directional relationship between perception of a possible self and action to change occupation, that is, action at time 1 influenced perception of a possible self at time 2, which in turn influenced action to change at time 3. The structural model showed an equally good fit applied to both women and men in this data set. The measured aspects of the self-concept differed in their unique contribution to occupational satisfaction. Threats to meaning, growth, personal goals and values were significantly related to occupational satisfaction but threats to self-esteem, self-efficacy or belonging did not make significant unique contributions. Comparison between time intervals showed that the perception of identity threat and thoughts of changing occupation remained stable over the three months of the study and perception of a possible self increased.

The discussion considers reasons for different contribution by aspects of identity on occupational satisfaction. Of the six principles suggested in the literature as guiding
identity processes, only meaning contributed unique variance. Nevertheless, the application of Identity Process Theory as a theoretical framework for the self-concept in career has suggested useful insights on work behaviour. A need for growth is proposed as worthy of further investigation as a possible guiding principle for the self-concept. The discussion concludes by placing the findings in the broader context of careers.

Chapter 7 Discussion and Implications

The final chapter reviews the objectives of the research programme, and argues that the studies made empirical, theoretical, methodological and practical contributions to the existing literature.

It is suggested that empirical contribution is made in the areas of the self-concept, emotion and decision making in occupation change. The research is argued to represent the first quantitative study to demonstrate the involvement of the self-concept in career change and to suggest roles for emotion as part of the process of change. The findings of Study 1 provide empirical support for other-than-rational perspectives on career decision making and an extended perspective is proposed, in which the contributions of the self-concept, emotion and action are recognised.

The theoretical contributions are also considered under the headings of the self-concept, emotion and decision making. Focusing on the theoretical construct of the self-concept in occupation change, the application of Identity Process Theory as a framework for conceptualising the self-concept, and extending this framework by considering a need to grow as a self-related concept in career, are proposed as novel contributions. Addressing the limited consideration of emotion in previous careers research, the studies here, it is suggested, contribute a greater theoretical understanding of how emotions may influence occupation change, specifically proposing negative emotions as contributing to initiation of change and positive emotions as facilitating decision making. Although the findings on these hypotheses are not conclusive, new directions for future research could be suggested. A new framework for decision making in occupation change, incorporating action, affect, cognition and self-regulation, is proposed. It is suggested as contributing
theoretically to the understanding of voluntary occupation change by integrating a range of other-than-rational perspectives on career decision making with recent theoretical progress on emotion.

The research is proposed as making a methodological contribution by using mixed methods, by collecting longitudinal data, by sampling a wider range of occupations than previous research and including a higher proportion of non-white-collar workers, and by attempting to operationalise identity threats in career. Practical contributions in career management in general, for the individual facing occupation change and for career counsellors, are also suggested. Limitations of the research programme are considered and suggestions are made for future research. The chapter concludes with the argument that the current research programme offers a more complete perspective of the individual changing occupation than is commonly represented in the literature.

The research programme is now described in detail, beginning with a review of relevant literature in the next chapter.
Chapter 2 Review of Theory and Research

2.1 Definitions

The original use of the concept of career can be traced back to E.C. Hughes in the early decades of the twentieth century (Barley, 1989). The Chicago School of Sociology, as described by Barley, consciously used “career” as a broad term, to allow consideration of various life paths, for example, ‘the career of the delinquent’. Wilensky (1960) argued against a broad view of career, and proposed that “career” should be limited to an individual’s succession of related, paid jobs, undertaken in a predictable, ordered sequence of increasing prestige. Both meanings align with dictionary definitions of career as “course or progress through life; way of making a livelihood and advancing oneself” (Concise Oxford Dictionary) but Wilensky’s narrow definition became the default in the literature for most of the next 30 years (Barley, 1989), despite Wilensky’s own recognition that it did not apply to the majority of workers. With this definition came a number of assumptions. Firstly most careers were assumed to be organisational and played out in large, bureaucratic organisations. Secondly careers were assumed to demonstrate continuity. Thirdly unpaid work was not considered part of a career. Finally it was assumed that organisational careers were aspirational and motivational (Collin & Watts, 1996) and only those who could pursue continuous, paid work had ‘a career’ (Gowler & Legge, 1989). Almost 50 years later, in academic and non-academic contexts, most of these implicit assumptions are still in place: although an organisational career is no longer seen as the norm, the term ‘career’ tends to be applied to an individual’s sequence of connected, continuous, paid jobs, which are typically white-collar or professional (Collin & Watts, 1996). ‘Career’ is used less for ‘workers’ than ‘employees’ (Jahoda, 1982), and less often for those in poorly-paid jobs, or in a series of job which may be disjoint or non-continuous. It is important, therefore, to note that ‘career’ is not a neutral term.

A number of synonyms for career have been used. The term ‘vocation’ is used extensively in North American literature (cf. Journal of Vocational Behavior; Holland, 1973). In the UK however, vocation is most closely associated with a
calling, especially a divine calling (Concise Oxford Dictionary). The terms ‘profession’ and ‘occupation’ have been used interchangeably with career. Profession is typically a narrow definition, for example, Blau and Lunz (1998) characterised professions as involving high levels of expertise, autonomy and commitment. Profession tends to be used for a limited number of occupations, which require extended training, and are exclusively white-collar (see ONS, 2008). Occupation, on the contrary, is broad, defined by the Concise Oxford Dictionary as “what occupies one, means of passing one’s time, temporary or regular employment, business, calling, pursuit”. Lee, Carswell and Allen (2000) argued in favour of ‘occupation’ as a more specific work-related term than ‘career’. They noted that ‘career’ had been found to relate to unexpected components of work commitment by Blau, Paul and St. John (1993) and that the term has been used more broadly than occupation, to denote sequences of work-related choices. For my purposes, these connotations of career as suggesting greater personal engagement than occupation and relating to the broad set of choices relating to work over an individual’s adult life-span are important. This thesis employs both ‘career’ and ‘occupation’ in discussion of the research: ‘occupation’ to specify a limited work domain and ‘career’ to indicate a broader, richer, work-related context. However, these are somewhat subtle nuances and the meaning of the text below does not depend on differentiating between the terms. The use of both terms is also intended to mitigate the potentially elitest, white-collar-specific connotations of ‘career’.

Careers have been considered from a variety of perspectives within the domain of psychology and are also a topic of research in management science, sociology and economics (Arthur, 1994; Gouws, 1995). Across the research domains, there is a dichotomy in treating the career as an subjective, internal or an objective and external phenomenon. A social constructionist perspective argues for career as constructed, both by social institutions such as organisations, and by the individual (Collin & Young, 2000). A phenomenological view proposes careers as stories which aid the construction of identity and direction (Arthur et al., 1999) and as sources of meaning (Young & Collin, 2000). The Chicago school of sociology saw the career as integrating the objective and the subjective, the structural and the
phenomenological, and positioned the working career as connecting individuals with social structures (Barley, 1989).

Much of the career literature to date has taken an external perspective and focused on organisational careers. Such approaches have assumed that most employers were large organisations and that most careers were played out in a relatively stable, organisational context, often within the same firm (Arthur, 1994; Arthur & Rousseau, 1996; Bailyn, 1989; Nicholson & DeWaal-Andrews, 2005). The rapidly changing economic conditions in Europe in the late 1980s and early 1990s caused these assumptions to be challenged. In 1992, firms of over 500 employers employed only 30% of workers in the UK and other European countries (Storey, 1994). With the changing nature of the world of work – deregulation, outsourcing, flatter organisational structures (Cooper & Burke, 2002) – organisational careers are no longer typical (Arthur & Rousseau, 1996; Hall, 1996) or necessarily valuable to individuals (Hirsch & Shanley, 1996). Individuals are now normatively expected by organisations to manage their own careers (Brousseau, Driver, Eneroth & Larsson, 1996).

Definitions of career have followed the particular perspective taken. Arnold’s widely used definition of career as “the sequence of employment-related positions, roles, activities and experiences encountered by a person” (2002, p. 116) allows for objective and subjective components and has fewer restrictive implications than Wilensky’s definition. However, this definition is passive in that the agency or purpose of individuals is not recognised. Alternative perspectives position career as an active construction. Weick (1996), Arthur et al. (1999) and others argued for career as enacted or created by the individual. Emphasising processes of career rather than structures, several writers described career as an ongoing, dynamic interaction between the individual and the social context (Bailyn, 1989; Derr & Laurent, 1989; Kidd & Kileen, 1992; Nicholson & West, 1988). Individuals not only enact their careers but also actively organise knowledge to make sense of their sequence of jobs (Nicholson & West, 1989; Savickas, 2002). Careers then do not happen to an individual but are actively constructed and actively interpreted by the individual.
On the other hand however, the individual clearly does not possess “unmitigated agency” (Weick, 1996). Gender and class can circumscribe the experience of careers (Gottfredson, 1981). Family, social networks (Higgins, 2001) and the wider economic context (Arthur et al., 1999) can constrain how careers operate. In particular, societal structures offer different opportunities to different social classes (Thomas, 1989) and to women and men (Marshall, 1989). Individuals then play an active role in construction of careers but cannot fully determine their course (Brooks, 1990; Thomas, 1989).

Taking the relatively less travelled path, and in line with the perspective that current careers belong more to the individual than the organisation, the focus in this thesis is on the internal, subjective career and not the external or organisational career: this research programme explores the meaning and processes surrounding career as experienced by individuals.

### 2.2 What is meant by Occupation Change?

Changes during a career can range from simple (changing jobs with the same employer) to complex (changing employer, industry, role, tasks and basis of employment) (Parnes, 1954). They may be experienced as voluntary or forced. Feldman (2002, p. 75) defined career change as “entry into a new occupation which requires fundamentally different skills, daily routines and work environment from the present one”. However, many types of occupations have similar daily routines and work environments, so these factors do not necessarily differentiate occupation from job change. Further, complex career changes can require similar skills in old and new: a nurse who becomes a clinical psychologist continues to use skills of empathy and care. The critical point overlooked by Feldman is that of field of expertise. Occupation change is defined in this thesis as a change that requires substantial changes in roles, responsibilities, skills and fields of expertise or body of knowledge. Out of the set of possible changes during a career, it is this type of complex change that is the centre of the current research. The research is focused specifically on voluntary occupation change, as changes that are perceived as enforced may involve different psychological processes.
In the next section, it is argued that the major career theories in the literature do not adequately describe the experience of voluntary occupation change and their description of the process is limited. The main points of the major theories are briefly outlined, their contribution to explanation of career change discussed and, where appropriate, gaps are critiqued.

**2.3 Major Career Theories and Voluntary Career Change**

Amongst the most-cited career theories are those of Holland (1973), Super (1957, 1990), Schein (1978), Krumboltz, Mitchell and Jones (1976) and Lent, Brown and Hackett (1994). More recent influential theories are the boundaryless career (Arthur & Rousseau, 1996), the protean career (Hall & Mirvis, 1996) and the chaos theory of careers (Bright, Pryor & Harpham, 2004; Pryor & Bright, 2003). Each will be discussed in order.

**2.3.1 ‘Classical’ Career Theories**

Holland’s (1973) theory of career focussed on person-environment (PE) congruence. He characterised both individuals and job contexts against a six-dimensional framework. Congruence between the type of individual and type of job was postulated to influence his/her career behaviour, including career choice, career stability and achievement. Congruence between person and job was held to be the result of ideal career choice. The six dimensions – realistic, investigative, artistic, social, enterprising and conventional - were proposed as aspects of personality, so an individual expresses existing features of personality in making career choices. An individual has a dominant type but the type may be characterised by up to three dimensions. The underlying principles of the theory included the assumption that the choice of vocation is an expression of personality, that personality types become established between the ages of 18 and 30, and that the norm and the ideal for career choices is stability.

Holland’s work has been highly influential in career counselling, and the approach of matching person and environment has been central to DOTS, the dominant career guidance framework in the UK in the 1980s and 1990s (Law & Watts, 1977).
However, empirical studies show only weak to moderate correlations between congruence and job satisfaction (Arbona, 2000; Assouline & Meir, 1987). The correlation with the Big 5 personality dimensions has been shown to be small or modest, with wide variation between samples on correlations (Gottfredson, Jones & Holland, 1993). The theory has additionally been criticised for its lack of developmental perspective, its limited consideration of context and its poorly conceptualised construct for self-concept (Vondracek, 1992).

In terms of its relevance to the current research, person-environment fit theory appeared limited in its contribution to the understanding of the experience and the process of occupation change. Its reification of interests and types was underwritten by a positivist approach, in which the individual was seen objectively: subjective experience was sidelined (Collin & Watts, 1996; Savickas, 2003). PE fit theory proposed that the objective of career change is to increase congruence. This was supported by the findings of Oleski and Subich (1996). However, the authors acknowledged that their study used a small (n = 42) and homogenous sample and was limited to correlational analyses, and that the congruence predicted for the new career was moderate. In addition to weak empirical support, the principles underlying the theory severely limit its usefulness in understanding career change. The theory was essentially a static theory: although it acknowledged that vocational personality and environment interact, this was not seen as dynamic and continuous. Vocational personality was predicted to stabilise by 30: how then can voluntary career change at the ages of 40 or 50 be explained?

More recent work on personality suggests that aspects of personality relating to goals and motives may change over an individual’s lifetime (Heatherton, 1994). Given the rapid rate of change in the global marketplace and work environments, flexibility and adaptiveness have replaced stability as the norm and ideal in working life (Cooper & Burke, 2002; DeFillippi & Arthur, 1994). Overall, the findings and the theory of PE fit do not offer any explanation of how people experience career change – what cognitions or emotions play out when an individual moves towards career change? Nor do the findings or theory account for the process of career
change: how does career change begin? What stages does it move through? What determines the new career from the range of potentially congruent outcomes?

Super’s (1957, 1990) life-span, life-space career theory took a developmental perspective and looked at work career in the context of the whole life span. He saw careers within their structural, societal contexts, with choices affected by opportunities for learning and education, socioeconomic class, gender, geographic area, religion, family and social expectation. The keystone of the theory, integrating all such influences, was the self-concept. Super argued that, in career choices, people seek to implement their self-concept. This theory recognised that people shape - and are shaped by - their careers: a dynamic interaction over the working life-time. Initially, Super (1957) proposed a stage model, with the stages of exploration, establishment, maintenance and decline linked to age ranges. Later (Super, 1990), the theory was modified to acknowledge that mini-cycles of these stages occur around transitions in working life. Different processes surrounding the self-concept characterised each stage.

As Super himself noted (1990, p. 199), his theory was “not an integrated, comprehensive and testable theory but rather a ‘segmental theory’ … a loose unified set of theories dealing with specific aspects of career development”. It offered rich and insightful perspectives on the overall patterns of career, recognising the complexity of influences and allowing for change. However, as a meta-theory, it did not deal with the phenomenology of career change. Although the self-concept was pivotal, the theory did not suggest what psychological processes involving the self may be salient. The theory offered new insights into career decision-making as a series of mini-decisions rather than one major, one-off decision, but Super (1981) acknowledged that his theory did not address the decision-making process.

Schein (1978) built on Super’s life stages idea and developed a concept similar to Holland’s dimensions of career choice in proposing career anchors: a set of initially five areas, namely autonomy, creativity, technical or functional competence, security and power. Career anchors develop through work experience and the primary career anchor then becomes a driver and a constraint on the individual’s career. Although intuitively appealing and emphasising an interaction between
person and career over time, Schein’s theory was data-driven, based originally on a very small (n = 44) and very restricted population (U.S. male management school graduates). Schein (1978) did not position his proposals as theory and the mixture of abilities, needs and values in the set of anchors was purely taxonomic. In his discussion of the dynamics of careers, Schein drew on the work of development stage theorists including Erikson and Vaillant to suggest some of the possible transitions in working life. He noted that transitions can be difficult if they involve disconfirmation of the self, but, other than life-stage transitions, did not propose why or how people may choose to change career.

Krumboltz et al. (1976) proposed a social learning theory of career choice, categorising influences on career choice into the four categories of innate abilities, environment, learning and task approach skills. Innate abilities and the environment interact to provide experiences for learning. On the basis of such learning, individuals develop tendencies to seek out (or to avoid) particular career choices, using task approach skills. The focus of the theory on the importance of learning experiences was useful, but the other three categories subsumed a widely varying set of factors. Innate abilities were linked with gender, race and disabilities. Environmental influences ranged from geography, to family, to reward systems. Task approach skills included (unspecified) cognitive processes, emotion and values. The categorisation of all possible influences on careers into a simple four appeared to discriminate between factors that are intrinsically connected - innate abilities cannot be defined or played out without reference to the influence of the environment – and to downplay the critical psychological processes of cognition, emotion and values. Values appeared to relate to the self-concept. Emotion and cognition were not further defined. Theoretically this poses problems in trying to link the social learning theory of career choice to other bodies of theory and research in these areas. Although the theory incorporated a very broad range of potential influences and their effect on decision-making in careers, it did not offer any insight as to why people may choose to change career.

One further major career theory to be considered is social-cognitive career theory (SCCT; Lent, Brown & Hackett, 1994), which will be briefly outlined before
assessing its usefulness for career change. Lent et al. (1994) extended Bandura’s socio-cognitive theory for careers and proposed that self-efficacy combined with outcome expectations gave rise to career interests and goals. Self-efficacy was postulated to be a dynamic set of self-referent beliefs by which people judged their capability to carry out specific actions. Outcome expectations were an individual’s expectations surrounding the probability and value of the results of the action. Both self-efficacy and outcome expectations were believed to be derived from context and experience. Both influenced career interests and career goals, which in turn influenced career-related behaviour, such as studying a particular subject. Goals “operate principally through people’s capacity to symbolically represent desired future outcome” (Bandura, 1986, p. 85). SCCT posited self-efficacy, outcome expectations and goals as its central tenets, allowing for the influence of environment (e.g. job opportunities) and personal attributes (e.g. family influence; gender) directly via learning experiences and indirectly by moderating relationships between career interests, career goals and related actions.

Brown (1990) however noted that outcome expectations and self-efficacy may not be possible to measure as separate constructs. Despite describing the theory as dynamic and continuous, Lent et al. also described the theory as focused on initial career choice in adolescents and not accounting for later career choices (Lent et al., 1994, p. 81). Its weakness in explaining career change is evident in its assumptions of stability: SCCT predicted that self-efficacy and outcome beliefs stabilise by early adulthood. How then can career interests change and develop over the life-span? Theoretically, subsuming values into outcome expectations is unsatisfactory – values are seen as being intrinsic to the self (Breakwell, 1986; Rokeach, 1973) and can direct human behaviour (Sverko & Vizek-Vidovic, 1995). The focus on goals assumed that every career choice is in pursuit of a goal. More recent and some earlier perspectives on careers have argued that career actions are not necessarily planned in pursuit of a goal but may happen as a result of current circumstances (Bright et al., 2004; Gelatt, 1989; Krieshok, 1998; Miller, 1983; Nicholson, 1987).

Empirical support for SCCT is limited: Lent, Brown, Brenner et al. (2001) found that outcome expectations but not self-efficacy contributed significantly to career
interests in a sample of college students, and contextual influences (barriers) did not moderate relationships between career interests, career goals and related actions. SCCT usefully brought a focus on self-efficacy and a general concept of expectations to career theory but its assumptions of stability, its limited set of psychological constructs influencing career decisions and its focus on early career decisions limited its contribution to understanding the process or experience of voluntary career change in adults.

The theories discussed above, with the exception of SCCT, are generally considered as ‘classical’ career theories. They may be seen as appropriate to their time, based on the culture and economic conditions that prevailed in the US and Europe in the 1950s, 1960s and 1970s. Fundamental assumptions included stability in careers, a predominantly male workforce and the organisational career as the norm (Arthur, 1994). By the mid-1980s however, economic conditions had begun to change radically (Grzeda, 1999). Several new perspectives on careers emerged since the early 1990s: the most influential of these are the boundaryless, protean and chaos career theories, and the systems theory framework of careers.

### 2.3.2 Recent Career Theories

The boundaryless career was defined as having a variety of forms which differed from the traditional stable, hierarchical, primarily intra-organisational career (Arthur & Rousseau, 1996). Boundaryless career refers to experiences of careers moving across employers (e.g. Silicon Valley); careers which are validated at the occupational level, rather than by the employer (e.g. academic); careers which depend on external networks (e.g. estate agents) or careers based on projects (e.g. film making) (Arthur & Rousseau, 1996). The term has also been used for careers which flow over geographical boundaries, for portfolio careers and for careers which include a mix of work and non-work stages (Arthur & Rousseau, 1996). Boundaryless careers then require more sense making, since continuity may not be obvious (Mirvis & Hall, 1994). Meaning and identity therefore took on more significance and required more ability in the boundaryless career (De Fillippi & Arthur, 1994).
The themes of meaning and identity were also fundamental in the second ‘new’
career theory: the protean career (Hall, 1996). Although the boundaryless career
described a broadly based non-organisational career, the protean career was
specifically driven by the individual, suggesting self-determinism. The meaning of
‘protean’ (changing shape at will) gave the image of flexibility, variability and
intention. Success and achievement lay in realisation of one’s potential, subjective
meaning, personal identity and learning.

The chaos theory of careers focused on the complex, non-linear, non-deterministic
functioning of individuals within their environments, stressing broad-ranging
influences, chance events, emergent patterns and unique paths (Bright et al., 2004;
Pryor & Bright, 2003). In particular, Pryor and Bright critiqued traditional
approaches to career choice as failing to consider meaning, emotion and purpose.

McMahon and Patton (1995) proposed a system theoretical framework (STF) as a
meta-theory to integrate the range of influences proposed as operating on careers.
Addressing both content and process, STF posited three interworking content
systems, individual, social and environmental-social, which operate within processes
of change over time, mutual influence and chance. Personal qualities and attributes,
from age, culture and health to beliefs and values, are considered part of the identity
system. Family and friends are part of the person’s social system, and both social
and individual systems operate in conjunction with wider environmental-social
influences, such as the economy, the labour market and the mass media. All three
systems change over time, are recursively related, that is, have mutual,
multidirectional and nonlinear interactions, and are all subject to chance events. STF
proposed a dynamic, open system and has integrated many of the career influences
from both traditional and more recent perspectives. STF is positioned within an
emerging constructivist perspective on careers, which sees the individual actively
constructing career using narrative as a essential tool, and in which sense-making
and meaning are central (McMahon & Patton, 1995; McMahon & Watson, 2008).

Further recent perspectives on careers include the ‘butterfly’ (McCabe & Savery,
2007) and the ‘chameleon’ career (Ituma & Simpson, 2006). The common features
of these newer approaches to careers are the pervasiveness of change and the
salience of meaning. All suggest updated patterns of careers but none speaks to the experience of the individual in career transitions, nor do they address the process by which career change is attained (Mallon, 1999; Ornstein & Isabella, 1993)

In this section, the main theories of career have been outlined and their applicability to voluntary career change critiqued. It has been argued that these theories contributed to understanding of a wide variety of factors pertinent to career but do not directly consider voluntary career change: there is as yet little insight into how an individual may experience career change and how the process of change may proceed. This programme of research is intended to address these gaps.

In the current research, the themes of self and identity, and of emotion, emerged as salient in the experience of career change. It will be argued that, although the self-concept has long been discussed in relation to careers, it has not been adequately defined or investigated, and that the role of emotion in career change has been little explored. How the self and emotion are dealt with in established theories will now be discussed.

2.4 Major Career Theories, the Self and Identity

As has been noted in the discussion above, the self-concept is explicitly or implicitly addressed in most career theories. Its conceptualisation, definition and operationalisation however are argued to be lacking in precision. Super (1990) positioned the self as the keystone of his theory. He proposed the self-concept as becoming increasing stable over the life-span but this appeared to contradict his proposal that the self-concept depends in part on experience and on feedback from others, which suggested a more dynamic construct. The self-concept was assumed to include self-esteem and self-efficacy but abilities, needs, values and interests were mentioned alongside the self-concept as separate constructs. Nonetheless, work satisfaction was posited as related to the degree to which individuals can implement their self-concepts in their occupation. Taken literally, this implies that work satisfaction relates to self-esteem and self-efficacy but not to values, needs or interests. As Super himself acknowledged (1990, pp. 202-203), despite its pivotal
role in the life-span, life-space approach to careers, the self-concept was not adequately conceptualised.

Holland (1973; 1997) referred to Super’s notion of career as implementation of the self-concept in his Person-Environment (PE) fit theory but proposed a more static perspective, seeing career as an expression of personality. Personality traits, which included career interests, could be assessed on the six dimensions proposed by his theory. Dynamic, contextual, process-related or self-referent aspects of the self were not addressed in the PE approach.

Schein’s (1978) definition of the self-concept was broader than Super’s: abilities, motives, needs and values were all proposed as parts of the self-concept which contribute to career anchors. Work experience in turn consolidated these constructs as part of the self-concept. The self then was seen as dynamically developing, based on interactions with the environment. Schein acknowledged that transitions may involve threat to the self but did not explore further.

Krumboltz et al. (1976) and Lent et al. (1994) incorporated specific aspects of the self-concept in their theories but did not address the overall self-concept. Generalisations from self-observation contributed to learning and experience, and values formed part of Krumboltz’s task approach skills (Mitchell & Krumboltz, 1990). Self-efficacy was central to SCCT and outcome expectations included values.

Recent change-focused theories and frameworks: boundaryless, protean and chaos theories and STF, gave limited attention to the self. Protean career theory argued the necessity of self-awareness and a clear sense of identity for dealing successfully with modern careers (Hall & Chandler, 2005). STF implicitly acknowledged the self-concept in its identity subsystem. However, in general, the salience of the self in career was not explicitly explored in change-focused theories. This is an important theoretical gap since arguably change and development for the person necessarily involves the self-concept.

The reciprocal relationship between career and self has been considered by some writers under terms relating to identity. Hughes and the Chicago school of sociology
considered identity to be the subjective experience of career (Barley, 1989). Holland (1985, p. 5) similarly saw personal identity as constituted by career-related concepts, being “a clear and stable picture of one’s goals, interest and talents”, and vocational identity as clarity of vocation and self-concept. Protean career theory proposed that objective and subjective career success can potentially change identity and identity growth was proposed as a meta-competency in the new type of career (Hall & Mirvis, 1996). In contrast, emphasising how the self may influence the experience of career, Ibarra (2004), following Schein (1978), defined professional identity to be the values, motives, attitudes and beliefs by which people define themselves in their professional role. Khapova, Arthur, Wilderom and Svensson (2007) loosely defined professional identity as one’s sense of one’s professional role. Again, however, the concepts of identity – personal, vocational or professional – are not clearly conceptualised or operationalised (Vondracek, 1992).

More generally too, definitions of identity and the self-concept have not been clear: “Achieving definitional consensus [on identity and the self-concept] is virtually impossible” (Breakwell, 1992, p.3). The concepts are not independent: Turner (1982) suggested the self-concept as a collection of self-images including personal and social. Thoits (1991, p. 103) defined social role identities as “self-conceptions based on positions in the social structure”. Deaux (1992) suggested that the self refers to individualistic frameworks and identity references collective self-definitions, that is, that the self relates to the personal and identity to the social. Based on the thinking of James (1890) and Mead (1934), identities have been seen as multiple. Stryker (1987) proposed that identities are arranged in a hierarchy based on salience, and the most salient identity can change with context. Career then may be both a realisation of the self-concept and one of many possible role identities, on which the individual’s self-concept is based.

Savickas (2001) suggested an explanation for the limitation of earlier career theories in the conceptualisation of the self, by drawing on McAdams’s (1995) proposal of personality as a hierarchy. Particular career theories may relate to particular levels of the hierarchy only: traits approaches to career (e.g. Holland) operate at Level 1 (personality types), and developmental perspectives (e.g. Super) at Level 2 (career
concerns). Savickas’s proposal thus aligned career theories with a perspective on the self and suggested a reason why earlier career theories addressed only aspects of the self-concept. Savickas linked McAdams’s third level of integrated narratives of the self to career narratives, which he defined as self-defining stories which provide continuity, are intended to explain needs, goals and actions, and guide career behaviour. Savickas went on to propose a further level at which career theories could contribute: Level 4 addressed process – an area Savickas argued has been ignored in favour of content such as types, concerns and attitudes. He proposed Selection-Optimisation-Compensation (SOC) as the fundamental process for career development, following Baltes and Baltes’s (1990) universal developmental process, although decision-making was also acknowledged.

Although most career theories agree on the centrality of aspects of the self and identity, including self-esteem, self-efficacy, values, needs, goals and motives, the definitions of constructs are imprecise or ambiguous, and rarely aligned with the theoretical literature (Blustein & Noumair, 1996; Gottfredson, 1985; Pryor, 1985). Burns (1979, p. 28), reflecting on the general state of the self-concept literature at the time, summarised the position as: “It is obvious that conceptions of the self system are often considerably vague, occasionally mutually contradictory… and lacking any definite or complete statement.”

Pryor (1985) argued that a major problem with the use of the self-concept in the counselling literature was its definition in relational terms. He argued that the structure of the self needed to be established. This call was answered by Breakwell (1986) who provided an extensive and detailed theory of the self, specifying the structure, processes and guiding principles of operation. With the exception of psychodynamic models of the self, which include radically different assumptions to those of interest here, it is argued here that Breakwell’s (1986) Identity Process Theory (IPT) remains the most complete proposed model of the self. Its conception of both structure and processes, incorporating self-concept and identity, offers a testable model with which to integrate a range of constructs related to the self-concept. It offers the potential to extend the career literature to describe better, and possibly predict, the experience and processes of voluntary occupation change. It is
acknowledged that other theoretical perspectives on the self may also offer insights on careers. Because the focus of the research programme was occupation change, comparison of alternative theories of identity and the self was not undertaken. The choice of IPT and the benefits of its application to career change is expounded in the thesis (see Sections 5.4.1, 6.4.3, 7.3.1.2). A brief outline of the main elements of the theory is now presented.

**Identity Process Theory**

The main features of Identity Process Theory (IPT) will now be summarised before the self and self-concept, as understood in this research programme, are defined. Breakwell (1986) described identity as a “dynamic, social product” (p.9) and recognised both personal and social identities. Personal identity pertains to motives, personal values, emotions and attitudes; social identity includes social roles and group memberships. Because personal and social identities constitute the structure of the self, and therefore the self-concept, there is little benefit in considering them separately (Breakwell, 1986, 1988). The structure of the self comprises two dimensions: content and an associated value. The twin structure of the self, with content and evaluative dimensions, follows the traditions of James (1890), Freud (1933) and Mead (1934). The processes by which identity is continuously maintained are assimilation/accommodation and evaluation. The processes of assimilation and accommodation add new information to content or modify the existing structure to accept new content. The process of evaluation updates the value dimension. These processes operate in line with guiding principles. These principles were initially specified as continuity, distinctiveness and self-esteem, to which were later added generalised self-efficacy (Breakwell, 1992), and meaning and belonging (Vignoles, Chryssochoou & Breakwell, 2002), although both noted that the set of principles may not be exhaustive. People are motivated to maintain and protect their self-concept. A breach of a guiding principle is experienced as a threat and coping strategies are triggered to minimise the threat and restore or modify the self-concept to achieve a non-threatened state. The operation of the self is complex, with evaluation contributing to self-efficacy and distinctiveness related to self-esteem, for example (Breakwell, 1988). The salience of facets of content is context-specific,
thus the self has continuity though the self-concept may vary. The processes of identity are posited as universal, but the guiding principles are proposed as specific to time and culture. The six guiding principles are therefore relevant in Western cultures. Thus IPT provides the theory which Pryor (1985) argued had been missing, providing a framework for the self, defined in its own right as a structure with associated processes, and not only with respect to its relationships.

The concept of the self applied in this research programme is as defined within IPT. The self-concept – how individuals conceptualise, describe or characterise themselves - can be considered as individuals’ integration of their own perspectives on themselves, based on the content and values within the self. Identities are seen as internalised social roles, by which the self-concept is partially constituted. In line with social constructionist perspectives, it is acknowledged that these conceptualisations are embedded within their social, cultural and historical context: other and radically different perspectives on the self are possible (Sampson, 1989). It will be argued below that IPT provides a useful framework for understanding the self-concept in careers. Emerging from a social psychological perspective, it is appropriate for the research context and its conceptualisation of the self-concept and identity are congruent with the epistemological position of pragmatic realism which guides the research, as discussed in Chapter 3.

2.5 Major Career Theories and Emotion

In common with much psychological theory emerging in the 1980s, although it acknowledges emotions, IPT does not expand on the role of affect. Nevertheless, emotion emerged in the research as an important aspect of the experience and process of career change. Beginning with a brief overview of theoretical attempts to define emotion, how the major career theories have dealt with the topic of emotion is now reviewed.

Emotion, affect, feeling and intuition are related concepts, the definitions of which have proven problematic (Lazarus, 1991b). Attempts at taxonomies of emotion date back to James, McDougall and Freud (Crawford, Kippax, Onyx, Gault & Benton, 1992). Recent attempts include Ekman’s (1984) set of basic emotions derived from
facial expressions, which included anger, fear, sadness, happiness and interest. Lazarus (1991b) suggested four categories of emotion: positive, negative, borderline, and a set of non-emotions including complex states such as grief, ambiguous states such as frustration, and pre-emotions such as interest. Johnson-Laird and Oatley (2004) proposed three categories of basic, object-oriented and complex emotions. They linked basic and object-oriented emotions to Damasio’s (1996) similar neurological categories, and defined complex emotions, such as frustration, as originating in one or more simpler emotions and encompassing social evaluations and the self-concept. However, taxonomic approaches to emotion have been criticised. The examples given exemplify the lack of consensus on which categories may be useful or which emotions to include in which category. Sabini and Silver (2005) argued that taxonomies such as Ekman’s impute a unique mental state for at least basic emotions, whereas a more complex relationship exists between mental states and emotions. Crawford et al. (1992) deemed taxonomies inadequate since they do not connect to lived experience.

Differentiating between emotion, mood, affect, feeling and intuition has shown a similar lack of consensus. Many researchers have distinguished emotion and mood on the basis of intensity (lower in mood, higher in emotion), focus (diffuse in mood, object- or event-specific in emotion) and duration (longer-term in mood, transient in emotion) (Burke, 2004; Forgas, Wyland & Laham, 2006; Parkinson, 1995) but others have disagreed (Frijda, 1993). Furthermore, this differentiation causes problems within the career context. Is unhappiness at work an emotion, since it is specific and intense or a mood, since it is extended in time? Parkinson (1995) too noted that the same terms could refer to either emotion or mood. Some researchers have included mood, feeling and affect in definitions of emotion but others have not (Crawford et al., 1992). Summers-Effler (2004) defined feelings as awareness of emotion and intuitions too are feelings, though not necessarily related to emotions (Sabini & Silver, 2005). It is suggested that intuition, feeling, affect, mood and emotion are associated and are best considered as overlapping constructs within the same domain of psychological functioning. What is generally agreed is that emotions are “states that comprise feelings, physiological changes, expressive behaviour and inclinations to act” (Frijda et al., 2000, p.5), and include cognition,
particularly appraisal, and motivation (Johnson-Laird & Oatley, 2004; Lazarus, 1991a). The term ‘emotion’ will be used below, with recognition of its fuzzy relationship with other affective terms (Shaver, Schwartz, Kirson & O’Connor, 1987).

Although definitions of emotion cannot yet be agreed, there is consensus among many scholars on the function of emotions. Communication is seen as a primary function served by emotions, communication both to others and internally to the self (Johnson-Laird & Oatley, 2004; Parkinson, 1995). Sabini and Silver (2005) posited that emotion necessarily involves language and an audience, even if the person experiencing and describing the emotion is also her/his own audience. Their argument that the language describing emotion is “doing something” supported a widespread view that emotion is socially constructed (Crawford et al., 1992; Parkinson, 1995). There is evidence for different emotions historically (Edwards, 2001) and between cultures (Wierzbicka, 1986).

Emotion serves other functions too: in particular, it has been closely linked to the self-concept and identity. Parkinson (1995) saw the language of emotion as part of constructing identity. Stryker (2004, p.8) proposed that an essential communicative function of emotion was as a messenger to the self: “[Emotions] are messages not only from the self but also to the self, informing persons (…) about who they really are.” Haviland-Jones and Kahlbaugh (2000) emphasised the evaluative function of emotion as part of making sense of experience and maintaining the self-concept, and this can be related to the concept of evaluation in IPT. Discrepancies between experience and self-concept can give rise to negative emotions, signalling a problem that needs resolution and motivating action (Burke, 2004; Haviland-Jones & Kahlbaugh, 2000; Smith-Lovin, 1990). Lazarus (1991b) too linked emotion with identity and with goals, seeing emotion as the primary evaluation between personal goals and the environment.

Emotion has traditionally been seen as separate from cognition but more recent work is beginning to re-integrate the psychological processes, with cognition and emotion seen as mutually influencing (Forgas et al., 2006; Isen, 2003). A neurological basis for the role of emotion in judgment has been proposed by Damasio (1996), who
demonstrated that problems in the experience of emotion have adverse impact on social decision-making.

Emotion has been posited as influencing cognition via content (e.g. affect-as-information) and process (e.g. affect priming). Schwarz and Clore’s (1983) affect-as-information hypothesis suggested that experience may be (mis-)interpreted in line with current mood. Clore and Gasper (2000) proposed that emotion provides information and directs attention to emotion-relevant goals. The information provided by emotion may be the result of unconscious evaluation. Clore and Storbeck (2006) also argued the importance of the informational content of emotion. Affect priming research has demonstrated that memory processes may be mood congruent (Forgas et al., 2006). The affect infusion model (Forgas, 2000) proposed that particular types of cognitive processing strategies, namely heuristic and elaborative processing, may be influenced by affect, but other strategies, namely goal-pursuit and directed processing, are unlikely to be. The model implies that generative, open or creative cognitive processes are more likely to be influenced by feelings, and closed or focused processes are less so.

Isen (2000, 2001) found that positive affect can help creativity and flexibility in problem-solving, and efficiency and thoroughness of decision-making. Johnson-Laird and Oatley (2004) argued for emotion as a heuristic, making cognition more efficient and lessening the load on scarce cognitive resources. Emotion can extend the bounded rationality of the human cognitive processing system, which Simon (1955) argued could not cope with exhaustive, systematic decision-making in complex contexts. In addition to the influence of emotion on cognition, the cognitive process of appraisal has been defined as an intrinsic part of emotional processes (Crawford et al., 1992; Lazarus, 1991a). In summary, emotions communicate with the self or others, are closely linked with identity, serve evaluative and heuristic functions, and are closely intertwined with cognition.

Despite the vital psychological roles played by the emotions, the major career theories have not considered the role of emotion in careers in any depth. Holland’s (1973) PE fit theory, Super’s (1957, 1990) life-span, life-space theory and Schein’s (1978) career dynamics approach did not mention emotion. The social learning
theory of careers (Krumboltz et al., 1976) acknowledged that task approach skills include emotions but did not elaborate. SCCT (Lent et al., 1994) focused on cognitive processes only. Despite the emphasis in Hall’s (2005) protean career theory on meaning and fulfilment, contributory or resultant emotions were not discussed. The chaos theory of careers (Pryor & Bright, 2003) and the Systems Theoretical Framework (McMahon & Patton, 1995) alone suggested emotion as having an effect on career. In these theories, emotion is proposed as an emergent property of people and therefore influential in the systems surrounding career choice.

The broader field of emotions at work has been investigated only in part (Arnold, 2002; Fisher & Ashkanasy, 2000; Kidd, 1998; Nicholson & West, 1989). Hochschild (1983) described the growing requirement for emotional labour in the workplace, where workers such as airline attendants are required to both use and manage their emotions as part of their job role. Salovey and Mayer’s (1990) seminal paper on emotional intelligence as the ability to perceive, understand, regulate and use emotions as information has led to investigations of emotional intelligence as a skill that may be related to performance of teams and leaders (Astin, Saklofske & Egan, 2005; Koman & Wolff, 2008). The more general trait of positive affect has been extensively researched, particularly due to findings of positive affect as a predictor of job satisfaction (Staw, Bell & Clausen, 1986) and the importance of job satisfaction as perhaps the most widely investigated work attitude over the last 60 years (Jewell, 1998). There is evidence too for the influence of state affectivity on work attitudes (Brief, Butcher & Roberson, 1995). Constructs overlapping with affect, including job and occupational satisfaction, commitment, stress and attitudes, have been explored but Fineman (1993) argued that the limited range of emotions investigated presented a view of the individual as “emotionally anorexic”. In particular, Fineman proposed that job satisfaction was an attitude about work rather than an experience of work, i.e. job satisfaction as a measure is more cognitive than affective. Weiss and Cropanzano (1996) agreed that job satisfaction has belief as well as affective components, and proposed that specific work events, as well as dispositional tendencies, contribute to affective reactions, which in turn influence
work attitudes and behaviour. Job and occupational satisfaction then are related to but distinct from emotions in the workplace.

Having reviewed how emotion and associated constructs have been defined and used in the literature, and how emotions at work have been investigated, it is concluded that emotions are closely related to identity and to cognition, but that much remains to explore on the influence of affect on career behaviour.

**2.6 Major Career Theories, the Model of the Person and Motivation**

Linked to emotion is the concept of motivation, as the driving force or energy which initiates and guides behaviour, and is postulated to determine persistence. Motivation is intrinsic to psychological accounts of voluntary career change but it is argued that consideration of motivation in career theories is weak, particularly motivation for career change. A possible reason for a relative lack of focus on motivation may be the implicit model of the person underlying the theories.

The matching perspectives on careers (cf. Holland, Schein) have been critiqued on their model of the person as narrow and static, ignoring the broader model of the person as purposeful, motivated, adaptive and seeking meaning (Bordin, 1994; Pryor & Bright, 2003). The more processual perspectives of Super, Krumboltz and Lent et al. incorporate a broader model although fundamental assumptions are implicit rather than explicit. In the life-span, life-stage theory, for example, it can be assumed that the individual actively seeks to balance life-roles, and actively moves through phases of transition cycles while pursuing a self-concept. In SCCT, it can be assumed that the individual is seeking to attain career goals while integrating the influences of self-efficacy, outcome expectations and external factors. This thesis presupposes a holist model of the person: the person in career is seen as active, agentic, goal-seeking, sense-making and dynamically, continuously and reciprocally interacting with the environment.

The behaviour of the active, purposeful individual is assumed to be motivated in pursuit of specific goals. However, by not explicitly addressing the underlying
model of human functioning, career theories have tended to consider general but not specific motivations. Although Super (1957, 1990) described career development as developing and implementing occupational self-concepts, suggesting self and identity motivations, his life-span, life-stage theory did not propose how such motivations may trigger transitions. Transitions were seen as responses to typically negative event such as illness or socioeconomic change: voluntary career change was not envisaged. PE fit theory (Holland, 1973) could explain voluntary career change as action intended to attain greater congruence but the theory did not provide insights into the point at which the individual is motivated to act. The two social cognitive theories of Krumboltz and Lent et al. did not address specific motivation to change, nor did the three recent theories of boundarylessness, chaos and protean careers.

Rothman, Baldwin and Hertel (2004) noted that motivation is an important part of change. It is proposed here that greater insight is needed into motivational factors in the process of voluntary career change. One potentially relevant theory is that of the ‘possible self’ as motivator. Markus and Nurius (1986) proposed that behaviour can be motivated to pursue desired possible selves or to avoid undesired possible selves. A possible self is a cognitive representation of goals and motives or threats, which have personal meaning for the individual and are linked to the self-concept. Markus and Nurius suggested that possible selves are created from experience and influenced by the individual’s environment, although they did not specify how possible selves may be selected (Yost & Strube, 1992). Possible selves are constantly revised and desired rather than feared selves are favoured. Oyserman, Bybee, Terry and Hart-Johnson (2004) linked possible selves and goals, and argued that they may improve self-regulation and foster optimism and positive self-evaluation. In particular, perception of a detailed possible self with knowledge of how it may be achieved may facilitate self-regulation. A desired possible self then may motivate towards a new occupation and may facilitate self-regulation to achieve it. Self-regulation too may be important in the pursuit of a new occupation. Defined as any effort by an individual to alter his/her own actions, thoughts or feeling (Baumeister et al., 1994), self-regulation tends to be applied to goal-directed
behaviour and is seen as closely related to the self-concept (Baumeister & Vohs, 2004).

A possible self may function as a goal to achieve, and there is much evidence on the benefits of goal pursuit. Goals give direction, focus and meaning to actions (Carver, 2004) and predict life satisfaction (Cervone et al., 2004). Mental simulation of goals alone can provide enhanced motivation (Taylor & Pham, 1998). In the cybernetic approach to self-regulation, goals are seen as reference values in feedback loops (Carver, 2004). There is theoretical linkage between goals, identity and emotion, with empirical support. In Carver and Scheier’s (1999) model of self-regulation, emotion results from the evaluation of progress towards a goal. Gonzales, Burgess and Mobilio (2001) found that positive affect was enhanced by plans for self-improvement, where self-improvement was defined as goals relating to achieving a valued possible self. This suggests that, in itself, perception of a desired possible self could bring benefits. Carver and Scheier (2005) proposed that goals may be structured hierarchically, with higher level goals more central to the self, which was consistent with the proposal of Gollwitzer and Kirchhof (1998), that identity can be conceptualised as a set of goals. Gollwitzer and Kirchhof’s self-completion theory considered the volitional aspects of implementing identity-related, self-defining goals. Self-defining goals are conceptualised as ideal conceptions of the self, and appear consistent with desired possible selves. The self may be presented to others through symbols, including language, roles and skills, and requires verification from the environment. Lack of verification or negative feedback can give rise to a sense of incompleteness which drives compensatory action. However, self-completion theory proposes self-symbolising as equal to real achievement in achieving identity goals (Wurf and Markus, 1991) and, as such, has limited contribution to understanding actual career change behaviour. Overall, however, research evidence suggests that goals in general, and perception of a possible self in particular, may be pertinent in the experience and process of occupation change.
2.7 Major Career Theories and Gender

The limited consideration of voluntary transitions in the major career theories may be due, in part, to their assumptions of the male norm for career paths. Many scholars have argued that career theories are based on male career patterns and needs (Arthur et al., 1999; Betz & Fitzgerald, 1987; Brooks, 1990; Fletcher, 1996; Gallos, 1989; Goffee & Nicholson, 1994; Kram, 1996; Marshall, 1989) and assume continuous, linear progression in careers. For women, however, discontinuities are more frequent (Gallos, 1989; Marshall, 1989). Several studies have found that women are more likely than men to make radical career changes (Brett & Stroh, 1994; Burke & McKeen, 1994; Marshall, 1989; Sterrett, 1999; Whitmarsh, Brown, Cooper, Hawkins-Rodgers & Wentworth, 2007) so the question arises as to whether the process of voluntary career change is the same for women and men. It has been argued that women and men have different value systems (Marshall, 1989), different perspectives on the meaning of career (Gallos, 1989), different criteria of success in career (Powell & Mainiero, 1999), different opportunity structures (Astin, 1984; Banks et al., 1992; Goffee & Nicholson, 1994) and different career patterns (Astin, 1984; Goffee & Nicholson, 1994; Marshall, 1989). However, there are also arguments for similarities in the experiences of career for women and men, made by Astin, Goffee and Nicholson, and Marshall. In particular, Astin (1984) suggested that the fundamental motivations for work are the same for women and men, but their different experiences of socialisation and of opportunity structures give rise to different expectations, which in turn lead to different career decisions. From a social cognitive perspective, Hackett and Betz (1981) argued that women have different and often poorer access to experiences to build self-efficacy, and therefore have lower and weaker self-efficacy than men. The restriction on experience and lower self-efficacy limits the opportunities women may explore. This suggests that women and men may seek the same satisfactions in work but their career paths may differ. Despite widespread understanding of the more restrictive social structures in which women make career decisions, women’s career choices have been attributed to individual decision-making. Brown (1990, p. 365) summarised the reviews of Betz and Fitzgerald (1987) and Fitzgerald and Crites (1980) by stating “Women restrict their occupational choices more than men”. The use of the active voice exemplifies
Burke and McKeen’s (1994) argument that women’s choices are often decontextualised and seen as separate from the environment. These weaknesses in the literature indicate that, in exploring the experience and process of voluntary career change, the experiences of women and the testing of gender differences are especially salient and that context must be considered.

2.8 Career Decision Making

Among the major career theories are those which have been described as ‘process’ theories (Nicholson, 1996), which addressed the way in which career choices are made: Krumboltz’s social learning theory of career decision-making is one such process theory. Krumboltz’s theory however was high-level and static: it considered the influences on career choice but not the specific psychological processes invoked to make a career decision nor how such processes would integrate the various influences over time. Many other scholars have proposed more detailed processes of career decision making, many of which are termed rational models of decision making. Such models, originating from Pascal and game theory in the 17th century, are based on assumptions of expected utility, and have recently been criticised for their failures to accommodate how people carry out decision making in the real world. A number of alternative perspectives have been proposed, collectively termed “other-than-rational” approaches by Phillips (1997). The rational models of career decision-making will now be briefly described, followed by the other-than-rational models.

Blaise Pascal proposed that, in deciding whether to place a bet, a gambler estimates the size of the prize multiplied by the probability of winning (Singh, 1997). This model of expected utility (EU) has influenced much of the research on decision making in the 20th century, not only in mathematics and economics but also in psychology. Vroom’s (1964) expectancy theory can be seen as an extension of Pascal’s formulation: the motivation to action (deciding to bet) is a function of

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2 The term rational models carries the connotation that these models are based on reason and that alternative models are not. Phillips’s “other-than-rational” label recognised that alternative models are not necessarily irrational. In keeping with the literature, the term “rational models” will be used but as an accepted label rather than as a claim to an objective rationality.
valence (size of win) multiplied by instrumentality (probability of winning), as well as expectancy that the action will lead to the reward. Extending the model to career decision-making, Gelatt (1962) proposed a model of career decision-making that was systematic, sequential and “scientific”. A more explicitly EU approach, which proposed exhaustive search to ensure all alternatives were considered, was applied to career decision-making by Katz (1966) and Pitz and Harren (1980). Career decision-making then became an exercise in assessment of the value and the probability of all possible outcomes, followed by extensive computation to determine the highest combination, that is, the maximum gain (or minimum loss), and select that as the optimum choice. Such models have been considered as normative, that is, stating how decision-making should be done (Gati & Asher, 2001).

More recent decision-making models proposed modifications to the rational model. Based on Tversky’s (1972) shortened process in which major attributes of choices were used for early elimination, Gati proposed a Sequential Elimination model (Gati, 1986), later refined as the Pre-screening, In-depth exploration and Choice (PIC) model (Gati & Asher, 2001). This model was intended to simplify the choice between a large number of options, as Gati characterises career decisions, by excluding many, based on broad criteria, in the early stages of the process. The Cognitive Information Processing model (CIP; Peterson et al., 1996) also suggested ways to improve the process. The CIP model mapped information processing skills to the stages of decision-making: communication for identifying a career-related problem; analysis of its cause; synthesis or elaboration of alternative options followed by crystallization of a small set of possibilities; valuing or prioritizing the options; and execution of the chosen option. By suggesting ways to enhance these cognitive skills, they proposed an enhanced decision-making process.

However, these prescriptive models remain rooted in the same approach and assumptions of the original rational model, taking for granted that a systematic, primarily cognitive, process working from known facts is the right way, and perhaps the only way, to make a career decision. As Phillips (1994, p.156) puts it:
“Our theories of career development, choice and vocational behavior implicitly or explicitly endorse decision-making behavior that is logical, methodical and objective, that is based on thorough consideration of knowledgeable facts about oneself and one’s alternatives, that yields the best course of action.”

There have been insightful arguments as to why rational decision making may have come to dominate thinking on career decisions. Gigerenzer (1991) argued that the tools and methods of psychology can be related directly to accepted concepts and findings of psychological research. He showed how the dominance of inferential statistics by the mid 1950s led to theories of the mind as intuitive statistician. One example was that of the widely-cited paper of Kelley (1967) whose attribution theory proposed that people do mental ANOVA and $F$ test calculations. Gigerenzer’s argument can be seen as exemplified in rational approaches to decision making. For example, Kahneman and Tversky’s models of judgement under uncertainty cast probability theory as normative, and human decision-making as biased or “fallacious” where it departed from probability theory. The application of the rational model to career decision-making has been traced back to Frank Parsons’s (1909, p. 5) seminal advice (Brown, 1990; Phillips & Jome, 2005):

“In the wise choice of a vocation there are three broad factors (1) a clear understanding of yourself (…) (2) a knowledge of the requirements and conditions of success (…) in different lines of work; (3) true reasoning on the relations of these two groups of facts.”

However, it has been argued that it is in the interpretation of Parsons’s words that exhaustive search and a ‘rational’ approach have been deemed essential aspects of career choice (Hartung & Blustein, 2002; Phillips, 1997).

A number of scholars have challenged the rational model. Simon’s (1955) early work had proposed limitations on human cognitive function, a ‘bounded rationality’ which contradicted the expectation of limitless processing power in the rational model. Simon also noted that decision outcomes may be “good enough”, or “satisficing”, rather than optimising. Kahneman and colleagues demonstrated a
range of ways in which people failed to follow the process prescribed by EU models, for example, by failing to consider all options, by deciding differently dependent on how a choice is framed or by incorrectly assessing the probabilities of events (Kahneman, Slovic & Tversky, 1982). The complexity and lack of certainty in career decision-making has been contrasted with the feasibility of total knowledge and of calculating the likelihood of outcomes in the rational model (Gelatt, 1989; Phillips, 1997). Knowledge of what career goals are desired or how to evaluate options is often problematic (Beach, 1993). Knowledge of all pertinent facts about oneself and the predictability of future events are unlikely to be realized (Brooks, 1990; Gelatt, 1989; Krieshok, 1998). Values and preferences are omitted from rational models, and complex, subjective life-decisions reduced to a set of small numbers (Carson & Mowsesian, 1990). There have been strong arguments (Gigerenzer, 2007; Krieshok, 1998) and evidence (Dijksterhuis, 2004) for an unconscious basis for decision-making. Not only must career decision-makers attempt to consider all possible options, but also how they will feel about them (March, 1978; Phillips, 1994, 1997). Despite evidence for the importance of emotion in decision-making (Damasio, 1996; Johnson-Laird & Oatley, 2004; Schwarz & Clore, 2007), affect is not central to prescriptive or normative models (Hartung & Blusstein, 2002; Phillips, 1997): the CIP model acknowledges that affect may be involved, but this is not explored. Decisions are influenced by their contexts (Amundson, 1995; Gigerenzer et al., 1999; Simon, 1955) and by other people (Amundson, 1995; Janis & Mann, 1977; Phillips et al., 2001; Scott & Bruce, 1995) but the context and the influence of others are ignored by prescriptive models (Etzioni, 1988).

Such criticisms point to a further unchallenged assumption: that the best or even a good career decision can be determined objectively. Many theorists have asserted that decision-making which follows a (rational) process is optimal (Gati, 1986; Gati & Asher, 2001; Gelatt, 1962; Janis & Mann, 1977) but an optimal solution assumes that career decision-making is a problem space with one single solution. There is little or no empirical evidence to establish relative benefits of different approaches in real-life career decisions (Phillips & Jome, 2005). Gati (1990) suggested that career counsellors who are not sufficiently skilled ‘decision analysts’ may guide a client
towards an “inferior” solution. By implication, the fully skilled decision analyst/career counsellor knows the best way to make a decision and therefore knows the best solution for the client, an implication analogous to ‘the God trick’ suggested by Haraway (1988) in which the objective scientific experimenter is seen as transcendental and omniscient. A weakness then with prescriptive models of decision making is the difficulty of establishing what an optimal solution or process may be, or even how such an optimal solution or process could be evaluated.

A final criticism of prescriptive models is their assumption of a static, bounded process, with a clear end point (e.g. Jepsen & Dilley, 1974). Vroom (1964) noted that a choice and its realisation are not the same, and this is particularly pertinent in careers. Little or no recognition has been ceded of barriers to implementation of a career decision (Borgen, 1997). With the exception of a few writers who have considered that the process may proceed gradually, iteratively or cyclically (Peterson et al., 1996), the individual and the context of the career problem are seen as essentially unchanged throughout the process. There is no acknowledgement of the dynamic reciprocal influences of person and environment. While the individual is thinking about career issues, the environment is changing, the individual is learning and developing (Phillips, 1997) and any decision-related action produces further change in both individual and context (Gelatt, 1962). The fixed, rational, systematic models do not allow for the richly interactive, continuously dynamic processes of real-world decision-making.

Other-than-rational perspectives, based on how people appear to make career decisions in their working lives, have offered more insights. Gelatt (1989), changing radically from his earlier views of career decision-making as rational, described career decision-making as non-sequential and non-systematic. Gelatt suggested career decision-making as a process of arranging and rearranging information into a course of action, linking to notions of reframing (e.g. Amundson, 1995). Although Gelatt did not specify a process, he argued for a flexible approach which acknowledged and saw benefit in the uncertain nature of career decisions. Nicholson and West (1989) noted that careers are not necessarily an orderly progression, but rather a reaction to evolving opportunities. People often ‘go with the flow’ and may
post-rationalise or use uncertainty to move in a particular direction. Krieshok (1998) too argued that systematic decision-making was not possible in careers. In contrast to the assumption of rational models that people could access salient aspects of self-knowledge on which to base their decision, Krieshok argued that this information is not necessarily available to individuals and that decision-making is partially unconscious. Mitchell, Levin and Krumboltz (1999) and Bright and Pryor (2004) argued for the importance of context in career decision, both sets of scholars focusing on chance events. Despite acknowledgement of affect, emotion and intuition as part of the processes of decision-making by some theorists (e.g. Gati & Asher, 2001; Janis & Mann, 1977; Peterson et al., 1996), rational perspectives have seen such influences as distorting the ideal, systematic process (Kahneman et al., 1982; Kidd, 1998). Although Kidd (1998) very usefully brought attention to the neglect of emotion in career theory, in line with the dominant paradigm, she implied that the influence of feeling on decision-making leads to a less-than-rational process.

A final alternative perspective to be considered here is the existential model of career decision making (Cohen, 2003) in which people seek meaning and authenticity in their choice of career. Career decision making was seen as a boundary or transitional situation in which existential issues may arise. Career decisions may relate to individuals’ existential quest to become a whole person and to live authentically (Hansen, 1997), thus career decision making may link to the self-concept.

Despite their valuable contributions, alternative perspectives have tended to emphasise particular aspects of the decision-making process, for example, chance or unconscious influences, but have not proposed processual models. One exception is that of Amundson’s (1995) interactive model. The interactive model proposed that external influences and decision triggers contribute to determining contexts for a decision. These contexts in turn determine the individual’s framing of a decision and therefore consequent action. Actions taken could affect the contexts which influence the decision and its framing. The interaction model acknowledges the contextual, transformational and evolving nature of the decision process and suggests framing as one type of psychological process that is involved. In particular, the decision-making process does not end once an action has been taken, rather it evolves over
time with action and cognition influencing the contexts of subsequent decision-making. The emphasis on action is consistent with Young and Valach’s (2000) central premise for their action-theoretical model of career. Amundson’s model may therefore be seen as a descriptive perspective that reflects real-world decision-making.

Other-than-rational approaches to career decision-making link to advances in general decision-making theory in psychology. The characterisation of the career decision-making process as non-sequential and often creative echoes Beach’s comment that decision-making “feels its way along” (Beach & Connolly, 2005). Gigerenzer (Gigerenzer et al., 1999; Gigerenzer & Selten, 2001; Gigerenzer, 2007) has argued that real-world decision-making uses context-specific heuristics, which can perform as well or better than those deemed optimal by a rational approach, and that emotions can guide intuition in decision making. Kidd’s (1998) insightful comments on the potential importance of emotion and affect to career decisions are supported by Damasio’s (1996) neuropsychological proposals on the criticality of emotion in judgment and decisions generally. The centrality of emotion to decision-making is further supported by the cognitive approach of Johnson-Laird and Oatley (2004) that argued for emotion as facilitating complex decision-making and reflecting partially unconscious evaluation processes. There is consistency too with the arguments of Frijda et al. (2000) who argued that feelings influence thoughts and are essential as triggers to action.

Phillips’s (1997) critique of the literature on career decision-making concluded that both affect and context are likely to be part of decision-making, that decision-making may evolve over time and the decision-maker is likely to be purposeful. This final point links back to earlier criticisms of approaches to career decision-making as decontextualised (Blustein, 1997): not only have career decisions been considered as isolated from context but also as separate from the decision-maker. The rational decision-maker attributes values to outcomes but neither uses emotion nor is personally invested in the outcomes. In contrast, Phillips (1997) proposed that the decision-maker is purposeful, agentic and actively adapting to the changing environment. Given the centrality of the self-concept to career throughout career
theory, to this we can add assumptions that career decisions necessarily involve the self – these are decisions, the outcome of which are likely to profoundly influence the sense of self and identity. Phillips (1997) concluded with a call for more descriptive models of career decision-making, using approaches that ask deciders about their experience, and use examples of successful decisions. The research programme outlined in the thesis answers this call.

In summary then, rational models of career decision-making are still influential in the literature despite empirical evidence and theoretical criticism that they do not describe the experience of career decision-makers, nor can they demonstrate superior outcomes. A wide range of research and theory, that springs from description of real-world decisions, proposes a richer, more dynamic and interactive perspective on decision-making. These perspectives stress that real-world decision-making is complex, uncertain, unstable, not temporally bounded, and that change and emotion, and, it is argued here, the self, are essential aspects.

Having described the major career theories and theoretical approaches to career decision making, discussion now turns to models of turnover, that is, change of job or occupation.

### 2.9 Models of Turnover and Recent Empirical Findings

In reviewing models of leaving a career, it is necessary to start with models of leaving a job, or employee turnover, on which models of occupation change have been based.

Focusing on intra-career changes, Nicholson (1984) proposed a work-role transitions model, which suggested that taking up a new work role brings about personal and/or role development. Ashforth and Saks (1995) however noted that context and social influences were neglected by the model, which focused on engagement with the new role rather than disengagement with the old.

Mobley (1977) is acknowledged as the first writer to postulate intermediate constructs in the established relationship between job satisfaction and turnover.
Specifically, he suggested “Thinking of quitting” as the “first logical step” (p. 237) after lowered job satisfaction, followed by evaluation of expected utility of search, intention to search, search, evaluation of alternatives, intention to leave and actual leaving. Despite his positioning of this model as a heuristic intended to stimulate more detailed research, it was widely adopted as a comprehensive explanation of the withdrawal process (Hom & Griffeth, 1991).

Rhodes and Doering (1983, 1993) drew on Mobley’s constructs and empirical work with teachers to propose a model of career change which centred on the relationship between job satisfaction and the withdrawal process. Their withdrawal process included intention to change, intention to search and actual search. Their integrated model posited three types of influence on the process of career change: environmental, organisational and personal, a categorisation later used by Cotton and Tuttle (1986), Blau and Lunz (1998) and others. The organisational influences included perceived support for personal growth, which had emerged as one of the top two reasons for changing career in their earlier qualitative study (Doering & Rhodes, 1989). The other top reason of pay was not included in their 1993 study. This later model added more work factors, including safety and autonomy, but dropped performance, presumably for practical reasons concerning the time required for participants to complete the measures. Availability of alternative opportunities was postulated as contributing negatively to job satisfaction and career satisfaction. Although Rhodes and Doering’s (1993) study was a valuable attempt to explore determinants and process together, it resulted in a complex model and may have contributed to the low response rate (9%) and limited significant findings. In particular, alternative opportunities were not significantly related to job satisfaction and no variance of career satisfaction was explained. A relationship between job and career satisfaction was not tested.

Mobley’s intermediate constructs in the withdrawal process have been contested by Hom and Griffeth (1991), who argued that the constructs were not based on empirical evidence. Using structural equation modelling, they demonstrated that a single global cognition adequately and more parsimoniously described their data of withdrawal by a group of nurses. Rather than separate constructs of ‘thinking of
quitting’, ‘intention to search’, and ‘intention to leave’, one construct of ‘withdrawal cognitions’ was adequate. Further, they noted, as Mobley (1977) had done, that some workers leave a job without having found an alternative. For these employees, perception of alternative opportunities did not appear to relate to withdrawal cognitions, and search behaviour therefore did not precede action to change.

Blau and Lunz (1998) investigated the relationship between professional commitment and intention to change profession in medical technologists. A moderate relationship was found, with professional commitment explaining 11% of the variance of intention to change. However, a weakness of this study was the use of intention to change as the dependent variable. Intention to change has been used as a proxy for actual change in turnover research, based on the theory of planned behaviour. The theory of planned behaviour (Fishbein & Ajzen, 1975) proposed intentions as the immediate antecedent of action but it has been argued that this may not hold in turnover. Hom and Griffeth’s (1995) meta-analysis found shared variance of only 12% between intention to leave a job and actual leaving. Internal processes such as self-efficacy and barriers (Lent et al., 1994), or external forces such as the labour market, may intercede between intention and action.

Kirschenbaum and Weisberg (1994) found that intention to change job was not significantly related to actual change. Researchers have noted that the use of intention to change has a pragmatic basis, since actual change is more difficult to measure (Blau, 2007; Rhodes & Doering, 1993), but it should be acknowledged that the use of intention to change as a proxy for actual change is a weak measure.

Noting the weak linkage between job satisfaction and actual turnover (3.6% shared variance) in Hom and Griffeth’s (1995) meta-analysis, Lee and colleagues took a different approach to understanding voluntary turnover (Lee & Mitchell, 1994; Lee, Mitchell, Holtom, McDaniel & Hill, 1999; Lee, Mitchell, Weiss & Fireman, 1996). Based on interviews with people who had left a job, Lee and Mitchell proposed four different paths to change. These paths combined a shock event, a script or pre-existing plan of action, image violations and search activity. A shock or trigger event could be positive (e.g. a job offer), negative (e.g. a poor appraisal) or neutral (e.g. relocation of spouse). A script could be based on the individual’s own
experience or that of others, or on social expectation. Image violation related to a mismatch between the individual’s values and goals and their current or expected environment. Search behaviour was defined as looking for and evaluating alternative jobs. The four paths in the unfolding model described different combinations of presence or absence of the four variables.

The unfolding model offered an alternative perspective on the withdrawal process. It described the experiences of 93% of Lee et al.’s (1999) sample. It acknowledged that search activity is not always necessary and it considered psychological factors relating to values and goals. It also appeared to offer a falsifiable model. However, key constructs have not been clearly defined, related to theory or rigorously operationalised. While scripts may be part of the psychological processes of withdrawal, they ranged here from a ‘leave my job and find another’ to “I turned down a previous job offer and I was sorry. If they offer again, I’ll accept it” (p. 453). This suggests a range of psychological processes: the use of the script construct appears to describe but not explain. Similarly, image violations may relate in part to the self-concept but this was not clear. Beach and Connolly (2005) suggested that the turnover model was based on their image theory, but did not expand on what images were salient and whether salience could change over time. Overall, the approach by Lee et al. of exploring the experiences of people who have changed job has offered fruitful new areas of interest. More work is needed to specify relevant constructs and relate them to theory.

Griffeth, Hom and Gaertner (2000) in their meta-analysis found that withdrawal cognitions were related to job factors, mediated by job dissatisfaction. The only demographic with a significant relationship to job turnover was the number of dependent children. Blau (2007) however found no relationship between job turnover and demographics, which included dependent children, tenure and primary earner. In this first test of Rhodes and Doering’s model on occupation change, Blau found that only occupational satisfaction was significantly related to later occupational turnover; at the later time-point, intention to leave the occupation was significantly related to occupational turnover, but occupational search and perception of alternative opportunities were not. Blau argued that the findings
supported a common framework for organisational and occupational turnover, which includes satisfaction as a contributor, but also confirmed occupational and organisational turnover as separate constructs.

Previous models then have shown some of the complexities of career change, suggested some key concepts and raised further questions on influences and process. In addition to the quantitative studies which proposed and tested models, three recent empirical investigations specifically on career change have been identified and will now be outlined.

Arthur et al. (1999) investigated the experience of careers in New Zealand at a time of economic change. Amongst the themes they elicited from their interviews with 75 people in a wide variety of occupations were improvisation, retrospective sense-making and adaptive behaviour. The participants had experienced a high level of change in their working lives: more than 50% had changed occupation within the previous 10 years, and the average job tenure was 4.3 years. Individuals appeared to use or to create opportunities and to react to their circumstances to make changes in their working lives. The authors described experimentation in the early years, moments of truth when individuals realised what they wanted to do or conversely what they did not want to continue doing, and maternity leave experienced as a transition which gave opportunity for reflection and regeneration. They noted patterns of moving from somewhat formless exploration to more defined direction at all stages of career. Arthur and colleagues concluded that career improvisation rather than career planning best described their participants’ working lives, that voluntary radical change was common and “non-linear careers appeared to be the rule rather than the exception” (p. 164). They also noted that the discontinuity implied by such change was typically retrospectively constructed into a narrative of continuity through people’s sense making. The extensive study by Arthur, Inkson and Pringle provided a richly descriptive account of the lived experience of careers, and highlighted many aspects of the phenomenology of careers that had previously been missed or minimised.

Cohen and Mallon’s (1999) qualitative studies explored the experience of 39 people changing from organisational careers to self-employment. The triggers described in
the accounts were varied: more than half of the participants saw lack of growth or stagnation as an influence; many had experienced a clash of values; many suggested work-nonwork conflict as contributing. Cohen and Mallon described a “web of factors” (p. 338) as appearing to contribute to initiation of the career changes. The research then considered the participants’ feelings and beliefs about the change. Many noted they could “be themselves”, appearing to find greater authenticity in their new roles. There were further benefits, including greater freedom and excitement, but there were disadvantages too, many relating to portfolio working and social identity, social status, economic risk and the lack of organisational structure. Cohen and Mallon’s studies documented a more holistic and textured account of the experience of career change. Amongst the contributions of their studies was the move away from earlier tendencies in the literature towards dichotomies, such as ‘push’ or ‘pull’ towards career change, or of either benefit or disadvantage of organisational or non-organisational careers.

Wise and Millward’s (2005) qualitative study of career changers in their 30s noted themes of continuity and discontinuity, values and context. In line with Cohen and Mallon’s (1999) findings, Wise and Millward described the contemporaneous experience of apparently antithetical feelings and beliefs: participants’ accounts included both change and continuity. Their values, including a need for growth and self-fulfilment, appeared to guide their change, and sense making and progress through the change seemed to relate to individuals’ contexts. In its focus on occupation change, and on participants in their thirties, Wise and Millward’s study contributed to the limited empirical base, and their findings complemented those of Cohen and Mallon, and of Arthur and colleagues in showing complexity and the importance of context in career paths.

Based on the review of the literature on turnover and on career change, the research programme aimed to understand the experience of occupation change within its context and to refine existing models of change.
2.10 Alternative Perspectives on Career

In seeking to investigate the experience and process of occupation change, it is acknowledged that there are alternative perspectives on career that are not addressed in this research.

From a social constructionist perspective, the nature of career as a construction is central. Careers play out in time and in space and both of these concepts are in themselves constructed (Collin, 2000). Career theories, especially life-stage theories which map tasks and milestones for different life stages (e.g. Super, 1957), can become normative and be assimilated into the individual’s construction of career, despite the acknowledged inappropriateness of a life-stage theory for describing any one life (Collin, 2000). Individuals’ constructions of careers have been construed as “vocational projects” (Riverin-Simard, 2000), based on the concept of personal projects of Heidegger (1962) and Sartre (1963). This concept aligns with Giddens’s (1991) self-reflexive projects and sees the constructed narrative as a means of creating continuity and connection (Patton, 2000). The vocational project is assumed to be constructed by every individual but its value (and perhaps its salience) is especially relevant during change (Riverin-Simard, 2000): the vocational project helps maintain continuity of identity, coherence in narrative and guidance toward action.

From a developmental perspective, the evolution of career over the life course is intrinsic to its exploration. Cytrynbaum and Crites (1989) and others had mapped career stages to life span developmental theories, such as those of Levinson and Vaillant. However, Vondracek and colleagues (Vondracek & Fouad, 1994; Vondracek, Lerner & Schulenberg, 1983) argued the weakness of stage theories in accounting for development in ever-changing socioeconomic and cultural contexts. They proposed that careers should be understood within a contextual framework, which encompassed human development over the life span. They and Savickas (2002) argued the importance of longitudinal studies in exploring career. The importance of human development and of time in career is acknowledged. The
research programme does not explicitly address development but does position the process of occupation change within a changing context over time.

Psychodynamic perspectives on career take a substantially different approach from the theory and research on which this programme is based. They have much to offer regarding understanding careers but they are not a focus of the current research.

There has been much published on the construct of fit between individuals and their working environment (Cable & DeRue, 2002; Judge & Ferris, 1992; Kristof, 1996; Verquer, Beehr & Wagner, 2003). Most such studies can be characterised as adopting either a complementary perspective, of congruence between individual and environment, or a supplementary perspective, of the employee providing the skills required by the employer and the employer providing for the needs of the employee (Cable & DeRue, 2002; Cable & Edwards, 2004). This research has demonstrated correlation between fit and job satisfaction and turnover, and has proposed particularly useful insights into mechanisms involved in recruitment and socialisation of employees (Chatman, 1991; Kristof-Brown, 2000). However, the approach is of limited use in the current research programme. Of interest is the proposal that person-organisation fit relates to values (Chatman, 1991; Kristof, 1996; O’Reilly, Chatman & Caldwell, 1991) and that fit generally relates to the self-concept (Wheeler et al., 2005). However, despite attempts at integration, there is still acknowledgement that “it is difficult to differentiate between fit perspectives” (Kristof, 1996, p. 6; Wheeler et al. 2005) and the overall research paradigm is firmly organisationally based. The exploration of occupation change in the current research programme focuses on the individual: where appropriate, the contributions of fit research are considered but are not central to the approach.

### 2.11 Summary and Conclusion

It has been argued above that, despite the broad and well-established literature on careers, the experience and process of voluntary occupation change are not adequately explained. Despite its long establishment as a salient psychological factor in careers, the self-concept in career change has been poorly conceptualised. It has been further argued that Identity Process Theory could offer a useful theoretical
framework for the self in career. There has been relatively little investigation of the role of emotion in career change, notwithstanding the increasing evidence from other fields of psychology of its intrinsic role in cognition in general, and in decision-making in particular. The motivational construct of a ‘possible self’ has been suggested as potentially relevant in career decisions. Moving on from assumptions that rational decision-making is the right way to make career decisions, other-than-rational perspectives have been argued to be a closer reflection of real-life decision making. Such perspectives require further extension to incorporate emotion and the self. Although women’s career paths differ from men’s, the implication for voluntary occupation change has not been investigated.

There is a need, therefore, for more investigation of the process and experience of voluntary occupation change which this thesis addresses. The next chapter will describe the methodologies chosen to explore the research area.
Chapter 3 Epistemology and Methodologies

Research methodology should be consistent with the objectives of the research (Breakwell et al., 2000). The aim of this research programme was to investigate the experience and process of voluntary occupation change. The objectives were to enrich understanding of the experiences involved, to add to theoretical knowledge on the psychological processes and to contribute to the limited empirical base. The intended audience for the research was the individual considering career change and the career counsellor, as well as the scientific community. In designing the research, two different methodologies were used to meet the research objectives: Interpretative Phenomenological Analysis and a quantitative, longitudinal survey. Because epistemological assumptions fundamentally influence approach and methodology, this chapter will review the epistemological assumptions underlying approaches to the study of careers, before outlining the researcher’s epistemological stance, and then explaining the research strategy and choice of methodologies.

3.1 Epistemologies underlying Career Research

As noted in Chapter 2, research on career has been multi-disciplinary. Although Barley (1989) suggested a tendency for a split in conceptualisation of career along disciplinary lines, with sociology focusing on the external or structural career and psychology on the internal or subjective career, he acknowledged that Hughes and the Chicago sociology school explored both the internal and the external career. Arthur (1994) saw this dual conceptualisation as continuing to be acknowledged within psychology through the 1970s. However, his review of 73 articles in 5 interdisciplinary journals from the late 1980s and early 1990s noted that the focus on organisational careers meant that the subjective career was relegated to a secondary interest, and was generally seen through the lens of the organisational career. A similar critique has been made of the literature on career success. Although many writers have noted the interdependence of objective and subjective career success (Gunz & Heslin, 2005; Nicholson & DeWaal-Andrews, 2005), objective outcomes have typically been used as proxies for success (Heslin, 2005; Nicholson & DeWaal-Andrews, 2005). The underlying epistemology and the methodologies of
much research on career success, and on careers in general, may account for the drift towards the objective career. In common with most psychological research in the latter half of the twentieth century, and consistent with an epistemology focused on the organisational career, studies of careers have used a logical positivist approach, The approach focuses on measurable constructs. Measures are objective and are determined by the researcher (Gunz & Heslin, 2005). The approach thus facilitates research on the objective aspects of career.

The logical positivist epistemology underpins the dominant research paradigm in psychology, and as such, offers benefits in the study of careers, as well as constraints. The approach can facilitate causal explanation, and while full explanation may not be possible, such an outcome is desirable within the Western scientific tradition. The approach assumes common patterns of behaviour and this offers opportunities for generalisation. The requirement for operationalisation of psychological constructs offers the discipline of precision, and of comprehensive and adequate definition, with the potential for shared tools (measures), and an additional way of contributing to knowledge.

However, the logical positivist epistemology also brings constraints. Its methodologies of closed-question surveys or hypothesis-testing experiments can be reductionist: context may be greatly limited and complexity greatly minimised. It can focus on components rather than wholeness and can explore only problems that can be reduced to measurable facets (Wetherell et al., 2001). The source of new theoretical ideas can be problematic within this perspective: hypotheses are typically built on induction from previous research, which can limit substantially new theoretical directions (Danziger, 1990). An epistemological position and its linked methodology can determine the type of research findings. Gigerenzer (1991) argued that the dominance of the logical positivist paradigm and the traditional scientific experiment has meant that the tools have influenced the theories: the cognitive-based method has resulted in cognitive-based findings, sidelining affective and conative processes. Because the epistemology is nomothetic, seeking general laws, the experience of the individual is not explored, and the voice of the individual is usually not heard (Arthur et al., 2005; Tice & Wallace, 2003). In aiming to provide a
characterisation of a population, findings may not describe or explain the lived experience of any one person (Marshall, 1989) and the human source of data may become invisible (Walsh-Bowers, 1999).

The limitations of hypothetico-deductive research in careers have been pointed out by many commentators, including the lack of context (Bailyn, 1989; Hartung & Blustein, 2002; Nicholson, 1996), the loss of richness and complexity (Cohen et al., 2004) and the absence of emotion (Kidd, 1998). The emphases in the new career theories on phenomenological meaning and learning (Hall, 1996), personal growth (Collin, 2000), psychological success and development of identity (Hall, 1996, 2004), personal values (Patton, 2000) and sense-making (Mirvis & Hall, 1994) are more fully explored through subjective interpretation, and critics of the logical positivist traditional in career research have suggested alternative epistemologies and methodologies.

One such alternative approach is phenomenology. The phenomenological view takes an individual’s lived experience as its ontological focus, and uses qualitative methodologies concerned with stories or narrative. Career stories are not only the data of research but are, in themselves, part of experience, sources of meaning (Young & Collin, 2000) which aid the construction of identity and direction (Arthur et al., 1999). Stories and texts are used also in social constructionist analyses, which argue for career as constructed, both by social institutions such as organisations, and by the individual (Collin & Young, 2000): as such, the narratives themselves, whether spoken or written, are constructive texts, building or extending perspectives of ‘career’. Qualitative epistemologies acknowledge the situated and complex nature of psychological processes: the psychological is not seen as separate from its social and physical environment. The individual and context are mutually constructive – the environment influences the person and the person’s actions, including speech, change the environment (Sapsford, 2001). Coyle (2007) defines context as the social systems and feedback mechanisms within which individuals live their lives and notes that context therefore forms part of what psychology researches. Qualitative epistemologies emphasise meaning – from the phenomenological perspective, it is the meaning to the individual that is focal. The product of qualitative research is
understanding, rather than causal explanation, and richly detailed description which attempts to incorporate context and complexity. Qualitative approaches can offer richer theory too, since radically new concepts can emerge from the data (Henwood & Pidgeon, 1992). Validity is based not only on adherence to rigorous process but also related more broadly to importance and contribution of the findings, to individuals and to society (Coyle, 2007; Lyons, 2007; Yardley, 2000).

The applicability of qualitative methods to career research is clear. The subjective experience of career is focal. Context is also considered, so the objective career is not excluded. A rich and holistic description of career experience is the intended outcome and affective and conative processes are not sidelined. Validity is established in part with reference to faithfulness to the individual’s lived experience, and in terms of contribution to understanding. Nevertheless, despite their advantages, qualitative methods do not offer a singular, definitive approach to career research. In particular, their aim is description rather than explanation (Henwood & Pidgeon, 1992) and causality is not addressed. Their findings may generalise theoretically rather than statistically, and may be salient only for the small number of participants (Willig, 2001).

However, the limitations of a qualitative approach can be complemented by the strengths of the quantitative approach, suggesting that a mixed approach has much to offer career research. Henwood and Pidgeon (1992) argued that qualitative and quantitative methodologies are not incommensurate, and that research can be strengthened by the judicious mixing of methods. They and others (e.g. Davis & Rose, 2003) advise that the choice of methodology depends on the research question. In careers, Nicholson and West (1989) had argued for both quantitative and phenomenological approaches.

This programme of research used both approaches: a qualitative methodology for its first study and a quantitative approach for the second study. In order to explain and justify the methodologies used, I will first describe my personal epistemological position and then show how this links to the methodologies chosen.
3.2 The Researcher’s Epistemological Stance

An extreme realist position argues the existence of one common reality that exists outside of human experience, the understanding of which is the ‘truth’ to which science aspires (Ashworth, 2003; Walsh-Bowers, 1999). An extreme relativist stance argues against a reality beyond human experience, with the consequence that knowledge has no absolute basis. In this research, I take a pragmatic realist perspective. I accept the concept of a shared reality because of its usefulness for shared communication, as a reference point for meaning and sense-making, and as a way of organising knowledge and experience, within research and more generally. However, I also accept that experience is constructed and, as such, is socially, culturally and temporally situated. Construction occurs at both individual and societal levels, but in this research, the experience and processes of the individual are foregrounded. Although careers are constructed within the structures of society, and the individual’s constructions are embedded within the context of society, culture and time, I am interested in how and why individuals act as they do in voluntary career change, and how individuals make sense of their experience (see Personal Reflexivity below). My aim, inter alia, is to provide findings of use to individuals as they seek to pursue and make sense of voluntary career change.

3.3 Research Strategy and Choice of Methodologies

Fitting with my interest in the individual’s experience, I chose Interpretative Phenomenological Analysis (IPA) for the first study because of its phenomenological focus. I chose IPA rather than grounded theory because my aim was to enrich existing theory, rather than generate new theory. Discourse and narrative analysis were rejected as based on social constructionist epistemology rather than a pragmatic realist basis. IPA is an established, ideographic methodology (Lyons & Coyle, 2007; Millward, 2006; Smith, 1996), increasingly widely used in European psychology. Typically based on individual, semi-structured interviews with a small set of participants, IPA aims to give an account of participants’ experiences through a systematic and rigorous analysis (Smith, Jarman, & Osborn, 1999). The resulting account represents a double hermeneutic: firstly, at a
The methodology does not test hypotheses: its objective is to understand the participants’ lived experience without imposing the constraints of prior theory (Storey, 2007). At the critical analytical level, links to existing theory may be explored, to provide greater insight on the data or, volte-face, to critique or to extend current theory (Storey, 2007). IPA can offer insights which quantitative methods cannot (Flowers, 2008; Reid, Flowers, & Larkin, 2005): through systematic analysis of the experience of interest, in all its richness and complexity, novel insights and a broader, more integrated perspective may be gained. IPA then was an appropriate methodology to meet the initial aims of the research programme: to explore the lived experience of voluntary career change in order to enrich understanding of process and experience.

The findings from the first study suggested interesting possible relationships and one aim of the second study was to test these. The first study raised questions on the generalisability of its findings, in part because women only were included as participants. Further, the findings, especially relating to identity, suggested opportunities for moving beyond general constructs towards specifying, defining and operationalising. For these reasons, a quantitative approach was chosen for the second study. Because most previous research on career change had been cross-sectional, and also because findings from Study 1 had suggested causal relationships, a longitudinal design was chosen for Study 2. The aims were to advance understanding of the career change process, to investigate key constructs as the process evolved over time, and to provide evidence for causal relationships among the key constructs.

### 3.4 Criteria for Evaluation

The criteria by which qualitative research may be evaluated are acknowledged to differ from the criteria applicable to quantitative (Henwood & Pidgeon, 1992; Lyons, 2007; Smith, 2003). For quantitative study, objectivity as a primary criterion leads to evaluation of validity, replicability and representativeness. For qualitative
research however, these criteria do not apply and others have been suggested. Henwood and Pidgeon (1992) proposed keeping close to the data, reflexivity to recognise and analyse the researcher’s role, and plausibility and persuasiveness of findings. Yardley (2000) suggested sensitivity to context, rigour, coherence, transparency, commitment, and contribution. Lyons (2007) categorised these and other approaches as relating to rigour and to usefulness. The description of the qualitative study in Chapter 4 shows how the research process attempted to meet these criteria. The standard criteria for evaluation of quantitative research are addressed in Chapters 5 and 6, which describe the quantitative study, and include statistical significance, representativeness of sample and thresholds for goodness-of-fit for structural models.

3.5 Personal Reflexivity

The logical positivist perspective aspires to research as an objective process from which human aspects are removed. The origin of the research – how and why it had been selected as a topic worthy of study – is rarely explained and any personal engagement with the topic is not acknowledged. In contrast, a benefit of qualitative methodologies is the spotlight they bring to bear on the role of the researcher in the research process. Qualitative methodologies typically require the researcher to describe her/his ‘speaking position’: to reflect on prior knowledge and experience that may be salient in the research process (Coyle, 2007; Lyons, 2007). My speaking position is now described.

I had made two major changes in my career in recent years. The first was to move from a typical vertical career path in a large organisation. I had worked in Information Technology (IT) from university and had worked in the same organisation for 11 years, taking several steps up the career ladder. In my first major change, I resigned from the large organisation with the intention of taking up contract work. I started a 6-month contract with another large organisation, in a different industry. This was extended to last 3 years, including part-time work after maternity leave. It ended when a major down-turn in business for the industry meant that almost all contract staff were laid off by the company. I took some time to
review what I wanted from my life and work. I decided to retrain in occupational psychology and began the first course of study which led ultimately to my doctoral research.

My choice of research topic for the doctoral programme linked back to my reflections on what I wanted to do in my working life. Based on my own experiences, I felt that little support existed for working adults outside senior management who were grappling with career issues and I decided that I wanted to work as a career coach. In addition, I realised that my radical career change was not unusual, that few of my 40-year-old peers were still in organisational careers. These reflections prompted my choice of research topic of voluntary occupation change.

Reflecting on salient aspects of my experience that may have been influential in the research process, I believe my resignation from a permanent position in a large organisation was in part a reaction to feeling pressured to conform to normative organisational culture. As a manager within a big company, I had seen the often negative effects that organisational culture can have on individuals. I think that these experiences contributed to my focus on the individual as part of resisting the power of the organisation (Sapsford & Dallos, 2001). In line with Heather (1976), I believe that psychology should provide knowledge which empowers individuals, by facilitating greater understanding and greater control over their own experience. Ultimately, I wanted the outcomes of this research to be for the individual. The implication of my personal stance is that the findings are more likely to be relevant and meaningful to individuals: findings that may be relevant for organisations may not be examined in as much detail.

The move from permanent to contract employment within IT was, for me, the ‘big’ change: I experienced it as more risky, and involving much more emotion, than my change from contract IT work to psychology. There were many reasons why I resigned my permanent position and it felt like a sudden decision in the end, although it had been building for many years. In comparison, I experienced my decision to move into psychology as a more gradual and calmer process. Both of my changes were ‘reasoned’, rather than rash, decisions but it is only in the course of my reflections here that I have seen the different levels of emotions associated with
each. Because my change of field had felt like a gradual transition, I had no specific expectations of triggers for voluntary occupation change or of a path for decision-making in my research. In the course of the research, I experienced some resonances with my own experience and I believe this helped my analysis of the qualitative data in the first study. I felt far more that my research findings helped me to understand aspects of my experiences rather than that my experiences influenced the research. In some ways, this was a triple hermeneutic: my interpretation of the participants’ sense-making enabled me to interpret my own career changes more deeply. However, in line with IPA, the interest here is in the interpretation of the participants’ stories.

Having discussed how the choice of methodologies related to the research aims and to my epistemological stance, the next chapter presents in detail the background, approach and findings for the first study: a qualitative exploration of the experience of career change in women who had voluntarily changed occupation.
Chapter 4 Study 1 - A Qualitative Investigation of How Women Experience Occupation Change

This chapter describes a qualitative study of the experience of occupation change. Section 4.1 provides a summary of what is known or suggested by the literature on career change, and what gaps of understanding remain. Section 4.2 justifies the choice of method and details the procedure and process of analysis. Section 4.3 describes the analysis, under five main themes. The discussion in Section 4.4 considers how the themes that emerged from the analysis link to existing literature, where the data diverge from previous findings, and the implications of the findings. The chapter concludes with proposals for future research and for application in career counselling.

4.1 Background

The literature review in Chapter 2 provided a detailed critique on the contributions of career theory and research to understanding occupation change. The main points of that discussion are now outlined.

Although the main career theories address careers and career choice in general, some aspects can be applied to career change in particular. Super’s (1957, 1990) life-stage framework suggested a varying pattern of needs underpinning careers over the life-span and this may have a bearing on voluntary career change. Super also proposed that there are cycles of transition throughout working life. This implies that the individual takes multiple career decisions over the course of a career, contrary to the single choice of career taken on leaving education, which is implicitly assumed by much of the career literature. Super (1957) also posited career as the realisation of the self-concept: a proposition widely accepted although little explored. Nicholson (1990), in considering work transitions, proposed a changing identity during the transition process. Identity and the self-concept then may be involved in career change.
Recent career theories, including boundaryless career (Arthur & Rousseau, 1996), protean career (Hall & Mirvis, 1996) and chaotic career theories (Pryor & Bright, 2003), have stressed the pervasiveness of change in working lives, suggesting factors that may be pertinent in voluntary career change. The salience of values and meaning have been suggested in the theoretical and empirical literature (Hall & Chandler, 2005; Kanchier & Unruh, 1989), as well as the desire for personal growth (Cohen & Mallon, 1999; Mallon, 1999; Rhodes & Doering, 1993; Roborgh & Stacey, 1986). Shock or trigger events, and possible violations of the self-concept, have been implicated in voluntary turnover (Lee et al., 1996; Lee et al., 1999).

Traditional perspectives on career decision making have proposed prescriptive models which emphasised logical, systematic search and rational decision making (Gati & Asher, 2001; Peterson et al., 1996) but other-than-rational perspectives have argued that decision making is non-systematic, contextual and interactive, and draws on affect and the invested self (Gelatt, 1989; Krieshok, 1998; Phillips, 1997).

There is a limited empirical base on voluntary occupation change (Mallon, 1999). Rhodes and Doering’s (1983, 1993) quantitative studies on voluntary career change in teaching, Arthur, Inkson and Pringle’s (1999) research on changing career contexts in New Zealand, Cohen and Mallon’s (1999) qualitative studies of people changing from organisational careers to self-employment, and Wise and Millward’s (2005) phenomenological study of career changers in their 30s stand out as the key empirical studies on voluntary career change in the last 25 years. Rhodes and Doering (1993) tested a model in which person/work environment factors which included ‘career growth discrepancy’ and ‘autonomy achievement need’, demographic factors such as tenure, and external factors such as ‘available alternative opportunities’ were related to thoughts of changing career via job satisfaction. In their study, thoughts of changing were related to intention to change careers via actual search behaviour. However, Rhodes and Doering concluded that their model had only modest support from the data.

Arthur et al. (1999) interviewed 75 people and found that more than half (64% of women, 54% of men) had changed career in the previous ten years. Arthur et al. noted the importance of improvisation and of sense-making in careers. They argued
that, rather than following a predetermined, pre-planned path, people enacted their careers, that is, they played an important role in creating their own career path. Further, although careers could appear objectively discontinuous, sense-making processes constructed a more continuous story. Cohen and Mallon (1999) also noted the interaction between the objective and the subjective in career stories. They argued that a dichotomy of ‘push’ or ‘pull’ motives for the change to self-employment was too simplistic, that in fact a “web of factors” (p. 338) was at play. Wise and Millward (2005) found personal growth, challenge and meaning salient in explanations for career change, and noted that, while participants acknowledged discontinuities during the change process, they also appeared actively to seek continuity.

Notwithstanding the insights provided by theory and research, many questions still remain regarding voluntary career change. The self-concept, including growth, autonomy and self-related sense-making, has been implicated in careers and also in career change but how transitions may involve the self is not clearly understood at the processual level. If the self has been realised in the old career, what processes enable change to the new career? If the self has not been realised in the old career, does this contribute to thoughts of changing? What role do emotions play? Do they contribute to the initiation of a career change process? Do emotions facilitate decision making? If career decision making may be non-systematic, contextual and improvised, what processes are involved?

A final gap of note is the restricted focus of much career research (Betz & Fitzgerald, 1987; Gallos, 1989; Marshall, 1989; Pringle & Mallon, 2003; Thomas, 1989). Career theories have tended to focus on the manager or professional, almost invariably male and implicitly white (Arthur, 1994; Sullivan, 1999), with the result that women’s experiences have been constructed as “deviations from a dominant pattern” (Pringle & Mallon, 2003, p. 842; see also Gallos, 1989; Marshall, 1989). Assumptions of the organisational career as continuous and aimed at upward progression do not necessarily reflect many women’s experience of interruptions to career to look after family, and acceptance of lower-status roles to accommodate non-work responsibilities (Burke, 1994 499 /id;Goffee, 1994 460 /id;Lingard, 2008
Differences in career motivations between women and men have been found (Brett & Stroh, 1994), and some scholars suggest that women’s careers may be particularly useful to study:

“Women’s career trajectories, which tend to be characterized by nonlinear paths and frequent transition, provide an ideal location to begin mapping the elements of career adaptability (…), that is, the constellation of skills and traits that allow one to adapt successfully to vocational disruption, transformation and changing demands” (Fassinger, 2005, p. 101).

Arguably then, there is a need to understand the career experiences of women, to see how different patterns of career paths are experienced and to explore change.

There is therefore scope for more studies investigating voluntary career change, with particular reference to the questions raised above. These questions may be seen as relating to the self, to emotion and to context and a qualitative approach is thus suggested as appropriate. In particular, Interpretative Phenomenological Analysis (IPA) offers a systematic and rigorous approach that foregrounds the participants’ sense making, answering Phillips’ (1997) call to investigate career decision making from the perspective and experience of the person making the decisions, and Blustein’s (1997) call for more contextual research.

An IPA study on women’s experience of voluntary career change was therefore conducted. The objective of this study was to understand the experience of changing occupations. The research question was: how do women experience voluntary occupation change? The research aimed to explore experiences of occupation change with potential to extend current career theory and to add to a limited empirical base by providing a detailed and rich description of subjective experiences of career change.

As described in more detail in Chapter 2, career change can encompass a broad spectrum, from ‘simple’ changes of job to ‘complex’ changes of field or industry. The term ‘occupation change’ is used here for a complex transformation that
requires significant changes in roles, responsibilities, skills and field of expertise or body of knowledge.

4.2 Method

IPA is an established, ideographic, phenomenological methodology (Lyons & Coyle, 2007; Millward, 2006; Smith, 1996). IPA was chosen over other qualitative methods because of the focus on the phenomenology of career experience and the aim of the study to enrich existing theory, rather than generate new theory. Typically based on individual, semi-structured interviews with a small set of participants, IPA aims to give an account of participants’ experiences through a systematic and rigorous analysis (Smith et al., 1999). The resulting account represents a double hermeneutic: firstly, at a descriptive level of the participants’ own sense-making of their experience, and secondly, at a critical analytic level across the participants’ accounts (Smith & Osborn, 2003). The methodology does not test hypotheses: its objective is to understand the participants’ lived experience without imposing the constraints of prior theory (Storey, 2007). At the critical analytical level, links to existing theory may be explored, to provide greater insight on the data or to critique or extend current theory (Storey, 2007).

As with all methodologies, there are limitations to IPA. Practical considerations such as time can limit the number of participants that can be involved. The results emerge from the unique interaction between researcher and data, and as such, will not be identically replicable. However, IPA can offer insights that quantitative methods cannot (Reid, Flowers, & Larkin, 2005; Flowers, 2008). IPA explores experiences in context, as can quantitative methods, but whereas quantitative studies tend to measure limited aspects of experience as determined by previous theory, IPA allows a more holistic description of the experience in its richness and complexity. Systematic analysis of these data can provide novel insights and a broader, more integrated perspective. IPA centres on the participants’ sense-making of their personal experience, providing a subjective view in contrast to the more objective or external standpoint of quantitative research. More generally, IPA provides an
investigatory perspective that can complement other approaches and, as such, is an appropriate methodology to explore the experience of voluntary occupation change.

Retrospective accounts of change were chosen for the study in preference to accounts of current, ongoing change for the following reasons. Firstly, the outcome of the change process was clear: for all of the participants, career change had happened. Secondly, this facilitated homogeneity, avoiding potential issues of participants not being in comparable stages of change. Finally, it was considered more likely that retrospective accounts would tend to be internally consistent, due in part to post hoc reflection. Although accounts from memory may be constructed rather than veridical (Crawford et al., 1992), it is the construction or sense-making that is of interest. Crawford et al. noted that memory is ‘true’ - whether or not the events happened as described is not pertinent where the focus is on participants’ interpretation of their experience. A participant’s account is valid because it is a product of the social interaction within the interview. Coyle (1992) argued that retrospective accounts are particularly useful because they are framed within current understanding.

4.2.1 Participants

Purposeful sampling was used to find those who had experienced the process (Mallon, 1999). Participants who had changed career in the previous three years were recruited through social networks. Eight participants, living in the south-east of England, agreed to participate. Women only were chosen following the methodological recommendations for homogeneity of sample (Smith & Osborn, 2003), and as a relatively less-studied group in occupational psychology (Marshall, 1989; Pringle & Mallon, 2003). The participants were aged between 29 and 48. Seven were university-educated; one was educated to secondary level. One participant described herself as Black Caribbean; the remainder described themselves as White British. Five of the participants had dependent children. Seven participants were married or in long-term relationships. One participant lived in

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3 There was one exception: Fran had changed careers 10 years earlier. Despite the criteria on an introductory letter, this emerged only during the interview. However, because Fran’s story was so rich and because it provided a counterpoint to the other accounts in several ways, it was included.
council housing and the remainder were owner-occupiers. The council-housed participant was secondary-educated and described herself as White (see Table 4.1).

**Table 4.1 Summary of Participants’ Demographics**

<table>
<thead>
<tr>
<th>Demographic</th>
<th>Range</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age</td>
<td>29 – 48</td>
</tr>
<tr>
<td>Education</td>
<td>Degree level: 7</td>
</tr>
<tr>
<td></td>
<td>GCSEs: 1</td>
</tr>
<tr>
<td>Class Indicator</td>
<td>Homeowners: 7</td>
</tr>
<tr>
<td></td>
<td>Council flat: 1</td>
</tr>
<tr>
<td>Ethnicity</td>
<td>White: 7</td>
</tr>
<tr>
<td></td>
<td>Black Caribbean: 1</td>
</tr>
<tr>
<td>Location</td>
<td>Based in Britain for at least 20 years: all</td>
</tr>
<tr>
<td>Mothers with dependent children</td>
<td>5</td>
</tr>
</tbody>
</table>

The names of all participants, their families, organisations and place names have been changed to protect confidentiality. Demographics are presented separately from old and new occupations because one participant could be identifiable from the data.

Two participants (Clare and Brenda) were known to the researcher before the interviews. The remaining participants were recruited through the researcher’s networks but were not known to the researcher. Only data from the interviews were used in the analysis.

Table 4.2 summarises the occupation changes:

**Table 4.2 Participants’ old and new occupations**

<table>
<thead>
<tr>
<th>No.</th>
<th>Pseudonym</th>
<th>Age</th>
<th>Previous Occupation</th>
<th>New Occupation</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Clare</td>
<td>46</td>
<td>Caterer: self-employed and own small business</td>
<td>Senior personal administrator (PA)</td>
</tr>
<tr>
<td>2</td>
<td>Brenda</td>
<td>42</td>
<td>Biomedical scientist</td>
<td>Alternative therapy practitioner</td>
</tr>
<tr>
<td>3</td>
<td>Gayle</td>
<td>29</td>
<td>Retail manager</td>
<td>E-marketing consultant</td>
</tr>
<tr>
<td>4</td>
<td>Anne</td>
<td>45</td>
<td>Caterer</td>
<td>Academic researcher</td>
</tr>
<tr>
<td>5</td>
<td>Fran</td>
<td>34</td>
<td>Stable hand</td>
<td>Coach driver</td>
</tr>
<tr>
<td>6</td>
<td>Joan</td>
<td>39</td>
<td>Senior retail buyer / manager</td>
<td>Secondary teacher</td>
</tr>
<tr>
<td>7</td>
<td>Helen</td>
<td>39</td>
<td>Civil servant</td>
<td>Academic researcher</td>
</tr>
<tr>
<td>8</td>
<td>Diane</td>
<td>48</td>
<td>Geoscientist / manager</td>
<td>Occupational psychologist</td>
</tr>
</tbody>
</table>

A brief description of the participants is now given, to introduce the participants’ stories and to provide background to the analysis. (Appendix A-4 reproduces shortened descriptions as a fold-out for ease of reference.) Any short description is unavoidably selective and cannot represent the richness of the participants’ accounts or their experiences, and this should be borne in mind while reading the sketches.
The descriptions aim to provide summary career information and try to avoid any simplified indication of causes or motivations.

Clare had worked in retail after leaving school, ending up in Head Office roles in a large organisation. She left full-time paid work when she had her first child and spent 20 years looking after her children and latterly doing part-time jobs. The more recent jobs were catering in her own small business, school catering (‘dinner lady’) and schools’ liaison for a Christian group. Clare had completed a degree in theology in her late thirties. When she decided to return to work full-time, Clare applied for two administrative jobs with a large development agency. She was invited to apply for a role as PA (personal administrator) to a director of the agency, to which she was then appointed.

Brenda worked as a biomedical scientist in the NHS from school, gaining qualifications and promotion over the years. When her son was born, she took lower grade work in the same field. When her son was ill as a young child, she took about 18 months off work and then worked as a locum and part-time, which she continued to do with longer hours when he recovered. Brenda ascribed her son’s recovery to Amatsu, an alternative therapy comparable to osteopathy. For interest, she began studying Amatsu and became qualified. Conditions were changing in her main job as biomedical scientist and, in parallel, she was building up a client base for Amatsu. After about three years of reducing her biomedical work in order to have more time for her Amatsu clients, she left her NHS work to become a full-time Amatsu practitioner and trainer.

Gayle combined study and work from the age of 16. She did well academically, winning a year’s scholarship to study and work in the US. While completing her degree, she worked in retail and in insurance. On graduating, she started work as a trainee manager in a large retail organisation, and was promoted twice in two years, ending up as a deputy branch manager. Gayle wanted to work in marketing but, despite many applications, found that her lack of experience in marketing appeared to prevent her from starting in the area. She resigned from her job and took a postgraduate course aimed at women in business which had a marketing module. She took part-time bar and clerical work to survive financially during her study. Her
work experience as part of the course was in e-marketing and she was offered a job with the company while doing work experience. At the time of the interviews, she had been working in e-marketing with the same company for over a year.

Anne left school with O-levels and worked as a secretary. She was promoted to events organiser, then left full-time paid work in her early twenties when she had a child. When her third child was a toddler, she started a catering business with a partner, which became successful. Rather than expand the catering business, Anne left to work part-time as a director’s cook. After two years, she resigned and decided to do an A-level in psychology, with some part-time catering. She then went to university full-time and completed a degree in psychology and an MSc in occupational psychology. After graduation, she worked as an academic researcher for a year and, at the time of the interviews, was beginning to gain work as an occupational psychologist.

Fran joined a Youth Training Scheme in stables straight from school. After two year’s training, she did a variety of jobs in stable yards, mainly in the south-east of England but also in Germany. At the age of 24, she applied for bus driver training. She became pregnant soon after starting work as a bus driver, and left work after six months. When her first child was still a baby, she began to do part-time coach driving. At the time of the interviews, she was doing full-time coach driving and hoped in the future to gain a Heavy Goods Vehicle Licence.

After a gap year working, Joan went to university. On graduation, she joined a major high-street retailer on their graduate training scheme. She remained with the same organisation for 18 years, moving roles every three to five years. Her roles included branch manager and buyer. In her mid-thirties, when she returned from maternity leave for her first child, she was given a project management role against her objections. Over a year later, while on maternity leave with her second child, she was offered a choice between a lower-paid, lower-status role and redundancy. She accepted the redundancy package and began exploring other possible careers. She did voluntary work in her local school and applied for primary level teacher training. While waiting to start training, she replied to an advertisement for a secondary
teacher and was accepted. At the time of the interviews, she was preparing to start work as a part-time secondary teacher.

Helen worked from the age of 16, first in a shop and then as a wages clerk, before returning to education to complete her A-levels and a degree. On graduating, she joined the Civil Service, where she worked for 10 years in a variety of roles including private secretary to the Secretary of State, and representing the UK on European education policy committees. She took a year’s career break to complete an MSc in social psychology, after which she returned part-time while doing a PhD. She resigned from the Civil Service and took part-time research jobs while she completed her PhD. At the time of the interviews, she had been working full-time as an academic researcher for a few years.

Diane did a secretarial course on leaving school and joined a magazine in a role as secretary. She worked briefly at another company before joining an oil and gas exploration and production company. She then undertook a part-time Open University degree, and on graduation, moved into geoscience roles in the company. She was promoted over the 25 years she was with the company, ending up as a senior manager with a team of 30 scientists and engineers. As a team manager, she did a part-time diploma in psychology. She then took voluntary redundancy and completed a full-time MSc in occupational psychology. At the time of the interviews, she was beginning to gain work as a freelance occupational psychologist.

4.2.2 Procedure

The story of a career change may cover years of lived experience. A typical single interview (cf. Smith, 2003) was felt to be inadequate and two interviews were planned with each participant. This was felt to balance practical constraints while offering the opportunity to hear more of each participant’s story, to hear potentially differing versions on the two occasions, and to gain assurance of significant themes where they were noted in different aspects or at different times during the interviews.
Participants were interviewed twice for approximately one hour each time. The second interviews were held between 1 and 4 weeks after the first. The first interview was not analysed before holding the second. The interviews were semi-structured, using prepared interview schedules (see Appendix A-1). In line with IPA methodology (Smith & Osborn, 2003), the schedules were for guidance and used general and open questions to encourage the participants to tell their story. If particular issues of interest emerged during the interview, these were pursued. The interview schedules were not followed slavishly or in order – they served more as a flexible framework for the interviews.

The general topics of the first interview were: job history, triggers for change, identity change, emotions around the change and the perception of choice. The topics for the second interview were learning in the new career, the influence and attitudes of other people, advice to others changing career and the meaning of ‘career’. In addition, in the second interview, participants were asked if they had had any additional thoughts on the subject of their career change between the interviews.

Interviews were held at locations to suit the participants: their home, university or café. The interviews were digitally audio-recorded, uploaded onto computer and transcribed verbatim. The data were then imported into NVivo 2 for analysis.

4.2.3 Data Analysis

In the first step of analysis, the two transcripts for each participant were read in depth and checked for inconsistency or compatibility. There were no substantial discrepancies. In several cases, a few additional insights were offered by participants, in elaboration of comments they had made in their first interview. In all cases, two interviews provided richer information, by allowing more time for the participant to tell their story and often by hearing salient points retold. Analysis proceeded in compliance with established guidelines {Smith, 2003 157 /id; Willig, 2001 235 /id}. The transcripts of one participant (Gayle) were read in detail several times and the software NVivo 2.0 was used to annotate the text with comments and to identify initial themes. Wherever possible, words or phrases directly from the text
were used as theme names. After initial coding into themes, higher level or master themes were identified to enable clustering of the themes. The same process was followed for Anne, Fran and Joan. The remaining four scripts were then analyzed looking for support for the master themes, while checking for any salient themes not yet identified. Some new themes were found, checked back to the initial set of scripts and, if supported, were added to the master list. Finally, the master list was reviewed and minor themes (i.e. not in evidence for most participants and not highly salient for any one participant) were removed. A narrative account was constructed, with constant checking back to the data, to ensure that the master themes represented the participants’ experience. This detailed analysis remained grounded in the data by including extensive excerpts. A shortened account was sent to the participants and feedback was positive.

Criteria for validity of qualitative research have been proposed to include sensitivity to context, rigour, commitment, and contribution (Yardley, 2000). To address sensitivity to context, the analysis moved back and forwards between specific extracts and each participant’s full story, and remained grounded in the data at every stage, by constant referral to the data. To address rigour and commitment, epistemological appropriateness was argued in Chapter 3, recommended systematic method was followed and analysis aimed for thoroughness, for example, by analysing four transcripts before clustering themes together. Also, counter-examples are discussed in the analysis. To address contribution of the study, the discussion in Section 4.4 focused on how the findings add to the previous literature.

4.2.4 Reflection

IPA methodology assumes that the researcher is a significant element in research, and that the researcher’s background and views will influence her/his findings. In order to make this influence open to scrutiny, it is recommended that researchers reflect on their contribution to their findings (Banister, Burman, Parker, Taylor & Tindall, 1994) which I now do.

Although I made every effort to bracket my strong views on women’s status and opportunities in society, these views may have affected my interpretation. In
particular, as a mother, I may have been particularly sensitive to issues relating to conflicts between childcare and career. Overall, I felt a great deal of empathy with all of my participants. I was deeply impressed by their achievements and attitudes. This may have aided my establishment of rapport and may have facilitated my gaining an ‘insider’s perspective’ (Conrad, 1987) although it may also have influenced my analysis. However, at every stage of analysis and write-up, I stayed very close to the text. In addition, the analysis and corroborating data was reviewed by my two supervisors, to provide assurance that my interpretation was valid.

4.3 Analysis

The objective of the analysis is twofold: it aims to describe the experiences of the participants and to interpret the experiences.

Before addressing the master themes, one overarching point is made to aid understanding of the accounts. In approaching an analysis of accounts of career change, an expectation could have been made that the data would show a preparation phase for making the decision, a point at which the decision is made and an implementation phase. However, these were not in evidence in the accounts and a salient point of interest across all of the accounts was how the decision making for career change extended in time. The ‘point’ of decision stretched over extended time periods for most participants. Explanations of the change extended back in time, in some cases as long as 20 years. Even where a particular action such as resignation from a job appeared to pinpoint the decision, the participants spoke of having come to a decision earlier. The implementation of the decision similarly was protracted in time, supporting Beach and Connolly’s (2005, p. 4) insight that the concept of a decision as happening at one point in time is merely “a useful fiction”.

The five master themes emerging from the accounts were: identity as a motivating force, emotions surrounding the old occupation, framing and reframing the problem, taking action and self-regulation. In justifying their decision to change career, the participants described psychological as well as practical needs, and the psychological needs appeared to relate to identity and the self-concept. It was possible to see unfulfilled identity needs as a motivation for change. Negative
emotions characterised the descriptions of the early stage of career change in the accounts and these appeared to contribute to the motivation to change. How the career decision was framed had a major bearing on how the process then moved on, and of particular salience were the subjective construals of potential barriers. In several cases, the initial framing of the situation was transformed and this led to altered thinking and enabled action. Although career decision making has been assumed to be a primarily cognitive process, in the accounts here, the actions that the participants took were central to their decision making in several ways, including enhancing self-efficacy and identity more generally, and generating positive emotions. A variety of self-regulation strategies, including establishing certainty and continuity, were salient and appeared to aid progress through the change. Having briefly outlined the master themes, each is now discussed in detail with reference to extracts from the accounts. Each extract is identified by participant number and interview number, for example, [P2-I1] represents Participant 2, Interview 1. Text omitted below for clarity is indicated by (…).

4.3.1 Identity as a Motivating Force

The participants were asked to recount their job history, from their first job to the present. Even though no questions asked specifically for reasons behind the career change, the participants referred to a variety of motivations, triggers and reasons in their accounts. Cultural norms guide people to expect stories to establish purpose and causality (Coyle, 1992; Gergen, 2001) and this may suggest why the participants sought to justify their change. Most of the participants described practical reasons for their career change. However, alongside practical explanations, psychological reasons were salient in all of the accounts. These psychological reasons appeared to relate to identity and to act to motivate change. All of the participants described ways in which their old career did not meet their identity needs and what emerged was a sense of dis-identification from the old careers.

Looking first at the practical needs emphasised by several participants, these initially appeared to provide the expected justification for changing occupation. Gayle felt
“the earning factor was a big, big, big one” [P3-I1]. Fran’s work in stables was physically demanding and dangerous:

“The days that you are off, most of the time you’re knackered anyway. It was really hard physical work. (…) my feet have been stamped on so many times (…) and my back. I used to have a bad back.” [P5-I1]

Anne’s work in catering had also involved physical demands and long hours. Anne emphasised these aspects, and their adverse impact on her family life and relationships:

“That was really tough because I was still working weekends, Sundays, evenings and I would work, I would easily work a 25-hour day. I could go 24 hours right the way through. I could do, it was really, really hard.” [P4-I1]

However, these tangible needs in themselves did not force a change – the participants had dealt with them over some years. A decision had had to be taken to leave the old occupation and psychological needs could be seen as contributing to this. Fran had experienced stable work as a sheltered environment, where food and accommodation were often provided, but she appeared to have experienced a need to grow and to take increased responsibility for her life. After the career change, she felt “just more grown up, probably, more … I can’t remember if it was more responsibilities were coming, but just more, you know, as if I was progressing through my life” [P5-I2].

Anne’s story too showed unmet psychological needs. Although Anne had worked long hours in some jobs, she had also done some part-time catering jobs that were “great”, “perfect”, “stress free” [P4-I1]. This suggested that, although her needs for a better physical environment were very important, they could potentially have been met within catering. It thus appeared that it was her psychological needs that pushed her to change career. Anne had gone from catering work to a full-time degree in psychology. In her description of the degree as providing “meaning and a purpose” [P4-I1], there was an implication that it was these that were missing in her career in catering, leaving her feeling “I really wanted to fulfil this…sort of …ambition,
ambition, longing” [P4-I1]. She struggled to describe this lack and it appeared that this unfulfilled need may have been at the heart of her dissatisfaction with catering, which she was “desperate” [P4-I1] to leave. Anne elsewhere expressed a feeling that she could have, and perhaps should have, achieved more academically when she was younger. Clare too felt that she had invested a great deal in a degree but that her potential remained untapped:

“The training, the theology degree, ministerial training, had taken a lot of time, energy, effort, commitment, and money (...) I was working in a school kitchen (...) so personally that felt very unfulfilling, that I’d spent a lot of time, energy and money and commitment in getting an extremely good degree and I hadn’t actually progressed.” [Clare P1-I1]

To feel unfulfilled is to feel capable of more and greater things, to be aware of unrealised potential, and this was evident in the extracts of Anne and Clare. The need to progress in life and the experienced lack of fulfilment in the accounts speak to a need for growth that appeared central to the participants’ self-concepts. Self-determination theory argued that a need to grow is a universal motivation {Deci, 2005 4/id}, as did Maslow’s (1987) concept of self-actualisation. In all of the accounts, a desire to grow was salient and this can be seen as an identity need motivating action towards career change. It was interesting to note that the need for growth was not generally aligned with typical social markers of advancement in pay, power or status. Brenda’s move from biochemist to alternative therapy practitioner or Fran’s move from stable hand to bus driver would not generally be seen as advancing in status. Helen’s move from middle-ranking civil servant to academic researcher, Diane’s move from senior manager in the oil industry to occupational psychologist and Joan’s move from middle manager in retail to teacher were all likely to result in lower pay. The need for growth and progression for the participants appeared to relate to psychological growth and personal development.

The need for growth and the sense of unfulfilled potential related in additional ways to identity. Gayle saw herself as wanting to learn, and she experienced her job as failing to fulfil these needs:
“I just find that I’m a person that needs to be continuously learning. (…) Every day’s a school day [laughs]. That’s the way I look at it…have to be continuously learning so I started to get really stressed because I wasn’t.” [Gayle P3-I1]

Gayle also wanted recognition for what she had achieved:

“I wasn’t getting the recognition, the recognition I felt I deserved for the hard work that I had put in (…) I wanted the sort of intellectual respect from people that I felt that I was due and not having people speaking to me as if I was an uneducated, uneducated person (…) and I wanted to be seen as an intellectual woman and a strong woman and not somebody that just works in a shop.” [P3-I1]

These needs made sense in the context of her identity as an “intellectual woman” and as someone who loved learning. Gayle noted that she had achieved more academically than anyone else in her family and in her account, her academic qualifications were an important aspect of her self-concept. This suggested that her academic achievement was part of her desire for distinctiveness, a guiding principle of the self-concept proposed by Breakwell (1986). Gayle’s extract further suggested that she felt her self-esteem being undermined by being seen as “somebody that just works in a shop”. The established importance of self-esteem to well-being (Tesser & Martin, 2006; Rosenberg, 1986; Sedikides & Strube, 1997) suggests why threatened self-esteem may be a motivator for change. More generally, Identity Process Theory (Breakwell, 1986) proposes that breaches of guiding principles of the self-concept, including self-esteem and distinctiveness, result in the experience of identity threat, and a threatened identity will motivate change to mitigate it. An individual maintains multiple identities, or internalised social roles (Stryker & Serpe, 1982), and the accounts could be seen as describing both management of, and threat to, different identities.

In Diane’s account, her changing attitude to her career was associated with her changing identity. She said:
“By that stage I was in my mid-30s, and had reached quite a senior level within the organisation and somebody had said to me, ‘well, you’ve obviously made a decision not to have children, you’re a career woman’ (…) And I kind of thought ‘well actually, no I’m not, I’m not a career woman at all’ (…) What I really want is to have a family, and so I’m just doing this before I do the bit that’s really important to me.” [Diane P8-11 italics added]

When she found out that she and her husband could not have children: “I felt in a way, I’d almost, I’d lost my identity a bit” [P8-11]. Here Diane was explicitly reflecting on her identity needs. She rejected an identity suggested by others of “a career woman”. When her desired identity as mother was prevented, this appeared to influence her thinking about career.

Other salient identities could be seen in the accounts, for which in some cases, the participants appeared to experience a lack of support:

“…but then laboratories changed and they became factories (…) and I’m not a button pusher” [Brenda P2-11 italics added]

“I think that a lot of the time, when I was doing those part-time em poorly-paid jobs, I think I was very frustrated so I think I was, it’s difficult to see whether I was actually myself. I don’t think I was really myself because a lot of the time I was frustrated and quite depressed really about the fact that I was being forced into doing something by circumstances.” [Clare P1-11 italics added]

These extracts suggested that a gap perceived by Clare and Brenda between identities salient to them and identities relating to or required by their work was part of their motivation for change. Sociological identity theories can help to explain these experiences and behaviour. Such theories propose that individuals have multiple identities that are organised in a hierarchy of salience (Stryker, 2004). Salient identities require verification from their context and the extracts here suggested lack of verification of important identities. Discrepancies trigger behaviour aimed at gaining verification {Burke, 2004 370 /id;Swann, 1981 802 /id}. 89
The discrepancies experienced by the participants can be expected to prompt behaviour to change, suggesting un-verified or threatened identities as a factor in triggering career change.

In some of the accounts, the participants contrasted identities in the new occupation with identities in the old. Clare felt that people’s attitude toward her in her new career had changed:

“When I go out for dinner, and people say ‘What do you do?’, (...) there’s a huge difference between saying, you know, well, I work part-time in a school kitchen (...) but there’s a big difference between that and saying I’m PA to a director of CAFOD. I mean, people are interested in me and that really annoys me. Why wasn’t I interesting when I, you know, worked voluntarily for a church (...) or took a school assembly every day?” [Clare P1-I2 italics added]

Two opposing interpretations could be suggested for this extract. Clare may have been annoyed because she saw that people were in fact interested in her job rather than her. Alternatively, she may have been annoyed that, in the past, people were not interested in her as a person because of her job, but now they are interested in her. The latter interpretation would suggest a close alignment between Clare’s identity and her new career, implying that she equated others’ interest in her job with their interest in her as a person. This contrasted with Diane’s perception of similar experiences:

“You introduce yourself to people and inevitably they say ‘Hello. How are you? What do you do?’ and you’d say, oh I can’t, I’m ashamed to say this, I’ve kind of like rehearsed my piece about ‘Well I’m taking a career break now.’ (...) But it was almost like consciously getting away from having to introduce yourself and then work becoming the focus. (...) It was like I think people were more, more interested in what you were doing than you as a person”. [Diane P8-I2 italics added]

Diane’s differentiation between herself as a person and the job she did suggested an identity gap. This suggests that in career change, people may move from alignment
of identity and occupation to seeing identity and occupation as distinct: a process of dis-identification. The participants described, sometimes explicitly and sometimes implicitly, how their old career was not ‘them’, in Diane’s words “that’s not me, that isn’t me” [P8-I1]. But identity control theory would suggest that since people actively pursue identity self-verification (Burke, 2004), salient identities are likely to have been verified within an environment in which people worked for a number of years. Dis-identification then may arise from environmental changes, as Brenda’s story of change in the nature of the job suggested. The changing nature of work then may be a trigger for career change. Alternatively, changes in the identity hierarchy may result from life-span development or life changes, as suggested in the accounts of Diane, Joan and Fran of planned or actual parenthood, and a different salient identity may not be supported. Developmental changes over the lifespan may therefore contribute to career changes, as Super (1990) proposed, through reprioritisation of salient identities.

This does not imply that the participants considered only one salient identity or that their occupation was the only environment which could verify an identity. On the contrary, the data suggested that the participants experienced more than one salient identity at a point in time, that future identities were important and that non-work contexts were important for alternative identities. The accounts referred to a range of identities including mother (all participants), sister, daughter and friend (Helen, Diane, Joan, Gayle), daughter-in-law (Brenda), wife (Gayle, Clare, Diane) and neighbour (Fran). It was noteworthy that these identities were embedded in relationships with other people, and as such appeared to demonstrate the importance of communion and relationships argued to be central to women (Gallos, 1989; Marshall, 1989). However, it is also possible that the identities described were prompted by the questions in the interview which referred to the role of others, and that different questions may have prompted additional identities.

Most participants also considered future possibilities for identity. Joan, for example, said:

“I don’t really know where it’s going to take me. Like I said, I might stay in the classroom, I might not. I know I’m going to go into teaching and that’s the
first springboard. I’ve got to do that to go on to *anything I want to be* in education.” [Joan P6-I2 italics added]

The description of multiple identities in the accounts, as well as changing identities evidenced by dis-identification and by future possibilities, showed complexity and fluidity in the experience of identities in career. While a specific salient identity may persist over time, the fluidity of the organisation of identities may help to explain the unpredictability of career decisions, why some people choose to change career and others stay. People are seeking to verify salient identities in a hierarchy (Burke, 2004) which may change with context and with life stage (Bordin, 1994; Hall & Chandler, 2005; Hall & Mirvis, 1996). The work environment is one of many contexts which may or may not offer verification, and may align with an identity to a lesser or greater extent over time. The complex negotiation of identities may be a factor in the unpredictability of career outcomes.

The future possibilities for identities were salient in several accounts and these did not align with the objective markers of career success such as higher pay, status and power (Nicholson & DeWaal-Andrews, 2005). Fran described a positive aspirational self: “[After changing career] now I was with people that have families and that’s what I think I must aspire, you know that’s what I wanted in the end” [P5-I1]. This contrasted with Joan and Helen who spoke of selves they wanted to avoid:

“[I don’t want to be one of these women, you know, my kids leave home in 20 years and I’m like, well, who the heck am I?]” [Joan P6-I2]

“It was that sort of ‘If you don’t do it, you’re just going to carry on for the next 40 years and change into one of these really boring people’ (…) I thought I just don’t want to be one of those people.” [Helen P7-I1]

Fran had a positive and desirable self in mind whereas Joan and Helen spoke of undesired possible selves. Diane described a desired self in contrast to the unwanted self she had become: “…hopefully, me being a nicer, calmer, less stressed, hateful, three-headed creature that I knew I’d turned into” [P8-I1]. Markus and Nurius (1986) proposed possible selves as motivational constructs, both aspirational and
undesired selves that guide behaviour towards or away from future possible selves. In these extracts, future selves appeared to contribute to Joan, Helen and Diane’s motivation to change career. The accounts suggested active construction of the self, looking not only at fit with the current context but also how the self might align with its context in the future. This aligns with Markus and Nurius’ (1986) conception of the ‘current working self-concept’ which is continuously influenced by future (and past) selves.

However, not all participants had an aspirational possible self in mind. Fran, Gayle and Brenda appeared to have aimed for a specified new occupation (bus driver, marketing executive and Amatsu practitioner respectively) but the other participants did not describe perceiving a desired self. They appeared motivated to change, perhaps to move away from an undesired self, in line with Markus and Nurius’ theory, but were not clear about their desired future self. The implication is that one function of the process of career decision making may be to facilitate identification of a desired possible self.

In summary, the participants described unmet psychological needs alongside practical reasons for changing occupation, and these needs included a need to progress and to grow. The need for growth appeared central to participants’ self-concepts, and, in their stories, the participants experienced threats to this need as well as threats to self-esteem and to a need for distinctiveness. The participants described multiple identities, which varied in salience in the career context. In most cases, salient identities appeared unsupported in the old occupation. For some participants, their identities appeared to have changed over time. For others, the environment had changed. In either case, they came to dis-identify with their old occupation and this appeared to motivate their actions to change occupation. In their accounts, the participants considered future identities and, for some, desired future possible selves may have motivated their change. Threatened or unverified identities, then, may contribute to motivation of career change away from an old occupation, and perception of a desired possible self may contribute to motivation towards a new career.
4.3.2 Emotions surrounding the Old Occupation

A second master theme was that of emotions in the old occupation. Most of the participants began their accounts by describing the negative emotions they experienced in their old career:

““I was increasingly dissatisfied with my job” and later “I was miserable at work.” [Diane P7-I1]

“[I] had started to get extremely stressed and dissatisfied in my job” and later “I hated it, hated it.” [Gayle P3-I1]

““It was really, really tough (…) it was really, really hard” and later “it was really unpleasant and that left me some really, really horrible experience.” [Anne P4-I1]

Their descriptions of negative affect appeared to fulfil an expected part of a narrative format (Edwards, 2001; Gergen, 2001), setting the scene for and justifying subsequent action. Later in their accounts, as illustrated above, their descriptions became more strongly negative, as if they had begun in the accepted format and later began to express more directly the feelings they had experienced. This was consistent with a format of narrative in qualitative research noted by Rosenwald and Wiersma (1983), of an earlier “public account” followed later in the interviews by a more personal description. Emotions have been defined as communications (Parkinson, 1995), suggesting the strongly negative emotions served as more powerful communication of the participants’ experiences. Furthermore, the strength of the descriptions may have worked to emphasise the importance of the emotions in contributing to the initiation of the process of change.

Frustration – a negative emotion arising from the need to progress, to reach their potential – may be seen in some of the extracts above. Anne felt “I really wanted to fulfil this…sort of …ambition, ambition, longing.” [P4-I1] Clare said of her old occupation: “a lot of the time I was frustrated and quite depressed really about the fact that I was being forced into doing something by circumstances.” [P1-I1] Their
frustration made sense as a result of unmet identity needs: a need to grow as a motivating force implies that thwarting such a need would give rise to negative emotions. In some cases, emotions such as unhappiness and stress could be explained in part by the poor working conditions or a manager who was belittling (as in Gayle’s case): affective events theory suggests that affect at work results in part from experienced events (Weiss & Cropanzano, 1996). However, this did not appear to account for most of the negative emotions. Helen, for example, having climbed the promotional ladder, could have been seen objectively as successful in her career. Anne mentioned some catering jobs that she found enjoyable and beneficial.

One explanation for the intensity of misery, frustration and stress is the sense of dis-identification, the experienced lack of fit of the self in the occupational context. Theoretically, this aligns with the many classical career theories which emphasise the necessity of person-environment fit (Dawis & Lofquist, 1984; Holland, 1997). If the self-concept is core to personality, cognition and behaviour, then it follows that strong negative emotions are likely when that core is not aligned with the behaviours, emotions and cognitions required or expected by the environment. Burke (2004) argued that distress is a likely result of lack of self-verification, that negative emotions signal a problem that requires resolution and provide the motivation to act. Emotion then may be the mechanism by which alignment of identity and environment is monitored and reported, as proposed by affect control theory (Smith-Lovin, 1990). If emotions serve as indicators, providing information for cognitions (Carver, 2004; Schwarz & Clore, 1983; Simon, 1955), then negative emotions in one’s job may trigger awareness of lack of fit and contribute to motivation to change. Arthur et al. (1999) noted that deep dissatisfaction often prefaced a radical career change and Heatherton and Nichols’ (1994) study showed that changers are more likely than non-changers to refer to strong negative emotion.

Interestingly, in addition to the negative emotions, all of the participants also mentioned some positive emotions, or at least some benefits, which they associated with their earlier career. However, in most cases, these references to positive
emotions were incidental in comparison to the emphasis in the stories on the negative emotions, with two exceptions.

Diane and Brenda spoke first of the positive emotions they felt in their first careers, and negative emotions were seen to emerge gradually in their account. Diane said

“I loved what I was doing. I loved the challenge, I loved, you know, from an intellectual point of view, it was still stimulating” [P8-I1]

but later acknowledged

“there were occasions where I’d kind of go to a meeting, and you know, you’d walk into the boardroom and it would be a sea of suits and inside, I would just be in absolute turmoil.” [P8-I1]

Diane’s account gave a more complex picture of her emotional experiences. She made sense of her career change with reference to more cognitive appraisals, such as a need for better work-life balance, but the mix of emotions could also be understood with reference to her changing identity needs and dis-identification with her old career. A phenomenological account allows for the simultaneous experience of apparently paradoxical processes: here, Diane described both positive and negative emotions in her old occupation.

Brenda too emphasised her enjoyment of her old job: “I loved my job in the labs” [P2-I1] but mentioned negative emotions in passing:

“There were grades 1 to 4, 4 being the top (...) I was an acting 3, so I was quite high up (...) I was the Chief and then I had [my son] and dropped down to a 1 (...) which I found really tough actually, to go back at a much lower level (...) I found it incredibly hard, having been in quite a position of seniority to be, to be back to the bottom.” [P2-I1]

Brenda’s account went on to map changes in her work as a biochemist:
“(…) we actually worked directly with the patients (…) we actually got to know the patient and that was lovely. You took their blood. You did the tests. You were in with the doctor while the various results were given out and then you’d discuss treatment. Em, and that was great. I loved that but then laboratories changed and they became factories.” [P2-I1]

Although Brenda did not dwell on her feelings around these changes, her account suggested that they diminished her enjoyment of her job. Brenda’s story overall was particularly positive and she characterised herself as such: “I’m so optimistic, so positive about everything” [P2-I1] and this may have accounted for her focus on positive emotions.

In their stories, when the participants had recognised their unhappiness and dissatisfaction with their existing careers, most then experienced additional negative emotions surrounding uncertainty about what to do and about making choices:

“I thought ‘you’ve got to explore other opportunities’ (…) and at the time, I wasn’t terribly sure what I wanted to do. I knew I wanted something to change but I wasn’t sure what.” [Diane P8-I1]

“What I want to do is make a change. I don’t where the change wants to be or what I want to do, but I do know I want to change.” [Joan P6-I2]

“[By doing an MSc] I got exposed to a different way of living, a different way of being but em in a way it was almost too scary to let myself recognise that.” [Helen P7-I1]

So facing up to their unhappiness at work brought further emotional difficulties and, in particular, being confronted with uncertainty or with choices was especially problematic. This is an important point, which helps make sense of some of the self-regulation strategies used in moving through career change, discussed below.

In summary, all of the participants described negative emotions in their old occupation. The strength of these emotions appeared consistent with an absence of fit between the person and her work environment, a lack of support for the self-
concept. In most of the accounts, the negative emotions in the old job seemed to work as justification for the change and it is suggested that negative emotions may act as a motivating force in occupation change. The recognition of a need to change brought further negative emotions concerning uncertainty and choice, and such emotions require management during the process of career change.

4.3.3 Framing and Reframing

A major theme in interpreting the move towards career change was how the participants construed or framed their situation. Framing is placing events in a context so that previous experience can be used (Beach & Connolly, 2005). Different construals were evident, of the level of choice experienced and of potential barriers. In several cases, a sudden reframing transformed perception and enabled action.

To explore whether the participants felt their career change had been voluntary, they were asked “How much choice do you feel you had in deciding to change career?” Their responses varied from a feeling of free choice to more complex perceptions, and showed that the participants framed their situations in a variety of ways.

Five participants experienced the career change as being wholly their own choice. Clare, for example, said: “every choice really. Yeah, it was completely my decision” [Clare P1-I1]. The implications of their perception of choice included a sense of control over their life, of autonomy and self-determination. The response of Joan, whose job had been made compulsorily redundant, was particularly interesting:

“It’s a strange one that, that’s not that easy to answer, because in terms of the decision to change, I could’ve, like you know, I could say yeah, I had as much freedom to change as I’d wanted to but I didn’t ever really, because if it hadn’t been that I’d been offered the financial lifeline, I would never have been able to do it.” [P8-I1]
Here, she was talking about her redundancy payment. Although compulsory redundancy might be expected to take away choice, in this extract, Joan positioned the redundancy, with the accompanying severance package, as an enabler of choice rather than as a constraint. This shows the difficulty of attempting to consider career change as a dichotomy of voluntary or involuntary action.

The framing of choice was addressed explicitly by the responses of Fran and Helen. Helen’s response was: “almost everything I’ve described to you I suppose has been a result of choices that I’ve made though at the time I didn’t see it that way at all.” [Helen P7-I1] To see no choices may appear to be limiting to the individual and to deny them the benefits of control and self-determination. However, Helen reflected on how her perception of lack of choice in fact provided a number of advantages to her.

“I do think the big thing for me was, if I don’t, if I tell myself I don’t have a choice, then it’s not my fault if it goes wrong. So that was my big, I think that was my big self-protective thing. But if I tell myself it wasn’t really my choice and it’s something that I had to do, then if it goes wrong, then nobody can blame me and I can’t blame myself.” [P7-I1]

So, alongside self-determination and control, choices bring responsibility and the risk of getting it wrong. Responsibility brings with it investment of identity so blame may be experienced as a threat to identity. Choice can also evoke anxiety and other negative emotions:

“If you don’t have any choice, there’s nothing you can do about it, therefore end of story. I think once you start opening up, it’s like a huge can of worms, it’s a Pandora’s box. It’s like you know if I’ve got choices, where do I even start? (…) It’s like you know you’re blinded by, you know, the extreme, you know, variety of stuff that potentially you could do.” [Helen P7-I1]

In this extract, Helen pointed to the problems that choice can bring, “a Pandora’s box”, and suggested the idea that choice can induce paralysis of action. In contrast, the perception of lack of choice can be comfortable, absolving the individual of
responsibility and protecting them from the potentially paralysing emotions and cognitions sparked by choice.

But the perception of lack of choice can bring benefits in the opposite way – by enabling action. Fran said: “I don’t know really, I mean it wasn’t so much choice. It was just that I made my mind up that was what I was going to do (…) It just felt like a natural progression.” [P5-I1] Other participants too positioned their steps to change as an obvious sequence. In this way, the perception of lack of choice appeared to ascribe control to external events and served to protect the individual from responsibility. This can help the individual to take action and make progress. In fact, some of the participants appeared to create barriers, to limit their own choices, in such a way as to help them make and commit to a decision. Diane said: “I kind of thought ‘if you are going to change, you’ve got to do it now’.” [P8-I1] Such an approach may be an example of an implemental mind-set (Gollwitzer, Fujita & Oettigen, 2004) (Gollwitzer et al., 2004), in which alternative courses of action are ignored in order to focus on a single goal.

Overall then, the accounts showed a variety of ways in which the participants framed choices. The perception of limited choices, of an apparent barrier, aided some participants’ decision making and there were additional ways in which potential barriers were used to facilitate change. Throughout the accounts of career change, structural barriers were visible: societal, cultural or organisational expectations that limited the participants in some aspects of their career path. Lack of money, insufficient qualifications, ethnicity and socioeconomic class could be seen to hinder the participants. In some cases, the participants consciously experienced individual barriers in the career path:

“I’d been thinking about getting out (…) for me, in my case, [the constraints] were mainly financial, in that I couldn’t afford to give up work (…) mortgage to pay and all the rest of it.” [Joan P6-I1]

In others, there was awareness that the barrier operated generally in society:
“[In] my experience of the world, you know, as a Black woman, there are lots of things which I don’t have any control over. There are lots of outside pressures which do shape my life which I can’t, don’t have a choice to engage with or not to engage with: they just exist.” [Helen P7-I1]

Several barriers to women’s careers emerged in the analysis. The relative lack of status of jobs that are traditionally women’s was clear in Clare’s account of her job as a Personal Administrator (PA), and Clare reflected on her role, contrasting her situation with what might have been:

“Had I been in the workplace for 20 years, I would be a senior manager (…) and I wouldn’t have had any qualms about it. It would have been a natural step up and progression.” [P1-I2]

Clare’s perspective on her career path demonstrated one type of hurdle affecting women’s careers: that is, the truncated career path due to absence from paid employment while caring for children.

A further hurdle was the low expectations of others for women’s careers. When Anne was leaving school in the 1970s, girls were typically expected to do secretarial work:

“It was still in the day, really you know, it was quite the norm to become a secretary. Not many people really were on to become lawyers, doctors, things, of my girlfriends (…) and in that day and age. I mean, lots of the girls friends that I know now are still at home and haven’t worked full-time in years (…) married very rich men or whatever” [P4-I1]

Anne in this extract recognised the norm for women of her age to have had low status occupations which they then gave up on marriage. The attitude to women’s careers had not changed much by Gayle’s story in the 1990s: “[My uncles and aunts] very much said you know ‘Gayle, get married and have kids. Marry into money and have kids’” [P3-I2]. Helen too was faced with a similar attitude in 2004:
“When I actually sort of finally got my PhD and everything, [my mother] said ‘You’ve done really well. It’s a really big achievement. Of course, I am disappointed about the fact you’re not going to be able to do other things’. I said ‘What other things will I not be able to do?’ ‘Of course, you’ll not be able to have 6 children’ [both laugh], six children, right, six. And I thought ‘That says it all really’. It doesn’t matter if you’ve got good qualifications or whatever, if you don’t have 6 children, you’re not worth bothering with.” [P7-I2]

Clearly, social expectations of women continue to place obstacles in women’s careers paths, as do lack of money and ethnicity. However, these hurdles were not necessarily experienced as impenetrable barriers and the women in this study were not prevented from changing their career by such attitudes. In several cases, they actively used the hurdles to help drive them forward.

“I wanted to prove them wrong, prove that I actually could do better than they ever could just to prove a point [laughs]. So I think maybe that’s where that all stems from, I wanted to prove a point to the males in my family, that I was going to be a successful woman, that I was going to be successful in work, in my education and everything else, that I could outdo them.” [Gayle P3-I2]

In this extract, Gayle appeared to frame the low expectations as a challenge which she used to motivate her.

Another potential challenge experienced by all of the mothers were conflicts between child care needs and the demands of their jobs, and associated negative emotions including guilt and frustration. However, Fran and Joan appeared to frame such potential constraints differently. Fran positioned the conflicting demands as a temporary point in a longer term perspective:

“I could look to do different things, it’s the child care that, and the children that is what, not holding me back, but I can’t sort of move on too far at the moment (...) because I still have to sort them out. My Mum has them when I
work and like I say, (…) the choice is there but it’s a bit limited at the moment because of, you know, with the munchkins.” [P5-II]

Here, Fran talked about the constraints “at the moment”, suggesting that she will move on in the future. This temporal framing of the burdens of childcare was used by Joan too:

“I would rather take a back-seat now for a bit of time. My children are the priority. I still want to have a professional career, but it’s going to have to take a bit of a back burner for a few years and then go back sort of later on. (…) I might start [a second career] slowly and part-time, but once the kids are at school, and I’m back into the seat, I’m equally going to want to be as successful in this one as I was in the first one.” [P6-II]

Joan also framed childcare demands as a temporary phase in her career path. In these extracts, Joan and Fran seemed to take a long-term perspective and this temporal frame helped avoid experiencing potential constraints as blockages.

The importance of framing in decision making has been noted by Amundson (1995), Beach and Connolly (2005) and others. Beach and Connolly defined framing as ascribing meaning to a situation and suggested that mental schemas, stereotypes and possibly the self-concept were used. Amundson argued that framing suggested possible paths of action and that reframing was part of moving towards a decision. The subjective construal of events is widely recognised (cf. Kelly, 1955), and theories of stress and coping emphasise the importance of appraisal and reappraisal (Folkman & Lazarus, 1984). Processes of subjective construal and reappraisal are assumed to be unconscious, and there was evidence here of unconscious reframing in line with changing identity needs:

“While I was married and didn’t really have any commitments, it was a great job to do because you did do travelling and you did do this, and whatever.(…) But having had the kids, I then didn’t, you know, overnight trips and stuff like that weren’t what I wanted to do.” [Joan P6-II]
Joan’s values and needs had changed after having children. In this extract, Joan did not position the demands of childcare as preventing her from enjoying her job. Instead, she described the job as not meeting her desires: “not what I wanted to do”. She appeared to have probably unconsciously reframed having children as changing her needs rather than as a constraint.

Reframing then appeared to help the participants to use barriers or to reinterpret them in such ways as to facilitate a constructive approach to the situation. In several accounts, a sudden reframing, a transformation of options, was evident.

Helen had wanted to change but had no alternative career in mind: “I kept on thinking, well, what do I do, if I can’t do this job?” [P7-I1] She took a year-long career break, during which she completed an MSc:

“I think what had happened in the intervening year was that, it’s one thing to do a job where you do that job and that’s all you, you know, that’s your only sort of option’s to do that job and I think basically I’d had a view, a peep into, you know, an alternative world that I liked better, so to then go back to this job (…) was a nightmare, because it was like not just you know, I don’t like doing this job and I’ve got to do this job, it was I don’t like doing this job and there’s something over there that I’d rather do.” [P7-I1]

Helen’s awareness of possible alternative careers seemed to have transfigured her thinking and this transformation appeared to emerge from her action in undertaking a course of study. The extract suggested that she had tolerated her old job, possibly reframing her dislike within a context of no choice. Framing within the old occupation may have helped her to ignore the problem requiring resolution signalled by negative emotion. The awareness of a preferred option however permitted alternative framing in which her unhappiness was acknowledged. This interpretation suggests ways in which people may stay in less-than-ideal occupations. Joan’s comment that “you sort of, you put reasons and obstacles in your way, don’t you? And for me, in my case, they were mainly financial” [P4-I1] suggested other types of framing which block action, and may result in people not acknowledging a desire to, or possibility of, change.
Clare described conversation with other people as being influential in the transformation of options that she experienced, and Helen, Anne and Gayle described a dramatic shift in their perspective triggered by others.

“I never really thought about it [continuing from MSc to PhD] as an option for me. I thought really, that’s not for me, and then was actually we were all sitting round at the end of a class or something and [my lecturer] said to me ‘Are you doing a PhD too?’ I said no, and she said ‘Well, why aren’t you? You can do one too. You’re just as capable as so-and-so, and so-and-so’. And it was only then that, you know, having somebody say ‘You’re actually capable of doing this’ that made me actually even think about it.” [Helen P7-I1]

In this extract, Helen’s assumption that she would not undertake the higher degree was challenged by her lecturer and that challenge appeared to transform her thinking. Anne described a very similar challenge to her assumptions that she would not go to university. Their initial assumptions may have related to their low self-efficacy for academic achievement. Helen’s wording in this extract – “that’s not for me” – could also be interpreted as relating to low self-esteem.

Although Gayle in contrast felt confidence in her academic ability, she felt that returning to university would be taking a step backwards, until a friend suggested its benefits in a different light:

“when I was thinking about going to university, em, the first impression was that I’ve already done that (...) the first thing that flits through your mind is like taking a step back rather than moving forward (...) But em after actually speaking with Mum’s friend, she basically said to me ‘look, really it’s fantastic. It’s all about, it’s not only about studying, it’s about personal growth (...)’ and I thought, well do you know what, she’s actually right. If I do, and if I see it as a retraining as well , and that’s the way I approached it then (...) That’s the one thing that I thought, well no, actually I will do it, because of personal growth, I’ll grow. I can go and do this. It’s not taking a step back. It’s retraining and I invested in that.” [P3-I2]
Gayle’s extract mapped how her initial thoughts about going back to university changed. In rejecting an action that was “taking a step back”, Gayle appeared to underline her need for progress and development. Hearing the course framed as “personal growth” and thinking about it as “retraining” linked to her self-concept as “an intellectual woman” who loved learning. The reframing appeared consistent with a salient identity for Gayle and the transformation of thinking enabled her actions, which ultimately led to career change.

The moments of transformation experienced by the participants could be interpreted as a Gestalt ‘insight’ (Ohlsson, 1992 778 /id): a rapid restructuring of a problem in such a way that the resolution appears obvious. Of interest was the source of the reframing. The participants described a trigger of some sort – their own actions or comments from other people. Amundson’s (1995) interactive model of career decision making proposed iterative cycling between action and reframing. The unfolding model of voluntary turnover (Lee et al., 1999) found that a shock event, such as a job offer or change in marital state, was involved for 68% of changers in their sample. The findings here suggest that a shock event may work by causing reframing, and that more minor events, such as conversations with other people, may equally trigger reframing.

In summary then, the participants demonstrated a variety of ways of framing their choices. For some, framing their change as voluntary permitted a sense of control over their life but, for others, framing their circumstances as offering no choice but to change facilitated their move to action. Societal barriers, particularly those affecting women’s careers, were in evidence in the accounts. However, the participants framed potential barriers in constructive ways that allowed progress, seeing them as challenges or as transient life stages. The importance of framing was particularly pertinent in the accounts which described as sudden reframing or transformation of options.

**4.3.4 Taking Action**

In interpreting the accounts, of particular salience were the actions taken by participants, often unrelated to career, that were pivotal to the career change
achieved. In several cases, the actions appeared serendipitous. Brenda’s career change into Amatsu therapy was initiated by her choosing to study Amatsu out of curiosity and happenstance. Anne’s decision to study psychology also appeared almost arbitrary:

“So I decided to go and do the A-level in psychology. I don’t know why I chose psychology. I just, I do know why I chose psychology. It just was a subject, I didn’t want to go and do maths, science, or French. I completely don’t do languages - eh, so I went and did psychology.” [Anne P4-I1]

“It was just the sort of passion of the moment, really.” [Anne P4-I2]

Nicholson and West (1989) noted that many career moves are “planless” and the importance of serendipity in careers has been argued by several scholars (Bright et al., 2004; Miller, 1983; Mitchell et al., 1999; Williams, Soeprapto, Like, Touradji, Hess & Hill, 1998). The accounts here are consistent with the findings of Arthur et al. (1999) that many of their participants ‘happened on’ their new career, and suggested how planless actions can play an important role in career decision making.

Firstly, actions provide information and open up further opportunities. Anne’s decision to do an A-level opened up the possibility of going to university. Helen’s MSc course gave her “a peep into an alternative world”. In addition to the practical benefits of information, action can help to identify accessible goals, which bring benefits including allocation of resources, commitment and focus (Shah & Kruglanski, 2002).

Secondly, actions provide opportunities for experience and, for several participants, this appeared to lead to enhanced self-efficacy and self-esteem:

“I like this, I’m pretty good at it.” [Fran P5-I1]

“Then about 6 months in, I realised that I was actually quite good at it [laughs]. I’m absolutely passionate about it.” [Brenda P2-I1]
“I suppose having been a volunteer for CAFOD [helped] (…) It was something that with hindsight helped enormously because I hit the ground running. I knew a lot about the organisation.” [Clare P1-I1]

“I got confidence, more confidence [from doing the MSc course].” [Helen P7-I1]

Self-efficacy may be a pre-requisite for action (Bandura, 1997), including decision making in careers (Lent et al., 1994), so enhanced self-efficacy may aid selection of a future path in career.

Thirdly, actions appeared to facilitate increased positive emotions. Enhanced self-efficacy may contribute, as the extracts from Fran and Brenda above suggested, although the strength of the positive emotions suggested additional mechanisms at work. Gayle felt “it’s brilliant, it’s really great. (…) I really, really enjoy it” [P3-I2] and Joan said “I do feel quite passionate about it” [P6-I2]. The enjoyment of doing may link to ‘flow’ experiences (Csikszentmihalyi, 1990) and to intrinsic motivation {Deci, 2005 4 /id}. The motivational function of positive emotions could be seen in the stories. Anne appeared to acknowledge directly the importance to motivation of her strong positive feelings about her new career: “it’s definitely about the passion of wanting to do it, of having that, you know, emotional investment in it” [P4-I2]. Gayle positioned her positive feelings as guiding her choice of career. She explained her change of focus from marketing to e-marketing by referring to her enjoyment of one subject on the post-graduate course: “I sort of took a different route on the course because I discovered that I (…) really, really enjoyed computers and databases and working with that.” [P3-I1] The motivational value of feelings has long been acknowledged (McDougall, 1908) and recent theoretical perspectives have stressed their importance in motivating behaviour (Frijda et al., 2000). Isen (2003, p. 179) explored positive emotion in particular and argued that it "encourages people to do what needs to be done”. Further, positive affect can be particularly beneficial in decision making by enhancing creativity (Isen, 2000). Thus actions leading to positive emotions may facilitate reframing of the situation, improve creativity and enhance motivation.
Finally, actions appeared to benefit the self-concept. The experience of a desired possible self was outlined above. In several cases, such experiences solved the problem of what new occupation to pursue and provided motivation to pursue it. Diane had felt “I wasn’t terribly sure what I wanted to do. I knew I wanted something to change but I wasn’t sure what” [P8-I1]. After beginning her course in psychology, she thought: “Within a very short period of time, I sort of thought ‘yes, this is what I want to do. This is what I want to do’.” [P8-I1] Even though Gayle had intended moving towards marketing, her experience in related areas confirmed her goal: “I thought, right, this is what I want to do. Knew by trying the area, you know, this is what I want to do.” [P3-I1] The linkage to identity was clear in Joan’s story: after doing voluntary work in the classroom, she felt: “I can see myself doing this.” [P6-I1] Fran too found a desired new self in her actions: “But it’ll always be driving. I just love it. Queen of the road, great.” [P5-I1] Ibarra (2004) argued that actions moving people towards a new occupation function to help them establish new identities, and, drawing on Burke’s (2004) identity control theory, this may occur in two ways. If thoughts of changing career may be triggered by threatened identity, then actions may offer opportunities to find contexts which will verify important identities. Alternatively, actions may offer opportunities to revise the salience hierarchy and prioritise a different identity which could be verified in the new occupation.

In sum, whether the participants’ actions towards a new career were serendipitous or purposeful, their actions appeared to aid decision making in several ways, including providing information and opportunity for experience, enhancing self-efficacy and self-esteem, generating positive emotions and suggesting contexts for verification of salient identities.

4.3.5 Self-Regulation

As has been illustrated in the extracts above, when a new occupation had been decided upon, the process of seeing the change through can take a greatly extended period of time: for some of the participants, the entire process was taking seven years. During this time, the individual was facing a number of challenges. Some of
the hurdles that needed to be overcome included structural barriers relating to gender and race, lack of money and access to opportunities, and faltering self-efficacy. Lives and contexts changed over time so constant adjustment may have been necessary. Change brought risks, especially to the self-concept: there was fear of failure, of unemployment, of what others would say. In addition, all of the participants spoke of the emotional roller-coaster they experienced, and these fluctuating emotions required management. In the accounts here, a variety of self-regulation strategies were salient as participants moved through the career change process.

4.3.5.1 Certainty

All of the participants expressed their certainty that they had made the right choice in changing career, whether or not the new occupation had already proved successful. This emphatic certainty was somewhat surprising since several of the participants felt they were still on the path of career change.

“And then I can remember kind of walking out of the office on my last day and just thinking ‘this is a really significant moment’ and just knowing in my heart that it was the right thing to do, no matter what happened. No matter, even if I, you know, fell on my face with studying, even if I couldn’t get a job at the end of it, I just knew that it was the right thing to do.” [Diane P8-I1]

“As soon as I did my Masters I knew that this was exactly, I’d made the right choice. I was just em convinced that this was the right choice and that this was where I was going to go.” [Anne P4-I1]

Certainty was a salient theme in all of the accounts, and it appeared to aid self-regulation. The problems of uncertainty were outlined in the section on emotion above. The decision space with many options and no clear choice was emotionally fraught and uncomfortable. In contrast, having made a decision was associated in the data with relief and more positive affect. Having made a decision, to feel certain that it is the right one appeared to move the individual forward towards action and away from the discomfort of decision making. This bolstering has been described as
frequent in decision-making (Janis & Mann, 1977) and is consistent with Gollwitzer’s argument that overestimating feasibility may motivate behaviour towards and increase the likelihood of attaining a goal (Gollwitzer & Bargh, 1996). It linked too to the advantage of positive illusions such as positive self-evaluation, unrealistic optimism and exaggerated perceptions of control which Taylor and Brown (1988) proposed as benefiting cognition and well-being. It can be suggested that such positive illusions work in part by protecting and strengthening the self-concept: to believe one has high self-esteem, more control and is more self-efficacious can create self-fulfilling prophecies, through enhanced creativity and increased motivation, persistence or performance (ibid.).

The need for self-regulation was evident in the descriptions of fluctuating emotions after making the decision to change career:

“You do go through, even when you’ve made that decision, as it starts to get nearer, you go through that period of ‘Oh my God, am I going to be any good at it?’ You think you are but then you have that sort of moment of doubt (…) ‘Oh my God, what am I letting myself in for?’ sort of thing. (…) Sometimes I do have moments of, I have to say, why do you want to do this?” [Joan P6-I1]

Joan’s extract described fluctuation and self-doubt. Helen also described moments of feeling positive interspersed with “just utter terror” [P7-I1]. In order to achieve a goal, such problematic emotions required management, and the participants appeared to use certainty, their belief that they had done the right thing, to regulate these difficult emotions. Joan followed her comments on doubt above with “I still feel happy with the decision that I made” [P6-I1]. The implication was that telling themselves they had made the right decision was an important way of regulating the potentially undermining emotions such as doubt and fear. Their self-talk of certainty was likely to have enhanced positive affect and decreased negative emotion. The certainty expressed seemed to have helped protect the self from the fear of having got it wrong, so certainty could be seen to serve a self-protective function. To be less certain and to continue to consider other options would be to dissipate resources but certainty gives direction and one course of action. Certainty may have been part of an implemental mindset (Gollwitzer et al., 2004), working to focus energy and
psychological resources – emotional, cognitive, attentional – on one course of action.

By protecting and strengthening the self, increasing positive emotion, decreasing negative affect and focusing attention on the goal, constructing certainty appeared to be an effective strategy for self-regulation.

4.3.5.2 Continuity

The theme of continuity, particularly of continuity of identity and of experience, was noted in all of the accounts. The participants were asked whether they thought they had changed as a person as a result of their career change. Although this question allowed them to reflect on change or lack of change, the theme of continuity was seen to emerge in several places in their stories. But themes of discontinuity and change were also apparent, often within the same passages. Overall, however, the stories gave a sense of continuity and gradual change rather than rupture.

Several participants spoke of aspects of their new career as being “in the back of my mind” for some time:

“I suppose it [love of driving/desire to drive] was always ticking over in the back of my head.” [Fran P5-I1]

“It was quite gradual in that it had been sort of a seeping thought [wanting to change career] in the back of my mind for a period of time, more and more things layered on, to bring that up levels of importance in terms of what I wanted to achieve.” [Joan P6-I1]

In these extracts, the participants positioned their thoughts of changing as being long-standing. This implied continuity with their past, rather than an abrupt departure.

Most participants saw continuity between the skills they used in their new career and the skills and experience they had in their old. Brenda, in particular, drew on this continuity in her account while emphasising her changed personality:
“I: Would you say you changed as a person as a result of it?

P: Absolutely, most absolutely definitely. (...) before, before I started doing Amatsu, (...) I’ve always been quite a nervy, shy person. I’m much more a watcher and a listener than a joiner-in and if you put me in a room full of people, I will sit and watch. (...) but because I’ve had to go out and sell myself, I’m much more confident in my own abilities and I know that I am now a much more confident person” [Brenda P2-I1]

“I: So a very, very different area

P: Em, …yes… but it uses a lot of my background knowledge from the laboratory work because of the anatomy and physiology and a lot of the study has been a good foundation for me” [Brenda P2-I1].

In these extracts, Brenda appeared to position herself as much changed but rejected the suggestion that she had moved to a very different area, stressing the connections between old and new occupations. Brenda’s identity as a scientist emerged strongly in her account so the continuity between the foundations of the new and the old careers were relevant to her identity. In the story of Brenda and other participants, the perceived continuity in skill-set between old and new appeared to work to enhance self-efficacy: an important benefit during change.

Gayle appeared to feel that her career change brought her back to her ‘old self’:

“[The post-graduate course] took so much strength, and because it sort of built on my personality. I wouldn’t say it built on my personality, it just broke the shell and removed it again, you know, and let me back out. (...) So a lot of my friends] said they were glad to see the old Gayle back again.” [Gayle P3-I2]

In this extract, Gayle appeared to refer to her self-concept: the course did not so much change her as to allow the ‘old’ her to re-emerge. The implication was that the new occupation linked with who she really was, and continuity of self was
established. For Clare and Diane too, there was a sense of regaining an earlier identity. It appeared that their new identity was more apt, more authentic:

“Maybe in a sense you’re just more who you really are because I think I’m probably more comfortable in that environment (...) I think I was probably a bit more in touch with who I am.” [Clare P1-I1]

“It’s a before and after. It’s I am now embarking on the second phase of my career. In my own mind, it’s very much split between pre- and post- that period of study. And so I almost feel as though I’ve reinvented myself and so this is the first stage of the second phase [laughs] of my career (...) it’s just, it feels comfortable.” [Diane P8-I2]

While Clare’s quotation emphasised continuity, Diane’s appeared to suggest discontinuity.

Overall, the extracts appeared to establish continuity of identity but with some acknowledgement of discontinuity, consistent with the findings of Wise and Millward (2005). Rosenwald and Wiersma’s (1983) early study of women career changers argued that, in their accounts, discontinuity had been used as a rhetorical device in order to mitigate the challenge to social convention by these women pursuing careers in the 1980s. Here, there were echoes of the rhetoric of discontinuity in Brenda’s and Diane’s accounts of becoming a new person, but they appeared to serve different purposes. For Diane, her “reinvented” self may have served to emphasise a move away from the undesired self she had become. For both Brenda and Diane, a new self may have offered wider opportunities for development, particularly to help build self-esteem and confidence: previously weaker-than-desired aspects of the self-concept could be reconfigured in a new self.

Despite some acknowledgement of discontinuity, the emphasis in the accounts was on continuity, which has been defined as a guiding principle of the self-concept (Breakwell, 1986). Threats to continuity require coping strategies to protect the self. Change can be seen as a threat to continuity and the attempts in the stories to establish continuity may be examples of a coping strategy. Emphasising continuity alongside changes appeared to help the participants in the self-regulation necessary
to move through the change period, by protecting and strengthening the self and by enhancing self-efficacy.

### 4.3.5.3 Other Self-Regulation Strategies

In addition to building certainty and continuity, several other strategies were used by the participants that appeared to aid self-regulation. As with certainty and continuity, the strategies could be seen as protecting or bolstering the self, or helping to manage emotions.

Diane did not tell many people about her early steps to an alternative career:

> “It was the exploration of ‘this is something I think I might be interested in’ because I see myself as being quite a risk-averse person, that yes, I can study psychology and actually interestingly enough, I didn’t tell anyone at work that this was what I was doing, apart from my immediate boss, (...) that it was kind of like an exploration. I need to satisfy myself that (1) I can do it and (2) that it is sufficiently interesting to me. So it was two things: it was about being able to do my current job better but also at the same time finding out whether this was really what I wanted to jump ship for, turn everything upside-down [laughs].” [P8-I1]

In this extract, Diane positioned her initial steps as exploration, which would also benefit her present job. She explicitly acknowledged the risks of change: would she be able to do it, and would she want to do it? Her positioning served to protect her from some of the risks, particularly the risks to her identity. If the choice was wrong, her self-concept was not diminished: it was only exploration; it was useful for her work; few people knew about it.

To take gradual steps towards a goal lessens the risk and most of the participants took a gradual process, a sequence of steps to career change: Fran saw bus driving as “a way in” [P5-I1] to driving coaches, and, she hoped, eventually heavy goods vehicles. Anne saw her degree as “a first step in change” [P4-I1]. Joan considered
teaching as a starting point. Like Diane, this offered lesser risk and also the opportunity to build self-efficacy and experience.

In progressing gradually, the participants seemed to establish interim goals and this appeared to be an effective strategy in regulating their progress.

“You know, you can try and make things happen but you can’t just say, if I do this then this and this will follow, because there are too many unknowns and too many variables, but I think you have to know what you’re hoping to get out of it, and what your bottom line is. I suppose, certainly when I did it for the Masters, the bottom line was ‘I will do this and at the end of it, even if I have nothing else out of it, at least I’ll have a qualification I didn’t have before, and I’ll have had an experience and an opportunity I hadn’t had before, which I did and I got an awful lot more than that, which was great, but that was my bottom line, and I knew that was my bottom line, which is why at the time, I was absolutely paranoid about failing exams and coursework and so on.” [Helen P8-I2]

In this extract, Helen articulated the benefit of interim goals – a “bottom line”, a baseline of achievement. On the one hand, this protected her against the risks of major change: she did not set out to change career with the risks, both practical and psychological, that this would entail. She positioned the interim gains as beneficial in their own right: a qualification, experience, opportunity. But Helen also appeared to have invested in her interim goal and it was possible to see investment of identity. Failure would have meant loss of face, loss of self-esteem and lowered self-efficacy. Helen’s achievement of the degree would have distinguished her from her workmates, so failure threatened a sense of distinctiveness at work. Achievement of her interim goal became critically important to her. In a very similar way, Anne came to feel that her success on her degree course was of great significance:

“It mattered hugely, it mattered hugely. I couldn’t let myself down. I certainly couldn’t let my partner down. I certainly couldn’t turn round to my family, my sisters and say ‘oh, you know’…” [P4-I2]
However, this appeared at odds with Anne’s view of her partner as “incredibly supportive” [P4-I2] and of her family’s views as not important in her decision. It seemed unlikely that a failure in Anne’s studies would cause a problem for them. This appeared to be an issue for Anne herself and it can be seen as an identity project. Failure on this project would be a threat to Anne’s identity, as was the case for Helen. It seemed that the threat of failure served as a way of focussing Anne on her goal and strengthening her determination. A threatened identity is likely to engender a strong reaction and to motivate strategies to avoid or reduce the threat (Breakwell, 1986). Anne, and other participants, may have perceived ongoing threats to identity in order to motivate them and to maintain progress towards the goal.

The sense that the participants invested their identity in their change emerged additionally where there was reference to proving oneself:

“I think there was a big sort of thing about I’ll show, people I’m never ever going to see again, haven’t seen for years and years and years, I’ll show them. Those people at school who thought I was crap, I’ll show them. (…) I’ll show [my ex-colleagues] I’m not a stupid person they thought I was.” [Helen P7-I2]

“This was definitely a question of proving myself to myself and I suppose in a funny sort of way to, funnily enough to my parents actually who really weren’t interested at all.” [Anne P4-I2]

Gayle had also spoken of proving herself to her uncles and aunts. It was interesting that both Helen and Anne recognised that the people who were the target of their proof were probably not at all interested. There was a sense of them using a perceived threat to their identity to help them strengthen their sense of self. ‘Proving oneself’ appeared to relate to defining the boundaries and the capabilities of the self. A sense of distinctiveness and self-efficacy may be both used and increased in this process. Perceived identity threat then, even where the individual acknowledges that it may not match external signals, may be used as motivation, facilitating self-regulation during a risky and challenging process.
Pursuing interim goals and using perceived identity threats as motivation may have enhanced the participants’ self-efficacy. In addition, the participants appeared actively to seek to enhance their self-efficacy as a way of regulating their progress through their career change. This made sense in the context of their accounts since several spoke of their lack of self-efficacy in a relevant area or of their fluctuating self-efficacy. In their early actions, finding they were good at the skills of the new occupation appeared to help the participants to continue on their path to career change. Some participants drew on previous experience:

“I had to remind myself that I had managed a husband and 4 children for 20 years and that I’d been on the PTA [Parent-Teachers’ Association] and that I’d done all these other jobs and I had to consciously remind myself that of course I was perfectly capable of doing this job (...) because of all the life experience I had (...) because I didn’t, I didn’t have you know a high-powered CV to draw on, to remind myself. I couldn’t think ‘well, I did this job for somebody else’.” [Clare P1-I1]

Most of the participants noted that they were drawing on skills they had already used elsewhere. Clare’s insight showed that this was beneficial for self-efficacy in a new career, as well as contributing to continuity.

Two further cognitive strategies emerged from the career change stories: awareness of risks and a temporal perspective. Most of the participants described their awareness of the risks of change and this appeared to help them to anticipate problems and to regulate their responses through the change process. We have seen how Clare consciously worked to enhance her self-confidence and drew on her life experience as ways of coping with her new career. Joan expected to have times of doubt:

“P: Sometimes I do have moments of, I have to say, why do you want to do this? (…)
I: Yeah. So when you have the doubts creeping in, how do you handle that?
P: I just think that that’s normal, that you know, I will have moments where I think, I think I would not be normal if I didn’t start to think, you know, as it
comes to the time when it’s due to start, ‘Oh my goodness, what am I doing?’ (…) em, I think that would be very strange indeed” [P6-I1].

In this extract, Joan appeared to use a cognitive coping strategy to regulate her emotions.

Several participants appeared to find a time perspective useful. It was shown above how Fran and Joan saw childcare issues as a life phase, and were planning beyond it. Joan saw her career change as the start of her second career. Diane had looked ahead to the remainder of her working life as part of deciding her goals. All of the participants referred in their stories to long term plans. This suggested that a time perspective was helpful to the participants in dealing with their current stage of change. Temporal framing then not only facilitated action but also contributed to self-regulation through the process.

In summary, the participants used a variety of strategies, including constructing certainty, perceiving continuity, positioning early actions as exploration, setting interim goals, seeking to prove themselves, bolstering self-efficacy and using a long-term perspective, to regulate their movement through change. Most of the strategies appeared to coalesce around protecting and strengthening the self-concept.

4.4 Discussion

The study explored how women experienced voluntary occupation change, with eight women who had changed career in the previous three years. The main themes were identity as a motivating force, emotions surrounding the old occupation, framing and reframing of the context, actions - both planless and planned, and strategies of self-regulation, including constructing certainty and continuity. Overall, the salient themes appeared to relate to identity processes and to emotion. The discussion below considers the findings under these two headings, with reference to relevant literature and research, and the implications for future research and for theory are then discussed.
4.4.1 Identity Processes

4.4.1.1 Identity Threat as a Motivating Force

The findings showed how unverified identities and an unsupported self were salient in the early stages of the accounts of career change. In identity control theory, Burke (2004) presented an argument for identities as multiple, dynamic and in part contextual, and proposed that identities require continuous verification. Experiences are checked for self-relevant meaning and compared against identity standards. Where discrepancies are found, action is triggered to achieve a match. Action can be behaviour-in-the-world, such as changing career, or may be psychological, such as reframing meaning. In the data here, there was evidence that contributing to thoughts of changing career were the lack of verification of salient identities in the old occupation: Gayle’s identity as “an intellectual” woman, and Diane’s rejected identity as “a career woman” were examples. This is consistent with cognitive dissonance theory (Festinger, 1957). The perception of an unverified identity may represent one specific type of dissonance, which results in pressure for its reduction, and seeking a new occupation may be an example of behaviour change as proposed by the theory.

In addition to unverified identities, there were ways in which more detailed aspects of the self appeared to be involved in initiating career change. Identity Process Theory (IPT; Breakwell, 1986, 1988; Vignoles et al., 2006) is proposed as a useful framework with which to consider these aspects. In particular, IPT posits guiding principles for the self-concept and suggests coping processes invoked if the principles are breached. Experiences which contravene the principles result in perception of identity threat, which then triggers coping strategies to resolve the threat. Consistent with identity control theory, coping strategies may include behaviour such as career change, or intra-psychic processes (Breakwell, 1986). IPT suggests several detailed psychological processes which may be pertinent in the processes of career decision making and change, including deflection or acceptance strategies, or re-evaluation of current or future identity contents: this will be discussed further below.
In considering the applicability of IPT to the accounts of occupation change, evidence for breaches of the guiding principles of the self-concept is first briefly outlined. Six principles have been suggested: self-esteem, continuity, distinctiveness (Breakwell, 1986), self-efficacy (Breakwell, 1992), meaning and belonging (Manzi, Vignoles, Regalia & Scabini, 2006; Vignoles, Regalia, Manzi, Golledge & Scabini, 2006). The lack of recognition for her qualifications described by Gayle appeared to undermine her self-esteem, her distinctiveness and her sense of belonging. There appeared to be threats to distinctiveness for Helen too, relating to her degree. The threat to continuity through change could be seen in the salience of establishing continuity of identity in the accounts. Diane seemed to have lowered self-efficacy in dealing with a “sea of suits”. Meaning and values were part of the stories of Anne and Joan. Thus perceived threats to critical aspects of the self-concept were part of the participants’ sense-making around moving towards career change, and career change may be a strategy for coping with such threats to identity.

The proposal of threatened identities as contributing to career change may relate also to the concept of ‘image violations’ in the unfolding model of voluntary turnover (Lee et al., 1999). Defining image violations as occurring when an individual’s values or goals did not fit with the organisation, Lee and colleagues found that 98% of their sample of people leaving organisations had experienced such anomalies. If values may be interpreted as identity needs and part of the content of the self-concept, and goal intentions as involving the self (Gollwitzer, 1999), then IPT provides a theoretical framework in which image violations may be understood, and Lee’s findings provide further empirical support for the role of identity threat in triggering career change. The role of identity in transitions, including dis-identification from the old, has been noted, though not developed, by several scholars (Ashforth & Saks, 1995; Nicholson & West, 1989): the application of IPT to career change provides insight into how the self-concept may be involved in change. Some writers have proposed that the “ideology of self” is used to justify change (Baumeister, 1991; Vaughan, 1986): that the self is used as a value base, and a need to express or fulfil the self is used to explain the ‘cause’ of change. This could imply that the self may be used as a rhetorical device, but the proposal here is
that identity threats contribute to motivation for change and that identity processes explain some of the mechanisms of change.

4.4.1.2 Self-Regulation

Paradoxically, although occupation change may be intended to mitigate identity threat, change in itself can bring additional threats. A major function of self-regulation then is to protect the self during change (Baumeister & Vohs, 2004), and resilience in pursuit of a goal requires strengthening of the self. The self-regulation processes in the accounts could be seen as serving the functions of protection and strengthening. In their stories, the participants constructed certainty about their course of action. Certainty appeared to bolster self-esteem and self-efficacy. Perception of continuity while moving through career could be interpreted as directly addressing a potential threat to the self-concept, and served additionally to help build self-efficacy. Efforts to draw on, and to increase, self-efficacy also directly addressed the potential breach of a guiding principle of the self-concept (Breakwell, 1992). Establishing interim goals may have protected the self by lessening risk. Self-regulation strategies then may serve to strengthen or protect the self-concept during change.

Of particular interest were the investment of the self in interim goals, and a desire to prove oneself. Both strategies appeared to work to strengthen the self-concept but both could be considered as potentially allowing threat to the self-concept. In the accounts, they appeared to motivate. This suggested that experiences or events could be reframed in order to generate perceptions of identity threat and thereby enhance motivation. This suggests that identity motivations are not only protective, defensive and reactive but may be used proactively to motivate behaviour and progress, to drive personal development and growth. In regulating oneself through change, although the self must be protected and strengthened, perceived identity threats may in fact be beneficial to the process.

Perceived identity threats are posited as triggering coping mechanisms and several intra-psychic coping mechanisms could be seen in the accounts. Intra-psychic coping strategies include deflection processes such as reconstrual/reattributio
denial (Breakwell, 1986). Fran and Joan’s reconstrual of the constraints of childcare as temporary appeared to help them to cope with likely changes to their identities brought about by motherhood (Smith, 1999). Denial of personal responsibility and positioning the change as due to external forces could be seen in the stories of Helen, Fran and Anne. Deflection strategies may persist but in the functional individual, they are expected to give way to acceptance strategies, such as anticipatory restructuring or change within the content of the self-concept. Joan’s description of the awareness of the risks possible in change may represent anticipatory restructuring, and her perception that her values and their fit to the job had changed appeared to show a change to the self-concept. Overall, the implication is a mix of coping strategies may be involved in self-regulation through career change. Deflection strategies may be part of the normal change process. Problems in change may result from a failure to move from deflection to acceptance. So in moving through a career transition, the processes of identity and of managing identity threat can be seen to operate throughout the process.

4.4.1.3 A Need to Grow

One aspect of the self, however, was particularly salient in the accounts but is not explicitly addressed in IPT: the need for growth and development. This need was in evidence in all of the accounts. Although it could be considered as a facet of the content of self-concept, this would seem to underplay its salience in career change. Further, its theoretical importance, as central to self-determination theory and intrinsic motivation (Ryan & Deci, 2000), the motivational hierarchy (Maslow, 1987) and mastery motivation (Dweck, 1999), and implicit in many other theories (Baumeister & Vohs, 2004), suggests its centrality to the self-concept. One implication from the findings is that a need to grow may constitute a seventh guiding principle of the self-concept: this proposition is developed further in the research programme (see Chapter 6, Section 6.4.3).

The finding here of the importance of a need to grow to transitions in career supports a number of other studies. Cohen and Mallon’s (1999) qualitative studies of individuals leaving organisational careers for portfolio work found that, for more than half, the lack of opportunity for growth was salient. Several participants
explained leaving their organisation in order to regain a sense of self and felt they could ‘be themselves’ in their new career. In an early study, Kanchier and Unruh (1989) noted that work was important to identity, and that managers who changed jobs gave reasons for changing including a need for more challenge and achievement, and greater meaning.

4.4.1.4 Finding a Possible Self

In addition to the role of the self-concept in initiation of career change, a possible self was salient in the accounts: either a desired future self (Fran wanting to have a family) or an unwanted future or current self (Helen not wanting to become like her “boring” colleagues, Diane wanting to change from the “three-headed creature” she felt she had become). As was noted in the analysis, most of the participants did not have a possible self or a new occupation in mind when they started on the path of career change. Their actions, whether career-related or planless, appeared salient in finding a possible self: they “knew by trying” [Gayle P3-I1].

The analysis suggested, in addition to facilitating the identification of a desired possible self, the participants’ actions may have enhanced self-efficacy and positive emotion, and more generally strengthened the self-concept. This links to Ibarra’s (1999, 2004) findings that identity and self-concept change during career change, so that the individual becomes the person they want to be, and the person they need to be. Ibarra (2002) argued that such change emerges from action, that without action the individual will remain stuck, in the old occupation and the old identity. Exploratory action then can be a constructive way to find a desired possible self. The potentially planless nature of such action, as evidenced in the participants’ stories, implies non-determinism in the possible self identified: different actions – taking a course in psychology rather than French, for example – lead to different possible selves. A multiplicity of possible selves exists (Markus & Nurius, 1986), desired and undesired: the combination of timing, opportunity, action, feedback, emotion and self-concept may result in the possible self selected. This may explain in part how serendipity and chance can play an important role in careers (Betsworth & Hansen, 1996; Bright et al., 2004; Mitchell et al., 1999; Miller, 1983; Williams et al., 1998).
Multiple possible selves permit equifinality in careers, that is, a number of alternative outcomes may meet one high-level goal (Shah & Kruglanski, 2000). In careers, any of a number of possible selves could meet the high-level goals of a supported self-concept. There is symmetry and consistency in suggesting that identity threats contribute to triggering career change and a possible self may contribute to determining the new occupation. The proposal aligns with, and suggests mechanisms for, Super’s (1957) realisation of the self-concept in career, Nicholson and West’s (1989) destination of career as the developed identity, and Gray’s (1999) career as identity project. Identity motivations may be proposed as central in initiating and determining the course of career change.

In summary, threats to identity are argued to contribute to initiation of occupation change. Identity processes as proposed in Identity Process Theory (Breakwell, 1986) suggest some of the psychological mechanisms at work both in the initiation and throughout the process of occupation change. Self-regulation is argued to serve critical functions in the process of change, particularly relating to strengthening and protecting the self-concept. Although a need for growth is not explicitly considered in IPT, the findings here suggested that it played a highly salient role in participants’ self-concepts relating to careers. Finally, participants’ actions brought a number of psychological benefits to their process of change, amongst which facilitation of finding a desired possible self was of particular importance. Study 2 investigates these findings, testing the relationship of identity threats to initiation of occupation change, the contribution of a need to grow, and the influence of a possible self on actions to change occupation.

**4.4.2 Emotion**

The findings showed how negative emotions were salient in the early stages of moving towards career change. The intensity of the emotion described - being “miserable” [Diane P7-I1] and having a “really horrible experience” [Anne P4-I1] – appeared to relate to identity threat. Unverified identities, undermined self-esteem, threatened distinctiveness, lowered self-efficacy and lack of meaning helped to make sense of the strong negative emotions expressed. Theories of identity posit
emotions as signals of the level of support for identity by its context. Identity control theory proposed that there is constant comparison between the environment and identity standards to ensure congruence (Burke, 1991) and affect control theory proposed that it is emotion that encodes the valence and potency of congruence (Smith-Lovin, 1990). Thus the negative emotions may signal the lack of support for the self in the old career, and further, may trigger action, since lack of congruence prompts efforts to resolve it (Burke, 1991). The findings of Stets and Tsushima (2001) that unsupported work identities are more likely to prompt behavioural rather than cognitive changes to resolve the problem supports the suggestion that career change may be behaviour triggered by threatened identity. The relationship between negative emotion and threatened identity is part of the more general relationship between identity and emotions. Affect control theory emphasised the relationship of emotion to meaning, a point echoed by Haviland-Jones and Kahlbaugh {Haviland-Jones, 2000 188 /id /d} in their argument that emotion magnifies meaningful aspects of identity. Their proposal that “the emotional system is the value-making system in identity” (p. 294) can be linked directly to IPT. IPT proposed that the structure of the self-concept comprises values as the complementary dimension to content, and evaluation or value-making as the complementary process to assimilation-accommodation. It may be then that the emotional system is an intrinsic part of the structure and process of the self-concept. The key point here is summarised by Stryker (2004, p. 8):

“…emotions have signal functions, not only to others but to self; they are messages not only from the self but also to the self, informing persons (…) about who they really are.” [original italics]

Negative emotions in the old occupation then may signal threats to identity, and both identity threats and negative emotions may contribute to initiation of the process of occupation change.

In some cases, the negative emotions appeared to influence the participants’ rejection of not only the old job but the whole occupation or industry. Gayle appeared to reject not just her job but “retail” as an industry. Anne appeared to reject not only her job but “catering”, in both cases despite recognition of positive aspects
of the old occupation. Baumeister’s (1991) crystallisation of discontent may suggest an explanation: isolated annoyances suddenly form a pattern which can no longer be ignored. There may be a rapid and extensive ‘contamination’ of all cognition and affect to do with the situation, after which all experience is perceived with a negative bias and any positive aspect is ignored. This can work to force the individual to change since no good can be found in the existing situation. Similarly, Frijda and Mesquita (Frijda, 2000 34 /id /d) defined ‘sentiment’ as emotional beliefs of personal concern which become generalised. Sentiments may act as affective schemas or templates which specify appropriate action. Emotions may become sentiment, or templates for action, if such schemas are useful in dealing with a situation. So negative emotions and associated cognitions about the old occupation can become generalised into a belief that there is nothing positive about the old career, which links to a belief that change is the appropriate action.

Fiske and Taylor’s (1991) proposal of cognitive schema-triggered affect offers further insight. Their proposal, that an object may evoke affect if its larger cognitive structure also evokes that affect, may also apply in the other direction, that is, strong emotion attaching to an object, event or situation may influence wider cognitive schemas of which it is part. A further possibility is that evidence from feelings may be experienced as stronger than evidence from the environment (Clore & Gasper, 2000), leading individuals to focus on the negative feelings in the old career rather than any positive aspects. The emotion categorisation hypothesis (Clore & Gasper, 2000) suggests that situation and belief may become conflated via emotion. Combining the insights on the spread of emotion with the propositions on how emotion influences cognition and action suggests that the spread of negative emotion across the old occupation may serve to signal and to deepen the perception of identity threat. In turn, the combination of emotion and belief may trigger action to change career.

However, the study design does not allow causal linkage to be determined. Although negative affect may trigger career change, it can also be suggested that it is the primary experience of negative affect that leads to sensitised cognition about the job, which then finds mis-matches with identity. Narrative forms and cultural norms
require appropriate emotions (Gergen, 1991) and individuals are expected to justify change (Baumeister, 1991). Motivated reasoning (Kunda, 1990) would suggest that problems could be found to support the negative affect. Affect priming theory (Bower & Forgas, 2000) argued that cognitive processes such as memory retrieval and interpretation tend to be mood-congruent. So it is feasible that the experience of negative affect within the job, together with the cultural expectations of the experience and expression of emotions, could lead to fault-finding with the old career and the perception of threatened identity. Study 2 investigates the directionality of relationships between negative emotion, identity threat and thoughts of changing career.

The analysis found that the participants’ actions that were salient in moving them towards a new occupation generated positive emotions: passion and enjoyment. The benefits of positive emotions to creative thinking and encouraging action (Isen, 2000) were noted. Positive affect has been shown to facilitate top-down, ‘bigger picture’ processing (Clore & Storbeck, 2006). Positive emotions may have contributed to the process of career change in further ways. Firstly, positive emotions from ‘flow’, intrinsic motivation or enhanced self-efficacy may have pointed to a possible self. Secondly, emotion can guide attention (Clore & Gasper, 2000). Thirdly, affect can serve as a source of information, particularly relating to liking and to the importance of events or objects (Clore & Storbeck, 2006). Thus positive affect may have focused attention, facilitated the perception of a possible self as important and as liked, and helped establish it as a motivational goal.

Clore and Gasper (2000) suggested a ‘feelings-as-evidence’ hypothesis: where feelings are congruent with beliefs, they may be experienced as confirmation of beliefs. So feeling happier with the new career path, even its early stages, may be perceived as ‘evidence’ that the new path is the right one. The data appeared to support this hypothesis. Diane, for example, tied her positive affect to her certainty about her course of action, even though she was not yet where she wanted to be in her new career. Clore and Gasper (ibid) further suggested the concept of the “attentional funnel”, in which intensity of feeling leads to a reduced goal space, which increases the importance of the chosen goal, which in turn increases the
intensity of feeling. Theories of motivation, identity, decision making and other psychological processes propose that people seek to maximise positive emotions \cite{Larsen, 2004, Lowenstein, 2002, Vignoles, 2006} so processes surrounding positive affect can be seen as central aspects of self-regulation. Once a goal has been established, positive affect may contribute to positive illusions \cite{Taylor & Brown, 1988} which are beneficial for goal attainment, and fresh energy and positive affect have been associated with a new start in career \cite{Arthur et al., 1999}.

In summary, negative emotions and threatened identities are closely linked theoretically, suggesting that both may contribute to initiation of career change. It is acknowledged that the direction of the relationship between identity threats and negative emotion requires further research. Theoretical mechanisms for the strength and spread of negative emotion about the old occupation may include crystallisation of discontent and cognitive schemas. Positive emotions may play a beneficial role in decision making, self-regulation and achievement of goals in occupation change. Study 2 investigates further the proposed relationship of negative emotion and initiation of occupation change, and of positive emotion and action to change.

**4.4.3 Future Research and Application**

IPA methodology offers many advantages in terms of richness, depth and focus on subjective experience but is limited on generalisability. Further research could investigate whether the findings are supported through another methodology. In particular, a quantitative approach could explore whether the findings generalise across a population. Whether threats to the guiding principles of the self-concept contribute to initiation of career change could be tested for significance. The relative contribution of the different principles could be investigated. The role of emotions in career decision making could be investigated further. Specifically, the contribution of negative emotion to initiation of occupation change, and of positive emotions to actual career change, could be tested. The role of perception of a possible self in occupation change could be investigated. Causal relationships could usefully be explored: do identity threats and negative emotions lead to thoughts of changing career? Do negative emotions mediate the relationship between identity threats and
occupation change? Does a possible self contribute to occupation change? These areas for future research suggest a longitudinal quantitative study of occupation change.

The findings showed that a need to grow was salient in career change for the participants, and the analysis linked this to the self-concept. It has been suggested that women show higher growth needs in careers and that women may be more adaptable and therefore better at coping with changes in career than men (Brett & Stroh, 1994; Goffee & Nicholson, 1994). Future research should explore whether the findings are valid for men’s experience of occupation change, with particular reference to the need for growth.

The findings suggest methods of application in career counselling that may be beneficial, as well as particular topics. The study supports a constructionist approach to career counselling, to help clients to create a coherent and credible narrative (Collin & Watts, 1996). Narratives may be central to career decision making, in structuring, showing purposefulness and including values and emotion in stories of change (Beach, 1997). Stories ascribe meaning and make sense of personal history and of change (Gergen, 2001) so helping clients to tell their stories facilitates meaning-making and progress through change (McMahon & Watson, 2008). The findings suggest that actions are highly useful in career exploration. Clients should be encouraged to explore actively, and to make sense of the emotions and thoughts about identity and self-concept that their actions generate. Clients’ career-related emotions should be considered as a resource to explore. The client may be helped to recognise the informational value of feelings. Positive emotions around new career options can strengthen commitment, help to motivate action and enhance the exploration of options. The counsellor can facilitate these benefits by focusing awareness on positive emotions such as interest, enjoyment and passion, and encouraging the client to use these emotions to bolster self-motivation. Finally and critically, the counsellor should be aware, and raise awareness by the client, of the importance of self-regulation to achieve career change. The client should be encouraged to recognise fluctuating emotions and to reflect on action and experience in all aspects of life as part of the career decision-making process.
Chapter 5 Study 2 - A Quantitative Investigation of Identity and Emotion in Occupation Change: Cross-sectional Findings

5.1 Background

Chapter 4 presented the findings of Study 1, which yielded a number of rich themes relating to the process of occupation change. This chapter describes Study 2, which built on the findings from that study. Study 2 tested the contribution of threats to the self-concept and of negative emotions to occupation change, and of the construct of a possible self and of positive emotions in taking action to change career. A conceptual model of the process of occupation change is proposed and refined.

As with any research, the choices taken in designing Study 1 simultaneously constrained the study and excluded perspectives. The participants in Study 1 described their occupation change retrospectively: how do people experience occupation change as they move through the process? The evidence from Study 1 suggested experiences that are, in principle, theoretically generalisable (Willig, 2001) but which may only be valid for the particular participants involved. A key question arising is the extent to which these experiences are more widespread in the population. Study 1 focused only on women. Goffee and Nicholson (1994) argued the case for similarities as well as differences in women’s and men’s experience of careers: to what extent do the findings from Study 1 hold for men? The women interviewed in Study 1 had all changed occupation: are aspects of their experience shared by ‘career stayers’? Finally, the accounts from Study 1 suggested a process of occupation change that did not fully align with published models: is there evidence to support the novel constructs within a revised model? The overarching objective of Study 2 was to develop further understanding of the process of occupation change.

To address this objective, a quantitative method was chosen as most appropriate for the second study. This would make possible a wide research sample, to include non-changers and men, testing of hypotheses and statistical generalisation. People who were currently in the process of career change were targeted for recruitment. A
longitudinal study was designed, to advance understanding in particular of the process of occupation change, to investigate key constructs as the process evolved over time, and to provide evidence for causal relationships among the key constructs. The study comprised questionnaires at four time points: the first time point included people not considering changing occupation as well as those who were; the remaining three were completed by people thinking about changing occupation. Specific relationships in the career change process, based on the literature and on the findings from Study 1, were tested on the Time 1 data. This chapter describes the hypotheses tested and the results from these analyses. The longitudinal and further exploratory analyses are described in Chapter 6.

This chapter begins by outlining the background to the study and the hypotheses, and then describes the study design in detail before moving on to present and discuss the results.

**5.1.1 Major Themes from Study 1**

**5.1.1.1 Identity**

Study 1 proposed a specific involvement of identity in the process of voluntary occupation change, that of identity threats contributing to initiation of change. The finding generally links to earlier research on the role of identity in career decision making. However agreement on what is meant by the concept of identity or the self-concept in this literature has been lacking (Pryor, 1985), making comparison to other studies problematic. Early researchers recognised both the involvement of the self-concept and the weaknesses of definition. Gottfredson (1981) argued that career choices were compared against aspects of the self-concept, such as gender and social class, but noted the lack of consensus on the meaning of the self-concept, and “the methodological state of self-concept research [as] dismal” (Gottfredson, 1985, p. 162). Classical career theories, such as those of Super and Holland, assumed an involvement of the self (Blustein, 1994) but again acknowledged the weak state of conceptualisation (Super, 1990) or offered limited operationalisation (Vondracek, 1992). Nicholson (1990) theorised that identity alters to accommodate requirements in a new work role, but did not clarify what was meant by identity or by identity
change. Further, although he acknowledged the need to understand how career identity adapts to change (Nicholson, 1996), his transition theory did not consider the self-concept as involved in initiating change, as Study 1 suggested.

Some more recent studies however investigated identity as a predictor of career change, using London’s (1983) definition of career identity. London’s career identity comprised two sub-domains: work involvement, that is, the extent to which work contributes to identity, and upward mobility, that is, the motivation to develop skills and to gain greater responsibility in work. The sub-domain of upward mobility is of its time, when organisational careers and hierarchical career paths prevailed (Grzeda, 1999). The former sub-domain of work involvement may be seen as a measure of career or work identification, rather than identity, that is, a measure of subjective work importance similar to that investigated by Super and colleagues (Super et al., 1995) and related to the meaning of work for the individual. Possibly because of these problems of definition, Carless and Bernath’s (2007) study on the antecedents of intention to change career found that career identity, using London’s definition, was not a predictor. One further recent study suggested that issues relating to identity and the self-concept can cause problems in career decision making (Saka, Gati & Kelly, 2008). This study defined one such problem as concerning self-esteem and this can be linked to the finding in Study 1 of undermined self-esteem as potentially contributing to initiation of career change.

In reviewing the literature, there is general support for the finding that identity may be involved in career change, but two gaps are clear: there is a need to define, based on theory, what is meant by identity or the self-concept in this particular research domain, and there is a need to investigate the role of identity and the self-concept in initiating career change. The quantitative study described in this chapter aims to address these gaps.

5.1.1.2 Emotion

In the first study, themes relating to emotions were salient. Two potential roles for emotion in career decision making were proposed: negative emotions may contribute to the initiation of career change, and positive emotions may facilitate
finding a new occupation. In general, these findings speak to the theoretical perspectives and empirical results in the literature. Oatley and Johnson-Laird (1987) argued that emotions are essential to social plans – of which career change may be an example - and suggested that a change from one social role to another could be prompted by emotion. Later, they proposed more generally the centrality of emotions to decision making, seeing emotions as heuristics which can provide guidance for judgements (Johnson-Laird & Oatley, 2004). Similarly, Gigerenzer (2007) found evidence for intuitive judgement performing as well as or better than reasoned decisions and suggested that intuition can provide effective short-cuts to possible answers. Affect has been shown to influence elaborative thinking (Forgas & Vargas, 2000), as seeking a new occupation may be, and to influence cognition by providing information and by focusing attention (Clore & Gasper, 2000). Further, affect can provide information on liking and importance (Clore & Storbeck, 2006). Affective forecasting too, the anticipation of future emotions including regret and happiness, has been found to influence decision making (Dunn and Laham, 2006).

The findings from Study 1 relating emotions to career decision making are thus supported within cognitive, decision making and emotions research but evidence from the career literature is scarce. Fineman (1993) noted that the literature had tended to portray people as “emotionally anorexic”, with a limited range of emotions explored. Kidd (1998, 2004) pointed to the importance of emotion in career decision making and the gap in research and theory concerning its roles. Saka et al. (2008) found that negative emotions related to problems in career decision making. Harris, Daniels and Briner (2003) showed that achievement of goals within the work environment related to positive affect, especially if the goals were personally important. However, with these exceptions, the role of emotions in the process of career change has not yet been examined, to my knowledge. The study described in this chapter aimed to address this gap.

5.1.1.3 A Possible Self

Study 1 found that perception of a possible self appeared to facilitate moving to a new occupation and this is consistent with the views of a number of writers on careers. Law (1981), a major contributor to the literature on career guidance in the
UK, noted that young people should be encouraged to explore ‘possible future selves’. Careers have been seen as a partial answer to the question: “Who am I to become?” (Homan, 1986). Through analysis of interviews, Ibarra (1999) found evidence that professionals in career transition experimented with provisional selves, and she argued the necessity of such experimentation in developing identity during career change. More generally, positive future possible selves have been related to motivation (Ruvolo & Markus, 1992), consistent with the original theoretical proposition of desired possible selves as motivational (Markus & Nurius, 1986). Recent studies have suggested possible selves as important in self-regulation (Oyserman, Bybee, Terry & Hart-Johnson, 2004). Despite the strong theoretical arguments for possible selves as motivators and the involvement of possible selves in self-regulation and careers, there has been relatively little empirical evidence for possible selves in career decision making, with the exception of Ibarra’s work. There is a need for further investigation on the role of possible selves in career decisions, across a broader range of occupations and using a range of methodologies. The current study aimed to investigate how perception of a possible self may facilitate career decision making.

5.1.2 The Proposed Model and Hypotheses

Existing models of career change and turnover (i.e. leaving an organisation or occupation) have not considered emotion or a possible self, and consideration of identity has been limited.

The unfolding model of voluntary turnover (Lee et al., 1999) included the concept of ‘image violations’. ‘Image violations’ were defined as a lack of fit between an individual’s values, goals and sense of progress but the concept was not related to theory. In their study, 89% of participants were categorised as experiencing ‘image violations’ as part of their path to leaving their organisation voluntarily, suggesting an important predictor in turnover. Building from the contribution of Lee et al., it is suggested that image violations may constitute identity threats, and that Identity Process Theory (IPT; Breakwell, 1986) offers a theoretical framework on which to base conceptualisation and operationalisation of the concept.
The model of career change proposed by Rhodes and Doering (1993) included some factors potentially related to the self-concept, such as career growth, autonomy and need for stability. The model suggested that failure to satisfy such needs influenced thoughts of changing career, mediated by job satisfaction. IPT may offer a more comprehensive conceptualisation of identity motivations influencing career change. Rhodes and Doering’s (1993) model was based on earlier proposals of a process of change which consisted of the following sequential stages: thoughts of changing, intention to search for alternatives, actual search, intention to change and actual change (Mobley, 1977). However, Hom and Griffeth (1991) argued that a global withdrawal cognition provided a more parsimonious model, suggesting that intention to search was unnecessary. Further, the strength of intention to change career as a predictor of actual change has been challenged (Kirschenbaum & Weisberg, 1994). Based on these critiques and using the findings from Study 1, a modified model of career change was proposed (Figure 5.1):

*Figure 5.1 Proposed model of voluntary occupation change*

Following Rhodes and Doering’s (1993) model, the cognition ‘thoughts of changing occupation’ is central to the model, mediating the relationship between factors relating to career change and action to change. Rhodes and Doering suggested that occupational satisfaction is a key determinant of this cognition and this was
supported by Blau’s (2007) study of medical technologists. Based on the findings from Study 1, and linked to ‘image violations’ as a predictor of turnover (Lee & Mitchell, 1994; Lee et al., 1999) ‘identity threat’ is hypothesised to influence thoughts of changing, mediated by occupational satisfaction. Although occupational satisfaction has been assumed to mediate most factors influences thoughts of changing (see references above), identity threat may influence change cognitions directly, as well as indirectly through the more affective measure of occupational satisfaction. It is therefore hypothesised that the relationship between identity threat and thoughts of changing occupation is partially mediated by occupational satisfaction. Identity threat is defined below. Two further constructs were considered as predictors. Job satisfaction and commitment have been established as significant, independent predictors of thoughts of changing (see Cotton & Tuttle, 1986, and Tett & Meyer, 1993, for meta-analyses) in research on job turnover. Cohen and Freund (2005) found evidence for a directional relationship from occupational and organisational commitment to thoughts of changing career. Based on Rhodes and Doering’s (1993) argument for occupational satisfaction as more proximal than job satisfaction in influencing thoughts of changing career, job satisfaction and occupational commitment were hypothesised as contributing indirectly via occupational satisfaction. As control variables and for clarity, these constructs were not depicted in the conceptual model. The first hypothesis then was:

**H5.1:** Threats to identity contribute to thoughts of changing occupation, partially mediated by occupational satisfaction and controlling for job satisfaction and occupational commitment.

The discussion above noted the need for a sound theoretical basis for conceptualising the self-concept, and suggested IPT as a suitable framework. IPT proposes a coherent set of identity processes underpinned by the guiding principles of self-esteem, continuity and distinctiveness (Breakwell, 1986), and generalised self-efficacy (Breakwell, 1992), and more recently extended to include meaning and belonging (Manzi et al., 2006; Vignoles et al., 2006). The analysis in Study 1 found that threats to these principles appeared salient in accounting for initiation of occupation change, and a variety of theoretical and empirical approaches to career
support the involvement of these facets of the self-concept. Saka et al. (2008) linked
self-esteem to career decision-making, and self-esteem has been seen as central to
actualising the self-concept in career (Chartrand, Robbins, Morrill & Boggs, 1990). Self-efficacy is placed centrally in career decision making in Social Cognitive
Career Theory (Lent et al., 1994) and has broad support for its relationship with a
variety of career behaviour (Brooks, 1990). The need for meaning in career has been
argued within existential (Cohen, 2003), social constructionist (Young & Collin,
2000; Young & Valach, 2000), humanist (Kidd & Killeen, 1992) and other career
perspectives (Mirvis & Hall, 1994). Thus the findings of Study 1, of the
involvement of IPT’s guiding principles, are generally supported by earlier work.

However, there were other aspects of the self-concept salient in the accounts of
career change which IPT does not explicitly address. A need for growth was
particularly salient and, although not considered directly in IPT, has long been
recognised as a motivator in career. Kierkegaard (1950) saw work as an important
domain in which people strive towards their potential. Homan (1986) also argued
that people were motivated to find careers in which they could achieve their
potential, echoing Maslow’s (1987) proposal for self-actualisation as the highest
level in a hierarchy of motivation. Jahoda (1958) proposed that scope for growth in
work was necessary for mental health. In addition to a need for growth, personal
values have been proposed as central to individuals’ experience of career (Brooks,
1990; Hall & Mirvis, 1996). Lastly, careers have been linked with personal goals or
projects (Grey, 1994; Kidd & Killeen, 1992). Thus in this study, the self-concept in
career was conceptualised as comprising nine factors: six principles from extended
IPT together with a need to grow, values and personal goals. Using IPT’s
framework, identity threat was defined as a perceived breach to guiding principles,
and this was extended to include the additional three factors. Identity threats then
were the perception of lack of support in the old occupation for self-esteem, self-
efficacy, continuity, distinctiveness, belonging, meaning, a need to grow, values or
personal goals.

In proposing that identity threats may contribute to thoughts of changing occupation,
three paths of influence are suggested. A conscious, cognitive process may link
perceptions of identity threat directly to thoughts of changing. An evaluative outcome of identity threat may operate via occupational satisfaction. Additionally, negative affect from unsupported identity needs may also contribute, via occupational satisfaction. There is strong theoretical linkage between identity threat and negative emotion (Burke, 2004; Frijda et al., 2000; Hochschild, 1979). Affect control theory (Smith-Lovin, 1990) posits emotion as signalling the degree to which identities are confirmed by their environment. Negative affect then may signal problems in the old occupation, which influence thoughts of changing. This is consistent with the findings from Study 1 that suggested that negative emotions about the old occupation contributed to thoughts of changing. Weiss and Cropanzano’s (1996) comprehensive argument for job satisfaction as an evaluative judgement, and affect as a causal influence on that evaluation, implies that such negative emotions contribute to thoughts of changing via occupational satisfaction. Negative emotions were defined as state affect relating to the old occupation, that is, the current occupation for people in the process of career change. It was therefore hypothesised that:

**H5.2:** Negative emotions relating to the current occupation partially mediate the relationship between identity threats and occupational satisfaction.

Based on earlier models of change (Mobley, 1977; Rhodes & Doering, 1993), and on models of career decision making, the process of career change was assumed to move from thoughts of changing, through search behaviour to action to change occupation. Search behaviour comprises information seeking about new occupations, a fundamental assumption in rational models of decision making (Gati & Asher, 2001; Peterson et al., 1996). However, the findings from Study 1 questioned this sequential linkage, suggesting that search behaviour may not be part of the process of change. The third hypothesis proposed that search behaviour partially mediates the relationship between thoughts of changing occupation and action to change: a direct relationship between thoughts of changing and action to change is additionally proposed. One further improvement on previous research is in the measure of career change. Previous studies have tended to use intention to change career (Khapova et al., 2007; Rhodes & Doering, 1993) but there is evidence
that intention to leave may not be significantly related to actual turnover (Kirschenbaum & Weisberg, 1994). In this study, actions to change occupation were used as a more proximal measure of actual occupation change. Action to change occupation was defined as actions intended to start in a new career, such as applying for training or applying for a job related to the new occupation. The third hypothesis was:

**H5.3:** The relationship between thoughts of changing occupations and action to change occupation is partially mediated by search behaviour.

Study 1 found that the perception of a possible self appeared salient in participants' selection of their new career. Linking to possible selves as motivators (Markus & Nurius, 1986), as involved in self-regulation (Oyserman et al., 2004) and as important in career change in professionals (Ibarra, 1999), it was hypothesised that the perception of a possible self influences action to change occupation.

**H5.4:** Perception of a possible self in a new occupation is positively related to action to change occupation.

Study 1 showed the salience of positive emotions around the new occupation and it was proposed that positive affect may facilitate decisions about occupation change. This was supported by recent perspectives on the role of emotions in judgement and decision making (Damasio, 1996; Johnson-Laird & Oatley, 2004) and the benefits of positive affect for creative thinking (Isen, 2000) and for achievement of goals (Taylor & Brown, 1988; Trope, Igou & Burke, 2006). In the accounts in Study 1, perception of a possible self and positive emotions appeared to be associated. Defining positive emotions as state affect, the final hypothesis to test in Study 2 was:

**H5.5:** Positive emotions relating to a new occupation mediate the relationship between a possible self and action to change occupation
5.1.3 Summary

The objectives of this study were to add to understanding of the processes of voluntary occupation change. In particular, the study aimed to add to theoretical knowledge on the psychological processes involved. The specific theoretical foci were identity threats and negative emotions in the old occupation contributing to thoughts of changing occupation, and the role of possible selves and of positive emotions in influencing actions to change. Additionally, the study aimed to contribute to the limited empirical base on voluntary career change, by extending the range of occupations beyond specific professions (e.g. medical technologists: Blau, 2007; nurses: Hom & Griffeth, 1991; teachers: Rhodes & Doering, 1993), and by using actions to change occupation rather than intentions as a measure of actual change. There were further objectives relating to the longitudinal aspects of the study design, to gender and to aspects of the self-concept: these are discussed in Chapter 6. The hypotheses for the cross-sectional data in the study were:

**H5.1:** Threats to identity contribute to thoughts of changing occupation, partially mediated by occupational satisfaction and controlling for job satisfaction and occupational commitment.

**H5.2:** Negative emotions relating to the current occupation partially mediate the relationship between identity threats and occupational satisfaction.

**H5.3:** The relationship between thoughts of changing occupations and action to change occupation is partially mediated by search behaviour.

**H5.4:** A possible self is positively related to action to change occupation.

**H5.5:** Positive emotions relating to a new occupation mediate the relationship between a possible self and action to change occupation.

5.2 Method

5.2.1 Procedure

The study consisted of an initial questionnaire for all participants, and three follow-up questionnaires for people who indicated on the first questionnaire that they were thinking of changing occupation.
The first questionnaire was piloted by 11 people, male and female, with eight different types of occupation, four of whom were not UK nationals and two of whom were non-native English speakers. The objective of the pilot was to check intelligibility, wording, time to complete and participant reaction to the questionnaire. Minor modifications of wording were made based on pilot feedback.

Data were collected via online questionnaires between November 2007 and June 2008 from employable adults aged between 25 and 55. Online studies may be more accessible to specific participants (Reips, 2002), may facilitate increased sample sizes (Hewson, 2003), have been found to be consistent with traditional approaches (McGraw et al., 2000) and may encourage self-expression (Bargh et al., 2002). A lower age limit of 25 years was chosen to eliminate those who had not pursued a first career for a period of time before considering a new career. Frequent change can be characteristic of the early years of career (Super, 1957) and the psychological processes may not be the same as for career change later in working life. An upper age limit of 55 was chosen to reduce the likelihood of “bridge employment” between full-time work and retirement (Feldman, 2002). The process of career change as a preliminary to retirement may not be the same as earlier career change.

The cut-off of 55 years was arbitrary. It is acknowledged that, for some professions such as the fire service and the police force, retirement in the fifties is possible, and, conversely, that many people remain engaged in working careers long past the age of 55. Nonetheless, the threshold of 55 years was expected to limit the sample to predominantly within-working-life occupation change.

Participants were assured of anonymity, confidentiality and the right to opt out at any point. An information sheet about career change on completion of each questionnaire was offered. The information sheets gave general advice on career change and suggested resources for further information. An opportunity to avail of an online clinic with a career coach was also offered to participants on completion of their fourth questionnaire.

Questionnaire 1 (see Appendix B-1.1) consisted of a shorter version, with measures relevant to any employable adult, or a longer version, which additionally included measures relevant to people thinking of changing occupation. One item in
Questionnaire 1 was used to determine if a participant was thinking of changing occupation and therefore received the longer version. With the exception of one measure, all questions were compulsory – participants could not proceed without answering each item. The final question on all four questionnaires gave the option of submitting the data, protecting the participants’ right to opt out.

All participants submitting the longer questionnaires, the ‘career changers’, were emailed four weeks later and invited to complete the second questionnaire. On submission of the second questionnaire, an invitation to complete the third was sent by email four weeks later, and similarly for the fourth and final questionnaire. On each invitation, participants were assured they were not under obligation to complete the survey. If questionnaires 2, 3 or 4 were not received, a reminder was sent two weeks later, followed by a final call after a further two weeks. The final call thanked the participants for their participation and promised no further contact. In the intervals between questionnaires, participants were sent a short item of interest from the media on careers (two short articles from The Guardian Work supplement and a short extract from a work-related article in Psychologies), to maintain their interest in the study.

5.2.2 Participants

Participants were recruited in several ways: by advertisement in the student newsletter of a major UK distance learning university, by email invitation to distribution lists for postgraduates at three UK campus-based universities, by snowball invitation through the researcher’s social networks on email, by email invitation on a professional forum for UK-based occupational psychologists, and postings on two websites concerned with career breaks. As recruitment was voluntary and open, rather than from fixed groups, it was not possible to calculate the initial response rate. Some participants were not UK-based.

Of the 293 responses, 64% were from women and 36% were from men. The ages of the sample ranged from 25 to 53 years, with a mean of 37.7 years. Based on the eight occupation categories defined in the National Statistics Socio-Economic Status (NS-SEC) self-coded method (ONS, 2008), 13% of participants described
themselves as unwaged, which included caring for family or studying. Twenty per cent were in technical, craft, service, routine or semi-routine manual or clerical occupations. The remaining 67% were in professional or managerial occupations. This compares with estimates for the UK working population of 32% in management and professional jobs, and 33% in routine and semi-routine jobs (McNair et al., 2004): the sample had a higher representation of management and professional and a lower representation of routine and semi-routine workers than the UK working population. The majority of the sample were graduates (first degree 37%, post-graduate degree 40%), with 23% with secondary level as the highest level of education completed. The ethnicity of participants reflected that of the general population: in the sample, 86% of participants described themselves as White or White British compared to 92% in the UK overall. The difference came from slightly higher representation of people who described themselves as Chinese (2% in the sample, 0.4% of the population), Mixed (3% of sample, 1% of population) and Other (3% of sample). 63% of the sample (183 participants) was thinking about occupation change. Of these participants, 67% were women and 33% men.

5.2.3 Measures

Unless otherwise indicated below, all measures used a Likert scale with 7 points, anchored at ‘1 Strongly disagree’ and ‘7 Strongly agree’.

The literature was consulted for appropriate measures for the constructs of interest. However, as discussed in Chapter 2, little earlier research explored occupation change in its own right. Measures tended to be study-specific modifications of analogous constructs (e.g. the occupational commitment scale used by Meyer, Allen & Smith, 1993). Some central constructs had been measured with single items (e.g. thoughts of changing career in Rhodes and Doering, 1993; action to change occupation in Blau, 2007), limiting reliability. Several measures therefore were created for this study. Each measure is described below, with reference to its precedents in the literature and explanation of modification for this study.
Thoughts of Changing Occupation

One question was used to differentiate between participants who were thinking of changing occupation and those who were not. Participants who responded positively to the statement ‘Recently I have considered changing occupation’ were presented with the longer form of Questionnaire 1.

A four-item scale to measure Thoughts of Changing Occupation was developed for this study. Rhodes and Doering (1993) used one item, which was felt to be inadequate for a central construct in this study. Sample items are: ‘I often feel I would like to do a different type of work’; ‘I rarely think about changing occupation’. Cronbach’s alpha for the four-item scale was .93. Factor analysis, using principal components extraction, and Kaiser’s criterion (eigenvalues greater than 1), showed one factor. Item loadings are given in Appendix B-2.

Identity Threat

A measure of identity threat was developed for this study. Following Manzi et al. (2006), a two-item subscale was created for six principles of identity processes: self-esteem, generalised self-efficacy, continuity, distinctiveness, belonging and meaning. Two further aspects of the self-concept, a need for growth and personal goals, were similarly measured with a two-item subscale, and the final aspect, values, was measured with a single item. Where possible, the wording for each facet followed that of Vignoles et al. (2006), modified to focus on work, and all of the items were phrased to encompass threat to identity, for example, ‘I think my line of work has little value’; ‘I have changed for the worse as a person due to my work.’ In addition to the 7-point scale from ‘1 Strongly disagree’ to ‘7 Strongly agree’, all items had an additional option of ‘Not relevant to me’ (coded as missing).

A subscale for each of the nine facets of identity threat was calculated as the mean of the two items. The subscales had adequate reliability (.73 ≤ α ≤ .85), with the exceptions of threats to belonging (α = .65) and self-efficacy (α = .60). For the main analyses, an aggregate measure was calculated across all nine facets of identity measured (α = .80). Factor analysis, using principal components extraction, and
Kaiser’s criterion (eigenvalues greater than 1), showed one factor. Item loadings are given in Appendix B-2.

**Search Behaviour**

A measure of search behaviour was created for this study. It considered two areas of search, occupations in general and occupations suited to the individual, based on the fundamental areas for fact-finding advised in traditional and recent models of career counselling (Peterson et al., 1996). Five possible sources of information were listed and participants rated each on a 7-point scale from ‘1 Not at all or hardly’ to ‘7 Extensively’. The five sources were: the internet, friends and family, career professionals, reading and other, for example, ‘I have consulted professionals, such as careers advisors, to find out more about one or more different occupations’, ‘I have explored in additional ways what occupations may suit me’. Cronbach’s alpha for the 10-item scale was .89. Factor analysis using principal components extraction, oblique rotation and Kaiser’s criterion (eigenvalues greater than 1), achieved simple structure with three factors, which corresponded to: consulting the internet, books and other sources, consulting career professionals, and consulting friends and family. Item loadings are given in Appendix B-2.

**Action to Change Occupation**

Earlier studies used either one item to measure actions to search for a new occupation (Blau, 2007; Boswell, Boudreau & Dunford, 2004) or measured intention to search (Rhodes & Doering, 1993). Given that search is seen as an essential part of the career decision-making process (Gati & Asher, 2001; Peterson et al., 1996), a more extensive measure that considered actual search behaviour, rather than cognition, was considered necessary. For this study, four factual questions about actions taken to move to a new occupation were used: the title of the new occupation, the date of the next step towards the new occupation, the date of application for training or study for the new occupation, and the date of application for a job in the new occupation. Participants were offered options of ‘yes’, ‘no’ and ‘uncertain’. An affirmative to either applying for training or for a new job were taken as equivalent in the analysis. Only a ‘yes’ was scored as 1: participants could
therefore score between 0 and 3 on the measure. Cronbach’s alpha for the scale was .70. This measure was retrospective – the wording of items was in the past tense: “I have decided/planned/applied…”.

Several earlier studies used intention to change as a proxy for actual career change (Blau, 1989; Mobley, 1977; Rhodes & Doering, 1993). However, the relationship between intention to change and actual change has been challenged, as discussed in Section 5.1.2. The measure here remains a proxy for actual change but it tapped into real-world actions that are prerequisites for changing.

**Possible Self**

A measure for a possible self was developed for this study, using one item for each of the nine facets of identity used in the measure of identity threat. Examples are ‘I can picture a new line of work at which I would be good’ (self-efficacy); ‘I can visualise a new occupation that will allow me to develop myself as a person’ (growth). Reliability was high (α = .98). Factor analysis using principal component extraction and Kaiser’s criterion showed one factor. Item loadings are given in Appendix B-2.

**Emotions**

State emotions relating to two aspects of occupation change were measured using scales derived from the Positive and Negative Affect Schedule scales (PANAS; Watson & Tellegen, 1985). The first measure related to affect experienced “during the past few weeks in your working life”. Participants were asked to indicate to what extent they felt anxious, stressed, frustrated or unhappy (negative emotions), enthusiastic, excited or contented (positive emotions), on a 7-point scale ranging from ‘1 Very slightly or not at all’ to ‘7 Extremely’. These items were based on specific emotions described by participants in Study 1. A separate measure was calculated for positive (α = .86) and negative (α = .81) emotions. Factor analysis using principal component extraction, oblique rotation and Kaiser’s criterion showed two factors, corresponding to negative and positive emotions.
The participants were also measured on how they felt about their new occupation. This question was optional since not all participants had decided on their new occupation. They indicated the extent to which they felt enthusiastic, inspired, excited or happy (positive emotions), sad, nervous or frustrated (negative emotions). Reliability for the measure of positive emotions relating to the new occupation was high ($\alpha = .94$) but for negative emotions relating to the new occupation was low ($\alpha = .46$). This latter measure was not used in the analysis. Factor analysis for emotions relating to the new occupation, using principal component analysis, oblique rotation and Kaiser’s criterion, showed two factors, corresponding to positive and negative emotions. Item loadings for both emotion measures, that is, emotions in old and new occupations, are given in Appendix B-2.

**Job and Occupational Satisfaction**

Job satisfaction was measured with the 5-item scale of Brayfield and Rothe (1951), which has been used extensively in the literature (e.g. Judge, Ilies & Scott, 2006; Niklas & Dormann, 2005; Wanous & Lawler, 1972). Example items are ‘I find real enjoyment in my job’ and ‘Most days I am enthusiastic about my job.’

Occupational satisfaction was adapted from the same scale. Wording was changed to refer to occupation or type of work rather than job, e.g. ‘I find real enjoyment in the type of work I do’. Three items were reverse-worded. One item was omitted (‘Each day at work feels like it will never end’) and two items were added, to ensure a focus on the higher-level category of occupation rather than job: ‘Taken overall, I think I made a good choice of occupation’; ‘Overall, my occupation provides me with what is important to me.’ Occupational satisfaction was the second measure on Questionnaire 1 and job satisfaction was the last, to ensure that participants did not confound job and occupation in their responses. Cronbach’s alpha for job satisfaction was .86, and for occupational satisfaction was .92. Factor analysis for occupational satisfaction using principal component extract and Kaiser’s criterion showed one factor.
Occupational Commitment

Occupational commitment was measured using a modified version of the Occupational Commitment Scale developed by Meyer et al. (1993).

Questionnaire 1 measured *continuance* occupational commitment. The original subscale was reworded to replace ‘nursing’ with a more general reference to occupation. One item was dropped due to its low loadings in Meyer’s study. A sample item used was ‘I have put too much into my occupation to consider changing now.’ Reliability on the 5-item scale was good ($\alpha = .83$).

Questionnaire 3 measured *normative* occupational commitment. Item 1 from the original subscale was dropped since it referred specifically to occupations requiring long training and was therefore not necessarily relevant to the participants in this study. The remaining 5 items were reworded to generalise to all occupations. Cronbach’s alpha on the 5-item scale was .83.

Self-efficacy relating to changing Occupation

A three-item measure of self-efficacy relating to changing occupation was generated for this study. An example item was ‘I believe that I am capable of changing occupation’ ($\alpha = .78$).

All of the measures above were taken at each of the four time points.

Individual Differences

**Openness to Experience** was measured in Questionnaire 2 using two items from the Ten Item Personality Inventory (TIPI; Gosling, Rentfrow & Swann, 2003): “I see myself as (1) Open to new experiences, complex; (2) Conventional, uncreative”. Item 2 was reverse scored. The developers of TIPI argue that an alpha coefficient is not an appropriate index of the scale (Gosling, 2008).

**Locus of Control** was measured in Questionnaire 3. Using the Work Locus of Control scale of 16 items (Spector, 1988), six items were selected to provide a
shorter measure. The six items referred to the job, rather than promotion or reward and were reworded for occupation. Cronbach’s alpha was .64.

**Demographics**

Participants were asked their month and year of birth, gender, current occupation, ethnic origin and level of education. In analysis, age in years was calculated from the month and year of birth.

Current occupation used the eight occupation categories and descriptions from NS-SEC self-coding (ONS, 2008): technical and craft, routine, semi-routine and service, clerical, middle managers, senior managers, traditional professional and modern professional, with four additional categories for this study of ‘unwaged’: caring for family, studying, voluntary work, other.

The categories for ethnic origin were based on the six high-level categories used by the Office of National Statistics.

The categories for level of education were GCSE or equivalent, A-levels, degree, post-graduate and other. The ‘other’ category required the participant to specify the level of education. During analysis, these participants were manually allocated to the other four categories.

**5.2.4 Analytic Procedure**

The total number of participants for Time1 was 315. After data cleanup, which excluded statistical outliers and participants outside the age range, the sample comprised 293 individuals (93%). The cases excluded comprised participants younger (n = 5) or older (n = 2) than the specified age range, cases detected as multivariate outliers using Mahalanobis distance (p < .001, n = 12) and participants with incomplete data (n = 3). The outliers included women and men, of White and Asian ethnicity, with a range and mean on occupational satisfaction and thoughts of change comparable to the full data set.
Analysis was carried out in three stages. Multiple regression was used to test the hypotheses. The first analyses regressed hypothesised contributor variables (Independent Variables, IVs) onto dependent variables (DVs), and included control variables. Structural Equation Modelling (SEM) was then used to develop a structural model for the process of occupation change. The small data set limited the statistical power of this second set of analyses (MacCallum, Brown & Sugawara, 1996) but provided stronger statistical testing by including estimation of measurement error and simultaneous estimation of the relationships in the model (Hayduk, 1987). The third part of the analysis is described in Chapter 6 and investigated supplementary research questions and longitudinal relationships, using SEM on panel data and for group comparison, and multiple regression, as appropriate.

SEM can be used to calculate regressions but it is recommended for use in model testing. SEM proceeds by calculating speculative values for the parameters to be estimated, deriving a covariance matrix, comparing the derived matrix with the given covariance matrix which describes the data, and iterating until the difference between derived and given covariance matrices is minimal (Hoyle, 1995). The estimates calculated may depend on the starting values, local minima may occur and nonsensical individual estimates may result from poor input data: for such reasons, it is recommended that, after development, a structural model is tested on independent data. This can provide a robust check that the model is not fitted only to the sample data. It is also recommended that a theoretically based model is specified a priori, against which SEM estimates may be evaluated (ibid.). SEM was used in this study to test a theoretically based model of occupation change, and the initial structural model was tested on independent data.

SEM was conducted using LISREL 8.8 (Jöreskog & Sörbom, 2006). Maximum Likelihood (ML) estimation was chosen as a robust algorithm (West, Finch & Curran, 1995). After checking theoretical congruence, the fit of the model was then assessed using the overall chi-squared measure and the degrees of freedom, the Root Mean Square Error of Approximation (RMSEA), the Non-Normed Fit Index (NNFI) and the Comparative Fit Index (CFI). A variety of tests of fit is recommended as
different indicators are sensitive to sample size, sampling error and estimation methods (Hoyle, 1995). The choice of fit measures is now explained and the acceptability criteria are summarised in Table 5.1.

$\chi^2$ has been described as a ‘badness-of-fit’ indicator (Hoyle, 1995): a smaller value is preferable to a larger. $\chi^2$ should be less than twice the degrees of freedom and should be non-significant ($p > .05$), that is, the estimated model does not differ significantly from the data. The traditional assessment of fit using $\chi^2$ is strongly influenced by degrees of freedom. RMSEA overcomes this weakness by measuring lack of fit per degree of freedom (MacCallum, 1995). Browne and Cudeck (1993) proposed a threshold of $.05$ for RMSEA, below which good fit is indicated, and deemed values up to $.08$ as acceptable. A further issue of fit is small sample bias, with a likelihood of poorer fit on smaller samples (Hu & Bentler, 1995). CFI is well-suited to assessment of fit in small samples and also considers the degrees of freedom (ibid). Values above $.95$ are considered indicative of good fit. NNFI was also chosen as an index as it has been found to be relatively independent of sample size for ML estimation (Marsh, Balla & McDonald, 1988). A threshold of $.95$ is recommended for NNFI (Hu & Bentler, 1995). In addition to checking theoretical implications and overall fit of the model, each individual estimate was also checked as a model may have good overall fit but poor specific fit for some relationships (Hayduk, 1987).

Table 5.1 Summary of acceptability criteria for model goodness-of-fit

<table>
<thead>
<tr>
<th>$\chi^2$</th>
<th>RMSEA</th>
<th>CFI</th>
<th>NNFI</th>
</tr>
</thead>
<tbody>
<tr>
<td>&lt; 2 x df, $p &gt; .05$</td>
<td>&lt; .05 good</td>
<td>&gt; .95</td>
<td>&gt; .95</td>
</tr>
<tr>
<td>&lt; .08 acceptable</td>
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</tbody>
</table>

Model development proceeded by evaluating theoretical, overall and specific fit of a structural model, making changes that were theoretically appropriate and comparing overall fit of the model before and after change. In general, model development seeks a balance between parsimony and explanation: a good model should show a good fit to an independent data set (that is, the model is an accurate predictor of relationships), provide a credible and substantiated theoretical explanation for the
phenomena in question and be as simple as possible. Unnecessary relationships or constructs should be removed but not at a cost of explanation. Judgement is required to decide between these potentially conflicting objectives of model development: where such decisions were made in the analysis, the reasoning is given based on these objectives.

5.3 Results

Tables 5.2 and 5.3 show the means, standard deviations and correlations, based on all valid data at Time 1. Because the reliability of the measure for negative emotions in the new occupation was low, it has been replaced in the following tables by the single item measure of anxiety about the new occupation. Anxiety has been explored in careers previously (Lazarus & Cohen-Charash, 2001) and has been proposed as one dimension of well-being in the workplace (Warr, 1990).
### Table 5.2 Means and Standard Deviations of all valid data at Time 1

<table>
<thead>
<tr>
<th>Metric</th>
<th>N&lt;sup&gt;a&lt;/sup&gt;</th>
<th>Mean</th>
<th>Std. Dev.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Thoughts of changing</td>
<td>293</td>
<td>5.23</td>
<td>1.79</td>
</tr>
<tr>
<td>Identity threat</td>
<td>293</td>
<td>3.87</td>
<td>1.46</td>
</tr>
<tr>
<td>Search</td>
<td>183</td>
<td>3.94</td>
<td>1.36</td>
</tr>
<tr>
<td>Action to change occupation</td>
<td>183</td>
<td>1.38</td>
<td>1.22</td>
</tr>
<tr>
<td>Possible self</td>
<td>183</td>
<td>5.06</td>
<td>1.54</td>
</tr>
<tr>
<td>Emotions: current occupation - negative</td>
<td>293</td>
<td>4.31</td>
<td>1.55</td>
</tr>
<tr>
<td>current occupation - positive</td>
<td>293</td>
<td>3.21</td>
<td>1.58</td>
</tr>
<tr>
<td>new occupation - anxious</td>
<td>120</td>
<td>2.77</td>
<td>.97</td>
</tr>
<tr>
<td>new occupation - positive</td>
<td>119</td>
<td>5.91</td>
<td>1.01</td>
</tr>
<tr>
<td>Occupational satisfaction</td>
<td>293</td>
<td>4.22</td>
<td>1.52</td>
</tr>
<tr>
<td>Job satisfaction</td>
<td>293</td>
<td>4.25</td>
<td>1.46</td>
</tr>
<tr>
<td>Occupational commitment</td>
<td>293</td>
<td>3.68</td>
<td>1.47</td>
</tr>
<tr>
<td>Self-efficacy re changing occupation</td>
<td>183</td>
<td>5.64</td>
<td>1.26</td>
</tr>
<tr>
<td>Age</td>
<td>293</td>
<td>37.65</td>
<td>7.91</td>
</tr>
<tr>
<td>Gender</td>
<td>293</td>
<td>1.36</td>
<td>.48</td>
</tr>
<tr>
<td>Education</td>
<td>293</td>
<td>3.13</td>
<td>.87</td>
</tr>
</tbody>
</table>

<sup>a</sup>*N = 293: variables measured on all participants. N = 183: variables measured on career changers only. N = 119, 120: optional question for career changers.*
Table 5.3 Correlations of all valid data at Time 1 (N = 293)

<table>
<thead>
<tr>
<th></th>
<th>Thoughts of changing</th>
<th>Identity threat</th>
<th>Occupational satisfaction</th>
<th>Search</th>
<th>Action to change occ.</th>
<th>Possible self</th>
<th>Emotions: current</th>
<th>Emotions: current negative</th>
<th>Emotions: current positive</th>
<th>Emotions: new occ. anxious</th>
<th>Emotions: new occ. positive</th>
<th>Job satisfaction</th>
<th>Occupational commitment</th>
<th>Self-efficacy re occ change</th>
<th>Age</th>
<th>Gender</th>
</tr>
</thead>
<tbody>
<tr>
<td>Identity threat</td>
<td>.73**</td>
<td></td>
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<td></td>
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<tr>
<td>Occupational satisfaction</td>
<td>-.76**</td>
<td>-.82**</td>
<td></td>
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</tr>
<tr>
<td>Search</td>
<td>.21**</td>
<td>.14</td>
<td>-.16*</td>
<td></td>
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<td></td>
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</tr>
<tr>
<td>Action to change occ.</td>
<td>.12</td>
<td>.39**</td>
<td>-.33**</td>
<td>.38**</td>
<td></td>
<td></td>
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<td></td>
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</tr>
<tr>
<td>Possible self</td>
<td>.15**</td>
<td>.11</td>
<td>-.03</td>
<td>.40**</td>
<td>.50**</td>
<td></td>
<td></td>
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<td></td>
</tr>
<tr>
<td>Emotions: current occ.</td>
<td>.42**</td>
<td>.46**</td>
<td>-.45**</td>
<td>.12</td>
<td>.16**</td>
<td>.02</td>
<td></td>
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<tr>
<td>negative</td>
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<td></td>
</tr>
<tr>
<td>current occ. positive</td>
<td>-.63**</td>
<td>-.68**</td>
<td>.74**</td>
<td>.09</td>
<td>-.27**</td>
<td>.09</td>
<td>-.33**</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>new occ. anxious</td>
<td>.02</td>
<td>.02</td>
<td>-.03</td>
<td>.06</td>
<td>-.03</td>
<td>-.06</td>
<td>.06</td>
<td>.06</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>new occ. positive</td>
<td>.12</td>
<td>.03</td>
<td>.02</td>
<td>.36**</td>
<td>.25**</td>
<td>.64**</td>
<td>.04</td>
<td>.04</td>
<td>.07</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Job satisfaction</td>
<td>-.65**</td>
<td>-.73**</td>
<td>.77**</td>
<td>-.14</td>
<td>-.28**</td>
<td>-.05</td>
<td>-.48**</td>
<td>.76**</td>
<td>.05</td>
<td>-.09</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Occupational commitment</td>
<td>.21**</td>
<td>-.16**</td>
<td>.15*</td>
<td>-.18*</td>
<td>-.19**</td>
<td>-.21**</td>
<td>.06</td>
<td>.12*</td>
<td>.12</td>
<td>-.09</td>
<td>.13*</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Self-efficacy re occ change</td>
<td>.11</td>
<td>-.01</td>
<td>.03</td>
<td>.35**</td>
<td>.33**</td>
<td>.34**</td>
<td>-.03</td>
<td>.04</td>
<td>-.19*</td>
<td>.25**</td>
<td>-.01</td>
<td>.48**</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Age</td>
<td>.03</td>
<td>.08</td>
<td>-.07</td>
<td>-.12</td>
<td>.01</td>
<td>-.07</td>
<td>.11</td>
<td>-.10</td>
<td>-.20</td>
<td>-.01</td>
<td>.06</td>
<td>.05</td>
<td>-.02</td>
<td>-.01</td>
<td>.09</td>
<td></td>
</tr>
<tr>
<td>Gender</td>
<td>-.11</td>
<td>-.09</td>
<td>.05</td>
<td>.01</td>
<td>.00</td>
<td>.14</td>
<td>-.04</td>
<td>.13*</td>
<td>-.28**</td>
<td>-.06</td>
<td>.05</td>
<td>-.02</td>
<td>-.01</td>
<td>.09</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Education</td>
<td>-.21**</td>
<td>-.16**</td>
<td>.17**</td>
<td>.07</td>
<td>-.05</td>
<td>-.09</td>
<td>-.07</td>
<td>.11</td>
<td>-.03</td>
<td>.02</td>
<td>.15*</td>
<td>.07</td>
<td>.12</td>
<td>-.05</td>
<td>.01</td>
<td></td>
</tr>
</tbody>
</table>
Correlations were mainly in line with the hypotheses. Correlation between thoughts of changing occupation and identity threat, and thoughts of changing and occupational satisfaction were high. However, correlation between thoughts of changing and search behaviour was low to moderate, and was not significant between thoughts of changing and action to change occupation. Correlation between possible self and action to change was high as expected. Negative emotions in the current occupation correlated in the expected direction and significantly as expected with identity threat and with occupation satisfaction. Positive emotions relating to a new occupation correlated positively with action to change and with possible self, as expected.

Age and gender did not correlate with any main variable. Level of education correlated positively with occupational and job satisfaction in line with earlier research. Self-efficacy relating to occupation change correlated positively with search behaviour and with action to change occupation, in line with socio-cognitive theory (Bandura, 1997).

5.3.1 Multiple Regressions

Initial analysis used multiple regression to test the relationships between identity threat, negative emotions in the current occupation and control factors as independent variables, and thoughts of changing career, occupational satisfaction and action to change occupation as dependent variables.

Table 5.4 shows the results of regression to test Hypothesis 5.1, that threats to identity contribute to thoughts of changing occupation, mediated by occupational satisfaction and controlling for job satisfaction and occupational commitment.
Table 5.4 Regression results: Thoughts of Changing Career as Dependent Variable

<table>
<thead>
<tr>
<th>Variable</th>
<th>Step 1 Standardised Coefficients</th>
<th>Step 2 Standardised Coefficients</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age</td>
<td>-.01</td>
<td>-.02</td>
</tr>
<tr>
<td>Gender</td>
<td>-.02</td>
<td>.00</td>
</tr>
<tr>
<td>Education</td>
<td>-.02</td>
<td>-.01</td>
</tr>
<tr>
<td>Job satisfaction</td>
<td>-.23***</td>
<td>-.11</td>
</tr>
<tr>
<td>Occupational commitment</td>
<td>-.11**</td>
<td>-.09**</td>
</tr>
<tr>
<td>Occupational satisfaction</td>
<td>-.54***</td>
<td>-.28***</td>
</tr>
<tr>
<td>Adjusted $R^2$</td>
<td>.58</td>
<td></td>
</tr>
<tr>
<td>Identity threat</td>
<td></td>
<td>.44***</td>
</tr>
<tr>
<td>Adjusted $R^2$</td>
<td></td>
<td>.63</td>
</tr>
<tr>
<td>$\Delta R^2$</td>
<td></td>
<td>.06</td>
</tr>
</tbody>
</table>

Notes. ** $p < .01$; *** $p < .001$.
Step 1 $F(6,286) = 66.10, p < .00$; Step 2 $F(7,285) = 71.02, p < .00$

The regression was carried out in two steps, to show the contribution of control variables and the incremental improvement in variance explained by the second step. The first step included all control variables and occupational satisfaction, and explained 58% of variance of thoughts of changing occupation. The measure for identity threat was added in step 2, accounting for an additional 6% of variance.

Tests for mediation were then carried out, using Baron and Kenny’s (1986) criteria. A Sobel test was applied, which tests for significant difference from zero of the indirect effect of an IV on a DV via the mediator variable. The regression in Table 5.4 showed that identity threats (IV) had a significant effect on thoughts of changing career (DV) when occupational satisfaction, the hypothesised mediating variable, was included in the regression, and that occupational satisfaction also had a significant effect on the DV. A further regression showed that identity threats (IV) had a significant effect occupational satisfaction (the mediator), satisfying the
criteria for partial mediation. A Sobel test confirmed a significant mediation (Sobel $z = 4.51, p < .05$). These results supported Hypothesis 5.1: threats to identity contribute to thoughts of changing occupation, mediated by occupational satisfaction and controlling for job satisfaction and occupational commitment.

The same tests for mediation were used to test Hypothesis 5.2, that negative emotions relating to the current occupation partially mediate the relationship between identity threats and occupational satisfaction. Table 5.5 shows the results of regression analyses.

\textit{Table 5.5 Regression results: Occupational Satisfaction as Dependent Variable}

<table>
<thead>
<tr>
<th>Variable</th>
<th>Step 1</th>
<th>Step 2</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Standardised Coefficients</td>
<td>Standardised Coefficients</td>
</tr>
<tr>
<td>Identity threats</td>
<td>-.82***</td>
<td>-.78***</td>
</tr>
<tr>
<td>Adjusted $R^2$</td>
<td>.67</td>
<td></td>
</tr>
<tr>
<td>Negative emotions in current occupation</td>
<td>-.10*</td>
<td></td>
</tr>
<tr>
<td>Adjusted $R^2$</td>
<td>.68</td>
<td></td>
</tr>
<tr>
<td>$\Delta R^2$</td>
<td>.01</td>
<td></td>
</tr>
</tbody>
</table>

\textit{Note.} *$p < .05$; ***$p < .001$. Step 1 $F(1,291)=602.28, p < .05$; Step 2 $F(2,290)=310.17, p < .00$. 

Table 5.5 shows that identity threats contributed significantly to occupational satisfaction, and that the significant relationship held when negative emotions in the current occupation were added to the equation. A further analysis showed that identity threats had a significant effect on negative emotions in the current occupation. A Sobel test confirmed a significant partial mediation (Sobel $z = -2.45$, $p < .05$). Hypothesis 5.2 is thus supported.

To test Hypothesis 5.3, that the relationship between thoughts of changing occupations and action to change occupation is partially mediated by search behaviour, further regressions were conducted. Self-efficacy relating to occupation
change was included as a control variable because of substantial evidence for its influence in career decision making (Brooks, 1990) and in behaviour change more generally (Salovey, Rothman & Rodin, 1998). Table 5.6 shows the regression results.

**Table 5.6 Regression results: Action to Change Occupation as Dependent Variable**

<table>
<thead>
<tr>
<th>Variable</th>
<th>Step 1</th>
<th>Step 2</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Standardised</td>
<td>Standardised</td>
</tr>
<tr>
<td></td>
<td>Coefficients</td>
<td>Coefficients</td>
</tr>
<tr>
<td>Self-efficacy relating to change</td>
<td>.27***</td>
<td>.18*</td>
</tr>
<tr>
<td>Thoughts of changing occupation</td>
<td>.17*</td>
<td>.11</td>
</tr>
<tr>
<td>Adjusted $R^2$</td>
<td>.12</td>
<td>.18</td>
</tr>
<tr>
<td>Search behaviour</td>
<td>.29***</td>
<td></td>
</tr>
<tr>
<td>Adjusted $R^2$</td>
<td>.18</td>
<td></td>
</tr>
<tr>
<td>$\Delta R^2$</td>
<td>.06</td>
<td></td>
</tr>
</tbody>
</table>

*Notes.* *p* < .05; *** *p* < .001.
Step 1 $F(2,176) = 13.13, p < .00$; Step 2 $F(3,175) = 14.37, p < .00$

An initial regression had confirmed that demographic factors of age, gender and education did not relate significantly to action to change career. Although thoughts of changing occupation had an initial significant contribution in Step 1, the contribution of the construct became non-significant on inclusion of search behaviour in the regression, supporting full mediation by search behaviour. A Sobel test confirmed significance of mediation (Sobel $z = 3.15, p < .05$). Hypothesis 5.3 was thus not fully supported by the data: full rather than partial mediation was found in this data. Possible reasons for lack of support for partial mediation are considered in the discussion in Section 5.4.

Table 5.7 presents the results of regressions to test Hypotheses 5.4 and 5.5 (perception of a possible self relates positively to action to change occupation;
positive emotions relating to a new occupation mediate the relationship between a possible self and action to change occupation, respectively):

Table 5.7 Regression results: Action to Change Occupation as Dependent Variable

<table>
<thead>
<tr>
<th>Variable</th>
<th>Step 1</th>
<th>Step 2</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Standardised Coefficients</td>
<td>Standardised Coefficients</td>
</tr>
<tr>
<td>Self-efficacy relating to change</td>
<td>.17</td>
<td>.11</td>
</tr>
<tr>
<td>Thoughts of changing occupation</td>
<td>.03</td>
<td>-.02</td>
</tr>
<tr>
<td>Search behaviour</td>
<td>.21*</td>
<td>.19*</td>
</tr>
<tr>
<td>Adjusted $R^2$</td>
<td>.07</td>
<td></td>
</tr>
</tbody>
</table>

|                                              | .43***            |
| Possible self                                 |                   |
| Positive emotions in new occupation           | -.16              |
| Adjusted $R^2$                                 | .17               |

$\Delta R^2$                                    | .10               |

*Notes. * $p < .05$; *** $p < .001$.
Step 1 $F(3, 113) = 3.83, p < .05$; Step 2 $F(5, 111) = 5.72, p < .00$

The regression in Table 5.7 shows that the perception of a possible self adds significant unique variance to action to change occupation, and a model including perception of a possible self explained 10% more variance than one without. Hypothesis 5.4 was thus supported. Further regressions tested the mediation relationship in Hypothesis 5.5. Perception of a possible self (IV) was significantly related to action to change occupation (DV) and to positive emotions about the new occupation (hypothesised mediating variable). Positive emotions about the new occupation related significantly to action to change but became non-significant when perception of a possible self was added to the equation. Criteria for mediation were therefore not met and Hypothesis 5.5 was not supported. A Sobel test confirmed non-significance. However, the relationship between perception of a possible self and positive emotions was significant.
In summary, the data supported the following relationships. Threats to identity were significantly related to thoughts of changing occupation, partially mediated by occupational satisfaction and controlling for job satisfaction and occupational commitment. The relationship between identity threats and occupational satisfaction was partially mediated by negative emotions relating to the current occupation. The relationship between thoughts of changing occupation and action to change was fully mediated by search behaviour. The perception of a possible self was positively related to action to change occupation. Perception of a possible self was significantly related to positive emotions around the new occupation, and the positive emotions were related to action to change occupation, but mediation by positive emotions was not demonstrated.

Having proposed a set of theoretical relationships and supported them empirically, the next stage of analysis was to test and develop the conceptual model using SEM. As discussed above, SEM allows more robust testing as measurement error is included in its estimates. However, the small sample size limits the statistical power of SEM (MacCallum et al., 1996), thus combining the results from different statistical approaches improved confidence in the findings. In conducting SEM, it is recommended to start from a theoretically defensible model, which is titled the ‘initial conceptual model’ (Maruyama, 1998). The initial conceptual model is depicted in Figure 5.2. It replicates Figure 5.1 with the exception of the removal of the direct link from thoughts of changing occupation to action to change, because this was not supported in the multiple regression analyses.
5.3.2 Structural Equation Modelling

As noted in Section 5.2.4, it is important to test a structural model on independent data, to demonstrate that it is not fitted only to the sample data. To derive independent data in this study, the sample was split randomly and 90 cases were used for the development model. The remaining 93 cases were used as an independent sample on which to test the developed model. Scale reliabilities were used to derive error variance. Reliabilities for all scales were calculated from the development data, with one exception. Since the items for the variable ‘action to change occupation’ did not constitute a scale (sample question: ‘Have you applied for a job in the new occupation?’), a measurement model for action to change occupation using the development data was used to estimate error variance.

The conceptual model was derived from theory as described above. Because the data set was small, control constructs were omitted. If a model does not fit the data well, modification indices produced by LISREL may be used to alter the model but should be declared if they are used (Bentler, 2007): modification indices were not used in the development of this model. The terms ‘contribution’ and ‘influence’ are used here to indicate directionality in the structural model. The model is based on cross-sectional data and thus cannot demonstrate causality (unless specific criteria
are met: Finkel, 1995). Directional relationships between the constructs will be investigated in the longitudinal data.

Having estimated the model on the development data set, a good fit was obtained on the independent data ($\chi^2 = 11.80$, df = 17, $p > .5$, RMSEA = .00, CFI = 1.00, NNFI = 1.03). This model accounted for 43% of the variance in action to change occupation, and 49% of the variance in thoughts of changing occupation. In general, this model supported the hypothesised relationships. Although the model fitted the independent data well overall, some relationships merited further investigation because of poor specific fit or to compare alternative models. Further, a well-fitting model indicates plausibility but not uniqueness and equivalent models should be considered (MacCallum, 1995). Three relationships were investigated further:

1. Emotions in the current occupation and occupational satisfaction
2. Positive emotions and the new occupation
3. A possible self and action to change occupation.

The investigations consisted of model comparisons, where significant improvement in model fit could indicate a better model but where theoretical explanation in particular, and also model parsimony, must be weighed up. Model comparisons were conducted on the full data set (except where indicated) to increase statistical power. Alternative models are illustrated as partial models below, which can be read in conjunction with Appendix B-3 in which the initial conceptual model is reproduced as a fold-out.

5.3.2.1 Negative emotions in the current occupation and occupational satisfaction

The standardised estimate for the relationship between negative emotions and occupational satisfaction was low (.12), positive and non-significant. Because positive emotions showed a stronger correlation with occupational satisfaction, two models were compared: (1) the conceptual model (see Appendix B-3) above, which included negative emotion linking from identity threat and to occupational satisfaction, and (2) a model identical to the conceptual model but substituting
positive for negative emotion in the current occupation, as shown in Figure 5.3. Table 5.8 compares the model results.

*Figure 5.3 Partial models showing differences being tested in Table 5.8*

![Diagram of partial models showing differences being tested in Table 5.8](image)

*Table 5.8 Comparison of alternative models: emotion in the current occupation*

<table>
<thead>
<tr>
<th></th>
<th>$\chi^2$ (df)</th>
<th>RMSEA</th>
<th>CFI</th>
<th>NNFI</th>
</tr>
</thead>
<tbody>
<tr>
<td>Model 1$^a$</td>
<td>7.95 (12)</td>
<td>.00</td>
<td>1.00</td>
<td>1.02</td>
</tr>
<tr>
<td>Model 2$^b$</td>
<td>14.59 (13)</td>
<td>.04</td>
<td>.98</td>
<td>.97</td>
</tr>
</tbody>
</table>

*Notes. Both models were tested on the full data set ($N = 183$). $\chi^2$ non-significant.*

$^a$ Full conceptual model, with negative emotion linked from identity threat and to occupational satisfaction.

$^b$ As conceptual model, with positive emotion linked from identity threat and to occupational satisfaction.

The table shows good overall fit for both models. However, specific fit differed: the link from negative emotion to occupational satisfaction was non-significant, whereas the link from positive emotion to occupational satisfaction was significant (standardised weight = .38, $p < .05$). The construct for negative emotions was replaced by positive emotions in the conceptual model, to indicate an influence of emotions. The link warrants further research. Possible reasons for the weak relationship with negative emotion and the stronger link for positive emotion are considered in the Discussion (Section 5.4).
5.3.2.2 Positive emotions about the new occupation

The multiple regressions above failed to support Hypothesis 5.5, that positive emotions about the new occupation mediate the relationship between perception of a possible self and action to change occupation. However, positive emotions about the new occupation related significantly to perception of a possible self, and to action. In order to investigate these relationships, three models were compared and the results are shown in Table 5.9. The three models were: the conceptual model (see Appendix B-3), in which perception of a possible self contributed to positive emotions about the new occupation, and positive emotions contributed to action to change occupation; an alternative model which omitted positive emotions; and a further theoretically plausible alternative model, in which action to change occupation contributed to positive emotions. Figure 5.4 shows the differences in the models to be compared. A fourth model with reciprocal linkage between positive emotions and action to change occupation estimated both links as non-significant and is not included in Table 5.9.

*Figure 5.4 Partial models showing differences being tested in Table 5.9*
Table 5.9 Comparison of alternative models: positive emotions about the new occupation

<table>
<thead>
<tr>
<th>Model</th>
<th>$\chi^2$ (df)</th>
<th>RMSEA</th>
<th>CFI</th>
<th>NNFI</th>
</tr>
</thead>
<tbody>
<tr>
<td>Model 1$^a$</td>
<td>31.35* (17)</td>
<td>.08</td>
<td>.94</td>
<td>.90</td>
</tr>
<tr>
<td>Model 2$^b$</td>
<td>19.95 (12)</td>
<td>.07</td>
<td>.95</td>
<td>.92</td>
</tr>
<tr>
<td>Model 3$^c$</td>
<td>32.09* (17)</td>
<td>.09</td>
<td>.94</td>
<td>.89</td>
</tr>
</tbody>
</table>

Notes. * $p < .05$. All models were tested on participants who responded to optional question on emotions about the new occupation ($N = 119$).
$^a$ Full conceptual model, with positive emotions contributing to action to change occupation.
$^b$ Alternative model: as conceptual model but omitting construct for positive emotions in the new occupation.
$^c$ Alternative model: as conceptual model but action to change occupation contributing to positive emotions.

Of the 183 participants who were changing career, 119 responded to the optional question about positive emotions relating to the new occupation. On this data subset, the full conceptual model did not show good overall fit (Model 1). The alternative Model 3, in which action to change occupation contributed to positive emotions, reversing the link, gave a similar pattern of fit. In both Model 1 and Model 3, the estimated value of the relationship between positive emotions about the new occupation and action to change was non-significant so specific fit was poor. However, Model 2 which omitted positive emotions had good overall fit. It was concluded therefore that, although a relationship between positive emotion about the new occupation and action to change may exist, it has not been found in the current data. The conceptual model therefore will be refined to omit the construct relating to positive emotions about the new occupation. However, this is an area in which further investigation is warranted.

5.3.2.3 Perception of a possible self and action to change occupation

Although Hypothesis 5.4, that the perception of a possible self is related to action to change occupation, was supported, directionality cannot be determined from the cross-sectional data and the possibility that action to change occupation contributes to perception of a possible self should be considered. A final model comparison tested this possibility. The full conceptual model (see Appendix B-3) was tested again but with two alternatives directions of the relationship between the constructs.
possible self and action to change. In Model 1, the construct of a possible self contributed to action to change occupation. In Model 2, action to change occupation contributed to the construct of a possible self. Table 5.10 shows the results.

**Table 5.10  Comparison of alternative models: possible self and action to change**

<table>
<thead>
<tr>
<th>Model</th>
<th>$\chi^2$ (df)</th>
<th>RMSEA</th>
<th>CFI</th>
<th>NNFI</th>
</tr>
</thead>
<tbody>
<tr>
<td>Model 1$^a$</td>
<td>7.95 (12)</td>
<td>.00</td>
<td>1.00</td>
<td>1.02</td>
</tr>
<tr>
<td>Model 2$^b$</td>
<td>7.95 (12)</td>
<td>.00</td>
<td>1.00</td>
<td>1.02</td>
</tr>
</tbody>
</table>

*Notes. Both models were tested on the full data set ($N=183$). $\chi^2$ non-significant.*

$^a$ Perception of a possible self contributes to action to change occupation.

$^b$ Action to change occupation contributes to perception of a possible self.

The fit for both models was the same. SEM on cross-sectional data could not differentiate between the possible relationships so the theoretical model is retained. Testing for directionality in the relationship required longitudinal data: longitudinal analysis was conducted and the results are presented in Chapter 6.

**5.3.3 The Final Structural Model**

From these findings, a final structural model was run on the full sample (N=183), as shown in Figure 5.5.
5.4 Discussion

This study explored the role of identity threat and negative emotion in the initiation of occupation change, and the role of perception of a possible self and positive emotions in acting to change occupation. An on-line survey was used to collect cross-sectional and longitudinal data over 3 months from 293 participants, aged between 25 and 55, and recruited through universities, on-line advertisement and snowballing from social networks. The findings showed evidence for the influence of identity threat on thoughts of changing occupation and for perception of a possible self as contributing to occupation change. There was support for emotions contributing to the process of change. The multiple regression analyses supported a positive relationship between identity threat and thoughts of changing occupation and found that negative emotion about the old occupation partially mediated the relationship between identity threat and occupational satisfaction. Perception of a possible self was found to contribute to action to change occupation but positive emotions, although related to the possible self, did not mediate the relationship. A
structural model was developed on half of the data and tested on the remainder as an independent data set. The model fitted the independent data well. Specific relationships in the model were tested further through model comparison on the full data set. A final structural model was proposed.

The longitudinal data and ancillary research questions are explored in the next chapter. This section begins by considering how the findings on identity contribute to the career literature and the relationship between identity and occupational satisfaction. Reasons why the influence of emotions on the career change process was weaker than expected are then explored, and the implications of alternative relationships for search behaviour are then discussed. Finally, limitations of the study are considered and the next steps in research are outlined.

5.4.1 Identity and Career

The study aimed to address two gaps in the literature: a need to define, based on theory, what is meant by identity or the self-concept in career change, and a need to investigate the role of identity and the self-concept in initiating career change. The study provided a broad-based theoretical framework for the conceptualisation of identity in career, and a new operationalisation of the self-concept in this research area. Identity threat was shown to contribute significantly to thoughts of changing career, controlling for job satisfaction, occupational commitment and emotions in the current occupation. This finding adds to the literature by providing evidence for the involvement of the self-concept in initiation of occupation change.

There are further theoretical implications from this finding. Career may be a particularly important context for the construction and influence of identity. Identity is a “dynamic, social product” (Breakwell, 1986, p. 9), continuously developed through interaction with the environment, and work, as a primary social milieu for most adults, represents an important environment for identity needs. The work context may provide an especially rich environment in which to conduct further research on identity. Equally, the existing theoretical body of work on identity offers rich insights into career theory. As a specific example, the theoretical framework of Identity Process Theory can integrate disparate theories on work. The guiding
principles of the self-concept, proposed by Breakwell (1986, 1993) and extended by Vignoles et al. (2006) and Manzi et al. (2006), map closely onto factors established as critical to psychological well-being at work, in three seminal contributions to the occupational literature: Hackman and Oldham’s (1975) job characteristics model of work motivation; Jahoda’s (1982) study of the psychological effects of employment and unemployment; and Warr’s (1987) vitamin model of work and mental health.

Warr’s opportunity for control, and Hackman and Oldham’s requirement for autonomy and experienced responsibility in work design, may be pre-requisites for self-esteem. Self-efficacy appears to relate to Warr’s opportunity for skill use and be supported by the need for feedback in Hackman and Oldham’s model. Warr’s valued social position and Jahoda’s discussion of employment bringing social status, and the need for involvement in collective activity, appear to link to the principle of belonging. The principle of meaning appears to relate to experienced meaningfulness in the job characteristics model, which is a critical psychological state required for motivation, and to Jahoda’s argument for employment providing a sense of purpose. Jahoda argued further that unemployment can bring loss of self-esteem, particularly through social isolation, linking self-esteem and belonging needs. In summary then, the application of IPT to the field of careers offers a theoretical framework for the self-concept which can help to integrate established theories in occupational psychology.

It is not surprising that work and identity should be closely related, and that threats to identity may contribute to initial thoughts of changing occupation. “Identity directs action” (Breakwell, 1986, p. 43), thus action to change occupation can be seen as motivated by identity threat. However, as is indicated by the moderate amount of variance of action to change occupation (28-31%) accounted for by the final structural models, this is not the only factor influencing action to change occupation, nor is career change the only likely outcome of identity threat. Breakwell (1986) argued that threat is usually transient, because the processes of identity operate to mitigate the threat. This suggests that a number of aspects of workplace behaviour, other than occupation change, may be influenced by the operation of identity processes. Such behaviour could demonstrate a variety of
coping strategies, including reinterpretation of the context, moving social position or acceptance (ibid.). Examples of these coping strategies could include, as a response to a breach of the principle of meaning, reinterpretting the context and changing from a relational to a transactional psychological contract (Herriot & Pemberton, 1996); as a response to a breach of the principle of belonging, making an internal job change, as a move to a less-threatening social position; and as a response to a breach of the principle of self-efficacy, accepting negative feedback by a supervisor and seeking to work harder.

To summarise, the study here has found evidence for identity threat as a factor in occupation change. The wider implication is the establishment of the self-concept as a specific influence to be considered in the experience of work, and the application of self-concept theory to integrate disparate theories of experience in the workplace. Further exploration of identity in the workplace may facilitate understanding of a range of phenomena relating to the individual at work.

The mediating role of occupational satisfaction in the results was interesting. Occupational satisfaction in the literature has tended to be derived from job satisfaction. Occupational and job satisfaction are assumed to relate to both cognition and affect, and have been defined as the outcome of an evaluative process (Weiss & Cropanzano, 1996). But what do people evaluate against? The criteria for comparison may include expectations and image (Lee et al, 1999). The definition of image used by Lee and Mitchell (1994, p. 58) included images concerned with achievement of personal goals, and value images representing “general values, standards and individual principles that define[s] a person”. Such value images appear to link closely with the self-concept. Image violations then may equate to identity threats. In Lee’s model, image violations contribute negatively to satisfaction with work. This is consistent with the study’s findings and it is therefore proposed that identity processes contribute to occupational satisfaction. The strong relationship in the structural model between identity threat and occupational satisfaction raises the possibility of conceptual or measurement overlap. However, the constructs were separately theoretically derived. Operationalisation of occupational satisfaction was based on established measures while
operationalisation of identity threat was developed from a separate body of research. It is argued that the strong relationship supports the premise that identity threat contributes to occupational satisfaction. If occupational satisfaction reflects an evaluation of how the work environment matches the self-concept, exploring the self-concept may give individuals or organisations insight into the likelihood of career change.

5.4.2 Emotions and Career

The results on emotions in the process of career change were less clear. The structural model suggested a linkage between positive but not negative emotions in the old occupation and occupational satisfaction, and the evidence for a relationship between positive emotions in the new occupation and action to change occupation was inconclusive. This contrasts with the strong salience of emotions in the stories of career change in Study 1. A number of possible explanations may be considered. Could the variance of negative emotions in the current career be accounted for by occupational satisfaction? Some of the items in the measure of occupational satisfaction could be considered to tap affect, e.g. “I find it difficult to be enthusiastic about the type of work I do”; “I find real enjoyment in the type of work I do”. However, they do not appear to overlap with the indicators of negative emotion used: anxious, stressed, frustrated, unhappy, and Weiss and Cropanzano (1996) argued strongly for affect as contributing to, but conceptually different from, the evaluative judgement measured by job or occupational satisfaction. To investigate whether specific rather than general negative emotions were influential, one-item measures of frustration and unhappiness in the old occupation were also tested in the model but did not show improvement over the four-item scale (see Appendix B-4.1). The significant link between positive emotions and occupational satisfaction could be interpreted as the absence of positive emotions, rather than the presence of specific negative emotions, contributing to change. However, it is also possible that the link could result from some conceptual overlap between the measures of occupational satisfaction and positive emotions in the old occupation.
Other aspects of the measures of emotion may have weakened the results, in particular, the time-frame of the measures, the attempted focus on work-related emotions and the dichotomy of positive and negative emotions. The measure of emotions in the current occupation asked the participants: “Please indicate to what extent you have felt this way during the past few weeks in your working life [italics in original].” Occupational satisfaction in contrast is assumed to represent evaluation over a protracted period of time (Weiss & Cropanzano, 1996). Recent fluctuations in emotions then may not have related to longer term evaluation. The measures assumed that the emotions persisted while the focal object persisted, that is, that negative emotions continued to be experienced while identity threats continued, and that positive emotions continued while moving towards the new occupation. Self-regulatory processing, however, suggests emotions are subject to active regulation over time (Carver, 2004), potentially leading to attenuation of intensity of emotion. This could result in the relationships between negative emotions and thoughts of changing, and between positive emotions and actions to change occupation, being less significant than expected.

The measurement of emotions about the new occupation attempted to focus on work, asking participants: “If you have a new occupation in mind, please indicate to what extent you feel this way about your new occupation [italics in original].” The measure may have tapped ambient mood, rather than emotion. Mood has been shown to influence measures of attitude (Brief et al., 1995) – it could also impact measures of emotion. Finally, a dichotomy of two bipolar dimensions of emotion was used, based on Watson and Tellegen (1985) but other conceptualisations are possible, including two bipolar dimensions of hedonic tone and intensity (Russell, 1979), two bipolar dimensions of approach-avoid, good-bad (Carver, 2004), or two unipolar dimensions of neutral to positive, and neutral to negative (Cacioppo, Gardner and Berntson, 1999). The significant relationship between positive emotions in the old occupation and occupational satisfaction raised the possibility that the absence of positive emotion may be a route by which emotion influences the change process: alternative measures of emotion could help to investigate this possibility. Other operationalisations may have resulted in more significant findings.
for the relationships between emotions and the process of occupation change, and further research is warranted in this area.

A process perspective on emotion can suggest additional explanation. Crawford et al. (1995) argued for an understanding of emotion as a process that includes affect, cognition and action, that is, emotion is more than simply feeling, and necessarily involves appraisal and social behaviour. This implies that all aspects of the conceptual model for the process of career change may constitute a process of emotion. The feelings about the current occupation, the evaluation implicit in occupational satisfaction and the cognitions around changing career are all part of an emotional process. Making sense of our experiences, of emotion in particular, is determined by social contexts (Crawford et al., 1995; Parkinson, 1995). Because of Cartesian and other rational traditions in Western cultures, making sense to ourselves, and to others, may be more likely to draw on cognitions rather than on feelings. Although affect may guide our cognitions (Frijda et al., 2000), we may not recognise their impact (Salovey, Bedell, Detweiler & Mayer, 2000). This suggests a further reason for the difference in findings on negative emotions in the old occupation between Studies 1 and 2, relating to the function of emotions. In the retrospective accounts in Study 1, emotion may have been used for communication and narrative effect, as discussed in Section 4.4.2. In order to meet cultural expectations of a causal sequence (Gergen, 1991), retrospective narratives may emphasise negative emotions. During the experience of career change, however, strong emotions may derail intentions and so must be managed. In Study 2, the participants are in the process of change and may be using emotion regulation techniques, such as suppression, cognitive reframing or other strategies, to attenuate the impact of strong negative emotion. The contribution of negative emotion is therefore likely to be weak. Affect then may be influential in career change, but may not be recognised or acknowledged for the role it plays, posing a methodological challenge for future research on individuals undergoing change.
5.4.3 Search Behaviour

The structural model included the construct of a possible self contributing to action to change occupation. The possible self may function as an aspirational self (Markus & Nurius, 1986), motivating action to achieve it. The possible self may also function as an idealised identity, a role or self that one wishes to become. The proposition that individuals may seek to fulfil identity needs in a new occupation connects with identity threats as contributing to occupation change. The very high inter-item reliability of the measure of possible self (.98) however may mean that a unitary construct for a possible self was envisaged. Individuals may not have been seeking to fulfil particular aspects of self-concept, such as self-esteem, rather they appeared to have perceived an overall match. Since identities are multiple (Stryker & Serpe, 1982), a possible self represents one of many possibilities. Perception of a possible self may emerge from multiple opportunities afforded by the environment, offering a plausible explanation for the path of serendipitous careers (Betsworth & Hansen, 1996; Miller, 1983; Williams et al., 1998).

In Chapter 4, it was argued that systematic search for a new occupation may not be a necessary part of successful career change. This was tested in Study 2 Hypothesis 5.3, that the relationship between thoughts of changing occupation and action to change occupation is only partially mediated by search behaviour. However, partial mediation was not supported: the data did not show a direct relationship between thoughts of changing and action to change. Possible reasons for the absence of support include the measure used and the different nature of the data in Studies 1 and 2. The measure of search behaviour included items beginning “I have investigated”, “I have explored” and “I have sought information”. Although referring to gathering factual information, such items may not have tapped into a systematic and logical search, in which equivalent data is sought on a number of possible occupations for the purposes of comparison, as proposed in rational models of career decision making. A better test of systematic search would be closely based on such rational models.

An alternative explanation for the apparently inconsistent findings on systematic search between Studies 1 and 2 relates to the retrospective accounts in Study 1.
Participants may have, in fact, been more rigorous in their approach to change than indicated in their accounts. Some years after an event, minor details may not be remembered and past events tend to be reconstructed in accordance with narrative conventions (Neisser, 1982). This would suggest that retrospective accounts of career change may omit details, in part due to lack of access to the memories and in part in order to tell an engaging story. This could help to explain the different findings relating to systematic search. However, the accounts in Study 1 represented the participants’ sense-making and what was important to them, and therefore cannot be dismissed as in some way inaccurate. Further, there is a growing body of theoretical argument in the literature against real-life decision making as necessarily systematic. The findings here point to the need for further research on alternative processes of decision making in career.

5.4.4 Limitations of the Study

Some limitations in the study above should be noted. The statistical power of the structural models was low. The multiple regression analysis surpassed the requirements for sample size for adequate statistical power (power > .80, α = .05) (Tabachnick & Fidell, 2001). However, the estimated power of the structural models was approximately .20 on the split data set, and approximately .40 on the full data set (MacCallum et al., 1996). This may have weakened specific or overall findings and caution therefore is advised in interpreting the results. Against that, the significant relationships in the structural model were generally consistent with the multiple regression results, and the power was equal to or better than that of some published studies (e.g. Hagemann & Naumann, 2009: power < .30; Sears & Galambos, 1992: power < .20).

Questions concerning conceptual overlap and issues relating to the measurement of emotion were discussed above. The operationalisation of identity threats was a first attempt to measure threatened aspects of the self-concept in this domain. Further empirical work is needed to establish the strength or weakness of the measures used here.
The study had aimed to sample more widely across occupations and socio-economic groups than existing published studies. This aim was achieved: with nearly a quarter of the sample non-graduates, the study was more representative of the general population than previous studies. Further, the study was not limited to a single occupation as many earlier studies had been (e.g. Blau, 2007; Doering & Rhodes, 1989; Hackett, Lapierre & Hausdorf, 2001; Kidd & Green, 2006; Rhodes & Doering, 1993). However, the generalisability of the results may be restricted. The sample was dominated by white-collar workers and the models may biased towards their experience of occupation change. A likely cause for the imbalance in the sample was the source of participants: most recruitment was done through university courses aimed at adults. It proved difficult to find communities of career changers outside of education but people from socioeconomic classes with limited economic resources or without a socio-cultural background of third-level education are less likely to be represented in university samples. This presents an ongoing problem for widening research on career change. One solution is more qualitative research, where large numbers are not required and the input or experience of individual participants is salient.

The negative correlation between level of education and thoughts of changing occupation, which is consistent with previous findings, and the predominance of graduates in the sample, suggest that the sample may have been less likely to think of changing occupation than the general population. However, against this, a lower level of education may limit individuals’ opportunities to change: a lower level of education may be related to lower pay and therefore fewer resources to support an individual through an occupation change; a lower level of education may be related to lower socioeconomic class and less power and opportunity in society; a lower level of education may be related to lower self-efficacy in academic or cognitive pursuits, limiting perceived choices. Although this study had a broader representation of career changers across occupations than earlier studies, caution is warranted in interpreting the results as generalisable across the working population.

A further possible limitation was the assumption of thoughts of changing occupation as a central premise in the model, following Mobley (1977) and Rhodes and
Doering (1993). Although this is consistent with other models of change, such as the transtheoretical model of Prochaska, DiClemente and Norcross (1992), the assumption of cognitions of change early in the process was contradicted by one participant in Study 1. It appeared that Brenda built up her alternative therapy practice before thinking about career change. This suggests the possibility that the initial stages of career change may not always be conscious. The process of such career change would pose particular challenges in research but it is worth noting that there are many possible paths in the process of career change, as the unfolding model of turnover illustrated (Lee & Mitchell, 1994; Lee, et al. 1999).

Finally, the correlational design of this stage of analysis is limited in exploring causality. Although structural models can indicate directionality, causality cannot be inferred from cross-sectional data. Chapter 6 investigates directionality by exploring the relationships in the longitudinal data.

### 5.4.5 Summary and Next Steps

The study comprised four questionnaires, completed one month apart. The first questionnaire was completed by people thinking of changing occupation and people who were not. The analysis of the cross-sectional data from Questionnaire 1 supported the hypotheses on the contribution of identity threat and of negative emotion to thoughts of changing occupation and the influence of perception of a possible self to action to change occupation. Two structural models were developed. Both fitted the data well: one included search behaviour linking thoughts of changing occupation and action to change, the other omitted search behaviour. The findings add to the literature by providing evidence for the involvement of the self-concept in initiation of occupation change, by providing a broad-based theoretical framework for the conceptualisation of identity in career, and by operationalising threats to identity. The findings contribute further by providing evidence for the role of negative emotions in the early stages of occupation change, and evidence for the role of perception of a possible self in acting to change. Lastly, the findings challenge existing models of career change by proposing that search behaviour is not a necessary stage.
For clarity, one structural model was chosen to explore further research questions, the model which included search behaviour. Three further questions were explored:

1) Using the longitudinal data, is there support for causality in the main relationships in the structural model?
2) Does the model apply differentially to women and men?
3) Do specific facets of identity threat contribute more than others to the relationship with occupational satisfaction?

As discussed above, a structural model can suggest directionality but longitudinal data is required to demonstrate causality or directionality over time. Panel analysis of the main relationships would allow investigation of causality.

The gender split in the sample followed the pattern of the main recruitment populations: the largest postgraduate populations invited to participate were approximately 60:40 women to men. However, a slightly higher proportion of women than men indicated that they were thinking of changing career (67%), suggesting that women may be more likely to think about changing career. This is consistent with earlier findings that women make more radical job changes than men (Arthur et al., 1999; Brett & Stroh, 1994; Goffee & Nicholson, 1994; Sterrett, 1999; Szinovacz, 1991). This raises the question of whether the structural model of occupation change applies to both women and men. Comparison of model fit for women and for men would provide evidence for applicability to both genders.

The self-concept was conceptualised based on the four guiding principles proposed by Identity Process Theory (Breakwell, 1986, 1993), its recent extensions (Manzi et al., 2006; Vignoles et al., 2006) and three additional factors arising from Study 1 and the career literature. Although self-esteem, self-efficacy, meaning, belonging, a need to grow, values and personal goals are well supported in the career literature, continuity and distinctiveness are not as clearly established. IPT posited identity as contextual (Breakwell, 1986) - this prompts the question of whether all nine aspects are salient in work contexts. Investigation of relative contributions to variance by each of the nine would provide initial evidence for those aspects of the self-concept salient in careers.
These questions are investigated in Chapter 6: panel analyses are used to investigate causality in the main relationships of the structural model; model comparison is used to investigate applicability of the model by gender; and multiple regressions are used to investigate contributions to variance of each of the nine factors relating to the self-concept.
Chapter 6 Study 2 - Causal, Gender, Identity Threat and Temporal Patterns Analyses

6.1 Background

The objective of the overall research programme was to add to understanding of the process of voluntary occupation change. In Chapter 5, a structural model of the occupation change process was proposed, based on previous theory and research, and refined based on the data in Study 2. The data supported the relationship between identity threat and thoughts of changing occupation, mediated by occupational satisfaction, and the relationship between perception of a possible self and action to change occupation. The model, and underlying theory, suggested directional relationships: that identity threat contributes negatively to occupational satisfaction, and that perception of a possible self makes a positive contribution to career change behaviour.

Building on these findings, and in order to extend understanding of the process of occupation change, four further aspects of the process were investigated. Firstly, causal analyses were conducted on longitudinal data from Study 2 to test whether the proposed directional relationships presented in the model in Chapter 5 were supported. Secondly, because Study 1 considered women only and the model guiding Study 2 was based in part on the findings from that study, applicability of the model to women and men was tested. Thirdly, the results of Study 2 described in Chapter 5 established identity threat as a predictor of thoughts of changing occupation, and operationalised identity threat using nine proposed aspects of the self-concept. Theory suggests that several but not all of these aspects of self-concept may be influential in career. Accordingly, the unique contribution of each aspect was tested. Fourthly, the patterns of change over time of thoughts of changing occupation, of identity threat in career and of perception of a possible self in a new occupation have not previously been explored empirically. Exploratory analyses were conducted on change over time of these variables.
6.1.1 Causal Analysis

Although existing models of turnover (Lee & Mitchell, 1994; Mobley, 1977) and career change (Rhodes & Doering, 1983; 1993) assume directional relationships – job dissatisfaction leading to thoughts of changing job, for example – little longitudinal research has tested these assumptions. One notable exception is the research of Hom and Griffeth (1991). Hom and Griffeth’s study tested a longitudinal model of job turnover, which included expected utility of a new job, job search and comparison of alternative jobs as key constructs. The results found that expected utility and job comparison over time were not significantly related to job change, and search behaviour unexpectedly showed a small, significant but positive relationship with staying in the old job. These results are broadly consistent with the findings of Study 1, in which expected utility, job comparison and job search were not salient in phenomenological accounts of occupation change. Hom and Griffeth argued for a more parsimonious version of Mobley’s (1977) model of turnover. The model of occupation change developed in Chapter 5 used their suggested refinements of Mobley’s model and the longitudinal analyses described in this chapter tested proposed directional relationships. In addition, this study built on Hom and Griffeth’s contribution by considering occupation change, rather than job turnover, and used a range of occupations, rather than nursing only.

To investigate causal relationships, data over time is required. The commonly-held criteria for demonstrating causality are: (1) two variables must co-vary; (2) the variance must not be caused by a common, third factor and (3) one variable must precede the second in time (Finkel, 1995). Although the structural models from the cross-sectional data presented in Chapter 5, Section 5.3.3, provided evidence for criteria (1) and (2) for the relationships between identity threat and occupational satisfaction, and between perception of a possible self and action to change occupation, longitudinal data is required for evidence of criterion (3). The longitudinal data from Study 2 can therefore suggest causality. However, a more rigorous definition of causality requires evidence that the caused outcome cannot occur without the pre-occurrence of the cause. For occupation change however, the processes are contextual as well as psychological: primary influences could be
environmental events such as a change in pay and conditions. Further, causes may be multiple or may differ across individuals: there is evidence for alternative paths to change (Lee & Mitchell, 1994). Thus, under the more rigorous definition of causality, identity threat is not claimed to cause thoughts of changing occupation, nor is it claimed that perception of a possible self causes action to change occupation. The hypotheses under investigation are that these constructs contribute to key stages in the processes of occupation change and that the relationships are directional. The term ‘causal analysis’ is used where appropriate to denote statistical analysis of causality, as used by Finkel (1995) and others, but this does not imply theoretical causality.

Cross-lagged panel analyses were conducted to test the following hypotheses on directionality:

**H6.1a** The relationship between identity threat and occupational satisfaction is directional: a threatened identity reduces occupational satisfaction.

**H6.1b** The relationship between perception of a possible self and action to change occupation is directional: perception of a possible self increases the likelihood of action to change occupation.

### 6.1.2 Gender

A further research question, separate from issues of directionality, is that of representativeness of the model proposed in Chapter 5. As discussed in Chapter 2, most major career theories have been developed explicitly or implicitly from men’s career patterns, a gap highlighted by several scholars (Arthur et al., 1999; Betz & Fitzgerald, 1987; Fletcher, 1996; Goffee & Nicholson, 1994; Marshall, 1989). Responding to their argument for consideration of women’s career patterns, Study 1 included women only. The conceptual model proposed and tested in Chapter 5 was based in part on the findings from Study 1. An important subsequent research question then is whether the model applies equally to men as well as women. Differences between women’s and men’s career have been noted, including more changes and more radical career changes by women (Brett & Stroh, 1994; Sterrett,
different values in careers (Marshall, 1989), different opportunity structures (Astin, 1984; Goffee & Nicholson, 1994; Banks et al., 1992) and different career patterns (Astin, 1984; Goffee & Nicholson, 1994; Marshall, 1989). Several influential theorists have argued for similarities in women’s and men’s experience of careers as well as differences. Marshall (1989), Super (1990) and Goffee and Nicholson (1994) have all noted that the different opportunities and constraints on women and men lead to different patterns of career, but Astin (1984) and Goffee and Nicholson (1994) postulate similar motivations. As the proposed model of the occupation change process (Section 5.3.3) focuses on a specific type of transition, that is, occupation change, and on specific motivations, threatened identity and negative emotions in particular, rather than more broadly on career patterns, it is proposed that the model applies equally to the experience of women and men.

**H6.2** The structural model of occupation change, as presented in Figure 5.5, Section 5.3.3, applies to both women and men.

### 6.1.3 Identity Threat

The findings on the cross-sectional data from Study 2 showed that identity threat contributed to thoughts of changing occupation, mediated by occupational satisfaction. Identity threat was operationalised by drawing on Identity Process Theory, to suggest self-esteem, self-efficacy, continuity and distinctiveness as aspects of the self-concept (Breakwell, 1986, 1993), on the work of Vignoles et al. (2006) and Manzi et al. (2006) to suggest meaning and belonging as additional aspects, and on the findings from Study 1 together with theory from Ryan and Deci (2000), Little, Salmela-Aro and Phillips (2007) and Hall (2004) to suggest a need to grow, personal goals and values as further aspects of the self-concept. The discussion in Chapter 5, Section 5.4, reviewed the theoretical support for involvement of the aspects of the self-concept in career behaviour. In summary, seminal theories of work, motivation and well-being by Jahoda (1982), Hackman and Oldham (1975) and Warr (1987), among others, support the influence of self-esteem, self-efficacy, meaning, belonging, a need for growth, personal goals and values on career behaviour. Empirical results have provided further evidence for the linkages. Meta-analysis has established a positive relationship between both self-
esteem and self-efficacy and job satisfaction (Judge & Bono, 2001), suggesting potential influences of threatened self-esteem or self-efficacy on turnover. Belonging as a salient theme in career change was supported by Cohen and Mallon’s (1999) research on people who had left organisational careers. A need for meaning in work was related to turnover in Kanchier and Unruh’s (1989) study of managers changing jobs. There is evidence for growth need strength influencing work outcomes including turnover (Loher, Noe, Moeller & Fitzgerald, 1985; Spector, 1985). Fulfilment of personal goals at work has been linked to positive affect (Harris et al., 2003) and goal pursuit more generally has been linked to action (DeShon & Gillespie, 2005; Gollwitzer & Bargh, 1996) and decisions (Stets & Burke, 2000) which suggests a role for personal goals in career behaviour. Lastly, Teixeira and Gomes (2000) found personal values to be salient in career change. The remaining two aspects of the self-concept from IPT, continuity and distinctiveness, have been suggested as important in the subjective construction of career: Savickas (2001) argued that career narratives allow individuals to construct continuity and uniqueness. However, there is as yet little empirical evidence for the contribution of continuity and distinctiveness to career behaviour. Based on the theoretical and empirical evidence for the influence of aspects of the self-concept on careers, the following hypotheses were proposed:

Within the work environment,

**H6.3a** Threatened self-esteem contributes negatively to occupational satisfaction.

**H6.3b** Threatened self-efficacy contributes negatively to occupational satisfaction.

**H6.3c** Threats to meaning contribute negatively to occupational satisfaction.

**H6.3d** Threats to belonging contribute negatively to occupational satisfaction.

**H6.3e** A threatened need for growth contributes negatively to occupational satisfaction.

**H6.3f** Threats to personal goals contribute negatively to occupational satisfaction.

**H6.3g** Threats to personal values contribute negatively to occupational satisfaction.

### 6.1.4 Patterns over Time

The patterns over time of the main variables of the proposed model have not been investigated before but, based on the literature, hypotheses may be proposed for the
temporal profiles of identity threat, thoughts of changing occupation and perception of a possible self in a new occupation. Identity threat within an occupation represents an evaluation of the current context (Breakwell, 1986) and, as such, is likely to demonstrate stability until the context changes: in this case until a new occupation is begun at the end of a career change process. Withdrawal cognitions, or thoughts of changing occupation, have been a primary construct in previous models of career change (Mobley, 1977; Rhodes & Doering, 1993). As such, the construct could be assumed to increase over time until career change is achieved. Perception of a possible self contributes to career change (Ibarra, 2004): it is therefore proposed that scores on the measure of possible self will increase during the career change process, indicating clearer awareness of a possible self. The hypotheses on temporal patterns to be tested were:

**H6.4a** Identity threat remains stable over the period of data collection.

**H6.4b** Thoughts of changing occupation increase over the period of data collection.

**H6.4c** Clarity of perception of a possible self increases over the period of data collection.

### 6.1.5 Summary

In summary, building from the model of voluntary occupation change proposed in Chapter 5, this chapter investigates four further aspects of the process of occupation change: directional relationships, gender, contribution to occupation change of threats to specific aspects of identity, and patterns of change over time of key variables. The summary hypotheses were:

**H6.1** The relationships between identity threat and occupational satisfaction, and between a possible self and career change behaviour, are directional.

**H6.2** The structural model of occupation change applies to both women and men.

**H6.3** Specific threats to identity contribute negatively to occupational satisfaction, namely threats to self-esteem, self-efficacy, meaning, belonging, a need for growth, personal goals and values.

**H6.4** The perception of identity threat remains stable over time, while thoughts of changing occupation and perception of a possible self increase.
6.2 Method

The analyses presented in this chapter are further analyses of the data described in Chapter 5.

6.2.1 Procedure for Longitudinal Data

The data were collected via four on-line questionnaires from each participant, collected approximately four weeks apart, thus covering a period of at least 12 weeks.

The number of participants who submitted the questionnaire for Time 2 was 109, for Time 3 was 76 and for Time 4 was 60. The data were inspected for univariate and multivariate outliers, using z scores and Mahalanobis distance, first as individual datasets and then as one merged dataset. Cases were excluded if: they appeared to be outliers (n = 4); data across the timepoints could not be fully matched (e.g. different gender given or different birth date or Time 1 missing; n = 5); or several data items were missing (n = 2). The screening excluded 11 cases, of which 5 were men, and all were from the majority groupings on ethnicity, education and occupation type.

After screening the data, the number of cases was 106 for Time 2 (a continuation rate of 57% of Time 1), 67 for Time 2 (63% of Time 2) and 55 for Time 4 (82% of Time 3). Of the 55 participants remaining at Time 4, 97% were White or White British, in comparison to 86% at Time 1. At Time 4, 77% were women, compared to 64% at Time 1. The percentage of management and professional grade occupations at Time 4 was 65%, very similar to 67% at Time 1.

6.2.2 Measures and Analytic Procedure

The measures are described in detail in Chapter 5, Section 5.2.3. Beginning with a brief summary of descriptive statistics on the longitudinal data, the sections below present the analyses and results of investigating directional relationships, gender difference, contributions of threatened aspects of identity, and exploring longitudinal patterns.
6.3 Results

Table 6.1 presents the means and standard deviations for the main variables at Times 2, 3 and 4, with the values at Time 1 shown for comparison.

Table 6.1 Means and Standard Deviations for Times 1, 2, 3 and 4

<table>
<thead>
<tr>
<th></th>
<th>Time 1 (N=109)</th>
<th>Time 2 (N=109)</th>
<th>Time 3 (N=76)</th>
<th>Time 4 (N=60)</th>
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<tbody>
<tr>
<td>Mean</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Thoughts of changing</td>
<td>6.28</td>
<td>6.00</td>
<td>6.17</td>
<td>6.19</td>
</tr>
<tr>
<td>Std. Dev.</td>
<td>0.79</td>
<td>1.26</td>
<td>1.21</td>
<td>0.99</td>
</tr>
<tr>
<td>Identity threat</td>
<td>4.51</td>
<td>4.44</td>
<td>4.42</td>
<td>4.42</td>
</tr>
<tr>
<td>Std. Dev.</td>
<td>1.00</td>
<td>1.13</td>
<td>1.15</td>
<td>1.34</td>
</tr>
<tr>
<td>Occupational satisfaction</td>
<td>3.60</td>
<td>3.61</td>
<td>3.52</td>
<td>3.59</td>
</tr>
<tr>
<td>Std. Dev.</td>
<td>1.31</td>
<td>1.09</td>
<td>1.25</td>
<td>1.09</td>
</tr>
<tr>
<td>Possible self</td>
<td>4.99</td>
<td>5.29</td>
<td>5.27</td>
<td>5.45</td>
</tr>
<tr>
<td>Std. Dev.</td>
<td>1.44</td>
<td>1.33</td>
<td>1.43</td>
<td>1.23</td>
</tr>
<tr>
<td>Action to change occ.</td>
<td>1.39</td>
<td>1.59</td>
<td>1.67</td>
<td>1.63</td>
</tr>
<tr>
<td>Std. Dev.</td>
<td>1.23</td>
<td>1.26</td>
<td>1.22</td>
<td>1.25</td>
</tr>
</tbody>
</table>

Note: "a" only participants who completed Time 2 questionnaire included.

6.3.1 Directional Influences

Data from Times 1, 2 and 3 were used for the causal analyses presented below (N=67 after listwise deletion). A low number of cases and a complex model make it difficult to disconfirm a model (MacCallum, 1995): for this reason, Time 4 (N =55) was not modelled.

To investigate directional influence, three-wave cross-lagged panel models were used, with contemporaneous links as appropriate. Cross-lagged relationships are those between two variables and between two time periods, that is, Variable 1 at Time 1 linked to Variable 2 at Time 2. Cross-lagged links represent causal influence because they include time-precedence. Contemporaneous links are those between two variables at the same time point, that is, Variable 1 at Time 1 linked to Variable...
2 at Time 1. Theory may propose that such links contribute to causal effect. Cross-lagged models test for any effect of one variable on a second, controlling for all the second variable’s previous values. SEM was carried out on panel models which allowed simultaneous estimation of cross-lagged, contemporaneous and stability relationships (i.e. Time 1 to Time 2), and included error variance. The general form of the three-wave cross-lagged and contemporaneous model is shown in Figure 6.1. Time 1 Variables 1 and 2 are taken to be completely determined by their error terms so that all causal effects in the model will be represented in the estimations of the remaining relationships. This does not affect the conclusions based on model outcomes (Finkel, 1995). Because of the modest sample size, a threshold of .1 was used for statistical significance in comparing panel models.

Figure 6.1 General three-wave cross-lagged model

6.3.1.1 The Directional Influence of Identity Threat on Occupational Satisfaction

The influence of identity threat on occupational satisfaction was investigated using a modified form of the general three-way cross-lagged model. From a theoretical perspective, occupational satisfaction (Variable 2) was not predicted to influence
identity threat (Variable 1)\(^4\) so cross-lagged and contemporaneous relationships were unidirectional (i.e. \(x2, x4\) and \(c1, c3\) were omitted). Contemporaneous links (\(c2\) and \(c4\)) were included to incorporate any changes in identity threat between Times 1 and 2, and Times 2 and 3. Two models were compared. Model 1 comprised the relationships just described (\(x1, x3, c2, c4, s1\) to \(s4\)). The contemporaneous links (\(c2\) and \(c4\)) were constrained to be equal to increase degrees of freedom (Finkel, 1995). Model 2 omitted the cross-lagged relationships (\(x1\) and \(x2\)). Table 6.2 compares the model fit.

\[\text{Table 6.2 Comparison of alternative models: identity threat and occupational satisfaction - panel data with and without cross-lag}\]

<table>
<thead>
<tr>
<th></th>
<th>(\chi^2) (df)</th>
<th>RMSEA</th>
<th>CFI</th>
<th>NNFI</th>
<th>(\Delta\chi^2) ((\Delta)df)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Model 1(^a)</td>
<td>7.86 (7)</td>
<td>.00</td>
<td>1.00</td>
<td>1.00</td>
<td>\</td>
</tr>
<tr>
<td>Model 2(^b)</td>
<td>12.33 (9)</td>
<td>.06</td>
<td>.99</td>
<td>.98</td>
<td>4.47 (2)</td>
</tr>
</tbody>
</table>

Comparison

Model 1 : Model 2

Notes:
\(^a\) Model 1: Full panel model, with unidirectional contemporaneous and cross-lagged links.
\(^b\) Model 2: Model with unidirectional contemporaneous links. No cross-lag.

The difference between the models was not significant although it approached significance \((\chi^2 > 4.60, p < .10)\). Model 1 had better fit. This provides limited support for inclusion of cross-lags in the model, that is, that identity threat at time \(n\) affects occupational satisfaction at time \(n+1\). Hypothesis 6.1a, the directional influence of identity threat on occupational satisfaction, thus has moderate support in this data.

6.3.1.2 The Directional Influence of Perception of a Possible Self on Action to Change Occupation

The generic model was used slightly differently to investigate the causal influence of perception of a possible self on action to change occupation. The measure of action

\(^4\) Occupational satisfaction is a measure of an evaluative judgement. Although it may be influenced by factors which also influence identity threat, theoretically it is not predicted to influence identity threat.
to change occupation was retrospective (see Chapter 5, Section 5.2.3), therefore contemporaneous links were not appropriate: perception of a possible self as measured at Time n could not influence action to change occupation before Time n. Links c1 to c4 were omitted. Reciprocal influence from action to change occupation (Variable 2) to perception of a possible self (Variable 1), as well as from perception of a possible self to action to change, is theoretically valid, so cross-lag links x2 and x4 were included.

Two models were again compared. Model 1 included reciprocal cross-lagged links (x1 - x4 in Figure 6.1) and no contemporaneous links. Model 2 included only unidirectional cross-lagged links from possible self to career change behaviour (i.e. x1 and x3, omitting x2 and x4) to test the reciprocal relationships. Table 6.3 compares the models.

Table 6.3 Comparison of alternative models: perception of a possible self and action to change occupation – panel data with reciprocal versus unidirectional cross-lags

<table>
<thead>
<tr>
<th></th>
<th>$\chi^2$ (df)</th>
<th>RMSEA</th>
<th>CFI</th>
<th>NNFI</th>
<th>$\Delta\chi^2$ (Δdf)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Model 1$^a$</td>
<td>4.19 (4)</td>
<td>.03</td>
<td>1.00</td>
<td>1.00</td>
<td></td>
</tr>
<tr>
<td>Model 2$^b$</td>
<td>9.18 (6)</td>
<td>.08</td>
<td>.99</td>
<td>.97</td>
<td></td>
</tr>
</tbody>
</table>

Comparison

Model 1 : Model 2

4.99* (2)

Notes. * $p<.10$

$^a$ Model 1: Model with reciprocal cross-lags

$^b$ Model 2: Model with cross-lagged links from possible self to change behaviour only.

The difference between the models was significant at $p < .10$ and Model 1 had better fit. This provides evidence for reciprocal cross-lagged relationships in the model. Not all of the cross-lagged relationships achieved significance. Figure 6.2 depicts the structural panel model.
Although not all cross-lagged links were significant, the pattern of significant relationships supports a reciprocal directional relationship between perception of a possible self and action to change occupation. Hypothesis 6.1b – perception of a possible self is directionally related to action to change occupation - is therefore supported.

### 6.3.2 Gender

The data on participants indicating at Time 1 that they were thinking of changing occupation \((N = 183)\) were used for the analysis on gender.

In order to test whether the structural model applied to both women and men, LISREL’s facility to test multiple groups simultaneously was used. This offers a robust test which includes error variance and is a stronger fit test than comparing models serially. Using the ‘group’ functionality of LISREL, the structural model described in Figure 5.5, Section 5.3.3, was tested on women \((N = 122)\) and on men \((N = 61)\). All links were constrained to equality between the two groups. The global fit statistics showed a good fit to both groups (Group Goodness of Fit Index = .96). The significance of all links was the same between groups and path weights were similar. Hypothesis 6.2, that the model applies to both women and men, is therefore supported.
6.3.3 Identity Threat

The data on all valid responses at Time 1 ($N = 281$) were used for the analysis of threatened aspects of identity.

The results in Chapter 5 demonstrated that occupational satisfaction mediates the relationship between identity threat and thoughts of changing occupation. Identity threat was measured across nine aspects, each measured by a sub-scale. Hypothesis 6.3 proposed that specific aspects relate negatively to occupational satisfaction. Multiple regression was used to test the relationship of threatened aspects of identity with occupational satisfaction as a dependent variable, and the results are presented in Table 6.4.

**Table 6.4 Multiple regression of threatened aspects of identity onto occupational satisfaction**

<table>
<thead>
<tr>
<th>Variable</th>
<th>$B$</th>
<th>$SE$</th>
<th>$\beta$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Occupational satisfaction</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Self-esteem threat</td>
<td>-.04</td>
<td>.05</td>
<td>-.05</td>
</tr>
<tr>
<td>Self-efficacy threat</td>
<td>-.04</td>
<td>.04</td>
<td>-.05</td>
</tr>
<tr>
<td>Continuity threat</td>
<td>-.06</td>
<td>.04</td>
<td>-.07</td>
</tr>
<tr>
<td>Distinctiveness threat</td>
<td>-.05</td>
<td>.04</td>
<td>-.06</td>
</tr>
<tr>
<td>Meaning threat</td>
<td>-.42</td>
<td>.04</td>
<td>-.28***</td>
</tr>
<tr>
<td>Belonging threat</td>
<td>-.04</td>
<td>.04</td>
<td>-.04</td>
</tr>
<tr>
<td>Growth threat</td>
<td>-.22</td>
<td>.04</td>
<td>-.29***</td>
</tr>
<tr>
<td>Goal threat</td>
<td>-.10</td>
<td>.05</td>
<td>-.13*</td>
</tr>
<tr>
<td>Values threat</td>
<td>-.07</td>
<td>.04</td>
<td>-.09*</td>
</tr>
</tbody>
</table>

Adjusted $R^2$       .71

$F$ test      $F(10,270)= 69.13***$

*Note.* *p* < .05, ***$p$ < .001.

Table 6.4 shows that threats to meaning and to growth were significantly related to occupational satisfaction, supporting Hypotheses 6.3c and 6.3e. Threats to personal goals and to values were also significant, supporting Hypotheses 6.3f and 6.3g.
Threats to self-esteem, self-efficacy or belonging did not make significant unique contributions: Hypotheses 6.3a, 6.3b and 6.3d were not supported.

As the structural model applied equally to women and men, the question was asked whether the pattern of identity threats in career change was also the same for women and men. Multiple regressions for women and for men across the facets of identity threat was carried out and Table 6.5 presents the results

### Table 6.5 Multiple regression of threatened aspects of identity onto occupational satisfaction, for women and men, and test of differences

<table>
<thead>
<tr>
<th>Variable</th>
<th>Women (N = 176)</th>
<th>Men (N = 103)</th>
<th>Test of difference</th>
</tr>
</thead>
<tbody>
<tr>
<td>Occupational satisfaction</td>
<td></td>
<td></td>
<td>z</td>
</tr>
<tr>
<td>Self-esteem threat</td>
<td>-.07 .06 -.09</td>
<td>-.01 .08 .01</td>
<td></td>
</tr>
<tr>
<td>Self-efficacy threat</td>
<td>-.03 .04 -.03</td>
<td>-.07 .07 -.07</td>
<td></td>
</tr>
<tr>
<td>Continuity threat</td>
<td>-.02 .05 -.02</td>
<td>-.14 .07 -.15</td>
<td></td>
</tr>
<tr>
<td>Distinctiveness threat</td>
<td>-.01 .05 -.01</td>
<td>-.14 .06 -.16*</td>
<td>.78</td>
</tr>
<tr>
<td>Meaning threat</td>
<td>-.28 .05 -.33***</td>
<td>-.10 .08 -.12</td>
<td>-1.91</td>
</tr>
<tr>
<td>Belonging threat</td>
<td>-.02 .05 -.02</td>
<td>-.07 .07 -.08</td>
<td></td>
</tr>
<tr>
<td>Growth threat</td>
<td>-.22 .06 -.29***</td>
<td>-.22 .07 -.27**</td>
<td>.00</td>
</tr>
<tr>
<td>Goal threat</td>
<td>-.12 .06 -.15*</td>
<td>-.08 .07 -.10</td>
<td>-.43</td>
</tr>
<tr>
<td>Values</td>
<td>-.07 .04 -.09</td>
<td>-.09 .06 -.12</td>
<td></td>
</tr>
</tbody>
</table>

Adjusted $R^2$                | .70             | .72            |                    |

$F$ test                      | $F(10,166)=42.91^{***}$ | $F(10,93)=27.19^{***}$ |

Note. * $p<.05$, ** $p<.01$, *** $p<.001$.

A similar amount of variance in occupational satisfaction was explained for women and men. For both, threats to growth remained a significant influence (supporting Hypothesis 6.3e), contributing similar amounts to variance. Threat to meaning was significant for women (Hypothesis 6.3c) but not men, as was threat to personal goals (Hypothesis 6.3f). Threat to distinctiveness was significant for men but not for women. However, tests of difference did not reach significance: in this data, the
contribution of threatened aspects of identity to occupational satisfaction did not
differ between women and men.

6.3.4 Patterns over Time

Little longitudinal data on occupation change has been published and little is known
on how thoughts of changing occupation, perception of a possible self and threats to
identity change over time. Descriptive statistics were used in this section to
characterise the longitudinal data. In addition, basic statistical analyses were used to
test Hypothesis 6.4, that the perception of identity threat remains stable over time,
while thoughts of changing occupation and perception of a possible self increase.

Firstly, the patterns of the means of the main variables over the four time periods of
data collection are depicted in Figure 6.3. T-tests were carried out on these variables,
comparing the following time points: Time 1 to Time 2, Time 2 to Time 3, Time 3
to Time 4, Time 1 to Time 3, and Time 1 to Time 4. Identity threat between Time 1
and Time 4 remained almost stable, without statistically significant change ($t = .59,$
df = 54, $p > .05$), supporting Hypothesis 6.4a. Thoughts of changing occupation
between Time 1 and Time 4 also showed stability in the sample, although it had
been expected that this measure would increase ($t = .00$, df = 54, $p > .05$):
Hypothesis 6.4b is not supported. There was a statistically significant increase in the
measure of perception of a possible self between Time 1 and Time 4 ($t = -2.22$, df =
54, $p < .05$), as proposed in Hypothesis 6.4c. All other t-tests were not significant.
The sample means could hide substantial individual differences. As a second step, the data was further characterised by plotting the percentage of participants whose scores on three main variables increased, decreased or remained stable over the three months period of the study, depicted in Figure 6.4. An increase was defined as a difference between Times 4 and 1 that was greater than +1 Standard Deviation from the mean. A decrease was defined if Time 4 was less than Time 1 by more than one Standard Deviation from the mean. Stability was defined as the difference between Times 1 and 4 not exceeding +1 or -1 Standard Deviation from the mean. 

This figure shows that less than 10% of the sample increased and decreased their scores on the measures of identity threat and of thoughts of changing occupation. On the measure of perception of a possible self, 25% of participants’ scores increased over the three months, consistent with Hypothesis 6.4c.
The stability of means across the time period of the study does not necessarily represent stability at each time interval. As a third and final step, a sample of individual results at each time point was graphed: a recommended approach to displaying longitudinal data in exploratory data analysis (Diggle, Liang & Zeger, 1994). Such graphs show the spread and pattern of scores for a random subset of participants. In the graphs following, an arbitrary one in five scores was chosen, the same scores on each graph, that is, Participants 2, 7, 12 and so on are shown on all three graphs. The values plotted were standardised residuals of three main variables, which represent individual variance against the sample better than raw scores (Diggle et al., 1994).
Figure 6.5 Standardised residuals of identity threat over time (1 in 5 shown)

Figure 6.6 Standardised residuals of thoughts of changing career over time (1 in 5)
Figure 6.7 Standardised residuals of possible self over time (1 in 5 shown)

The variation for most participants on these three variables is small but for some, there is large variation between time periods. The scores on thoughts of changing career, in particular, appeared to fluctuate for individuals across the period of the study. These graphs show individual differences across the time period of the study, and individual differences in patterns across time intervals. Investigation of relationships by profile of change (increase, decrease or stable) of the main variables found no relationships with the demographics or individual differences measured in Study 2 (age, gender, openness to change, locus of control). Appendix B-4.2 presents details of this analysis, together with further analysis of change patterns. Future research could explore further factors influencing the profiles of change.

The next section discusses the implications of the findings, beginning with a summary of the results.
6.4 Discussion

The analyses presented in this chapter built on the results and model presented in Chapter 5 and explored four further questions on the process of voluntary occupation change. Firstly, causal analysis on longitudinal data showed moderate support for directional relationships between identity threat and occupational satisfaction, and between perception of a possible self and action to change occupation. Secondly, the conceptual model of occupation change proposed in Chapter 5 was tested on women and men simultaneously and was found to fit both genders. Thirdly, the unique contributions to occupational satisfaction of threats to nine measured aspects of the self-concept were tested. Threats to meaning, a need for growth, personal goals and values made significant unique contribution. Threats to self-esteem, self-efficacy, continuity, distinctiveness and belonging were not found to contribute. Fourthly, analysis of the patterns of change over time showed that identity threat and thoughts of changing occupation remained stable across the period of study, and scores on the measure of perception of a possible self increased. Variation between time points and between individuals was also in evidence.

Overall, Study 2 adds to understanding of the process of occupation change. Although studies of turnover are plentiful, few studies have collected longitudinal data and fewer have focused on occupation change. The mix of cross-sectional and longitudinal analyses in this study lessens common method bias, and longitudinal data has enabled causal analysis. Initial hypotheses have been tested on patterns of change over time of key constructs, addressing the gap in previous research on how the constructs of thoughts of changing occupation and perception of a possible self in occupation change may alter over time. A conceptual model has been proposed and tested on women and men, addressing the critiques of much career theory as being based on men’s career patterns and experiences. Finally, Study 2 represents the first study to my knowledge which operationalises threats to the self-concept in career, based on theory, and tested the influence of identity threat on career behaviour.

The detailed implications of the results presented in this chapter will now be discussed.
6.4.1 Directional Influences

The directional influences of identity threat on occupational satisfaction, and of perception of a possible self on action to change occupation, were moderate rather than strong. The broader context of career change suggests why this might be. The construct measured as occupational satisfaction is analogous to, and based on, job satisfaction. Job satisfaction is defined as “a positive or negative evaluative judgment of one’s job or job situation” (Weiss & Cropanzano, 1996, p.2). A wide range of factors may influence such an evaluation, including pay, promotion prospects, relationships with supervisors and colleagues (Smith, Kendall & Hulin, 1969), job security, autonomy (Warr, 1987), recognition and support (Weiss, Davis, England & Lofquist, 1967), task variety and feedback (Hackman & Oldham, 1975), and perceptions of organisational justice (Agho, Mueller & Price, 1993). Additional factors may influence occupational satisfaction, such as social status or legislation: in the UK in 2009, the change in social status of bankers and the registration of psychologists by a Health Council are examples of events that could affect occupational satisfaction. External factors are also likely to bear on action to change occupation. There is evidence for the influence on career behaviour of structural barriers, labour market conditions, social policies, qualification requirements, family influence and cultural expectations (Thomas, 1989; Goffee & Nicholson, 1994; Hesketh, Elmslie & Kalder, 1990). In the context of a wide variety of external, societal influences, moderate support for directional influences of psychological factors in the process of occupation change is noteworthy. Although the research described here is focused on psychological influences in career, it is set within a larger system in which influences of society, time and chance events come together in career. Interpretation of the research findings must recognise this larger picture.

6.4.2 Gender

The finding that the structural model of the process of occupation change applies to both women and men is evidence for a common process of voluntary occupation change. This evidence is strengthened by the analysis of threats to specific aspects of identity for women and men, which demonstrated no significant difference. The results support the arguments of theorists such as Super (1990), Astin (1984) and
Goffee and Nicholson (1994) for substantially similar motivations in the careers of women and men. The arguments of, for example, Marshall (1989), that the experience and patterns of women’s careers differ from men’s, is not contradicted by the evidence here: the motivations may be similar but their realisation is likely to be strongly influenced by the structural opportunities in society (Astin, 1984; Barley, 1989; Hesketh et al., 1990). In this study, actions intended to change career were measured, such as applying for a job in a new occupation, rather than actual career change, such as becoming established in a new occupation: the realisation of an intention to change career was not measured. Different constraints and opportunities for women and men may result in different outcomes and may contribute to gendered career patterns.

Different opportunities may also suggest why women may be more likely to change career (Brett & Stroh, 1994; Sterrett, 1999) but additional mechanisms may be considered. Nicholson and West (1988) proposed that women have higher growth needs but the findings presented above do not support a significant difference between women and men. While a lack of opportunity for advancement was significant for women in Brett and Stroh’s (1994) study of women managers, growth is not only about increasing social status. Marshall (1989) argued that there are other ways of growing, such as deepening understanding, learning, seeking balance and building communion with others. Such goals may be more typical of women than men but may go unrecognised in organisational life based on male norms of linear progression (ibid.). Miller and Wheeler (1992) found that lack of recognition was more significant for women than for men intending to leave their organisation. While a need to grow was found to be significant for women and men in the current study, it may take different forms and societal structures may recognise and reward some forms over others: the substantial gender pay gap in the UK (GEO, 2006) speaks to different levels of recognition and reward for women and men. Gendered career patterns then may be influenced by social structures which offer different opportunities and constraints, and differentially reward similar motivations in women and men.
In sum, the findings on gender support common motivations of women and men in occupation change but do not contradict evidence of gendered career patterns and behaviours.

6.4.3 Identity Threat

In testing aspects of the self-concept in occupation change, the findings did not support significance contribution by all factors measured. Threat to self-esteem did not emerge as a significant contributor to occupational satisfaction. This was unexpected because a wealth of literature has established the importance of self-esteem to well-being (Rosenberg, 1986; Sedikides & Strube, 1997; Tesser & Martin, 2006). Some writers however have argued that self-esteem may be over-emphasised (Deaux, 1992) and may overshadow other aspects of identity (Vignoles et al., 2002). An alternative explanation in this research context may be that self-esteem is central to identity and threats to self-esteem trigger rapid and effective coping strategies. Breakwell (1986) proposed that coping processes normally operate to mitigate a threat as soon as it enters awareness. Individuals therefore would not spend a prolonged time in a state in which self-esteem was threatened. The protracted process of career change may not work as a coping strategy for threatened self-esteem.

Despite the centrality of self-efficacy to social learning theories (Bandura, 1997), social cognitive career theory (Lent et al., 1994) and career behaviour more generally (Brooks, 1990), threatened self-efficacy in the old occupation was not a significant contributor to occupational satisfaction. Again, rapid response to threat to self-efficacy in the work environment may be part of identity processes operating to protect the self-concept: a prolonged process of occupation change may not be an adequate coping strategy. Where self-efficacy in the occupation is perceived by the individual as lower than feedback from the environment, image management or role playing may be used to sidestep the threat, a possible example of the coping strategy of ‘unreal selves’ proposed by Breakwell (1986). Additionally, processes exist in the work environment external to the individual to resolve problems with self-efficacy where objective measures support a low perception of self-efficacy: low ability in a job will generally result in the organisation moving the person on.
As noted by Betz and Hackett (2006), it is essential to specify the domain of operation for self-efficacy: in Study 2, threats to self-efficacy measured as part of the self-concept related to the old occupation. To my knowledge, only one scholar has measured self-efficacy in the old occupation in considering its relationship to career change: Koob (2002) looked at self-efficacy as part of how the supervisory relationship of therapists in training influences turnover. Study 2 then adds to knowledge on the role in career change of self-efficacy in the old career across a range of occupations.

A second domain of behaviour was also measured for self-efficacy in Study 2: self-efficacy relating to career change in general. A small, significant relationship (.23) was found with action to change career, but became non-significant when perception of a possible self was added to the equation (see Chapter 5, Table 5.4). This contradicts many studies which found self-efficacy relating to career decision making as significant in career decisions (e.g. Giles & Rea, 1999; Nota, Ferrari, Solberg & Soresi, 2007; Rogers, Creed & Glendon, 2008). The difference in findings may result from different measures: self-efficacy regarding career change versus self-efficacy regarding career decisions. An alternative explanation may be that many studies on career decision making have used adolescent participants (e.g. Betz, Klein & Taylor, 1996; Chung, 2002; Dawes, Horan & Hackett, 2000; Gushue, 2006; Quimby & O'Brien, 2004). Self-efficacy may be more salient for such samples than for adult populations, as adults have had more opportunities for experiences to strengthen self-efficacy across a range of behaviours. The findings of Study 2 then have provided new empirical evidence on the involvement of two types of self-efficacy in occupation change.

Threats to belonging had been hypothesised to contribute negatively to occupational satisfaction but the data did not support the hypothesis. ‘Belonging’ as an aspect of the self-concept aligns with social identity theory (Tajfel & Turner, 1979) in viewing identification with particular groups of others as essential to the sense of self. Theoretical perspectives on women’s careers have emphasised the relative importance of relatedness for women, that is, that relationships with others may be more important for women than for men (Gallos, 1989; Marshall, 1989). However,
threats to the principle of belonging were not found to contribute significantly to occupational satisfaction for women or men. Coping strategies proposed by IPT may explain why. Two possible coping strategies are suggested: compartmentalisation, which permits acceptance of a threat to identity by limiting its psychological impact, and anticipatory restructuring, which accepts a threat by beginning a process of restructuring of the self-concept in preparation for further change. Compartmentalisation may permit an individual to accept a lack of belonging at work while maintaining a feeling of belonging in non-work groups. More relevant for career change, anticipatory restructuring may be part of the process of belonging with a new occupational group. This is consistent with the finding in Study 1 of a process of dis-identification occurring in the old occupation, and with the contribution of a possible self to moving to the new occupation. In Study 1, individuals appeared to describe a gap between their sense of self and the old career: “That’s not me”, and to perceive a desired possible self in the new occupation. These processes may have related not only to personal identity but also to social identity, that is, not only to how one sees oneself as an individual but also to how one sees oneself as part of valued social groups (Haslam, 2004). Ibarra (2004) argued that exploration for career change includes becoming part of a new ‘community of practice’. The principle of belonging then may influence action to change career in ways other than through perception of threats and thoughts of changing.

The findings support significant unique contribution of threats to meaning, to a need for growth, to personal goals and to values. These are consistent with theoretical perspectives on the importance of meaning and personal values in career (Hall, 1996; 2004), on the importance of goal pursuit to well-being (Harris et al., 2003; Locke & Latham, 1990) and of a need for growth as a motivating force (Ryan & Deci, 2000). Of these, only meaning has previously been proposed as a motive relating to the self-concept (Vignoles et al., 2002; Vignoles et al., 2006). Further, of the four guiding principles for the self-concept proposed by IPT, with the two additional motives of meaning and belonging (Manzi et al., 2006; Vignoles et al., 2006), only meaning was shown to have significant contribution to occupational satisfaction in a model of occupation change. However, it is argued that IPT and
associated identity motives provided a valuable and necessary framework for exploring the self-concept in career change. While the guiding principles may not all have shown significant contribution, the processes of identity defined in IPT, and the coping strategies in particular, have suggested insights into the psychological processes of occupation change. Future research could usefully explore the relationship of identity motives on other constructs of importance in careers, such as job satisfaction, organisational and occupational commitment, aspirations for promotion, and attitudes to change.

Vignoles et al. (2002, 2006) argued the need for a strong theoretical and empirical case, and conceptual distinctness, to be established before adding further identity motives to the list of six. Identity motives are defined as pressures towards particular identity states which guide the construction of identity (Vignoles et al., 2006). Although personal goals and values were operationalised in Study 2 in the same way as identity motives, they may be conceptualised better as aspects of the content of the self, as proposed in IPT (Breakwell, 1986). A need for growth, however, appears to meet the definition of an identity motive. It was highly salient in the phenomenological accounts in Study 1 and appeared closely related to the sense of self. There is strong theoretical support for its role as a motivating force (Maslow, 1987; Ryan & Deci, 2000), which is consistent with, although does not in itself imply, a role as an identity motive. There is strong empirical evidence for its influence on career change (Cohen & Mallon, 1999; Hackman & Oldham, 1975; Mallon, 1999; Rhodes & Doering, 1993; Roborgh & Stacey, 1986; Wise & Millward, 2005), that is, on a set of behaviours proposed as seeking realisation of the self-concept (Super, 1990). It is not proposed that the studies here yet meet the requirements set down by Vignoles and colleagues, but the results add to a body of evidence suggesting a need for growth as a possible identity motive. Further evidence is required on generality beyond career behaviour, on influence on identity construction and on empirical distinctness from related constructs.

6.4.4 Patterns over Time

The results above examined the patterns over time of three important variables in occupation change, addressing a gap in the literature on the process of change. The
patterns offered insights into the progress of occupation change. Scores on identity threat remained generally stable over the three months of the study, at a level indicating a moderate level of threat. This implied that identity threat persisted over time. Breakwell (1986) proposed identity threat as typically transient, with coping strategies triggered as soon as the threat entered consciousness. However, she also acknowledged that an individual could exist within a threatened state – the evidence here suggested that early stages of career change may be such a threatened state which extended in time. Action to change career may then be seen as potentially identity motivated. An alternative interpretation of a relatively stable measure of identity threat over time is that self-regulation processes may function to maintain perception of threat at a level sufficient to continue to motivate action to change. Chapter 4 noted how perceived threat appeared to facilitate motivation over time. Future longitudinal research could map identity threat over shorter time periods to see if there are fluctuations which are smoothed out over longer periods. Alternatively, longitudinal research which continues until participants are established in their new careers could show whether identity threat then drops to a low level.

Thoughts of changing occupation remained stable at a high level across the sample over the study period, although it had been predicted that this measure would increase over time until career change was achieved. As the mean score for thoughts of changing occupation was high at Time 1 (6.28 out of a possible 7), a ceiling effect may have hindered an increasing measure. Although the $t$-statistic comparing the scores on thoughts of changing at Times 1 and 4 was 0, individual plots showed variation between measurement intervals.

Perception of a possible self was hypothesised to increase over time and this was demonstrated. At an individual level, some individuals appeared to experience wide fluctuations in their perception of a possible self, although for most, the changes were small. This may indicate that many career changers can envisage a possible self and that this perception is maintained, becoming somewhat clearer and stronger over time. For a minority of individuals, however, there is uncertainty and the ‘trying on’ of different possible selves (Ibarra, 2004), many of which are rejected,
giving variation on scores of perception of a possible self. An increasing score on perception of a possible self across measurement intervals during change is consistent with the concept of a possible self as a motivator in occupation change.

6.4.5 Limitations of the Study

Limitations of the study should be considered when interpreting the results. The study used a new operationalisation of identity threat and further empirical support would be needed to corroborate findings.

At Time 4, 97% of the participants were White British so the findings of the causal analyses and the patterns of the main variables over time may not generalise to non-White people. It was not possible to ascertain why non-White participants dropped out of the study. One possible reason may be the structural barriers for minority groups in working life (Swanson & Fouad, 1999) – such barriers may have made it more difficult for non-White people to succeed in changing occupation.

It was noted above that support for directional relationships between identity threat and occupational satisfaction, and between perception of a possible self and action to change career, was moderate rather than strong. In addition to the theoretical reasons which may have contributed, it is suggested that statistical properties of the data set may have weakened the findings. A limitation of the study, as designed to test directional linkages, was the difficulty of determining the causal lag. No previous evidence was found on which to base an appropriate measurement interval: if identity threats contribute negatively to occupational satisfaction, does a threatening event have immediate or delayed effect? If delayed, is the lag hours or weeks? Cohen (1991) explained the weakness of ‘temporal proxies’, that is, measures for which the time period for causal influence cannot be determined: a temporal proxy is not the causal variable and variance from the actual causal variable is not partialled out (Cohen, 1991). Further, if the measurement interval is too short, a causal effect may be missed (Maruyama, 1998). Other difficulties of establishing directionality in real-world designs include the necessity of starting measurement during rather than at the start of a process, the number of observations being limited by practicality and the tendency of many real-world systems towards
equilibrium (Dwyer, 1983). Cohen (1991) acknowledged that demonstrating causality in social psychological data is difficult. In the current study, although support was found for directional relationships, a strong case for causality in career change will be difficult to establish.

6.5 Next Chapter

The qualitative findings from Study 1 on women’s experience of career change were described in Chapter 4. Chapter 5 presented the cross-sectional results from Study 2, which used survey-based data to test hypothesised relationships in a conceptual model of the process of occupation change. This chapter used longitudinal data from Study 2 for causal analysis of the main relationships, and provided more detailed analyses on gender, aspects of identity threat and patterns over time. The next and final chapter will bring together the results from Studies 1 and 2 and discuss how they contribute to understanding of the process of voluntary career change.
Chapter 7 Discussion and Implications

7.1 Summary and Outline of Chapter

The aims of the research programme were to investigate the experience and process of voluntary occupation change, in order to
- enrich understanding of the experiences involved
- add to theoretical knowledge on the psychological processes involved
- contribute to the limited empirical base on voluntary career change
- provide additional knowledge and understanding about the lived experience of occupation change for individuals thinking about changing career, and
- make practical suggestions for career counselling of adults changing occupation or approaching any major career change.

The review of the career literature found relatively little theoretical understanding of voluntary occupation change, and limited empirical research. To address such gaps, the research began with an exploratory study. A qualitative methodology was used to investigate accounts of occupation change. Themes relating to the self-concept and identity and to emotion were salient. The data also afforded insights into career decision making in real life. The second study used a quantitative approach to test specific relationships suggested in Study 1 in cross-sectional and longitudinal data. Most hypotheses were supported and the findings aligned with theory.

It is argued that the research makes empirical, theoretical, methodological and practical contributions to the existing literature. This chapter discusses the contributions in turn, relating the findings to existing theory and research, developing the implications of the findings and suggesting how the objectives of the research are met and the existing literature extended. The three main areas of contribution are suggested to be the self-concept and identity, emotion, and decision making, and these are used as subheadings in the discussion below where appropriate. After addressing the contributions of the research, the research process as a whole is considered, limitations identified and possibilities for future work suggested.
How the studies and findings contribute to the empirical base is considered first.

7.2 Empirical Contribution

7.2.1 Empirical Contribution on Self-concept and Identity

In the first study, a number of factors which the participants described as contributing to their occupation change seemed to coalesce around identity needs. The need for realising one’s potential, for recognition, for meaning, for advancing in life, for intellectual stimulation and challenge were all evident in their stories, and these were interpreted as relating to the self-concept. Across all of the accounts, it seemed that the participants felt that their old occupation no longer met their identity needs. In short, participants appeared to have begun to dis-identify with their old occupation, to experience their old occupation as ‘not me’. In the second study, identity threat was operationalised using the guiding principles of the self-concept defined in Identity Process Theory, extended with additional aspects of identity based on the themes from Study 1. The full set of aspects was: self-esteem, continuity, distinctiveness, self-efficacy, meaning, belonging, a need for growth, personal goals and personal values. The data supported the proposition that identity threat can account in part for thoughts of changing occupation, and the longitudinal analysis provided support for a postulated causal linkage. The studies thus demonstrated that identity threat may be a contributory factor in accounting for voluntary occupation change.

In Study 1, a possible self was a salient theme in the accounts and appeared to function as a motivational force. In Study 2, the construct of a possible self had a significant and directional relationship with actions to change occupation. The studies thus support the proposition that envisaging a clear possible self may contribute to actual career change.

It is proposed that the research represents the first quantitative study to demonstrate the involvement of the self-concept in career change. Although previous studies had suggested factors were involved in change, which could be interpreted as aspects of the self-concept, the factors were not conceptualised as aspects of the self: Lee and
Mitchell’s (1994) image violations and Cohen and Mallon’s (1999) lack of growth and clash of values were examples of such factors. A role for provisional or possible selves in contributing to finding a new career was proposed by Ibarra (1999, 2004) and supported in her qualitative studies. The findings here extend this proposal by providing both qualitative and quantitative support, and by showing evidence of a directional relationship between perception of a possible self and acting to change occupation.

The studies additionally add to previous research by demonstrating no significant difference in the influence of the self-concept on occupation change for women and men. Although many writers considered similarities and differences between the experience of careers for men and women (e.g. Astin, 1984; Goffee & Nicholson, 1994; Marshall, 1989), it is proposed that these studies represent the first empirical comparison by gender of the contribution of the self-concept to voluntary occupation change.

7.2.2 Empirical Contribution on Emotion

In the accounts of change in Study 1, strongly negative emotions such as unhappiness and frustration were salient in making sense of the change. These negative emotions appeared to relate not only to the old job, but to the entire occupation or industry, despite recognition by participants of positive aspects of the old occupation. In moving through change, the stories emphasised the positive emotions experienced early in encounters with the new occupation: passion and enjoyment were salient and appeared to facilitate the selection of the new occupation and the effort needed to achieve it. Study 2 confirmed a relationship between emotion and occupational satisfaction, although with positive rather than negative emotion, and demonstrated a weak relationship between positive emotions and actions to change occupation in these data. The findings of Study 2 on emotion were therefore inconclusive. However, it is proposed that they contribute to the career literature in providing the first empirical investigation of specific roles for emotion as part of the process of voluntary occupation change.
7.2.3 Empirical Contribution on Decision Making

In Study 1, the accounts did not show a systematic, information-based approach to career change. Rather the decision making appeared to be fluid, contextual and opportunistic. This study thus supported many proposals over the last two decades for an extended, other-than-rational approach to decision making. Although many scholars have argued against a purely systematic process based on their knowledge of real-world decision making (Amundson, 1995; Beach & Connolly, 2005; Gelatt, 1989; Krieshok, 1998), few offered empirical support: Study 1 contributed to the literature by addressing this gap. Although Study 2 did not find support for a path to action to change occupation omitting search behaviour, the findings pointed to better ways of testing the assumptions of rational models of decision making in future research. Taken overall, the findings argue for an extended perspective on career decision making, in which the contribution of the self, emotion and action are recognised.

The studies thus achieved the aim of the research programme, in contributing to the limited empirical base on voluntary career change by providing evidence for specific roles for the self-concept and for emotion, and by suggesting the possibility of non-systematic paths of decision making.

7.3 Theoretical Contribution

7.3.1 Theoretical Contribution on Self-concept and Identity

It is argued that the research programme makes theoretical contribution to the career literature in the area of self-concept and identity by:

- focusing on the theoretical construct of the self-concept
- applying Identity Process Theory as a framework for conceptualising the self-concept in career change
- extending this framework by considering a need to grow as a self-related concept in career
- identifying a gap on motivational drivers in career change and suggesting a possible self as a potential motivator.
These contributions will now be discussed in turn.

7.3.1.1 The Self-Concept in Career Change

The involvement of the self-concept and identity in careers has long been acknowledged. As described in Chapter 2, Super’s (1957) argument for career as the realisation of the self-concept has not been disputed in the decades of research since. Professional identity, work identity, organisational and occupational identity have been explored across a wide variety of occupations and individuals (Hasse, 2008; Janssens, Cappellen & Zanoni, 2006; Pratt, Rockmann & Kaufmann, 2006; Ryan & Kossek, 2008; Witt, Patti & Farmer, 2002). Careers have been positioned as identity projects (Grey, 1994) and continue to be seen as sources of self-actualisation (Hall, 2004). Although investment of the self in work is not universal, work is argued to offer the potential to fulfil identity needs (Sverko & Vizek-Vidovic, 1995), including self-esteem, status, reputation and recognition (Gowler & Legge, 1989). Most career theories agree on the centrality of aspects of the self and identity, including self-esteem, self-efficacy, values, needs, goals and motives, but the definitions of constructs have been imprecise or ambiguous, not based on the theoretical literature (Blustein & Noumair, 1996; Gottfredson, 1985; Pryor, 1985; Vondracek, 1992) and, if specified, typically defined in relational terms (Pryor, 1985).

Despite the apparently uncontested centrality of the self-concept in career (Super, 1957, 1990), very little research has attempted to draw on the existing psychological literature to provide a sound theoretical basis for understanding this construct (Pryor, 1985). The research here focused on the self-concept and sought a theoretical framework from outside the career literature which could offer an extensive and integrated conceptualisation. A theoretical spotlight on the self, at a time of increasing instability in careers (Mirvis & Hall, 1994), aligns with late- and post-modern perspectives on identity which suggest an increasing focus on the self as a source of meaning as a way of dealing with increased experience of change and uncertainty (Gergen, 1991; Giddens, 1991). A theoretical contribution of the research is its focus on the construct of the self-concept.
7.3.1.2 Application of Identity Process Theory

The investment of the self in work, and identification with occupation or organisation, necessitates a process of dis-identification as an early stage of change. This process was in evidence in the sense-making of the participants in Study 1. Dis-identification with the old occupation could be linked with unfulfilled identity needs such as lack of recognition, lack of opportunity to develop and undermined self-esteem. The salience of identity issues suggested the applicability of Identity Process Theory (IPT) to understanding occupation change.

It is argued that IPT advances understanding of occupation change in three major ways. Firstly, its conceptualisation of both process and content of the self-concept offers a dynamic elaboration of a construct that has frequently been implicitly static in career theory. Super (1990) proposed that self-concepts became increasingly stable from young adulthood and Holland’s (1985) vocational personality represented a fixed characterisation of the individual. Secondly, given the evidence for identity threat as a trigger for occupation change, the strategies proposed in IPT for coping with identity threat describe possible psychological processes involved in dealing with change. Career change itself can be seen as action to resolve identity threat and coping strategies suggest additional psychological processes which may be part of changing. Among the intra-psychic processes for coping with identity threat described by Breakwell (1986) were reconstrual, reattribution and deflection strategies. These coping processes obviate the need for change in the identity structure. However, for identity change, acceptance mechanisms which update the identity structure are required. The investment of the self in career means that, by definition, radical career change involves identity change. Accordingly, in the successful occupation changes in Study 1, acceptance as well as deflection strategies were in evidence (see Section 4.4.1.2). It can be proposed that successful occupation change may involve a mix of coping strategies, and that deflection strategies may in fact be part of the normal change process. Difficulties in making a desired career change on the other hand may result from a failure to move from deflection to acceptance.
The third major contribution of IPT to understanding occupation change is its specification of the guiding principles of operation of identity: self-esteem, distinctiveness, continuity, self-efficacy, meaning and belonging (Breakwell, 1986, 1993; Vignoles et al., 2006). These offer a framework for anchoring understanding of identity processes in the context of career change, and afford testable hypotheses for the involvement of aspects of the self-concept in occupation change.

### 7.3.1.3 Additional Aspects of the Self

Despite the valuable insights that IPT offers for understanding processes of occupation change, it is not the full story. Other psychological processes that are part of changing career are not captured by IPT. Breakwell (1988) suggested that self-esteem needs may function to motivate people to seek out particular experiences but this does not explain behaviour such as career change, in which self-esteem may be put at risk. A threat to meaning may motivate behaviour such as occupation change as a means of re-establishing meaningful activity. But human behaviour is not only reactive, and not only concerned with protecting the self. Conceptualisation of the self-concept requires a mechanism to support the need for growth, development and self-realisation: intrinsic human motivations argued by many writers (Dweck & Molden, 2005; Maslow, 1987; Ryan & Deci, 2000; Summers-Effler, 2004). Pyszczynski, Greenberg and Solomon (2000) argued that self-esteem and self-efficacy are defensive in nature, protecting the individual against existential fears. This argument can be extended to the other guiding principles of IPT: meaning may be defensive against existential fears of meaninglessness; continuity may be defensive against fragmentation of the self; distinctiveness may be defensive against lack of autonomy; belonging may be defensive against isolation, as Leary (2004) suggested. The principles of IPT may therefore be defensive not just in the breach but in nature, perhaps as an outcome of the formulation of IPT as a framework for understanding coping with threat (Breakwell, 1986). Pyszczynski and colleagues proposed a need for a dialectical interaction between growth and defence. The self-concept as defined in IPT could be extended to incorporate growth.

In Chapter 6, Section 6.4.1, a need to grow was suggested as an additional guiding principle of the self-concept. The dominance of this factor in the analyses argues for
its pertinence to the self-concept in a work context. Although it could be argued that a need for growth is likely to be salient in voluntary career change and may be context-specific, theoretical perspectives on growth (Dweck & Molden, 2005; Maslow, 1987; Pyszczynski et al., 2000; Ryan & Deci, 2000; Summers-Effler, 2004) suggest a more general motivation. IPT was proposed as a framework describing structures and processes which developed over time (Breakwell, 1986) and learning was proposed as the mechanism for development. While learning from experience of interaction between the self-concept and its environment can clearly lead to development of the self-concept, this appears to be a reactive perspective. There is scope for inclusion of purposeful or motivated processes. A need for growth as a principle of self-concept could suggest a mechanism for proactive development of the self-concept. As discussed in Chapter 6, Vignoles and colleagues (2002, 2006) have argued the need for a strong theoretical and empirical case to be established before adding further identity motives to the list of six, and it was suggested that the findings here can be seen as providing initial evidence for a need for growth as a possible identity motive. This research therefore contributes to theoretical understanding of the involvement of the self-concept in occupation change, and potentially to identity motivation more generally.

7.3.1.4 A Possible Self as Motivator

However, broader questions of motivation remain, even with a conceptualisation of self-concept extended to include the need for growth. How does an individual decide on a new occupation and pursue this goal over time? The involvement of the self in career behaviour provides a potential answer. If a threatened identity triggers thoughts of changing occupation, a desired outcome should be a supported self-concept, and this speaks to the idea of a possible self as a motivational goal (Markus & Nurius, 1986).

The qualitative study showed that people do not always have a goal to pursue when they embark on career change: Diane’s statement: “I knew I wanted something to change but I wasn’t sure what” exemplifies an early stage of change marked by the absence of a specific goal. One function of the process of career change, therefore, may be to establish a desired goal. Ibarra’s (1999) research on people changing
career led her to argue that action can come before planning, that starting without a clear goal can be constructive in allowing the gradual development of a new working identity. She saw the development of a new possible self as essential for successful career change. A function, perhaps for some people the function, of career exploration is to identify a desired new possible self to pursue.

There are multiple possible selves an individual could choose to consider (Ibarra, 2004; Markus & Nurius, 1986): the findings from this research suggest that a desired possible self must support the self-concept. Factor analysis of the measurement of a possible self found a single factor (Section 5.2.3), suggesting that a possible self may be a simplified matching template, in which a new self-concept is recognisable but not highly differentiated as the current self-concept is likely to be. If the self-concept is a continuously running operation in which processes modify and maintain content and structure, a possible self may represent a snap-shot in time of how the operation could look. A possible self is likely to meet the requirements of the guiding principles of identity processes, and to match salient identity content, such as values and goals. This suggests how multiple possible selves are possible, in that values and goals may be satisfied in a number of ways which comply with the guiding principles. Careers then appear to instantiate the principle of equifinality, that multiple outcomes may equally satisfy one goal (DeShon & Gillespie, 2005). Yost and Strube (1992) noted that the theory of motivational possible selves did not explain how, out of the multiple alternatives, one possible self is selected and this is addressed after the presentation of a model of career decision making in Section 7.3.3 below.

In summary, the studies contribute theoretically to the literature on career change by focusing on the theoretical construct of the self-concept, by applying Identity Process Theory as a conceptual framework, by extending this framework to consider a need for growth and by suggesting a possible self as a potential motivator.

### 7.3.2 Theoretical Contribution on Emotion

The research further contributes to the career literature by suggesting a theoretical role for emotions in voluntary occupation change. The proposal that negative
emotions contribute to initial career change cognitions and that positive emotions may facilitate moving to a new occupation have strong theoretical support. Close links between identities and emotion have been proposed (Burke, 2004; Frijda, 1999; Stryker, 2004). Discrepancies between an identity and feedback from the environment are likely to generate negative emotion, which may trigger action to resolve the discrepancy (Burke, 2004). Breakwell (1986, p. 192) postulated that an identity threat must be consciously experienced in order to trigger action and it can be suggested that negative emotions serve to bring identity threat into conscious awareness. The function of negative emotion as a communication, particularly of a problem that requires addressing, is widely agreed (Baumeister, 1991; Burke, 2004; Johnson-Laird & Oatley, 2004; Lazarus, 1991b). The proposal that negative emotion contributes to occupation change is consistent with existing theoretical perspectives. The findings of Study 2, that positive emotion rather than negative emotion had a significant relationship with occupational satisfaction, suggest a need for further research to examine whether the absence of positive emotions, or a different operationalisation of negative emotions, can support this theoretical linkage.

Positive emotions around the new occupation, including passion and enjoyment, were salient in the stories of occupation change in Study 1, and showed a weak relationship to occupation change behaviour in Study 2. The findings support theory and research on the importance of positive affect in goal-directed behaviour. Davidson (1998) found neurological evidence for the benefits of positive emotions in reinforcing action towards goals. Louro, Pieters and Zeelenberg (2007) proposed that positive emotions increase effort towards a goal by diverting attention and effort away from other competing goals. Cognitive-based theories suggest how positive emotions may facilitate achievement of goals. Emotions may influence beliefs (Frijda & Mesquita, 2000) so strong positive emotions, such as passion for the new occupation, may generate or reinforce beliefs about the suitability and desirability of the new occupation. Linking this with Neisser’s (1976) concept of the schema-driven perceptual cycle, in which active schema direct attention in the environment and data from the environment influence the schema, positive emotions may increasingly focus attention on those aspects of the situation which offer evidence to support beliefs. The intensity of emotion indicates the importance to the individual
(Clore & Schnall, 2005) so passion for the new occupation is likely to be perceived as strong evidence for the desirability of the goal. The proposal that positive emotion contributes to occupation change by facilitating goal-directed action is consistent with existing theoretical perspectives.

More generally, the findings link to recent perspectives on emotion which suggest that affective and cognitive processes are related in a number of ways. The valence of emotion may influence cognition differently, with negative affect increasing bottom-up accommodation processing, and positive affect leading to more top-down assimilative processing (Clore, Wyer, Dienes, Gaspar, Gohm & Isbell, 2001). Positive emotion can facilitate creative problem-solving (Isen, 2001), which may help the identification and pursuit of a new occupation. Emotions are sources of information (Clore & Storbeck, 2006) and are intrinsically related to cognition, including appraisal (Lazarus, 1991a,b). Further, emotion has been related to action. Although beliefs may operate to facilitate action towards a goal, emotion may be necessary to trigger action (Frijda et al., 2000). Crawford et al. (1992) defined emotion as including behaviour so affect ties together identity, cognition and action.

Addressing the very limited consideration of emotion in careers research (Arnold, 2002; Kidd, 1998; Nicholson & West, 1989), the studies here, it is suggested, contribute a greater theoretical understanding of how emotions may influence occupation change.

7.3.3 Theoretical Contribution on Decision Making

The literature on career decision making has been dominated by rational models, based on some form of expected utility (Phillips, 1997), and is exemplified in DOTS, the framework for career guidance in the UK from 1977 to today (McCash, 2006). As such, theories of career decision making may be seen to have suffered from what Gigerenzer called “tools-as-theories”. Gigerenzer (1991) argued that the dominant methods in psychology could be seen to have influenced directly the content of some psychological theory. It is argued that rational models of career decision making have been influenced by a positivist perspective in psychological research.
Rational models of career decision making follow a logical positivist approach which isolates the individual from the environment (McCash, 2006) and requires an objective process in which the outcome is quantifiable and can be evaluated with reference to predetermined thresholds (Danziger, 1990). Just as positivist research is evaluated in part on its faithfulness to the normative process (Danziger, 1990; Walsh-Bowers, 1999), career decision making has been judged on its adherence to the rational model (Brown, 1990; Gati, 1986; Gati & Asher, 2001; Gelatt, 1962; Janis & Mann, 1977). In a paper which neatly exemplified Gigerenzer’s argument, Gelatt (1989) explained how his model of rational career decision making of 1962 was based in ‘old science’ and his new model of positive uncertainty was in line with new science. Critical psychology has opened up new perspectives on theory and research, and the influence of time, culture or prevailing methodological paradigm can be recognised. The new psychological methods that have become established over the last 20 years, particularly qualitative methods, offer insights that provide a broader perspective on human functioning than that offered by a logical positivist tradition alone.

The mixed-method findings here argue for an extended perspective on career decision making, in which the contribution of the self, emotion and action are recognised. It is argued that career decision making is not always systematic. The extension of decision making to include other-than-rational processes does not discount models such as the PIC (Gati & Asher, 2001) but posits that such models do not describe the only way in which decision making can be successful. The findings from the first study support many proposals over the last two decades for an extended, other-than-rational approach to decision making. The remainder of this section proposes a model of career decision making and describes how the empirical results from the two studies, and theory and research in the literature, support it.

Building on Amundson’s (1995) interactive model, an action-affect-cognition (AAC) framework of decision making in career change is proposed. The salient features of this framework are illustrated in Figure 7.1.
Figure 7.1 Action-affect-cognition framework for decision making in occupation change

Drawing also on the systems framework of McMahon and Patton (1995), the AAC framework assumes that many factors may contribute to the context of career decisions, including environmental factors such as the economy and individual factors such as the self-concept. A threatened identity would constitute a determining context for career action, in Amundson’s terms. As in the interactive model, contexts and actions are mutually influencing: strategies for coping with a threatened identity, other than career change, could mitigate the threat, for example. A first difference from Amundson’s model is the proposal that actions may be executed without conceptualization of a career-related problem. Contexts may influence action directly: taking an opportunity to pursue a hobby was an example from the first study. The framework recognizes such non-career-directed actions as planless behaviour, and further that action may not have conscious precedents (Krieshok, 1998). The interactive model suggests that actions may shape subsequent
cognitions. The AAC framework extends this reciprocal relationship to include affect. Actions may influence and be influenced by emotions as well as cognitions, and cognitions and emotions are likewise mutually influencing.

A parallel cycle of action-affect-cognition is proposed for planned action. Although these two cycles are depicted separately, they may not be distinct. An individual may move between one cycle and the other: a planless cycle may become planned. In Study 1, one participant studied a complementary therapy for interest and later realized it was a viable career option which she then pursued. Equally, planned actions may not achieve the desired result and an individual can revert to planless action. The action-affect-cognition cycles contribute to, and are affected by, processes of self-regulation. Self-regulation, the management of emotion, cognition and behaviour in pursuit of a goal (Carver, 2004; Higgins & Spiegel, 2004), is likely to benefit directly from positive emotions resulting from action. Negative emotions resulting from action may require management by self-regulation processes. Cognitive outcomes too may impact self-regulation. Identifying a new possible self as a cognitive outcome of action may also aid self-regulation, by providing a motivational goal (Ibarra, 2004).

Emotion is intrinsic to the process and theoretical perspectives on emotion suggest a number of ways in which affect may influence cognition and action. The possible role of negative emotion in signalling an unverified identity has already been discussed and further specific ways in which positive affect may influence the process of career decision making proposed here can be considered. Positive emotions as information (Clore & Storbeck, 2006) may suggest a career path to follow. Positive affect can facilitate action by stimulating exploration (Fredrickson, 1998; Isen, 2001), so actions which open up career opportunities become more likely. Further, positive emotions can enhance cognition by facilitating flexible thinking (Fredrickson, 1998; Isen, 2001) so new career options and opportunities may be more readily recognized. Positive emotions can aid emotional self-regulation by alleviating the negative emotions associated with facing a major decision (Janis & Mann, 1977) and by enhancing positive self-evaluation and perceived resources (Taylor & Brown, 1988). Emotions may influence decisions and actions not only
through feelings at the time of the decision but also through anticipation of future emotions resulting from the consequences of the decision (Loewenstein & Lerner, 2003). Expected emotions such as enjoyment and satisfaction in a new occupation may guide action towards that choice of occupation. In fact, emotions may not only guide action but may be essential triggers for motivated behaviour (Frijda et al., 2000). Although appraisal theories of emotion suggest that affect and cognition are often closely aligned (see Scherer, Schorr, & Johnstone, 2001), when the two diverge, emotion often overpowers reason (Loewenstein, Weber, Hsee, & Welch, 2001).

In addition to clarifying the role of emotion, the AAC framework also proposes self-regulation as critical in decision making. Existing models of career decision making assume that the process concludes with execution of the decision (Peterson et al., 1996) or selection of a choice (Gati & Asher, 2001). The AAC framework however proposes a process which extends beyond choosing between options. In an analogous manner, models relating to change, such as the transtheoretical model (Prochaska et al., 1992) and planned action (Fishbein & Ajzen, 1975), have been criticised for assuming that once behaviour is changed, the change is simply maintained over time (Rothman et al., 2004). The AAC framework addresses an equivalent criticism of decision making models, positing self-regulation as an essential subprocess: a career decision typically cannot be realised without self-regulatory processes managing behaviour, cognition and emotion towards a goal.

Further, the framework suggests how a possible self may be selected as part of career decision making. In short, through planned or planless action, the context may afford a possible self which is recognised as having the potential to match salient content, and comply with the guiding principles, of the self-concept. Self-regulatory processes, such as building certainty, then operate to bolster and focus resources on the choice. Once chosen as a goal, relevant coping strategies within the self-concept begin to operate in preparation for change: in particular, those processes involved in acceptance start to update the structure or content of the self-concept through assimilation or accommodation. These then may be the psychological processes underpinning Ibarra’s argument for the need for gradual development of a
new identity as part of career change. A possible self then functions as a motivational goal, pulling identity change in its direction. Many psychologists have argued that a key task of adulthood is making an identity (e.g. Bruner, 1986; Gregg, 1991; Shotter & Gergen, 1989; Smith-Lovin, 2003): the choice and pursuit of desired possible selves can serve this work.

The action-affect-cognition framework aligns with a number of existing perspectives on decision making. Beach and Connolly (2005) noted that the concept of a decision as happening at one point in time is merely “a useful fiction” and the AAC framework instantiates their notion of decision making feeling its way along. The centrality of action (Ibarra, 2004; Young & Valach, 2000) is recognized, as are the influence of context and the unpredictability of outcomes {Amundson, 1995 533 /id;Bright, 2004 1 /id;Gelatt, 1989 388 /id;McMahon, 1995 560 /id;Mitchell, 1999 508 /id}. The framework is proposed as an extended model of career decision making that offers a more complete representation of the individual within career contexts, as proactive, motivated, feeling, learning and thinking. The need for such an integrated perspective is best expressed in Vygotsky’s words: “The affective and volitional tendency stands behind thought. Only here do we find the answer to the final ‘why’ in the analysis of thinking” (Vygotsky, 1934/1987, p.282).

Overall, the AAC framework integrates a range of other-than-rational perspectives with recent theoretical progress on emotion and adds to previous models by positing self-regulation as a necessary subprocess.

The research programme is argued to contribute to the theoretical development of the process of decision making in voluntary occupation change by proposing a new model of decision making.

7.4 Methodological Contribution

The choice of methods and the design of the research programme contribute to the career literature in a number of ways. Firstly, by using mixed methods, the results provide a rich description of real-life decision making in voluntary career change and also test hypothesised relationships. This is an important contribution because of
the limited research on occupation change, and the particularly limited qualitative data (Cohen & Mallon, 1999; Mallon, 1999). The combination permitted insights into the non-systematic aspects of the career change process, which the quantitative study alone may not have generated. The methodologies helped to achieve the research aim of enriching understanding of the experiences involved. Secondly, by collecting longitudinal data, patterns of change of the main variables over time could be described and directional relationships could be investigated. In addition to adding to a limited set of longitudinal studies on career change, using cross-sectional and longitudinal data is expected to reduce common method bias (Hom & Griffeth, 1991). Thirdly, the current studies sampled a wider range of occupations than previous research, which has tended to focus on management and professional occupations (Arthur, 1994; Cohen et al. 2004; Sullivan, 1999). Earlier models of turnover have used specific occupations, such as teachers (Rhodes & Doering, 1983, 1993) and nurses (Hom & Griffeth, 1991). Study 1 focused on women, countering the dominant pattern of career research (Gallos, 1989; Marshall, 1989; Pringle & Mallon, 2003). Further, the accounts of women who had interrupted their paid working career in Study 1, and of unwaged categories in Study 2, meant that the androcentric assumptions of continuous paid employment were avoided. Finally, it is proposed that the studies represented a first attempt to operationalise identity threat in career. Although these contributions may also be seen as empirical, it is proposed that the design of the research programme to use qualitative and quantitative methods, cross-sectional and longitudinal data, a broad sample of occupations and a new operationalisation also represents methodological advances in the study of careers.

7.5 Practical Contribution

The research findings offer practical contributions, relating to career management, to the individual and within the context of career counselling.

7.5.1 Practical Contribution for Career Management

The model of career decision making discussed above, together with considerations of the self-concept and of emotion, offer an elaborated perspective on career
management. To date, occupational satisfaction commonly has been assumed to be sufficient to capture people’s attitudes to their career (Heslin, 2005) but this research programme points to a broader perspective, including the relevance of affect and of the self-concept. Although affect may guide cognitions and attitudes (Frijda et al., 2000), its impact may not be recognised (Salovey et al., 2000). Affect then, whilst influential on career change, may not be recognised or acknowledged for the role it plays. The self-concept, long acknowledged as part of career decision making (Super, 1957), is shown to be integral to career behaviour, potentially triggering action. The self-concept, and desired possible selves in particular, suggest salient motivational forces (Breakwell, 1993). The model of career decision making based on the research here proposes a more fully integrated perspective of the person, with affective, cognitive and conative processes guiding career behaviour. This wider perspective is consistent with the enacted nature of career (Arthur et al., 1999; Weick, 1996). In agreement with Arnold (2002), the findings suggest that successful career management now requires adaptability and resilience or self-regulation, but they contradict Arnold’s view that the ability to identify future career opportunities is also necessarily important. Rather, it is argued that adaptability that is both reactive and proactive, that recognises the needs of identity and the information provided by emotion, may be the primary skill for successful career management.

The research may contribute to understanding of careers at societal level. The findings suggest that people may make career decisions in order to grow and develop so learning may be increasingly important as careers are enacted by individuals. Organisations and professional bodies may need to provide more, and broader, opportunities for development to retain people. Goffee and Nicholson (1994) suggested that younger managers want variety and challenge more than status. This idea has been picked up by many writers on career management in organisations (e.g. A&DC, 2009) as the needs of ‘Generation Y’, that is, workers born after 1977. However, the findings here suggest that these needs may be general rather than cohort-specific.

The research may also contribute to the understanding of behaviour at work beyond career change. The rupture of career change has brought to light different aspects of
cognition, emotion and the experience of the self in the work context. These findings suggest potential influences on aspects of workplace behaviour other than occupation change: Chapter 5 briefly considered expectations within psychological contracts and relationships with supervisors and co-workers. The framework of IPT in particular, as well as the evidence for the influence of emotions on career behaviour, offers the potential for further insights into work-related behaviour emerging from research on career change.

7.5.2 Practical Contribution for the Individual

A stated aim of the research programme was to provide additional knowledge and understanding about the lived experience of career change for individuals thinking about changing career. This section describes how the findings from the research provide knowledge of potential use to such individuals.

Individuals’ career behaviour depends on their thoughts, beliefs, feelings and the sort of person they want to be. Feelings of enjoyment and interest may motivate. The image of who we could be may inspire us. Thinking, feeling and identity are based on experience and are continuously negotiated within the environment. Not only are these psychological processes influenced by context, they in turn affect the environment. Successful career management requires reflection and awareness of one’s thinking and feeling about the chances and barriers in the environment, and about oneself. To know that a career is not necessarily a well-trodden path, that many careers are made up as we go along, can free thinking and encourage active responsibility. To know that feelings and intuitions can be useful guides can encourage emotional awareness. To know that a desired possible self can be part of deciding on a new career can suggest a criterion for selection. Particularly important is recognition of the context of career decisions, and the need for continuous adaptation as the context changes. The changing environment can offer opportunities and this awareness can increase sensitivity to the chances and possibilities and to the improvised nature of careers. Most people will be aware that career decision making does not end with selection of a new career, and that realising a career decision takes time. Awareness of the need for self-regulation over
time, and of strategies and emotions that can facilitate self-regulation, may enhance abilities to augment the decision and to persist in pursuing a goal.

7.5.3 Practical Contribution for Career Counselling

The research programme aimed to make practical suggestions for career counselling of adults changing occupation or approaching any major career change. This section outlines some considerations for counselling, based on the research findings.

The findings suggest that a phenomenological approach is essential to elucidate the client’s framing of the problem and determining contexts (Amundson, 1995). In particular, the aspects of the self-concept involved in a move to change career, or the possible selves considered, can only emerge from an approach to counselling in which the client is given the opportunity to make sense of his/her situation. Amundson proposed the use of metaphors to help exploration of the problem context. A narrative approach could also be appropriate. In a narrative approach, the client is encouraged to create and change stories: about the work history so far, about thinking of changing or about possible or ideal new careers (McLeod, 1996). In generating a narrative, the individual can understand or create identity (Coyle, 1992; Savickas, 2001) and explore possible selves.

The counsellor can encourage the client to seek informational value in emotions about old or new career. This is often done informally with ‘time line’ and similar exercises in which the client describes high and low points of earlier work history. The research here has suggested that both negative and positive emotions may influence career decisions, with the implication that clients’ feelings about their jobs or occupations may be hidden sources of information to be identified and explored. Investigation of these feelings may help to explain appraisals of work situations or actions taken. Strong negative feelings are likely to require resolution. The counsellor can discuss with the client how emotions can act as heuristics in decision making (Johnson-Laird & Oatley, 2004). Cohen (2003) suggested the use of guided imagery in assessing a new career: this could help to evoke informational emotions and to assess a new possible self.
Systematic decision making may be of use to clients but the counsellor can also discuss alternative approaches to career decisions. Most people most of the time change without recourse to professional help (Prochaska et al., 1992) so most successful career changes are made without a formal, systematic process of decision making. Clients can be encouraged to use existing action or to take additional action as a way of finding out more. The results here showed that a systematic search for a new occupation was not the only way people approached a change, and that action – even if not career-related – could provide information through affect, self-efficacy and identity. As Ibarra (2004) noted, taking action is not the same as committing to a new occupation. It can be part of moving towards change and may help to determine the desired direction without closing down options. Positioning occupation change as a search for a desired possible self can lead to viewing both focused search behaviour and wider life experience as ways forward. Recognition of equifinality in careers can help avoid exhaustive search for the right career.

Career change takes time and requires ongoing motivation. The career counsellor should ensure the client is aware of the need for long-term commitment and the likelihood of fluctuating emotions. The counsellor could work with the client on motivational and self-regulatory strategies, especially those which require the client to invest in the outcome, or which enhance positive affect.

Problems in dealing with change may be the result of dysfunctional coping strategies for identity threat. As discussed in Section 7.3.1, successful change requires moving to acceptance mechanisms in the self-concept. Individuals who find change difficult may tend towards deflection coping processes, such as denial or abdication of responsibility. Breakwell (1986) suggested that a suboptimal coping strategy will tend to persist until the context changes. This is where counselling can help. Where individuals’ narratives suggest this may be the case, counselling could focus on challenging the current interpretations – the perception of lack of control or the denial of change, for example – and on anticipatory cognitive restructuring by discussing a future self. The value dimension of the current or future contents of identity could also be explored: re-evaluation of the relative salience of identity contents could facilitate successful change. The objective would be to allow the
individual to see how s/he could become the new self that the context will require, in order to attain fundamental change in the structure or content of the self-concept.

7.6 Limitations of the Research Programme

Specific limitations of both studies were addressed in earlier chapters. This section considers limitations of the research programme more generally.

7.6.1 Sample and Design

Although a strength of this research has been the wider range of occupations considered, the majority of participants in both studies were graduates. A survey of over 5,000 UK adults (McNair, et al., 2004) noted different factors involved in change for qualified (any formal qualification from training or education) versus unqualified adults. They found that 30% of people with qualifications who made a career change cited gaining an increased level of challenge as a motivator, as against 16% of unqualified workers, and 25% of qualified employees changed to develop new skills compared to 6% of unqualified workers. The findings here of influences on occupation change may be less pertinent for unqualified employees.

In the design of the research, the focus on voluntary career change may have limited the findings to white-collar workers. An individual who chooses to change career may be expected to have opportunities potentially available to them and knowledge of those opportunities, the ability and desire to undertake formal training, self-efficacy to make the change and the financial support necessary to maintain an acceptable standard of living for him/herself and dependents until fully established in the new career. In all of these areas, blue-collar workers may face higher barriers than white-collar workers. Although Study 1 included one blue-collar worker and twenty per cent of the sample in Study 2 were blue-collar or skilled technical workers, it is possible that the focus on voluntary career change means the findings are more representative of the experiences of white-collar workers.

In Study 1, three of the eight participants had studied psychology, albeit at different institutions. Although it is possible that this may have influenced their
accounts, the participants did not refer to this background and no references to psychological theories were evident. It is possible that their study of psychology had led them to interpret their experiences in ways that other people would not. In Study 2, participants were recruited through an occupational psychology forum: this was estimated as a very small proportion of participants. Most participants joined the study from advertising in universities: the possible limitations of this sampling are outlined above. It is not possible to determine whether the sample may have responded consistently differently than the general population, but the findings should be considered in light of the recruitment pool.

Reflecting on the overall research design, the mixed method of a qualitative study followed by a quantitative, cross-sectional and longitudinal survey was a challenging approach. While the qualitative approach proved highly useful for exploration, moving from participants’ themes to operationally defined constructs for the second study was difficult. Some of the richness was, of necessity, lost and obtaining a good match between constructs already operationalised in the literature and themes from real-life was in some cases challenging. Design of the second study required a balance between investigation of many relationships and a questionnaire of practical length that would not deter potential participants. In both studies, the wealth of data meant that analysis was protracted. Although this was appropriate for an exploratory research programme, a slightly more restricted focus could have been adopted in order to complete the research in a shorter timescale.

### 7.6.2 Measures

The quantitative study provided what is proposed to be the first operationalisation of identity threat in careers but limitations of the measures should be acknowledged. In seeking to measure a dynamic process, snapshot measures of identity can only ever be partial. The use of self-report assumes that the individual has access to all facets of the self-concept (Breakwell, 1992). The operationalisation was based on theoretical aspects and each was measured by a small number of items. A more robust measure would include a sufficiently high number of items to allow factor analysis to corroborate the theoretically-derived aspects.
In a similar vein, although the measurement of emotion in Study 2 was rare in career research, limitations should be considered. Two dimensions of positive and negative emotions were calculated, based on the PANAS scale of Watson and Tellegen (1985), but an alternative measure could have been used, such as affective tone and intensity (Weiss & Cropanzano, 1996). A snapshot measure of emotion suffers from the further weakness of failing to capture the dynamic aspects of the state, which has temporal cycles (Weiss & Cropanzano, 1996) and is subject to self-regulatory processes (Lazarus, 1991). The relatively weak relationship between positive emotion and occupation change behaviour in Study 2 may have resulted from these weaknesses in measurement. Alternatively, the experience of positive affect may not be acknowledged and the influence of affect may not be recognised (Salovey et al., 2000). Further, there are many factors which constrain or direct career behaviour, which lie outside of the individual’s psychological processes: although affect influences career behaviour, it may not be a major determinant.

7.6.3 Interpretation

Overall, career behaviour is subject to a wide range of influences, external and internal, and an individual seeks to negotiate a complex set of constraints and needs in a career change. All research on career should acknowledge its limited ability to investigate such a multifaceted phenomenon. The studies in this research investigated a specific area of career behaviour, that of voluntary occupation change, and were based on a psychological perspective, that is, focused on internal processes. Other, equally valid, perspectives on career research are possible.

Although IPT was proposed as pertinent and useful for understanding occupation change, it is acknowledged as possibly limited to Western, industrialised cultures (Breakwell, 1986, p. 185) and other, equally valid, perspectives on the self-concept may offer additional insight.

7.7 Future Research

The research raises interesting possibilities for future investigations. One area worthy of further exploration is that of work identity and dis-identification. As noted
above, the research here attempted a first operationalisation of identity threats. A more extensive measure could be considered, sufficient for robust factor analysis. Having established a more robust measurement of aspects of identity, specific facets could be explored to determine if the findings from the current research are replicated. Measurement of identity threats could be compared to existing measures of occupational identification, and further explored by comparison to job and organisation identification. A longitudinal study could explore the relationships over time between identification with job, organisation and occupation, and job, organisation and occupation change. Can measures of identity threats be used to show a process of dis-identification? Of particular interest is the question of whether identity threat is a factor differentiating career from job change. A longitudinal cohort sequential study could explore whether occupational or other identification fluctuates over time, by cohort or as a result of time of measurement: such a study could test whether younger adults do in fact have different identity needs in careers than older workers as has been suggested by Goffee and Nicholson (1994) and others. Centrality of work or career to an individual’s self-concept may moderate the relationship between identification and turnover. There may be demographic differences in this moderation: gender, socioeconomic class or type of occupation may influence centrality.

The influence of emotions on career change merits further investigation. As noted in Section 7.6.2, the intensity of emotion could usefully be measured. The relationship of intensity of negative emotion to initiation of career change, and of positive emotion to choice of new career, could be tested. Does intensity of negative emotion predict career versus job change? The measurement interval in Study 2 may have been too long to map fluctuations in emotions. A study of people moving towards or through career change using a diary design could be considered: on-line applications offer the potential to send a request for information at pre-determined times.

One potential area for theoretical development is the IPT framework. The framework offers a conceptualisation of the self-concept that informs theory and research 20 years after its first proposal. However, some limitations have been noted above and these may result from the foundation of IPT on the dominant cognitive
metaphor of its day. A structure containing content, and separately defined processes operating on structure and content, links closely to information processing models of cognition. As information technology has moved rapidly on, it may be appropriate to consider how up-to-date technological metaphors could suggest an improved framework. The self-concept could be envisaged as a neural network, trained to comply with the guiding principles, and operating on experience as input with goals as the target output. Neural networks can self-modify to match the output, so the self would evolve towards its goals. Values or other components of the self bearing high salience could be weighted accordingly within the network, and actions could be modelled as recursively affecting inputs, through experience. Clearly, such a model would require greater refinement but it is suggested as a way to update the metaphor from which IPT is derived, to provide a different perspective on key features of IPT and to provide a basis for experimentation.

The study found that perception of a possible self was significantly related to action to change career, and in the discussion, the possible self was assumed to be a desired self. The theory of possible selves (Markus & Nurius, 1986) proposes both desired and feared selves as motivational: future research should explore the role of feared selves on career change. A starting point would be future feared selves in the current occupation as described by the participants in Study 1.

The research was carried out between 2006 and 2008, in a healthy economic climate. The global recession beginning in the latter part of 2008 is likely to impact on individuals’ career behaviour. Arthur, Khapova and Wilderon (2005) suggested that people deliberate more before changes in uncertain economic conditions. Sense-making in a climate of economic pessimism may differ greatly from making sense of experience in more stable times. It is likely that some people will still decide to change career, and more will find it necessary. Qualitative exploration of people who are changing career during an economic downturn could provide useful insights into external influences on individual sense-making.
7.8 Conclusion

The research programme explored the experience and process of voluntary occupation change. Its results provided evidence for the involvement of the self-concept and emotion. The conclusions drawn from the findings proposed an extended model of career decision making, and knowledge that can be used by individuals changing career and counsellors working with them. The research offers a more complete perspective on the individual in career than is commonly represented in the literature, and recognises the individual career changer as a purposeful agent who draws on cognition, emotion and self-regulation in negotiating the complex and changing world of work.
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Appendix A Study 1

A-1 Interview Schedules

A-1.1 Interview 1

Thank you for your time today. I am carrying out this research as part of a study on changing occupations. I am interested in hearing about your experience. I will be interviewing a number of other people and then I will analyse the discussions to look for common themes or for differences. The format of this research is a fairly informal interview today, followed by a second informal interview in about a week. Each interview should be about an hour. Although I have some general questions, it’s mainly about hearing your story of your job history and your occupation change.

If you want to withdraw from the research at any point, even after the interviews, that is fine – you are not under any obligation. And if you don’t want to answer any question, that is fine too. The interviews will be anonymous – I won’t be using your name or your identity at any point. In writing up my research, I will take care to change or leave out any details that could identify you. The interviews will also be confidential – I will only discuss them with my research colleagues and I will only use them for my research.

Do you have any questions?

I would like to record the interview, to make sure I catch everything. After the interview, I will transcribe the tape and then blank it so that no tape record will be kept. Is this ok with you?

Thank you.
May I ask you to sign this form to confirm that I have let you know of your right to withdraw, and of confidentiality and anonymity?

Thank you.
May I start with a few personal details? If there is any question you’d rather not answer, that’s fine.

Where are you living now (London / Home Counties)?
Do you have a partner? Are they working?
Do you have dependents?
Do you live alone?
What age are you?
What level of education did you complete?
How would you describe your ethnic background?

Thank you. Now let’s talk about your work. I’d be interested to hear about the jobs you’ve had. Do you remember your first paid job?
And then what did you do? And after that? What did you do next? ….

{Try to get the whole sequence of jobs up to the present. Identify the recent main change}
Thank you. I found that very interesting.

Thinking about that last change, can you tell me what led up to that?
   What else was happening in your life at the time? Did you have a partner? Were they working? Did you have dependents?

What would you say triggered it?
   Was it a sudden or a gradual decision?
   Did it feel like a big change to you at the time? Looking back now, does it feel like a big change?
   What were you hoping or aiming to gain from the change?
   What did you want out of …?
   What did you do first? What came next? What steps did you take? How long did it take?

Can you remember how you felt at the time?
   It was quite a change: some people feel anxious about change and others feel excited…

Did those feelings help you / cause problems / get in your way?
   What helped you to get through?

Did you feel that you changed as a person?
   Some people say that their change meant that they could be themselves and others say that they have changed as a person …. Did your new occupation change how you felt about yourself? Did you feel you had to change? Was this easy or difficult for you? What helped you in this?

Did your feelings change during this time of change / while you were looking for work/retraining…?

And looking back now, how do you feel about that change?
   Was it a good or a bad move for you?
   From your point of view, what did you gain / lose?
   Did you lose / gain anything by it?

{If negative, “have you considered how far you’ve come/how much you have learned/what you have achieved…” End on positive. If very negative, check they are still happy to continue to second session}

How much choice do you feel you had in making your change?
   Did anything influence your choice? Did anything restrict your choice?

Ok. I don’t want to run over time so I’d like to draw it to a close there for today.
Is there anything more you’d like to add?

Have you any questions for me at this point?

How did you find this interview?

So we’ve talked about ----- (brief summary of major issues). We’ve focussed mainly on how you felt about this occupation change. In our second interview, I’d like to explore how other people affected your change, whether supporting or commenting on, the range really. Our second chat is (confirm day, date, time, location) – is that still ok? Excellent. I’ve really enjoyed talking with you today and I’m looking forward to hearing a bit more next …. Thank you.

A-1.2 Interview 2

Thank you very much for your time again today. Just to remind you, this discussion is mainly about hearing your story of your occupation change. Again, to remind you, if you want to withdraw from the research at any point, even after the interviews, that is fine – you are not under any obligation. And if you don’t want to answer any question, that is fine too. The interviews will be anonymous and confidential. You’re still ok with the tape? Thank you.

I have some general questions but first, did you have any more thoughts about what we discussed last time?

Now in our last discussion, we talked about your change from………. and some of the important aspects of that change for you were….. (brief summary). Did I get that right? Is there anything else you’d like to add?

In order to make this change, did you know much about the new job in advance?

Were you able to find out?

How did you go about that?

Did you get any information from (any other) people?

Did you read much about making the change? Did that help?

You mentioned ---- as providing you with information / telling you about the new job., were there any other people you found helpful in making the change?

Were any of your colleagues helpful? How? In what ways?

How about people outside work?

Were your friends helpful?

How about your family?

Did you feel you had to learn a lot to change occupations?

What sort of things did you have to learn? How did you go about it?

Was that easy or difficult for you? What helped you to …

Now thinking about other people: what would you say was other people’s attitude towards your wanting to change?

For example, your colleagues? your family? How about your friends?
Did their attitudes help you or cause you problems? How did you deal with these?

And what do you feel (your ex-colleagues/family/friends) now think of how you’ve got on?
  Do they see you differently now, do you think? **Do they think you’ve changed** as a person?
  {If negative, move towards positive: “but you see that you’ve gained…”. If positive, reinforce “yes, it certainly seems that you have…”}

Ok, so having gone through quite a bit in terms of making the decision/finding out about the **new job**…, how have you found it?
  Did you find that your previous experiences helped at all?
  Is there anything you found difficult? What helped you overcome this?

**What advice** would you give to someone thinking about changing occupation?
  What would you **warn** them about?

And finally – we’ve talked about your jobs and occupation change: I’ve tried to avoid using the word “career” because it can mean different things to different people. What does the **word “career” mean** to you?
  Would you say you have a career?

Thank you very much. That is all my questions. {Repeat a positive or two}
Is there anything else you’d like to tell me about your occupation change?

Do you have any questions for me?

Thank you once again for your time. I have found it very interesting. My research is looking at occupation changes. There has not been a lot of research so far in this area but I think more people are changing, so I’m looking at what has been important for people such as yourself who have made the change. So I think your story will be very useful in my research. Thanks again. Can I just check you have my email in case you want to contact me at any point?
**A-2 Informed Consent**

I confirm that I am voluntarily participating in a research study on occupation change, conducted by Niamh Murtagh, as part of her doctoral research at the University of Surrey.

I understand that I will be interviewed twice on the subject of my work history, and the interviews will be recorded. I will receive no financial compensation.

I know that I may withdraw from the research at any time, including after the interviews, and I may decline to answer any questions, without needing to justify my decision.

I understand that, although it is not expected, aspects of my work history could feasibly cause me some distress. If this were to occur, every effort would be taken to minimise any adverse outcome.

I understand that all data from this research will be held and processed in confidence, and in accordance with the Data Protection Act (1998). I understand that tape recordings will be transcribed and then blanked, and that every care will be taken to ensure that I cannot be identified. I agree that I will not seek to restrict the use of the results of the study, provided that my anonymity is preserved. Quotations from the research may be used in research reports but no names or other identifying information will be attached. If I request it, Niamh can provide me with a summary of the research report, when the study is completed.

If I have any concerns or questions regarding the study, I can contact Niamh and/or her academic supervisors (contact details below).

I agree that Niamh may contact me at a later date for a possible follow-up to this study. However, I understand that I am under no obligation to participate in any follow-up study.

Name:

Signature: Date:

Dr. Paulo Lopes p.lopes@surrey.ac.uk
Dr. Evanthia Lyons e.lyons@surrey.ac.uk
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A-3 Example Transcript (partial)

Participant 3 “Gayle”

Interview 1 Saturday 25/2/2006

Location: coffee shop, so very noisy environment on tape. Participant on occasion spoke very quickly so some particular words/phrases difficult to transcribe – indicated by ? in the text - although the main points of what she said were always clear. Locations and company names changed. Personal names omitted.

I: If I can just start with the formalities of assuring you of confidentiality and the basics. First of all, thank you very much for agreeing to meet me today. I really appreciate it. I’m carrying out this research as part of a study on changing occupations. I’m interviewing a number of people, probably 8 or 9, and then I’ll be looking for themes or differences across people’s accounts. What I’m really interested in is your story in your words, of what you’ve done, how you found it, how you felt, and so on.
P: OK
I: I’ve got some general questions but they’re quite general but it’s mainly about how you describe how it was for you. The format of the research is an informal interview today and another one of about an hour or so in about a week – the timing isn’t precise, it doesn’t matter too much. The important thing is that if you want to withdraw from the research at any point even after the interviews, that’s absolutely fine or if you don’t want to answer any question, that’s absolutely fine as well. You’re not under any obligation. The information, what we talk about and everything to do with it I keep in confidence. I discuss with my supervisors and a research colleague but that confidentiality also binds them. I tape them in order to transcribe them. Once I’ve got the tape onto a PC, it’s deleted off this and then once I’ve transcribed both the interviews and I’m happy with those, I delete the audio version so that’s not held. And in the data version, I change names, locations and anything that could identify people,
P: OK
I: even before I show it to my supervisors. So I store it like that. The Data Protection Act applies. I’ll only use it for my research and it’s kept in confidence. Is that ok?
P: Mmm-mm.
I: I have an informed consent form to outline that so if you’d like to take a minute just to see if you’re happy with that
P: Sure
P: [pause – reads the Informed Consent form]. Yeh, that’s fine.
I: Lovely.
P: 24th or 25th?
I: Lovely and then just a copy for you in case you want contact details for myself or my supervisors.

(...)
I: Could I start with just a few demographics? Let’s cover those first.
P: Mm-mm
I: Are you living now in London?
P: Yeh
I: Do you have a partner?
P: Yes, I’m married.
I: And is he working?
P: Yes.
I: Any dependents?
P: No.
I: What age are you?
P: 27, 27, 28 this year. [laughs]
I: And level of education?
P: I have 9 GCSEs, 3 A-levels, a HND, a degree BA Honours, and a post-graduate diploma.
I: Right, ok. [Both laugh]
P: And how would you describe your ethnic background?
P: White.
I: That’s all the demographics. That’s just an idea of the type of people I’m interviewing. And now is the point where I stop talking to try and hear your voice on how things have been
P: Right
I: Maybe if you start by telling just about your job history, just what you’ve done so far, starting right from your very first paid job.
P: Very, very first one. My goodness. Just before my 16th birthday [laughs] em, I was working for Crazy Prices which you may or may not remember from the North
I: Yeh
P: I worked for them from I was 16 to 18 when I was doing GCSEs and A-levels
I: Yeh
P: Once I did A-levels, I started at university. I changed jobs then. I was working in retail again but it was fashion retail this time
I: Yeh
P: in Birmingham and I stayed there for just over a year and at that point, I was on the first, just finished the first year of my HND and then my HND was a gap, a sandwich course and the middle one you needed work experience or you did something else, I was lucky enough to win a scholarship that was run by the training and employment agency
I: Yeh
P: It was called a BEI, a business and education initiative, so I lived in America and went to college over there over there, and studied part of an MBA while I was there.
I: Yeh
P: I also as part of that did an internship and worked with Utilities Corporation in the personnel department there
I: Right
P: which thankfully was paid as well. Then whenever I got back home
after a year, I did a brief spell em temporary, on a temporary basis over
the summer, with an insurance company. Then after that, I worked for
a while em, I worked for the council although that was on an on call
basis, and I’m still actually on their books, so while I’m back home, if
they need somebody on a short, you know, a short-term basis.
I: Yeh
P: they would give me a call and I would go down and work for them.
I: Yeh
P: I then became employed with Abbey Insurance, no, Abbey National
at the time, in their call-centre and I worked there for the rest of my
college so I had, I finished off the 3rd year of the HND.
I: Yeh
P: so I completed my HND. (?) I completed a bridging course over the
summer which then got me on to the final year of the degree course
I: oh right
P: so that’s how I got on to BA Honours and did that for another year
so I worked for Abbey National for the rest of the time there. So I was
there for about 3 and a bit years. Em, then, got my degree and started
looking for a job, and because of my retail background, I got a job as a
trainee manager with M&S
I: Yeh
P: So I was actually in Co. Cavan, living for about 10 months
I: Yeh
P: there as a trainee manager, then got a promotion to department
manager and went back up to the city again and was working for M&S
in the em Portside branch of the department manager. I was there for
another, another 9 months or so, just over a year in all, and I then
moved to Acme as a deputy branch manager
I: Yeh
P: and that was in a store that had Burtons and Perkins
I: Yeh
P: and it was based in Donegal, so that’s my whole lot really.
I: Yeh
P: At that time, I was in retail then for, in retail management, for over 4
years.
I: Yeh
P: and had started to get extremely …stressed and dissatisfied in my
job in retail. Em, I just find that I’m a person that needs to be
continuously learning.
I: Yeh
P: Every day’s a school day [laughs]. That’s the way I look at it.
I: Yeh [laughs]
P: have to be continuously learning so I started to get really stressed
because I wasn’t
I: Yeh
P: You know, because in retail you’d be stressed anyway, you do, you get people coming up to you and “who do you think you are?” and “you just work in a shop”
I: Yeah
P: and I started to get quite annoyed because I really did work hard. You know, I did have qualifications
I: Yeh
P: I’d proved that, and I wasn’t getting the recognition, the recognition I felt I deserved for the hard work that I had put in
I: Yeh
P: So I thought, right, ok I want to change, you know, I want to change careers. I had actually being applying for over, last year. I’d been applying for marketing roles because I really wanted to get into some form of marketing but it was like banging my head up against a brick wall {***2nd interview – why marketing?}. I found it very, very difficult because even though I had some management experience, because it was in retail, any job I applied for, they basically felt the retail was the key, rather than the management
I: Yeh
P: and I found it very, very hard to break through that barrier
I: Yeah
P: I just couldn’t do it. I tried for over 12 months to do that and, and I was getting nowhere. I couldn’t get out of retail, at all, not, certainly not to a level, of wage that I was on at that time and it wasn’t a great deal of money at that time
I: Yeh
P: it was about £15,000 pounds
I: even in management
P: but to try and get into marketing, you know, or anything else, it was retail that was key at that stage
I: Yeah
P: and I just was not happy with retail
I: Yeah
P: because I wasn’t using my head and that was stressing me
I: Yeh
P: so I heard about a course that was for women only, that was being at the St. Andrews University, which was where I actually completed my degree
I: Yeh
P: and em it was actually through a friend of my, my Mum’s who’d actually completed this course and was working alongside (?) had done that and went through and did the Masters and got a role where my Mum worked and they became very friendly and she was telling Mum about it and, em, the only thing was, it was for women who were unemployed
I: Yeh
P: and at that stage I wasn’t
I: Yeh
P: unemployed but I felt that you know going and maybe retraining, getting a post-grad in something over and above business, giving myself a break from retail and then going at it again would give me a fresh start and would let me shake off that retail aspect
I: Yeh
P: so I quit my job, and became unemployed, …and I’d filled in an application form and everything for the course and just kept my fingers crossed and hoped that I’d get on it
I: Yeh
P: You know, I went for the interviews and what-not. I then did actually get on to the course and studied then. That was in September not last year, the year before, the year before, I started the course, started the diploma, so there was about 12, 13 women on the course, 14 altogether, 13 I think initially on the course, all unemployed women and it was basically to help the women get back into work again. Part of that, the part which I gained most (?) for me, and most advantageous for me, was the fact that you had to complete work experience, no matter what type of work experience background you had, whether you had any or not you had to complete it
I: Yeh
P: so I thought, well I’m going to make sure I complete it in marketing and then in that way, I have my marketing experience
I: Yeh
P: so I went and did this course, did very, very well on the course and really, really thoroughly enjoyed it
I: Yeh
P: and as part of my work experience, you had to organise that yourself, em, I sort of took a different route on the course because I discovered that I not only really, really enjoyed computers and databases and working with that and you know, working with HTML and building websites
I: Yeh
P: thoroughly enjoyed it, could spend hours doing it but I also, were my highest grades as well at the end of it
I: Yeh
P: so it was a totally different aspect on it altogether because one of the modules that was so good, that I enjoyed was a website one, you know, e-marketing, online marketing
I: Yeh, yeh
P: and I thought, right, this is what I want to do. Knew by trying the area, you know, this is what I want to do. My research on the internet for a local company and then my tutor also had sort of given me a few ideas of companies that she had heard of, em, and so I applied to them for work experience. The one that I applied to, the one that actually took me on, I started with them on a 3 month work experience. It was unpaid
I: Yeh
P: but I went on ahead with that
I: Yeh
P: because the course did fund me, they covered expenses, they covered me round about £400 a month so I was getting that still and that
I: Yeh
P: covered my travel up to the city and back again
I: Yeh
P: and after 4 days of that unpaid work experience, they offered me a full-time job [laughs]
I: Well done
P: and that’s why I’m moving into e-marketing
I: Yeh
P: em, and that really is I still continue obviously I was there for 3 months unpaid
I: Yeh
P: and they took me on 3 months unpaid, and after the 3rd month, then I started to become paid, em and that’s really how I got into the whole arena.
I: Oh, right. And where did that leave the, em, the post-graduate diploma?
P: Well, I finished the post-graduate diploma. However, to do the Masters, you’d have to be unemployed. At that time, I had become employed again by then
I: Yeh
P: so I’ve actually taken leave of absence
I: Yeh
P: You never know what’s going to happen over the next year, you now. I just thought I’ll take a leave of absence and work it out that way. If I decide over the next year that I’m not going to go ahead with it
I: Yeh [14:07]
P: I can graduate with my post-graduate diploma
I: Yeh. You have that option, and you have your work in marketing
P: Yeh
I: Wow. That’s a really interesting story. Very, very interesting. That’s great.
P: [laughs] Different.
I: Em, the leading up to that change, so when you were still working with Acme and thinking about what you wanted to do, what else was going on in your life at the time?
P: Em… actually quite a lot, you know, I had become very restless working there and very stressed within the work environment and about that time things had become very strained between myself and my husband and em it was very, very difficult. As well as working within Acme, as I said, I worked on call for the council. At that time, what I was doing was working - I normally had a Tuesday off – so I was working Monday, Wednesday, Thursday, Friday, Saturday with Acme and on a Sunday, I would have worked for the council for extra money
I: Yeah
P: em, because my husband had lost his job
I: Yeah
P: so I was very, very stressed. I felt that, em, …I was just running myself into the ground
I: Yeah
P: you know, eh, I just felt I wasn’t appreciated … by anyone around at that time
I: Yeah
P: I certainly didn’t feel that I was appreciated or felt… in work that I was … thought of highly
I: Yeah
P: not by my immediate manager, but by my area manager
I: Yeh
P: because I had talked to my manager about it and had indicated that I was thinking about possibly applying to do em the graduate course with Acme
I: Yeh
P: purely because of the money
I: Yeah
P: because at that time, I was a graduate but in Acme I was only on £15,000 but the graduate course, once you’re on that with Acme you’re automatically on £19,000 but my area manager was completely averse to that. Em, she very much put me down at every opportunity she could. At one point, she told me I needed a brain transplant… or I needed to get myself pregnant and that would settle me down.
I: I’d say she had problems.
P: So I felt that’s it, I cannot, I cannot deal with this any longer
I: Yeh
P: I really need to change this. Em, and so that was it. That was almost a deciding factor as well. Because I was very worried as well, saying with with £400 a month, I know I’ll get that on this course if I go on to it
I: Yeh
P: It’s less than half of what I’m used to bringing in, you know
I: Yeh
P: At this stage, my husband had begun working again
I: Yeh
P: It was actually Mum’s friend, you know the one who’d done the course, who said to me “no matter what, you always, always manage” and I thought, you know, I’m still hmm-ing and hah-ing and she sat me down and said “no matter what, no matter about the money, you always will manage. The things might go on but what’s the worst that can happen?
I: Yeh
P: You know, you might end up selling your house to get a bit of extra money but you can wait until then but once you do that, then you’ve got much more earning potential whenever you come out the other end and it’ll be worth it in the short-run. And it was that, that made me think well I can have the strength to do this
I: Yeh, yeh, and did you feel like that was the trigger? Was it a sudden decision then or did it feel more gradual?
P: Em… it felt like it had been building up – it’s the only way I can describe it… and then I think that it was maybe the charge? of talking with her was the push that I needed, the confidence maybe that I needed to see that somebody else had actually done this
I: Yeh
P: that had been through it, and she had been through it more than I had in that, em, she was married and had kids and her husband is unemployed and on benefit and she left the job and she managed to do it and I thought you know what, she’s right. If she can do it, I can. It was more so the strength that I got from her
I: Yeh
P: you know, that gave me the extra push that I needed to do it
I: Yeh, so that was a bit of a, so a gradual sort of working up but that all added to it
P: the final push over the edge
I: Yeh
P: sort of said yes, I can do it
I: Yeh, and then the things that you wanted to get out of the eh step change, certainly get into marketing, be more appreciated in your job and be appreciated for what you could do, learn more
P: Yeh, and the earning factor was a big, big, big one. You know, em, the way I looked at it was, as you know, I was in retail for a number of years, literally from when I was 16 and then I was in retail management for 4 years as well, and I thought to myself, ok, if I had left school with my 9 GCSEs at 16 years of age
I: Yeh
P: I would still be standing in this shop in the same position as I am today and earning the same amount
I: Yeh
P: whereas I hadn’t. I had all that work experience behind me, I had all the qualifications behind me
I: Yeh
P: and I was still standing there and I just sort of felt like I wasn’t, I wasn’t reaching my own potential, if that’s the right way to put it. I just felt that I really could have and should have been in a, doing an awful lot more
I: Yeh
P: with the qualifications that I had
I: Yeh
P: and I wasn’t.
I: Yeh
P: and for that reason, I often felt that in retail I suppose, as a result of my area manager saying no you can’t do that, you can’t do that, and earning the amount of money that I was on, you know, my manager at the time as well had been with Acme for 15 years and was earning about £18,000 and I thought, well ok, I have another 11 years to reach the same sort an extra £4000 a year
I: Yeh
P: and I’m not going to stand here for 11 years and wait for that £4000
I: Yeh
P: I’m going to go out and I’m going to get it
I: Yeh
P: you know, and that was like a determination almost
I: Yeh, yeh
P: and that just was a main factor as well
I: it was the money but also the money that you were worth
P: Yeh
I: and based on what you had done
P: Yeh, definitely
I: Were there other things you wanted from this change as well?
P: Em…I suppose I also, I also wanted. I don’t know- the respect from
other people if that’s the right way of putting it
I: Yeh
P: em you know, working in retail is a very, very difficult job. It’s a
very, very hard job and, you know, hands up to anybody who does it
and enjoys it
I: Yeh
P: It’s a very, very hard job but I wanted the sort of intellectual respect
from people
I: Yeh
P: that I felt that I was due and not having people speaking to me as if I
was an uneducated, uneducated person
I: Yeh
P: which you very often do get in the situation
I: Yeh
P: and I wanted to be seen as an intellectual woman and a strong
woman and not somebody that just works in a shop
I: Yeh
P: because very often you do get that attitude, you know, if you’re
sticking with something, you just work in a shop
I: from customers or from managers or from both?
P: from a bit of both
I: Yeh
P: and even whenever, when some of my friends would be, at the time,
would have been classed as young professionals
I: Yeh
P: and in some cases I felt quite…I don’t know, even though I was
educated to the same level, you know I probably had more work
experience than them, I almost felt I was out of place in their group
because I just worked in a shop
I: Mmm – like a status thing almost, almost
P: Almost, and I just felt like, you know, I always did want to be seen
as a young professional. I always did feel that I was a young
professional but I suppose whenever you work in a shop you don’t get
that
I: Yeh
P: and that’s what I
I: that was important as well
P: Yeh the status factor
I: the recognition of what you could do and had done
P: Yeh. And I think that, you know, as well as that you know, whenever I was very young, when I was younger, my mother had me when she was quite young, em… and she actually left school when she was 16. She had me when she was 21
I: Yeh
P: She wasn’t married at the time but her and my father married shortly after that and I’ve got you know 2, a brother and sister, but she actually went back to school and she studied for as long as I can remember {*** role model?!; family influence} and I, at the time, she worked in a bar for 13 years, which again is very, very hard work
I: Yeh
P: but she drummed into me, especially whenever I was younger, “don’t do what I did. Don’t have to work so hard”
I@: Yeh
P: “and on a pittance and try to educate yourself. Do it when you getting it for free, do it when you’re at school and that’ll stand you in good stead”. I suppose that as well will always ring in my head.
(…)
A-4 Brief Summary of Participants’ Careers

Clare had worked in retail after leaving school. She left full-time paid work when she had her first child and spent 20 years looking after her children and latterly doing part-time jobs. The more recent jobs were catering in her own small business and school catering (‘dinner lady’). When she decided to return to work full-time, Clare was invited to apply for a role as PA (Personal Administrator) to a director of a development agency.

Brenda worked as a biomedical scientist in the NHS from school. When her son was ill as a young child, she worked as a locum and part-time, which she continued to do with longer hours when he recovered. For interest, she began studying Amatsu and became qualified. Conditions were changing in her main job as biomedical scientist. After about three years of reducing her biomedical work in order to have more time for her Amatsu clients, she left her NHS work to become a full-time Amatsu practitioner and trainer.

Gayle started work as a trainee manager in a large retail organisation after graduation, and was promoted to deputy branch manager. She wanted to work in marketing but found that her lack of experience in marketing was preventing her from starting in the area. She resigned from her job and took a post graduate course which had a marketing module. Her work experience as part of the course was in e-marketing and she was offered a job with the company while doing work experience.

Anne left school with O-levels and worked as a secretary. She left full-time paid work in her early twenties when she had a child. When her third child was a toddler, she started a catering business with a partner, which became successful. She later resigned and did an A-level in psychology. She then completed a degree in psychology and an MSc in occupational psychology. At the time of the interviews, she was beginning to gain work as an occupational psychologist.

Fran joined a Youth Training Scheme in stables straight from school. After two years training, she did a variety of jobs in stable yards. At the age of 24, she started bus driver training. She became pregnant soon after starting work as a bus driver, left work after six months, and later began to do part-time coach driving. At the time of the interviews, she was doing full-time coach driving and hoped in the future to gain a Heavy Goods Vehicle Licence.

After graduation, Joan joined a major high-street retailer on their graduate training scheme. She remained with the same organisation for 18 years as a buyer and manager. While on maternity leave, she was offered a choice between a lower-paid, lower-status role and redundancy. She accepted the redundancy package, explored other possible careers and was appointed as a secondary teacher.

After graduating, Helen joined the Civil Service, where she worked for 10 years in a variety of roles. She took a year’s career break to complete an MSc in social psychology, followed by a part-time PhD. At the time of the interviews, she had been working full-time as an academic researcher for a few years.

Diane joined an oil and gas exploration and production company from secretarial school. She completed a part-time Open University degree, and moved into geoscience roles in the company. She was promoted over the 25 years she was with the company, ending up as a senior manager. She then took voluntary redundancy and completed a full-time MSc in occupational psychology. At the time of the interviews, she was beginning to gain work as a freelance occupational psychologist.
Appendix B Study 2

B-1 Study 2 Questionnaires
Appendix B-1 reproduces the text of the four questionnaires in Study 2. The presentation format of the online questionnaires was a high-quality survey format with ‘radio buttons’ to tick and included checks to ensure that all mandatory questions were answered.

Appendix B-1.1 Questionnaire 1
This is the first of four questionnaires, which are part of a study about careers by the University of Surrey. It should take between 10 and 20 minutes to complete.

No information from the questionnaire is submitted until you press the Submit button at the end of the form. If you decide not to complete the questionnaire, you can stop at any point and no information is held. All information collected is anonymous and in confidence. All questionnaires that are submitted are stored by the University of Surrey, which is a registered site under the Data Protection Act.

I hope you enjoy completing this questionnaire and find it interesting in thinking about your career. When you have submitted your responses, you will be given a link to download a short guide about career change. The guide includes an inspirational story of career change, where to start when you want to change career, and useful resources. If you are thinking of changing careers, I hope you will find it insightful and practical.

I will contact you about the second questionnaire in about four weeks. You are not under obligation to complete this questionnaire although a second guide covering different topics in career change will be provided to everyone who completes it.

When you complete all 4 questionnaires (if you choose to), you will have the opportunity to have a Career Coach respond to any career concerns you may have, by email.

Even if you may not wish to answer the later questionnaires, your responses to this short survey would be of great value in our research.

If you have any comments or concerns about the questionnaire or the study, please contact me on the email address below.

Thank you for your involvement.

Niamh Murtagh

General Information
Date of birth (dd/mm/yyyy) __/__/____
First three letters of surname: ___ [e.g. Smith ]
Gender (F/M) —
Email address:
Re-enter email address:

We will use your email address only to contact you regarding this research. To maintain anonymity, your email address will be removed from your data before analysis.

Most of the questions in this survey relate to your occupation. By “occupation”, we mean your main line of work, which typically will be the type of employment you have had but may also be unpaid. For some people, “occupation” is the same as their career or profession.

In this questionnaire, we will use the term “current occupation” to refer to the occupation you are thinking of moving from, and “new occupation” for the one you are thinking of moving to.

**Q1 Your current occupation**

The following questions refer to your main occupation over the last two years. Please tick one box to show which best describes the sort of work you do.

- Unwaged - Caring for family
- Unwaged – Studying
- Unwaged - Voluntary work
- Unwaged - Other (please specify) ________________

- Technical and craft occupations (such as: motor mechanic - fitter – inspector – plumber - printer - tool maker – electrician - gardener - train driver)

- Semi-routine manual and service occupations (such as: postal worker - machine operative - security guard - caretaker - farm worker - catering assistant - receptionist - sales assistant)

- Routine manual and service occupations (such as: HGV driver - van driver - cleaner - porter - packer - sewing machinist - messenger - labourer - waiter / waitress - bar staff)

- Clerical and intermediate occupations (such as: secretary - personal assistant - clerical worker - office clerk - call centre agent - nursing auxiliary - nursery nurse)

- Modern professional occupations (such as: teacher - nurse - physiotherapist - social worker - welfare officer - artist - musician - police officer - software designer)

- Middle or junior managers (such as: office manager - retail manager - bank manager - restaurant manager - warehouse manager – publican)

- Senior managers or administrators ([usually responsible for planning, organising and co-ordinating work and for finance] such as: finance manager - chief executive)
Traditional professional occupations (such as: accountant - solicitor - medical practitioner - scientist - civil / mechanical engineer)
Over the last two years, have you worked in this occupation  [Full-time / Part-time]

Q2 Your feelings overall about your current occupation
Thinking about your current occupation overall and your experience in this occupation over the years, please rate the following statements:

1 Strongly disagree – 7 Strongly agree

1. Taken overall, I think I made a good choice of occupation.
2. Overall, my occupation provides me with what is important to me.
3. I find it difficult to be enthusiastic about the type of work I do.
4. Most of the time, I am not satisfied with my occupation.
5. I think that I have a pleasant occupation.
6. I find real enjoyment in the type of work I do.

Q3 Thinking about changing
In thinking about your occupation in recent times, please indicate any that apply (you may tick more than one):

Recently I have considered
___ changing job (different responsibilities or different employer, same field of work)
___ changing industry or sector (same skills and responsibilities but a different type of employer, e.g. changing from administration in a civil engineering firm to administration in a pharmaceutical company)
___ changing occupation (different skills, different field of work, different day-to-day responsibilities)
___ other change: please specify ______________
___ none of these

Please rate the following statements

1 Strongly disagree – 7 Strongly agree

1. I rarely think about changing occupation.
2. I think it is unlikely that I will change to a different line of work.
3. I frequently consider if another line of work would suit me better.
4. I would like to find another occupation.
5. I often feel I would like to do a different type of work.
6. I feel it is likely I will stay in my current occupation.
7. I have a lot of information about a new occupation.

Q4 You and your current occupation
In this section are a number of statements that may apply to you and your work. Although some statements may seem similar, every statement is different. Based on your experiences in your current occupation over the years, please rate the statements:

1 Strongly disagree - 7 Strongly agree or 8 Not relevant to me
1. My occupation does not support how I see myself. ___
2. It is important to me to have high self-esteem in my work. ___
3. My line of work makes me feel less than competent. ___
4. I think my line of work has little value. ___
5. It is not important to me to feel capable and competent in my work. ___
6. My work has made me change in ways I do not like. ___
7. It is important to me to feel proud to be associated with others in my occupation. ___
8. For me, it is important that my occupation helps me to achieve my goals in life. ___
9. Some people in my work have undermined my self-worth. ___
10. I do not feel part of a team in my occupation. ___
11. I have a sense of personal stagnation in my occupation. ___
12. I believe that in the future my line of work will not help me to achieve the things in life that are important to me. ___
13. My occupation prevents me from being who I really am. ___
14. My line of work is bad for my self-esteem. ___
15. It is important to me to feel that I belong with others in my occupation. ___
16. My work does not make me stand out from other people. ___
17. I do not consider my line of work to be suitable for someone with my set of personal values. ___
18. I do not feel I belong with others in my line of work. ___
19. I find no meaning in my work. ___
20. I worry about my ability in my work. ___
21. For me, it is important to develop and improve myself in my work. ___
22. I do not want to be forced to change as a person by my line of work. ___
23. I am embarrassed to be associated with the people in my line of work. ___
24. It is important for my line of work to match my personal values. ___
25. My line of work does not make me feel distinctive. ___
26. I think that the people in my line of work compare unfavourably to those in other occupations. ___
27. I have changed for the worse as a person due to my work. ___
28. My line of work does not help me to achieve the things in life that are important to me. ___
29. It is important to me that my work makes me feel distinctive. ___
30. My line of work does not allow me to express important parts of myself. ___
31. My occupation does not allow me to grow and develop. ___
32. For me, finding meaning in my work is not important. ___
33. My line of work is not an important part of who I am. ___

Q5 Your recent feelings about your current occupation
The words below describe different feelings and emotions. Please indicate to what extent you have felt this way during the past few weeks in your working life.

1 Very slightly or not at all - 7 Extremely

Anxious
Excited
Contented
Unhappy

Enthusiastic
Stressed
Frustrated
Q6 Your intention to change

6.1 Commitment to your old occupation

1 Strongly disagree – 7 Strongly agree

1. I have put too much into my occupation to consider changing now.
2. Changing my line of work now would be difficult for me to do.
3. Too much of my life would be disrupted if I were to change my line of work.
4. It would be costly for me to change my occupation now.
5. Changing occupations now would require considerable personal sacrifice.

6.2 Certainty

1 I am very uncertain - 7 I am very certain

1. I intend to leave my current occupation in the foreseeable future. ____
2. I am determined to start in my new occupation as soon as is practical. ____
3. I expect to be working in my new occupation before long. ____
4. I will finish in my current occupation as soon as I can. ____
5. I have applied for a job (paid or unpaid) in the new occupation.
   Y/N/Uncertain Date of application: _____
6. I have applied for study or training for the new occupation.
   Y/N/Uncertain Date training begins: _____
7. I have planned the next step to begin in the new occupation.
   Y/N/Uncertain I have taken or will have taken the next step by (date) _____
8. I have decided on my new occupation
   Y/N/Uncertain Please enter title or brief description of new occupation: _____

Q7 A possible new occupation

1 Strongly disagree – 7 Strongly agree

1. I can think of a new occupation in which my self-esteem would be high. ____
2. I can picture a new line of work at which I would be good. ____
3. I can imagine a new occupation that fits with how I see myself. ____
4. I know of a new occupation which will allow me to feel distinctive. ____
5. I can see myself in a new occupation that has meaning for me. ____
6. I know of a new occupation in which I will feel that I belong with others in the field. ____
7. I can picture a new occupation in which I will be proud to be associated with others in the field. ____
8. I can see myself in a new occupation which will express an important part of who I am. ____
9. I can visualise a new occupation that will allow me to develop myself as a person. ____
10. I know of a new occupation that fits my personal values. ____
11. I can imagine a new occupation which will help me to achieve the things in life that are important to me. ____
Q8 Your feelings about changing to the new occupation

1 Strongly disagree – 7 Strongly agree

1. I believe that I am capable of changing occupation.
2. I am not sure that I will be capable of leaving my old occupation.
3. I know that I will be able to begin a new occupation.

4. The words below describe different feelings and emotions. Please indicate to what extent you feel this way about the prospect of changing occupation:

   I Very slightly or not at all - 7 Extremely

   Happy
   Anxious
   Determined

   Scared
   Excited

Q9 Search for your new occupation

1 Not at all or hardly - 7 Extensively

1. I have investigated one or more different occupations on the internet.
2. I have sought information about one or more different occupations from friends and family.
3. I have consulted professionals, such as careers advisors, to find out more about one or more different occupations.
4. I have read up about one or more different occupations.
5. I have investigated one or more different occupations in additional ways.
6. I have consulted professionals for help in working out what occupation may suit me.
7. I have talked to friends or family to try to work out what occupation may suit me.
8. I have read about occupations that may suit me.
9. I have used the internet to find out more about what occupation may suit me.
10. I have explored in additional ways what occupation may suit me.

11. The words below describe different feelings and emotions. If you have a new occupation in mind, please indicate to what extent you feel this way about your new occupation. If you do not yet have a new occupation in mind, please skip this question.

   I Very slightly or not at all – 7 Extremely

   Enthusiastic
   Nervous
   Excited

   Inspired
   Frustrated
   Happy

Q10 Changing job or occupation

Why are you thinking of changing occupation rather than just changing job?

How many times have you changed occupation before? [0, 1, 2, more than 2]
Some people say that telling others about our choices can help us to achieve them. If you can, before the next questionnaire, talk to two people about your choice and your reasons.

**Q11 Your current job**

Turning now to your *day-to-day job* in your current occupation, that is, the activities you do and the people you deal with each day, please rate your response to the following statements.

*1 Strongly disagree – 7 Strongly agree*

1. I feel fairly satisfied with my job.
2. Most days I am enthusiastic about my job.
3. Each day at work seems like it will never end.
4. I find real enjoyment in my job.
5. I consider my job rather unpleasant.

**Q12 Final questions**

Please indicate your ethnic origin and highest level of education

<table>
<thead>
<tr>
<th>Ethnic origin</th>
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<tbody>
<tr>
<td>White or White British</td>
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<tr>
<td>Asian or Asian British</td>
<td></td>
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<tr>
<td>Black or Black British</td>
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<tr>
<td>Chinese</td>
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<tr>
<td>Mixed</td>
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<tr>
<td>Other (please specify) _____________</td>
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<tr>
<th>Level of education:</th>
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<tr>
<td>GCSE (or equivalent)</td>
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<tr>
<td>A Levels (or equivalent)</td>
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<tr>
<td>Degree</td>
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<tr>
<td>Post-graduate</td>
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<tr>
<td>Other (please specify) _____________</td>
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</tbody>
</table>

Are you currently studying at the Open University (Y/N)?
Are you currently studying at the University of Surrey (Y/N)?

When you click ‘Y’ below, we will receive your completed questionnaire. Your responses are anonymous and confidential. They will be held in compliance with the Data Protection Act and will be used only in connection with the current research.

*If you are thinking about changing occupation*

You may find useful the Information Sheet on Career Change that you can download on the next screen after you click ‘Y’.

We are interested in following for a short period the experiences of people who are thinking about changing occupation. If you indicated that you are thinking about changing career, we will contact you again in four weeks with a second questionnaire, after which you can download a second Information Sheet.

Sheet No. 2 includes
- Common barriers to changing career
• How other people can help you succeed in changing.

You are under no obligation to complete the next questionnaire when we contact you.

When you complete all 4 questionnaires (if you choose to), you will have the opportunity to have a Career Coach respond to any career concerns you may have, by email.

Thank you for completing the questionnaire. Your responses will be very valuable in our research.
Appendix B.1-2 Questionnaire 2

This is the second of four questionnaires, which are part of a study about career change by the University of Surrey. We are interested in how thoughts and feelings may fluctuate as people think about changing career. It is shorter than the first questionnaire and should take about 15 minutes to complete. We hope you find it interesting in thinking about your career.

Completing the form is voluntary. No information from the questionnaire is held until you answer ‘Yes’ to the question ‘Submit your completed form?’ at the end of the form. If you decide not to complete the questionnaire, you can stop at any point and no information is held. All information collected is anonymous and in confidence. All questionnaires that are submitted are stored by the University of Surrey, which is a registered site under the Data Protection Act.

When you have submitted your responses, you will be given a link to download a second short guide about career change. The guide addresses questions including ‘Can I afford to change career?’ and ‘Am I too old?’, and ways in which other people can help your career change, which we hope will be useful to you.

People think about changing careers for many different reasons and your responses and thoughts will be of great interest to us. We look forward to receiving them.

If you have any comments or concerns about the questionnaire or the study, please contact us on the email address below.

Niamh Murtagh  Email Address: n.murtagh@surrey.ac.uk
Professor Evanthia Lyons
Dr Paulo Lopes

General Information
Date of birth
First three letters of surname: ___  [e.g. Smith ]
Email address:

We will use your email address only to contact you regarding this research. To maintain anonymity, your email address will be removed from your data before analysis.

As a reminder, by “occupation”, we mean your main line of work, which typically will be the type of employment you have had but may also be unpaid. For some people, “occupation” is the same as their career or profession. The term “current occupation” is used to refer to the occupation you are thinking of moving from, and “new occupation” for the one you are thinking of moving to.

Many of the questions are the same as in the first questionnaire. This is so that we can compare people’s thoughts and feelings over time. Some of the questions
are shorter, and overall the questionnaire is about 5 minutes shorter than Questionnaire 1.

**Q1 Talking to Others**
Did you talk to anyone in detail about your choice and your reasons for it, since the last questionnaire?

*I Did not discuss with anyone – 7 Discussed it in depth with at least 1 person*

**Q2 Your feelings overall about your current occupation**
Thinking about your current occupation overall and your experience in this occupation over the years, please rate the following statements:

*I Strongly disagree – 7 Strongly agree*

1. Taken overall, I think I made a good choice of occupation.
2. Overall, my occupation provides me with what is important to me.
3. I find it difficult to be enthusiastic about the type of work I do.
4. Most of the time, I am not satisfied with my occupation.
5. I think that I have a pleasant occupation.
6. I find real enjoyment in the type of work I do.

**Q3a Thinking about changing**
Please rate the following statements.

*I Strongly disagree – 7 Strongly agree*

1. I rarely think about changing occupation.
2. I think it is unlikely that I will change to a different line of work.
3. I frequently consider if another line of work would suit me better.
4. I would like to find another occupation.
5. I often feel I would like to do a different type of work.
6. I feel it is likely I will stay in my current occupation.
7. I have a lot of information about a new occupation.

**Q3b Personality Traits**
Here are two pairs of personality traits that may or may not apply to you. Please rate the extent to which you agree or disagree with each statement. You should rate the extent to which the pair of traits applies to you, even if one characteristic applies more strongly than the other.

*I Strongly disagree – 7 Strongly agree*

I see myself as:

1. _____ Open to new experiences, complex
2. _____ Conventional, uncreative

**Q4 You and your current occupation**
In this section are a number of statements that may apply to you and your work. Although some statements may seem similar, every statement is different. Based on your experiences in your current occupation over the years, please rate the statements:

*I Strongly disagree - 7 Strongly agree or 8 Not relevant to me*

1. My occupation does not support how I see myself.
2. My line of work makes me feel less than competent.
3. I think my line of work has little value.
4. My work has made me change in ways I do not like.
5. Some people in my work have undermined my self-worth.
6. I do not feel part of a team in my occupation.
7. I have a sense of personal stagnation in my occupation.
8. I believe that in the future my line of work will not help me to achieve the things in life that are important to me.
9. My occupation prevents me from being who I really am.
10. My line of work is bad for my self-esteem.
11. I do not feel I belong with others in my line of work.
12. I have a sense of personal stagnation in my occupation.
13. I do not feel I belong with others in my line of work.
14. I do not consider my line of work to be suitable for someone with my set of personal values.
15. I do not feel I belong with others in my line of work.
16. I am embarrassed to be associated with the people in my line of work.
17. My line of work does not make me feel distinctive.
18. I think that the people in my line of work compare unfavourably to those in other occupations.
19. I have changed for the worse as a person due to my work.
20. My line of work does not help me to achieve the things in life that are important to me.
21. My line of work does not allow me to express important parts of myself.
22. My occupation does not allow me to grow and develop.

(You now have 7 questions remaining and all are much shorter than this question.)

Q5a Your recent feelings about your current occupation
The words below describe different feelings and emotions. Please indicate to what extent you have felt this way during the past few weeks in your working life.

1 Very slightly or not at all – 7 Extremely

Anxious  Enthusiastic
Excited       Stressed
Contented  Frustrated
Unhappy

Q5b You and your emotions in general
Please rate the following statements.

1 Strongly disagree – 7 Strongly agree

1. I control my emotions by changing the way I think about the situation I’m in.
2. When I want to feel less negative emotion, I change the way I’m thinking about the situation.
3. When I want to feel more positive emotion, I change the way I’m thinking about the situation.
4. When I want to feel more positive emotion (such as joy or amusement), I change what I’m thinking about.
5. When I want to feel less negative emotion (such as sadness or anger), I change what I’m thinking about.
6. When I’m faced with a stressful situation, I make myself think about it in a way that helps me stay calm.
Q6 Your intention to change
Please rate the following statements.

*I am very uncertain - 7 I am very certain*

1. I intend to leave my current occupation in the foreseeable future.
2. I am determined to start in my new occupation as soon as is practical.
3. I expect to be working in my new occupation before long.
4. I will finish in my current occupation as soon as I can.

5. I have decided on my new occupation Y/N/Uncertain
Please enter title or brief description of new occupation:

6. I have planned the next step to begin in the new occupation.
   Y/N/Uncertain I have taken or will have taken the next step by (date)

7. I have applied for study or training for the new occupation.
   Y/N/Uncertain Date training begins:

8. I have applied for a job (paid or unpaid) in the new occupation.
   Y/N/Uncertain Date of application:

Q7 A possible new occupation

*1 Not at all – 7 Very much so*

1. I can think of a new occupation in which my self-esteem would be high.
2. I can picture a new line of work at which I would be good.
3. I can imagine a new occupation that fits with how I see myself.
4. I know of a new occupation which will allow me to feel distinctive.
5. I can see myself in a new occupation that has meaning for me.
6. I know of a new occupation in which I will feel that I belong with others in the field.
7. I can picture a new occupation in which I will be proud to be associated with others in the field.
8. I can see myself in a new occupation which will express an important part of who I am.
9. I can visualise a new occupation that will allow me to develop myself as a person.
10. I know of a new occupation that fits my personal values.
11. I can imagine a new occupation which will help me to achieve the things in life that are important to me.

Q8 Your feelings about changing to the new occupation

*1 Strongly disagree – 7 Strongly agree*

1. I believe that I am capable of changing occupation.
2. I am not sure that I will be capable of leaving my old occupation.
3. I know that I will be able to begin a new occupation.

4. The words below describe different feelings and emotions. Please indicate to what extent you feel this way about the prospect of changing occupation:

   *1 Very slightly or not at all – 7 Extremely*
   Happy Scared
   Anxious Excited
   Determined Sad
Q9 Searching for your new occupation

1 Not at all or hardly - 7 Extensively

1. I have investigated one or more different occupations on the internet.
2. I have sought information about one or more different occupations from other people.
3. I have investigated one or more different occupations in additional ways.
4. I have consulted other people for help in working out what occupation may suit me.
5. I have used the internet to find out more about what occupation may suit me.
6. I have explored in additional ways what occupation may suit me.

7. The words below describe different feelings and emotions. If you have a new occupation in mind, please indicate to what extent you feel this way about your new occupation. If you do not yet have a new occupation in mind, please skip this question.
   1 = very slightly or not at all  7 = extremely

   Enthusiastic
   Nervous
   Excited
   Inspired
   Frustrated
   Happy

Q10 Voluntary or forced change?

Do you feel that your possible occupation change is voluntary?

   Yes, it is my choice.
   No, I feel I have no choice but to change occupation.
   Other. Please explain

Q11 Your current job

Turning now to your day-to-day job in your current occupation, that is, the activities you do and the people you deal with each day, please rate your response to the following statements.

   1 Strongly disagree – 7 Strongly agree

1. I feel fairly satisfied with my job.
2. Most days I am enthusiastic about my job.
3. Each day at work seems like it will never end.
4. I find real enjoyment in my job.
5. I consider my job rather unpleasant.

End of Questionnaire

When you click ‘Yes’ below, we will receive your completed questionnaire. Your responses are anonymous and confidential. They will be held in compliance with the Data Protection Act and will be used only in connection with the current research.
You will find Career Change Information Sheet No. 2 available for download on the next screen after you click ‘Yes’. It looks at overcoming common barriers to changing career, such as worries about age or money, and how other people can help you succeed in changing.

Our study is designed to follow for a short period the experiences of people who are thinking about changing occupation. We want to see how particular aspects of their thoughts and feelings change as time goes on. We are very grateful for your information on this questionnaire.

We would like to invite you to complete a third questionnaire in about four week’s time. We will have a further Information Sheet available on completion of the third questionnaire. This will look at alternative career paths you may not have considered and important questions to consider when thinking about changing career. You are under no obligation to complete the next questionnaire when we contact you.

When you complete all 4 questionnaires (if you choose to), you will have the opportunity to consult a Career Coach on one of three on-line clinic days.

Thank you for completing the questionnaire. Your responses will be very valuable in our research.

Submit your completed form?
Yes
No
Appendix B.1-3 Questionnaire 3

This is the third of four questionnaires, which are part of a study about career change by the University of Surrey. It is about eight weeks since you completed your first questionnaire and we are very interested in your thoughts now about changing career.

This questionnaire should take about 15 minutes to complete. Completing the form is voluntary. No information from the questionnaire is held until you answer ‘Yes’ to the question ‘Submit your completed form?’ at the end of the form. If you decide not to complete the questionnaire, you can stop at any point and no information is held. All information collected is anonymous and in confidence. All questionnaires that are submitted are stored by the University of Surrey, which is a registered site under the Data Protection Act.

When you have submitted your responses, you will be given a link to download a third short guide about career change. The guide looks at alternative career paths you may not have considered, and important questions to consider when thinking about changing career. We hope you will find it thought-provoking and of practical use.

Whatever your thoughts and feelings now about moving to a new career, your responses will be of great value in our study. Very little research has been done about how people’s thoughts and feelings change while considering changing career, so we hope you can spend a little time completing the questionnaire.

If you have any comments or concerns about the questionnaire or the study, please contact us on the email address below.

Niamh Murtagh Email Address: n.murtagh@surrey.ac.uk
Professor Evanthia Lyons
Dr Paulo Lopes

Do you wish to continue? [Yes / No]

General Information
Date of birth (month and year only)
Gender [Female/Male]
First three letters of surname: ___ [e.g. Smith]

We require these details again to match this questionnaire with the first two you have completed.

As a reminder, by “occupation”, we mean your main line of work, which typically will be the type of employment you have had but may also be unpaid. The term “current occupation” is used to refer to the occupation you are thinking of moving from, and “new occupation” for the one you are thinking of moving to. If you are studying or training full-time for a new occupation,
“current occupation” also refers to the occupation you are thinking of moving from.

Many of the questions are the same as in the previous questionnaires. This allows us to see how people’s thoughts and feelings may have changed over time.

**Q1a Occupations in General**
Please rate the following statements concerning your beliefs in general about occupations.

1 Strongly disagree – 7 Strongly agree

1. In most occupations, people can pretty much accomplish whatever they set out to accomplish.
2. If you know what you want, you can find an occupation that gives it to you.
3. Getting into the occupation you want is mostly a matter of luck.
4. Most people are capable of doing well in their occupation if they make the effort.
5. In order to get into a really good occupation, you need to have family members or friends in high places.
6. It takes a lot of luck to be outstanding in your occupation.

**Q1b Talking to Others**
Did you talk to anyone in detail about your possible occupation change and your reasons for it, since the last questionnaire?

1 Did not discuss with anyone – 7 Discussed it in depth with at least 1 person

**Q2 Your feelings overall about your current occupation**
Thinking about your current occupation overall and your experience in this occupation over the years, please rate the following statements:

1 Strongly disagree – 7 Strongly agree

1. Taken overall, I think I made a good choice of occupation.
2. Overall, my occupation provides me with what is important to me.
3. I find it difficult to be enthusiastic about the type of work I do.
4. Most of the time, I am not satisfied with my occupation.
5. I think that I have a pleasant occupation.
6. I find real enjoyment in the type of work I do.

**Q3 Thinking about changing**
Please rate the following statements.

1 Strongly disagree – 7 Strongly agree

1. I rarely think about changing occupation.
2. I think it is unlikely that I will change to a different line of work.
3. I frequently consider if another line of work would suit me better.
4. I would like to find another occupation.
5. I often feel I would like to do a different type of work.
6. I feel it is likely I will stay in my current occupation.
7. I have a lot of information about a new occupation.
Q4 You and your current occupation
In this section are a number of statements that may apply to you and your work. Although some statements may seem similar, every statement is different. Based on your experiences in your current occupation over the years, please rate the statements:
1 Strongly disagree - 7 Strongly agree or 8 Not relevant to me

1. My occupation does not support how I see myself.
2. My line of work makes me feel less than competent.
3. I think my line of work has little value.
4. My work has made me change in ways I do not like.
5. Some people in my work have undermined my self-worth.
6. I do not feel part of a team in my occupation.
7. I have a sense of personal stagnation in my occupation.
8. I believe that in the future my line of work will not help me to achieve the things in life that are important to me.
9. My occupation prevents me from being who I really am.
10. My line of work is bad for my self-esteem.
11. My work does not make me stand out from other people.
12. I do not consider my line of work to be suitable for someone with my set of personal values.
13. I do not feel I belong with others in my line of work.
14. I find no meaning in my work.
15. I worry about my ability in my work.
16. I am embarrassed to be associated with the people in my line of work.
17. My line of work does not make me feel distinctive.
18. I think that the people in my line of work compare unfavourably to those in other occupations.
19. I have changed for the worse as a person due to my work.
20. My line of work does not help me to achieve the things in life that are important to me.
21. My line of work does not allow me to express important parts of myself.
22. My occupation does not allow me to grow and develop.

(You now have 7 questions remaining and all are much shorter than this question.)

Q5 Your recent feelings about your current occupation
The words below describe different feelings and emotions. Please indicate to what extent you have felt this way during the past few weeks in your working life.
1 Very slightly or not at all – 7 Extremely

Anxious Enthusiastic
Excited Stressed
Contented Frustrated
Unhappy

Q6 Your intention to change
Please rate the following statements.
1 Strongly disagree – 7 Strongly agree
1. I do not feel any obligation to remain in my occupation.
2. I feel a responsibility to my line of work to continue in it.
3. Even if it were to my advantage, I do not feel that it would be right to change my field of work now.
4. I would feel guilty if I left my occupation.
5. I stay in my line of work because of a sense of loyalty to it.
6. I intend to leave my current occupation in the foreseeable future.
7. I am determined to start in my new occupation as soon as is practical.
8. I expect to be working in my new occupation before long.
9. I will finish in my current occupation as soon as I can.

(The questions below are asked again because, for some people, the responses may have changed.)
10. I have decided on my new occupation  
   Y/N/Uncertain
   Please enter title or brief description of new occupation:
11. I have planned the next step to begin in the new occupation.
   Y/N/Uncertain  I have taken or will have taken the next step by (date)
12. I have applied for study or training for the new occupation.
   Y/N/Uncertain  Date training begins:
13. I have applied for a job (paid or unpaid) in the new occupation.
   Y/N/Uncertain. Date of application:

Q7 A possible new occupation
Please rate the following statements.
I Not at all – 7 Very much so

1. I can think of a new occupation in which my self-esteem would be high.
2. I can picture a new line of work at which I would be good.
3. I can imagine a new occupation that fits with how I see myself.
4. I know of a new occupation which will allow me to feel distinctive.
5. I can see myself in a new occupation that has meaning for me.
6. I know of a new occupation in which I will feel that I belong with others in the field.
7. I can picture a new occupation in which I will be proud to be associated with others in the field.
8. I can see myself in a new occupation which will express an important part of who I am.
9. I can visualise a new occupation that will allow me to develop myself as a person.
10. I know of a new occupation that fits my personal values.
11. I can imagine a new occupation which will help me to achieve the things in life that are important to me.

Q8 Your feelings about changing to a possible new occupation
I Strongly disagree – 7 Strongly agree

1. I believe that I am capable of changing occupation.
2. I am not sure that I will be capable of leaving my old occupation.
3. I know that I will be able to begin a new occupation.
4. The words below describe different feelings and emotions. Please indicate to what extent you feel this way about the prospect of changing occupation:
1. I have investigated one or more different occupations on the internet.
2. I have sought information about one or more different occupations from other people.
3. I have investigated one or more different occupations in additional ways.
4. I have consulted other people for help in working out what occupation may suit me.
5. I have used the internet to find out more about what occupation may suit me.
6. I have explored in additional ways what occupation may suit me.
7. The words below describe different feelings and emotions. If you have a new occupation in mind, please indicate to what extent you feel this way about your new occupation. If you do not yet have a new occupation in mind, please skip this question.

Q10 A gradual or a sudden decision?
Would you describe your thoughts about changing occupation as starting gradually or suddenly?
Gradual
Sudden
Other. Please explain [text box]
What events or experiences have contributed to your thoughts of changing?

Q11 Your current job
Turning now to your day-to-day job in your current occupation, that is, the activities you do and the people you deal with each day, please rate your response to the following statements.

I Strongly disagree – 7 Strongly agree
1. I feel fairly satisfied with my job.
2. Most days I am enthusiastic about my job.
3. Each day at work seems like it will never end.
4. I find real enjoyment in my job.
5. I consider my job rather unpleasant.

End of Questionnaire
When you click ‘Yes’ below, we will receive your completed questionnaire. Your responses are anonymous and confidential. They will be held in compliance with the Data Protection Act and will be used only in connection with the current research.
You will find Career Change Information Sheet No. 3 available for download on the next screen after you click ‘Yes’. It looks at alternative career paths you may not have considered, and important questions to consider when thinking about changing career.

Our study has been looking at how thoughts and feelings about occupation change may or may not change over time. Your responses have been of great benefit to the study. We would like to invite you to complete the final questionnaire in about four week’s time. We will then have a picture of specific thoughts and feelings spanning 3 months. You are under no obligation to complete the next questionnaire when we contact you.

On completion of the final questionnaire, you can download Information Sheet No. 4, which will suggest ways to make change happen, and tips for increasing confidence. You will also be given details for contacting a Career Coach, who will be happy to respond to any questions you have on career, during one of three on-line clinic days.

Thank you for your help in our study so far. Your responses have been very valuable in our research.

Submit your completed form? [Yes/No]
Appendix B.1-4 Questionnaire 4

This is the last of four questionnaires, which are part of a study about career change by the University of Surrey. Your responses to this questionnaire will provide our study with a picture of thoughts and feelings about occupation change over three months. This type of research has not been done before and your responses are very valuable to us.

When you have submitted your responses, you will be given a link to download a fourth short guide about career change. The guide suggests ways to make change happen, tips for increasing confidence and some more useful books and websites. We hope you will find it interesting and useful.

We hope you can complete this final questionnaire and thank you for your contributions to our study so far.

The questionnaire should take about 15 minutes to complete. Completing the form is voluntary. No information from the questionnaire is held until you answer ‘Yes’ to the question ‘Submit your completed form?’ at the end of the form. If you decide not to complete the questionnaire, you can stop at any point and no information is held. All information collected is anonymous and in confidence. All questionnaires that are submitted are stored by the University of Surrey, which is a registered site under the Data Protection Act.

If you have any comments or concerns about the questionnaire or the study, please contact us on the email address below.

Niamh Murtagh  Email Address: n.murtagh@surrey.ac.uk
Professor Evanthia Lyons
Dr Paulo Lopes

General Information
Date of birth (month and year only)
Gender [Female/Male]
First three letters of surname: ___  [e.g. Smith ]

We require these details again to match this questionnaire with the others you have completed.

As a reminder, by “occupation”, we mean your main line of work, paid or unpaid. The term “current occupation” is used to refer to the occupation you are thinking of moving from, and “new occupation” for the one you are thinking of moving to. If you are studying or training full-time for a new occupation, “current occupation” also refers to the occupation you are thinking of moving from.

Q1 Talking to Others
Did you talk to anyone in detail about your possible occupation change and your reasons for it, since the last questionnaire?
1 Did not discuss with anyone – 7 Discussed it in depth with at least 1 person
Q2 Your feelings overall about your current occupation
Thinking about your current occupation overall and your experience in this occupation over the years, please rate the following statements:

1 Strongly disagree – 7 Strongly agree

1. Taken overall, I think I made a good choice of occupation.
2. Overall, my occupation provides me with what is important to me.
3. I find it difficult to be enthusiastic about the type of work I do.
4. Most of the time, I am not satisfied with my occupation.
5. I think that I have a pleasant occupation.
6. I find real enjoyment in the type of work I do.

Q3a How you usually feel
Each of the words below describes different feelings and emotions. Please indicate to what extent you generally feel this way.

1 Very slightly or not at all – 7 Extremely

Interested
Happy
Upset
Strong
Guilty
Enthusiastic
Proud
Nervous

Irritable
Excited
Anxious
Unhappy
Determined
Frustrated
Afraid
Contented

Q3b Thinking about changing
Please rate the following statements.

1 Strongly disagree – 7 Strongly agree

1. I rarely think about changing occupation.
2. I think it is unlikely that I will change to a different line of work.
3. I frequently consider if another line of work would suit me better.
4. I would like to find another occupation.
5. I often feel I would like to do a different type of work.
6. I feel it is likely I will stay in my current occupation.
7. I have a lot of information about a new occupation.

Q4 You and your current occupation
In this section are a number of statements that may apply to you and your work. Although some statements may seem similar, every statement is different. Based on your experiences in your current occupation over the years, please rate the statements:

1 Strongly disagree – 7 Strongly agree or 8 Not relevant to me

1. My occupation does not support how I see myself.
2. My line of work makes me feel less than competent.
3. I think my line of work has little value.
4. My work has made me change in ways I do not like.
5. Some people in my work have undermined my self-worth.
6. I do not feel part of a team in my occupation.
7. I have a sense of personal stagnation in my occupation.
8. I believe that in the future my line of work will not help me to achieve the things in life that are important to me.
9. My occupation prevents me from being who I really am.
10. My line of work is bad for my self-esteem.
11. My work does not make me stand out from other people.
12. I do not consider my line of work to be suitable for someone with my set of personal values.
13. I do not feel I belong with others in my line of work.
14. I find no meaning in my work.
15. I worry about my ability in my work.
16. I am embarrassed to be associated with the people in my line of work.
17. My line of work does not make me feel distinctive.
18. I think that the people in my line of work compare unfavourably to those in other occupations.
19. I have changed for the worse as a person due to my work.
20. My line of work does not help me to achieve the things in life that are important to me.
21. My line of work does not allow me to express important parts of myself.
22. My occupation does not allow me to grow and develop.

(You now have 7 questions remaining and all are much shorter than this question.)

Q5 Your recent feelings about your current occupation
The words below describe different feelings and emotions. Please indicate to what extent you have felt this way during the past few weeks in your working life.

1 Very slightly or not at all – 7 Extremely

Anxious

Enthusiastic

Excited

Stressed

Contented

Frustrated

Unhappy

Q6 Your intention to change
Please rate the following statements.

1 I am very uncertain – 7 I am very certain

1. I intend to leave my current occupation in the foreseeable future.
2. I am determined to start in my new occupation as soon as is practical.
3. I expect to be working in my new occupation before long.
4. I will finish in my current occupation as soon as I can.

5. I have decided on my new occupation

Y/N/Uncertain

Please enter title or brief description of new occupation:

6. I have planned the next step to begin in the new occupation.

Y/N/Uncertain

I have taken or will have taken the next step by (date)

7. I have applied for study or training for the new occupation.

Y/N/Uncertain

Date training begins:

8. I have applied for a job (paid or unpaid) in the new occupation.

Y/N/Uncertain

Date of application:
Q7 A possible new occupation
1 Not at all – 7 Very much so

1. I can think of a new occupation in which my self-esteem would be high.
2. I can picture a new line of work at which I would be good.
3. I can imagine a new occupation that fits with how I see myself.
4. I know of a new occupation which will allow me to feel distinctive.
5. I can see myself in a new occupation that has meaning for me.
6. I know of a new occupation in which I will feel that I belong with others in the field.
7. I can picture a new occupation in which I will be proud to be associated with others in the field.
8. I can see myself in a new occupation which will express an important part of who I am.
9. I can visualise a new occupation that will allow me to develop myself as a person.
10. I know of a new occupation that fits my personal values.
11. I can imagine a new occupation which will help me to achieve the things in life that are important to me.

Q8 Your feelings about changing to the new occupation
1 Strongly disagree – 7 Strongly agree

1. I believe that I am capable of changing occupation.
2. I am not sure that I will be capable of leaving my old occupation.
3. I know that I will be able to begin a new occupation.
4. The words below describe different feelings and emotions. Please indicate to what extent you feel this way about the prospect of changing occupation:
   1 = very slightly or not at all  7 = extremely

   Happy               Scared
   Anxious             Excited
   Determined          Sad

Q9 Your possible new occupation
1 Not at all or hardly – 7 Extensively

1. I have investigated one or more different occupations on the internet.
2. I have sought information about one or more different occupations from other people.
3. I have investigated one or more different occupations in additional ways.
4. I have consulted other people for help in working out what occupation may suit me.
5. I have used the internet to find out more about what occupation may suit me.
6. I have explored in additional ways what occupation may suit me.
7. The words below describe different feelings and emotions. If you have a new occupation in mind, please indicate to what extent you feel this way about your new occupation. If you do not yet have a new occupation in mind, please skip this question.
   1 Very slightly or not at all – 7 Extremely
Enthusiastic Inspired
Nervous Frustrated
Excited Happy

Q10 Constant or fluctuating feelings about change?
Do you think your attitudes and feelings about changing occupation have changed over the last three months? [Yes/ No/ Uncertain]
Please explain a little more about your answer: [text box]

Q11 Your current job (last question)
Turning now to your *day-to-day* job in your current occupation, that is, the activities you do and the people you deal with each day, please rate your response to the following statements.

1 Strongly disagree – 7 Strongly agree

1. I feel fairly satisfied with my job.
2. Most days I am enthusiastic about my job.
3. Each day at work seems like it will never end.
4. I find real enjoyment in my job.
5. I consider my job rather unpleasant.

End of Questionnaire
When you click ‘Yes’ below, we will receive your completed questionnaire.

You will find Career Change Information Sheet No. 4 available for download on the next screen after you click ‘Yes’. It looks at ways to make change happen, tips for increasing confidence, and some more useful websites and recommended books. A second document gives you details of the on-line clinic days, when a Career Coach will be happy to respond to any questions you have on career.

Our study has been looking at what contributes to thoughts of changing careers, and how thoughts and feelings about occupation change over time. Few studies have investigated this area and your responses have been of great benefit to the research.

If you would like to receive a summary of the study’s findings, please enter your email address: [text box]

(We expect the findings to be available towards the end of 2008. The email address we have used to communicate with you regarding the study will be deleted when data collection is complete. This is expected to be by 31st May 2008.)

If we were to consider a follow-up study, may we contact you again? [Yes/No]
You are under no obligation to respond if we contact you.

Thank you very much for your contribution to the study. All information that you provided to us will be treated as confidential. Your data will be held in compliance with the Data Protection Act and will be used only in connection with the current research.
Submit your completed form? [Yes /No]
## B-2 Factor Analysis of Measures

### Thoughts of Changing Career: Item loadings

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### Identity Threat: Item loadings

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### Search Behaviour: Item loadings

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### Possible Self: Item loadings

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<td>Distinctiveness</td>
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<td>Belonging</td>
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<tr>
<td>Self-esteem</td>
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### Emotions in Current Occupation: Item loadings

| Em.crnt_occ_n1    |   .82   |   .09   |
| Em.crnt_occ_n2    |   .79   |   .18   |
| Em.crnt_occ_n3    |   .78   |  -.15   |
| Em.crnt_occ_n4    |   .68   |  -.44   |
| Em.crnt_occ_p1    |   .05   |   .90   |
| Em.crnt_occ_p2    |   .07   |   .87   |
| Em.crnt_occ_p3    |  -.07   |   .70   |

### Emotions about New Occupation: Item loadings

| Em.new_occ_p2     |   .93   |   .02   |
| Em.new_occ_p4     |   .90   |  -.03   |
| Em.new_occ_p1     |   .89   |  -.03   |
| Em.new_occ_p3     |   .86   |  -.01   |
| Em.new_occ_n3     |  -.21   |   .83   |
| Em.new_occ_n2     |   .22   |   .64   |
| Em.new_occ_n1     |  -.24   |   .60   |
B-3 Initial Conceptual Model

Figure B-3 Initial conceptual model of voluntary occupation change
**B-4 Additional Analyses**

**B-4.1 Additional Analysis on the Conceptual Model**

*Testing the construct negative emotions in the current occupation*

The relationship between negative emotions in the current occupation and occupational satisfaction was explored further. Two different one-item measures of negative emotion (frustration and unhappiness) were tested to replace the scale measure. Unhappiness had slightly better fit indices than frustration, but scale and individual measures all showed good fit with little difference between them. ($\chi^2$ difference test was not appropriate as the degrees of freedom remained the same.)

**B-4.2 Additional Analyses on Longitudinal Data**

Table B-4.2 shows the number of participants whose measures on the three main variables decreased, increased or remained stable over the monthly intervals of measurement.

Definitions of increase, decrease and stability are as given in Section 6.3.4: a difference between time periods within plus and minus one Standard Deviation from the mean (SD) is defined as stability, more than +1 SD as an increase and less than -1 SD as a decrease.

<table>
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<th>Increase</th>
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<tr>
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<td></td>
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<td>28</td>
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<td>25</td>
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<td>7</td>
<td>27</td>
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</tbody>
</table>

Decreases in thoughts of changing occupation were more numerous over the three time intervals than stable or increasing thoughts of change. This may reflect changing circumstances which contributed to thoughts of changing: events contributing to perception of threatened identity or negative emotion may arise at different times and may or may not persist over time so thoughts of changing may fluctuate. Psychological factors may also be pertinent: if thinking of changing career gives rise to cognitive dissonance, by conflicting with occupational commitment for example, individuals may modify their thoughts to reduce dissonance (Festinger, 1957). Regression to the mean may be part of the larger decrease in the first time interval. The similar numbers of increased, decreased and static scores over the three month interval (time 1 to time 4) is consistent with the non-significant t-test in Section 6.3.4 showing stability over the period of the study ($t = .00$, $df = 54$, $p > .05$), but shows variation over time as well as stability. Further study is required on influences on thoughts of changing career over time.

Similar patterns of change can be seen in the numbers of changed scores for identity threat, and similar explanation to those regarding thoughts of changing may apply. Psychological mechanisms contributing to decreasing perception of identity threat may include coping strategies described in Identity Process Theory, which operate to mitigate threats to the self-concept.

The pattern of scores on perception of a possible self shows more increases over each time interval than decreases or stability, and this is consistent with the perception of a possible
The decreases in scores may represent the vagaries of the exploration process: individuals may believe they have found a new possible self, investigate further and uncover information which causes them to reject that possible self.

In order to investigate whether the patterns of change were related to individual differences, the data set was split into three categories, for increased, decreased and stable scores, for each of the three time intervals: time 1 to time 2, time 1 to time 3 and time 1 to time 4. This was done for each of the three main variables: thoughts of changing occupation, identity threat and perception of a possible self. Each cell in Table B-4.2 represents one subset of data. For each subset, correlations of all variables were run, including individual difference measures of openness and locus of control, and demographic measures of age and gender. Locus of control has been argued to correlate significantly with job satisfaction (Spector, 1997). No consistent patterns of relatedness were evident. The two main regressions were conducted for each subset: (1) thoughts of changing occupation as dependent variable, with age, gender, job satisfaction, occupational commitment, occupational satisfaction, identity threat and negative emotions in the current occupation as independent variables; and (2) action to change occupation as dependent variable, and thoughts of changing, self-efficacy, search behaviour and perception of a possible self as independent variables. These regressions were run stepwise in the same way as described in Section 5.3.1. No new predictors emerged, in addition to those documented in Section 5.3.1.

In sum, with respect to the demographics and individual differences measured in Study 2 (age, gender, openness to change, locus of control), no relationship was found with the patterns of change over the period of the study.