

Peake, S. & McDowall, A. (2012). A narrative analysis of career transition themes and outcomes using chaos theory as a guiding metaphor. *British Journal of Guidance and Counselling*, 40(4), 395-410, **DOI:**

10.1080/03069885.2012.704350

Chaotic careers:

Sharon Peake^{a*} and Dr Almuth McDowall^b

^a *Sharon Peake Consulting, London, UK;* ^b *Faculty of Arts and Human Sciences, University of Surrey, Guildford, UK*

Abstract

In a rapidly changing world of work little research exists on mid-career transitions. We investigated these using the open-systems approach of chaos theory as a guiding metaphor and conducted interviews with seven mid-career individuals chosen for their experience of a significant mid-career transition. Four common themes were identified through narrative analysis, where ‘false starts’ to a career were a common experience prior to finding a career ‘fit’. Career transitions, precipitated by a trigger state and/or event such as a period of disillusionment, were an important part of this ‘finding a fit’ process. Overall, career success outcomes were shaped by a combination of chaos elements: chance, unplanned events, and non-linearity of resultant outcomes. We discuss implications for future research and for practice.

Keywords: career transition; chaos theory; narrative analysis; chance; career change; career counselling (*author note: these are our preferred key words, have chosen alternatives from set list provided*)

Introduction

We live in an unparalleled economic and technological milieu where the only constant is global and national change. For practitioners and theorists considering career transitions, environment influences cannot be ignored. The effects of economic instability due to the global recession and various financial crises on job availability are yet to be fully realised, with UK unemployment not predicted to fall significantly for several years (H.M. Treasury, 2011, p. 90) and the International Labor Organization forecasting a “six to eight year employment and social protection crisis” (2009). The broader trend of swiftly-evolving technology also means that the nature of jobs is changing appreciably, with remote working, outsourcing and off-shoring impacting how and where jobs are performed (e.g. Mamaghani, 2006). Additionally, UK labour market changes show greater levels of job movement, with length of service with an employer falling from an average of five years or less in 1996, to an average of four years in 2001 (Office for National Statistics, 2003). The result is a higher number of average job changes. It is not easy to make career plans in the midst of unpredictable and uncertain elements such as the pace of change, a growing service economy, technological expansion and economic influences. However, this is the reality in which career theorists, career practitioners and the workforce find themselves. We will begin with an examination of the concept of career transition and then review both traditional and contemporary approaches to career decision making and development, in order to position the current research.

Traditional approaches to careers

A traditional and widely cited definition of career is “the sequence of employment-related positions, roles, activities, and experiences encountered by a person” (Arnold, 1997, p. 16). This definition by nature implies a linear perspective. Traditional modernist perspectives on careers such as Holland’s (1985) person-environment fit model and Super’s (1976) life-span, life-space theory typically concentrate on skills

and interests and other individual characteristics. Both models emphasise career decision-making as a rational and controlled process, assuming only a narrow range of variables to be relevant. However, such approaches continue to have a significant impact on careers research and practice of today but are increasingly criticised for their potentially limiting perspective (e.g. McMahon & Watson, 2007; Savickas, 1997; Whiston & Brecheisen, 2002).

Yet the impact of a rapidly changing world of work forces us to question such approaches to career development (e.g. Bloch, 2005; McMahon & Watson, 2007; Patton & McMahon, 2006; Pryor & Bright, 2003a, 2003b; Schultheiss, 2007). The narrow focus of traditional vocational development theories and trait-factor approaches to career decisions has been increasingly criticised as failing to adequately capture the complexity and dynamism of the present-day (e.g. Bloch; Bright & Pryor, 2005; McMahon & Watson; Miller, 1995; Mitchell, Levin, & Krumboltz, 1999; Pryor, Amundson & Bright, 2008; Pryor & Bright, 2003b). Arnold (2004) points to weaknesses in Holland's theory and RIASEC model of careers, itself one of the long-standing dominant models in career psychology, referencing meta-analytic studies which demonstrate poor congruence between job and environment fit, and outcome measures such as performance and job satisfaction. This highlights that such a narrow and linear focus on the individual and the job environment neglects the wide range of factors which may well have a significant bearing on individual career choice and satisfaction, and thus the need for career transitions. Our discussion would be incomplete without acknowledging to what extent we can define or measure a 'successful' career. Traditional approaches have employed a narrow definition of career success (Heslin, 2005), as measurable by tangible factors, such as promotions, increased pay or bonuses. Such measures may not apply or may be incomplete in a transient career environment.

Career transitions

Career transition has been described as a process of disengagement from one situation and engagement in a new work situation (Fernandez, Fouquereau & Heppner, 2008). Heppner (1998) categorises this process in three alternate but distinct ways: a 'task change' in which new tasks are adopted within the same job and same location; or, a 'position change' resulting in a change in jobs, either with the same employer or with a different employer or location; or an 'occupation change', involving a transition from one occupation to a completely new role and tasks.

The existing literature on career transitions varies in its scope and focus. Work-role transitions theory (Nicholson, 1984; 1990; Nicholson & West, 1989) examines the personal development and career-related tasks required in occupational role transitions. Niessen, Binnewies and Rank (2010) explore this theory further, examining the influence of previous work-role disengagement in successful transitions to self-employment. Adams, Hayes and Hopson (1976) consider seven emotional stages an individual passes through during a transition. A body of literature also exists on transitions in and out of employment (e.g., Arnold, 1990; Reday-Mulvey and Taylor, 1996). Career transition has been of great interest to sports psychologists for some time (Wylleman, Alfermann & Lavalley, 2004) particularly in the sphere of athlete retirement. Other career transitions to have been well-documented include student transitions to the workforce (e.g., Yang & Gysbers, 2007). There has been some, but

noticeably less, research centred on the influences and impacts surrounding mid-career occupational transitions. One exception is a recent study by Brown et al. (2012) proposing a competency-based framework to capture the notion of and necessity for adaptation during transitions (“adapt-abilities”). Nonetheless, scant literature has examined career transition under more contemporary, open-systems theories to which we now turn.

Constructivist and postmodern approaches to careers

Increasingly there has been a call for career development theories to reflect salient influences such as chance events (Bright, Pryor, Chan & Rijanto, 2009; Chen, 2005; Pryor & Bright, 2003a), planned happenstance (Mitchell, Levin & Krumboltz, 1999), uncertainty (Miller, 1995; Trevor-Roberts, 2006), spirituality (Bloch, 2004), serendipity (Stone, 2007), and synchronicity (Guindon & Hanna, 2002); and to arrange these into a more comprehensive framework which recognises the complexities of modern careers (e.g. Bloch; Bright & Pryor, 2005; Bright, Pryor, Wilkenfeld & Earl, 2005; Kahn, 2007; Savickas, 2001). In their review of the careers literature, Guindon and Richmond (2005) pointed to the increased move away from positivistic career theories towards postmodern and constructivist theories. Recently, various writers have supported the use of narrative and metaphors to help explicate career development challenges, including that of career transition (e.g., Bussolari & Goodell, 2009; Pryor & Bright, 2007a, 2008, 2009). Chen (2003) noted the trend toward theory convergence and proposed a framework combining positivist and constructivist theories, with the three broad constructs of ‘career as self-realisation’, ‘career as a reflection of growing experiences’ and ‘career as context conceptualisation’. Other integrative theories include Savickas’ (2001) four level model, which builds on McAdams’ earlier work, incorporating personality dispositions, self-regulatory career concerns, career narratives and a process for continuity and change in career development. Systems Theory Framework (STF) (McMahon, 2005) provides a metatheoretical view of career development (Harrington & Harrigan, 2006; Patton, 2007) by bringing together modern and post-modern career theories (McMahon & Watson, 2007).

Chaos Theory of Careers

Pryor and Bright (2003a; 2003b; Bright & Pryor, 2007) extended systems thinking by proposing the Chaos Theory of Careers (CTC), which holds that an individual’s career is a complex system, capable of self-organising but at the same time susceptible to unpredictable change (Pryor & Bright, 2007a). Thus, CTC draws on key principles of chaos theory, which originates from mathematics and physics (Bird, Gunz & Arthur, 2002; Kauffman, 1995; Marion, 1999) and belongs to the wider field of systems theory (Bussolari & Goodell, 2009; Pryor & Bright, 2003a). Chaos theorists propose that open systems behaviour results from complex interactions. It is marked by the core elements of sensitive dependence on initial conditions, where an arbitrarily small difference in the starting point can have significant impacts on the outcome, recursiveness, where effects are amplified (such as when a pebble is thrown into a pond), and non-linearity, where change in one part of the system does not necessarily have direct causal impacts on other parts of the system. Indeed, a change in one part of the system may have some impact, no impact, or a disproportionate impact (Marion). Thus non-linearity allows for happenstance, uncertainty, serendipity, career chance and synchronicity under the umbrella of chaos theory (Kahn, 2007; Pryor & Bright, 2007b).

We note that chaos theory is as yet relatively novel and reliant on systems thinking which as several writers have critiqued may ultimately be less applicable to humans and social systems than to physical sciences (e.g. Baruch, 2002; Brennan, 1995; Stapleton, 2008). Chaos is by nature difficult to predict (Gleick, 1987), and thus chaos theory is difficult to 'test' in the classical sense in this study. This paper therefore took a metaphorical, rather than a literal level approach interpretation, where we drew on the language and principles of a chaos approach to careers, but acknowledge that a qualitative approach does not 'test' the concepts underpinning chaos theory.

Rationale for the present study

It is evident from the literature that a strong voice exists for more holistic, convergent approaches to career development which may complement traditional positivist-inspired research in the area of career development and decision making. Given the paucity of research surrounding mid-career transition, the current study aims to contribute to the literature by means of a qualitative, social constructionist investigation of career transition and its associations. We examine the degree to which 'chaotic' career patterns are evident in the careers of participants, and the degree to which such patterns influenced career transitions, as recounted in participant's career narratives.

Method

Participants

Sample size in all qualitative research is to do with the nature of the research question and investigation, rather than with generalizability (Marshall, 1996). As the focus of our investigation was idiographic and thus centred on the individual case to convey the richness of the individual experience (see Smith, Jarre & Van Langenhore., 1995), we decided on selecting a small pool of participants to fit out inclusion criteria. Thus, we used purposive sampling (Brewerton & Millward, 2001) to invite seven participants, all of whom were tertiary educated, were mid-career, had a minimum of six years' work history, and had experienced a significant mid-career transition in the past seven years. We defined a 'significant mid-career transition' as a change of profession or occupation, or a job change that involved at least two of the following: change of country; change of employer; change of job title; change of industry; or, leaving or re-entering the workforce. Participants ranged in age from 33 to 46 years: generation X in popular parlance. Their current employment covered a broad range of professional fields: osteopathy; IT development; executive remuneration; marketing; police force; learning and development; and occupational therapy. Their national origins were British, Australian and German. Whilst not a purposive element of the participant selection criteria, none of the participants had previously sought professional careers advice or counselling.

The narrative approach to interviews and procedure

We selected narrative analysis (NA) as the research approach for this study because of its emphasis on how individuals make sense of traumatic and transitional life events (Crossley, 2000; 2007). Additionally, NA's focus on the wider context is particularly relevant to the study of careers, given that individuals in the workplace exist not in

isolation, but rather as part of a broader social and organisational network of influences. We adopted a life story interviewing approach (Murray, 2008) and prospective participants were provided indicative interview questions in advance to allow for preparation and were also asked to provide their curriculum vitae where available.

Each interview commenced with broad questions relating to the participants' work history and the career transition ("*Begin at the point which represents the outset of the transition or any key events leading to it, and tell me as much as you can remember*"), then proceeding to autobiographical interview questions, based on McAdams (1993) approach, incorporating six areas: life (career) chapters; key events; significant people; future script; stresses and problems; and themes.

All interviews except one were conducted in-person (the seventh participant was interviewed by telephone), and interview length ranged from one hour, to one hour and thirty minutes. All interviews were recorded with informed consent and transcribed verbatim.

Data analysis

We analysed transcript data in accordance with the narrative approach proposed by Crossley (2007, p. 139-142), with the primary researcher reading each transcript five times to ensure adequate familiarisation with the material and noting key issues identified in the data. The second researcher also reviewed the transcripts, also noting key issues, before the authors met to discuss views on the primary themes. This process allowed us to identify the narrative tone – that is the manner in which the narrative is told– along with the 'imagery' and 'themes', enabling a rough outline of the prominent elements of each story to be created. We noted the language used, including symbols and metaphors, together with any dominant themes in each narrative, weaving this data into a coherent narrative for each transcript in which the participant stories were constructed. Finally, we considered narratives as a group, identifying individual narratives, key events, circumstances, and triggers, and whether any of the chaos theory elements were apparent. This allowed us to identify common themes, which we defined as commonalities within the narrative that presented in at least three of the seven narratives.

A summary of the mid-career transitions experienced by each participant is outlined in Table 1.

Insert Table 1 about here

Results

The themes indicated that the experience of careers and in particular transitions was shaped by a combination of factors, including chance events and the non-linearity of resultant outcomes. Careers were not planned, and growth from adversity featured prominently. 'Lucky breaks' – this is, being in the right place at the right time, was another theme, as was a process of 'finding a fit' – often spurred on by a period of disenchantment. Career transition appeared to be an important part of this 'finding a fit' process. We illustrate these themes with quotes which are particularly representative using pseudonyms to preserve anonymity.

Lack of career planning

None of the seven participants described having any clearly defined career plan when they entered their working careers and career advancement appeared to occur in a haphazard, opportunistic or reactive manner.

To illustrate, during his 12-year working life H1 has worked across four industries, in five different functional roles, with four different employers. He described how “*osteopathy was my first calculated move*”. It was a move that occurred six years into his career. Similarly, in his 18-year career, M1 worked in three cities, two countries, seven industries and four functional areas, and has been employed by eight different employers. He summed up his approach to career by saying: “*I leave a lot of things to opportunity and chance. ...there have been a lot of little things that have sort of steered me in a direction that I never honestly thought I would be in*”.

And K1 described how her current vocation is a very niche area and as such not a career that one would easily plan for:

When I left university I had absolutely no idea that such a thing as the job that I am doing right now even exists, and most people that I speak to when they ask me what I do, don't know that the job that I have exists.

All participants reported a sense of ‘drifting’, or ‘going with the flow’, at some stage of their careers prior to a career transition. For four of these individuals this sense occurred at the early stages of their career as they tried out different jobs and career paths.

K1 talked about the early days of her consulting career “*..being treated a little bit like a school kid, floating around between lots of different things, because we were covering a lot of ground. Not really being very focused*” while H1 made reference to trying different jobs because “*I had no idea what I was doing, no idea what I wanted to do*”.

Growth from adversity: Disappointment, disillusionment and forced change

A sense of disillusionment was a distinctive feature for six of the seven participants during at least one point in their career narrative which then served as a catalyst prompting the individual to achieve a more meaningful career.

R1 described feeling a huge sense of unease about the career he entered shortly after leaving university and starting in his first marketing role:

I just recognised that this is not the kind of thing that I probably wanted to be in.... I didn't really like the people; it seemed very fake and materialistic. But then ... when you realise ‘I just gave three years to a subject and it leads to people doing this’.. maybe I should have spotted it earlier..

This ultimately led R1 to consider other career options, with a satisfying IT career following suit.

Yet for two of the other participants, the disillusionment came much later in their careers and was more specifically related to perceived injustices in the workplace. M1, whose overall narrative was peppered with a sense of frustration, conflict, and betrayal, described his recent job loss from a high profile marketing role in Dubai:

I had worked in an area for 2½ years to get a promotion. I ended up losing my job with the rest of the team, apart from one person who then ends up with my job....we also lost our jobs two weeks before they handed out bonuses.

For B1, an unplanned event had a significant influence on her career trajectory. She had already started to question the meaning of what she was doing after several years of working in marketing in the opera industry: *“that is the realization I came to about GXX. It is pretty meaningless”*. Her unplanned pregnancy was a key precipitating factor in her career transition from marketing to occupational therapy, *“...I guess, if I hadn’t had my son, and that was a chance thing really, I would never have got into [Occupational Therapy] because I would never have got off the treadmill thing in the arts”*. She added that what may have been perceived as a negative situation turned out to have *“...given me so much, I am so much happier than I ever was....[it] changed my life really”*.

An example of a high impact chance event which was prompted by external influences occurred for H1 during the dot.com ‘bust’, which resulted in the collapse of his employer, and his subsequent job loss. In keeping with the optimistic tone of his narrative, he reflected, *“there would have been a very different end to my career if MFXX had worked. Because it was the best two years I have ever spent working in terms of the knowledge I gained, and how much I grew up”*. However, this significant event was the catalyst for him moving to osteopathy, which he describes as his real fit. This example highlights the sense of redemption, or liberation, which featured heavily in the narratives, with participants able to retrospectively rationalise the benefits of facing, and moving through, adversity.

Lucky breaks: Right place, right time

Several participants pointed to the role of luck, or being in the right place at the right time, as contributing factors in their transitions, often yielding disproportionate impacts on their subsequent career paths. For example, a seemingly serendipitous incident resulted in K1’s subsequent entry into her current specialisation – an area she is passionate about: *“...the reason why I drifted in that particular space was again somewhat by chance...there was essentially no-one there to resource the project at the level that I was at that time”*. K1 was brought on to the project, *“and then from that moment onwards... I was having this incredible learning curve where I was working like a sponge, and I absolutely loved what I was doing”*. This example illustrates an event over which K1 had minimal control, but which had a significant, and perhaps disproportionate, influence over her subsequent career.

For some participants these ‘lucky breaks’ came in the form of social contacts playing a role in shaping career opportunities. Five of the seven participants described a theme of job offers emanating from social connections, whether they were friends, former or current work colleagues, or lesser known social connections. In a particularly powerful example, R1 described how a chance encounter with a couple in a restaurant (he was waiting tables there at the time), led to their offer to help him find employment within

their organisation: *“And they said ‘...we work at CGXX in HR, do you want us to look for a job for you?’ And I said ‘Yes please! That was on the Saturday night. On Monday I got an email from them, I responded to it, I had an interview on Wednesday, and I started on the following Monday”* In effect, after applying for 250 IT jobs on his arrival in London, it was this brief social encounter that secured him a job.

K1 described how her career in human capital consulting very nearly did not happen at all after her application was initially rejected by a UK office of a large, global professional services company:

..there was the HR Director at the time who disagreed with the decision to reject me... and he contacted a partner in Manchester and said ‘I have this candidate and I think that they are being very stupid not making her an offer. I think you should meet her.’ So I met him in London for breakfast, and he made me an offer...So if it hadn’t been for that person actually putting himself out and making his disagreement of the decision known to others, I would have never joined consulting.

Finding a fit

The joy of finding a ‘fit’ with a career or vocation, whether this had occurred intentionally or inadvertently was evident throughout the narratives, the plots marked by a sense of hope, excitement, passion and fun.

For H1 it was his redundancy during the dot.com bust that forced him to re-evaluate his career options. He described how when exploring different health care career options, the osteopathy approach resonated most strongly with him, *“... the philosophy I loved, and I loved where it came from”*. He explained how the decision to retrain – not an insignificant decision given the five year training programme, and his fifth functional occupation to date - had been the right move: *“every day I come in here, I love it”*.

And A1 described his immediate acceptance of the Police Force offer, based on a sense that this new vocation would ‘fit’ him - *“once I had got the offer there was never any decision that I wasn’t going to take it”*. Interestingly, this decision ran counter to the overall theme of A1’s narrative, which largely spoke of passive career decisions, and *“taking the path of least resistance”*, A1 making the point that his application to the Police Force was *“...the only time I have actually put myself through something to achieve something”*. Yet he described how the move out of IT and into the Police Force was most definitely the right choice for him: *“I love it. There are moments that are dull, and I wonder ‘why am I still doing this’, but they pass very quickly”*.

Three of the participants described a sense of enlightenment, or discovery of themselves through their career transitions. B1 described a feeling of realisation which was one of several factors which prompted her to change career: *“I just suddenly realised I didn’t really feel I fitted in, but I didn’t really want to either. It wasn’t important to me anymore...”*. This sentiment was indicative of B1’s narrative, which was littered with self-insight and sage reflections on what appeared to be a journey of self-discovery through her career and career transition. Her passion for her new vocation was evident: *“it has given me so much, I am so much happier than I ever was”*.

Discussion

It was the common narrative that the career transition of each participant was brought about by an unplanned state and/or event which served as a trigger for the change. For six of the participants, a state of dissatisfaction or disillusionment in their employment was a factor in leading them to seek out alternative vocations. Such feelings of discomfort and frustration associated with disenchantment in one's work served as a key catalyst for these individuals reconsidering their career options and transitioning to a new area. In addition, chance factors, or lucky breaks, provided an impetus to the transition for five participants. For two of these, an unforeseen event, largely outside of their control – in H1's case his job loss following the dot.com bust, and in B1's case her unplanned pregnancy – also served to prompt the career change.

The narrative analysis showed that these chance catalysts initiated a process of finding a 'fit' commonly incorporated both positive and, importantly, negative experiences, some of which were brought about by chance and factors outside of the individual's control. Particularly pertinent examples were given by two participants who each described a significant number of job, location, industry, function and employer changes, thus underscoring a somewhat haphazard career journey. So whilst there was evidence of 'trying on' different roles in order to find a 'fit' with a vocation, what led to this was happenstance and chance, rather a systematic planned process.

The findings of this study show evidence of 'chaotic' career patterns across all participants, suggesting that chance, one or more 'false starts', trying different roles paired with states of dissatisfaction or disillusionment, unpredictability, and opportunistic career behaviour can lead to successful career outcomes in terms of 'finding a fit', without the need for traditional, linear career planning. At the extreme, there was an intentional lack of planning with an emphasis on responsiveness to new opportunities and indeed unforeseen chance events. This observation is consistent with chaos theory's hallmark system behavioural pattern – the strange attractor – a mathematic notion denoting a system which is characterised by change and unpredictability (Pryor & Bright, 2003a; 2003b).

Given that five of the seven participants reported a "love" of what they do, it would appear that formal goal-led career planning, and the many trappings of supposedly 'successful' careers – such as occupational status, promotions and pay (e.g., Heslin, 2005) - are not necessary for the achievement of career success, as defined by the individual. This finding is consistent with literature on 'objective' versus 'subjective' career success (e.g., Gunz & Heslin, 2005) and with calls for a subjectivist approach to career success, having individuals themselves define what 'career' and 'success' mean to them (Heslin).

Five participants reported that chance events - including externally imposed influences, events emanating through social connections, as well as simply being in the 'right place at the right time' - precipitated their career transitions.

Open systems perspectives, such as the Systems Theory Framework (McMahon, 2005) and Chaos Theory of Careers (Pryor & Bright, 2003a; 2003b) explicitly recognise the important and inevitable role of such influences which emanate from sources external to the 'system'. The role of social connections in career decision making was investigated

by Bright, Pryor, Wilkenfeld and Earl (2005), who found proximal social context to be a significant influence on career choice and direction amongst students. Their study further found that unplanned and serendipitous events were also commonly regarded as having an influence on career decisions. This accords with planned happenstance theory (Mitchell, Levin & Krumboltz, 1999), which recognises the value of creating and transforming unplanned situations into leaning opportunities, and Chaos Theory of Careers, which views both unpredictability, as well as order, as critical to career development (e.g., Bright, Pryor & Harpham, 2005). Various authors have called for career counsellors to help clients to be receptive to chance opportunities (e.g., Bright, Pryor, Wilkenfeld & Earl; Chen, 2005; Mitchell et. al.).

Non-linearity, another core element of chaos theory (e.g., Bright & Pryor, 2005), occurs where a change in one part of the system does not necessarily have direct causal impacts on other parts of the system: rather, it may have some impact, no impact, or a disproportionate impact (Marion, 1999). From the narratives of each participant, as well as the overall participant 'story', it would appear that non-linearity has almost certainly been at play with each of these career transitions, with some significantly disproportionate positive consequences evident. A particularly impactful example was given by R1 who described a fortuitous encounter with restaurant patrons in the restaurant, who helped him to secure his first IT job. This seemingly incidental event laid the foundations for an extremely satisfying career. While Bright, Pryor, Chan and Rijanto (2009) recently found evidence for disproportionate, non-linear impacts following negative chance events, little has been written on the prevalence and magnitude of positive chance events, such as this.

Common to the participants who reported their eventual discovery of a meaningful and satisfying career, was the realisation that 'finding a fit' was a *process* which entailed trying different jobs and employers and experiencing frustration and disillusionment, but remaining focused on learning and growth. As referenced above, chance factors also commonly featured in the transitions, suggesting that both disillusionment as well as random events can each function as a catalyst in prompting career transition and ultimately helping individuals to find a more meaningful career 'fit'.

While there is scant research testing these proposed causal factors with regard to mid-career transition, the findings from this study do share some similarities with an exploratory study conducted by Gerstman (1999). Her qualitative study of 19 second advanced degree seekers found that a change in the level of fulfilment from, and interest levels of, participants' careers (as would be the case when one experiences disillusionment), coupled with a change in personal philosophy were causal factors in the development of a new career identity.

It is also worth noting that, notwithstanding the current economic climate, the trend towards greater numbers of job and career changes (e.g., Jones, Scanland & Gunderson, 2004; Slay, 2006; Office for National Statistics, 2003) provides fertile ground, and greater social acceptability, for individuals to 'try on' different career options to determine the best 'fit' for them. The present study adds to the literature in this field by pointing to the links between 'chaotic' career behaviour, conceptualised using chaos theory as a metaphorical reference, career transition and positive career outcomes.

Implications for practice

As the results from this study show, linear, planned approaches are not necessary for job satisfaction and, in any case, are increasingly difficult to adopt in an era where change and uncertainty are becoming the norm. Career success outcomes can be shaped by a combination of chance events, non-linearity of resultant outcomes and a process of ‘finding a fit’ – often spurred on by a period of disenchantment. Career transition may be an important part of this ‘finding a fit’ process. Indeed, we acknowledge that none of our participants had experienced formal career counselling, we cannot discount the notion that they might have found ‘their fit’ at an earlier stage in their lives would this have been the case.

However given that non-linearity, chance and happenstance may be key elements for successful career transitions, certainly for this sample, career counsellors, human resources practitioners, coaches and other advisors may want to consider the following:

1. *Preparing clients for uncertainty* – rather than solely helping to identify ‘person-job fit’ career options, a more fruitful approach for advisors may be, in addition to formal planning, to help prepare clients for a variety of contingencies and to view change and chance as powerful and inevitable aspects of career development. Targeting adaptability, and thus building relevant competence and skill, as for instance undertaken by Brown et al. (in press) may provide a useful framework.
2. *False starts are not fatal but can be an integral part of the overall career journey*: empowering clients to adopt a broad approach where false starts and changes in direction are far from problematic and should, to some degree, be encouraged. Encouraging clients to try different things, focus on learning and growth and reflect on their learning will help them to understand the inevitable dips in their career where frustration or disillusionment may creep in, and interpret this as part of the overall pattern of careers.
3. *Using narrative interviews to understand clients*: the narrative approach is useful in itself to understand career plots (here marked by a sense of hope, excitement, passion and fun) and individual’s overall experiences, eliciting unplanned and chance events that may not be obvious or salient in a more traditional career discussion. Some helpful and practical ideas for practitioners are provided by Stebleton (2010) including: having clients keep journals; developing authentic listening and facilitation; studying narrative-based literature; and practicing articulating personal life-career stories. Pryor and Bright (2008) provide a fascinating and practical illustration of relating career narratives to the seven basic universal story plots identified by Booker.

Limitations

As with all research, this report must be interpreted within the context of its limitations. Given that all participants were professionals with tertiary education, the generalisability of the findings is restricted to similar samples, as given their level of education, and affluence, our participants had the opportunity to ‘wait for a fit’ and ‘let chance happen’. We acknowledge that this might be quite different for other individuals. In addition, the nature of participant self-nomination may inadvertently

have deterred individuals with low self-efficacy or negative transition experiences, and who may therefore have been less eager to share their experiences. We also cannot preclude the notion that our participants might have been particularly 'prone' to floating in, rather than planning, their careers given that we did not pre-screen them with regard to this. Also, none of our participants had experience formal career coaching or counselling. If they had, their experiences may have been different. Nevertheless, the notion of chance and happenstance was so pervasive in the narratives that this deserves attention in future research. In addition, we need to be mindful that we explored the narratives up to the point of the interview, thus narratives may continue to change direction, continue to be influenced by chance or remain in a relative equilibrium. The exploratory nature of this research was intentionally limited in breadth to keep the research focused. Given the small number of participants, the generalisability of these findings is restricted. Therefore there remains the possibility that career transition has antecedent influences and consequences that are more wide-ranging than those that could be captured within the scope of this research. Suggestions for future research, which build on the findings of this study, are made below.

Suggestions for future research

Open-systems approaches to career management, such as the Chaos Theory of Careers, and the Systems Theory Framework, are still reasonably new in the. Given the context of a rapidly changing world of work, greater focus on the impact of open-systems and 'chaotic' behaviour – including chance and non-linearity – is called for. The findings reported here imply that chance and happenstance are more prevalent than acknowledged in established models of careers (e.g. Super, Holland). Of course, this study focused on the career transitions of individuals who were 'mid-career'. Career practitioners, and individuals who will enter the workforce in the next few years, would likely benefit from qualitative, open-systems analyses of new graduates' experiences and sense-making as they enter a workforce operating in times of unprecedented economic hardship.

Also, our study included two individuals who had experienced involuntary mid-career transitions (brought on by redundancy): a study focused *solely* on such transitions, viewed through an in-depth, qualitative lens, would be particularly pertinent in the current economic climate. And finally, while this study touched upon the impact on an individual's identity post-career transition, as would be expected as part of a narrative approach, a more detailed examination of the nature of such impacts, including antecedent conditions and consequent outcomes, would benefit career counsellors, coaches and others who support individuals through career transition.

Conclusion

This study explored the role of chance events for careers in a sample of professionals, all of whom had undergone a mid-career transition. Non-linearity, marked by chance and one-off events paired with growth through adversity, were resounding themes in the career transition narratives offered here, which are elements notably absent from more traditional theories of careers. However, these served as catalysts for ultimately finding a 'fit', a notion compatible with established paradigms. So in other words, there is a role for acknowledging and understanding chance events in finding such fit, whether or

not individuals have access to and the benefit of career counselling. Thus, we conclude that the potential role of chance events should be acknowledged and explored in relevant activities, given that this may serve as a trigger or catalyst, based on these findings. Future research should further explore career transitions in the context of general life events and experiences, across different populations and generations.

References

- Adams, J. D., Hayes, J. & Hopson, B. (1976). *Transition: Understanding and managing personal change*. London: Martin Robertson.
- Arnold, J. (1990). From education to job markets. In S. Fisher and C. L. Cooper (Eds.), *On the Move: The psychological effects of change and transition*. Chichester: John Wiley.
- Arnold, J. (1997). *Managing careers into the 21st century*. London: Chapman.
- Arnold, J. (2004). The congruence problem in John Holland's theory of vocational decisions. *Journal of Occupational and Organizational Psychology*, 77, 95–113.
- Baruch, Y. (2002). Developing career theory based on “new science”: A futile exercise? The devil's advocate commentary. *M@n@gement*, 5(1), 15-21.
- Bird, A., Gunz, H. P., & Arthur, M. B. (2002). Careers in a complex world: The search for new perspectives from the “New Science”. *M@n@gement*, 5(1), 1-14.
- Bloch, D. P. (2004). Spirituality, complexity, and career counseling. *Professional School Counseling*, 7(5). *Special issue: Spirituality and school counseling*, 343-350.
- Bloch, D. P. (2005). Complexity, chaos, and nonlinear dynamics: A new perspective on career development theory. *The Career Development Quarterly*, 53, 194-207.
- Brennan, C. (1995). Beyond theory and practice: A postmodern perspective. *Counseling and Values*, 39(2), 99-107.
- Brewerton, P., & Millward, L. (2001). *Organizational research methods*. London: Sage Publications.
- Bright, J. E. H., & Pryor, R. G. L. (2005). The chaos theory of careers: A user's guide. *The Career Development Quarterly*, 53, 291-305.
- Bright, J. E. H., & Pryor, R. G. L. (2007). Chaotic careers assessment: How constructivist perspectives and psychometric techniques can be integrated into work and life decision making. *Career Planning and Adult Development Journal*, 23(2), 30-48.
- Bright, J. E. H., Pryor, R. G. L., Chan, E. W. M., & Rijanto, J. (2009). Chance events in career development: Influence, control and multiplicity. *Journal of Vocational Behavior*, 75, 14-25.
- Bright, J. E. H., Pryor, R. G. L., & Harpham, L. (2005). The role of chance events in career decision making. *Journal of Vocational Behavior*, 66, 561-576.

- Bright, J. E. H., Pryor, R. G. L., Wilkenfeld, S., & Earl, J. (2005). The role of social context and serendipitous events in career decision making. *International Journal for Educational and Vocational Guidance*, 5, 19-36.
- Brown, A., Bimrose, J., Barnes, S.-A. & Hughes, D. (in press). The role of career adaptabilities for mid-career changers. *Journal of Vocational Behaviour*.
- Bussolari, C. J., & Goodell, J. A. (2009). Chaos theory as a model for life transitions counselling: Nonlinear dynamics and life's changes. *Journal of Counseling & Development*, 87, 98-107.
- Chen, C. P. (2003). Integrating perspectives in career development theory and practice. *The Career Development Quarterly*, 51, 203-216.
- Chen, C. P. (2005). Understanding career chance. *International Journal for Educational and Vocational Guidance*, 5, 251-270.
- Crossley, M. L. (2000). *Introducing narrative psychology: Self, trauma and the construction of meaning*. Buckingham, UK: Open University Press.
- Crossley, M. L. (2007). *Narrative Analysis*. In E. Lyons & A. Coyle (Eds.), *Analysing qualitative data in psychology* (pp. 131-144). London: Sage Publications.
- Fernandez, A., Fouquereau, E., & Heppner, M. J. (2008). The career transition inventory: A psychometric evaluation of a French version (CTI-F). *Journal of Career Assessment*, 16(3), 384-398.
- Gerstman, R. L. (1999). Multiple career identities: The key to career development and career transitions of second advanced degree seekers [Abstract]. *Dissertation Abstracts International Section A: Humanities and Social Sciences*, 59(9-A), 3347.
- Gleick, J. (1987). *Chaos: The amazing science of the unpredictable*. London: Vintage Books.
- Guindon, M. H., & Hanna, F. J. (2002). Coincidence, happenstance, serendipity, fate, or the hand of God: Case studies in synchronicity. *The Career Development Quarterly*, 50, 195-208.
- Guindon, M. H., & Richmond, L. J. (2005). Practice and research in career counselling and development - 2004. *The Career Development Quarterly*, 54(2), 90-137.
- Gunz, H. P., & Heslin, P. A. (2005). Reconceptualizing career success. *Journal of Organizational Behavior*, 26, 105-111.
- Harrington, T. F., & Harrigan, T. A. (2006). Practice and research in career counselling and development - 2005. *The Career Development Quarterly*, 55(2), 98-167.
- Heslin, P. A. (2005). Conceptualizing and evaluating career success. *Journal of Organizational Behavior*, 26, 113-136.

- Heppner, M. J. (1998). The career transition inventory: Measuring internal resources in adulthood. *Journal of Career Assessment*, 6, 135-145.
- H.M. Treasury. (March 2011). *Budget 2011*. Retrieved 17 April 2011, from http://www.hm-treasury.gov.uk/2011budget_easyread.htm
- Holland, J.L. Making vocational choices: A theory of careers (2nd. Ed.) Englewood Cliffs, NJ: Prentice Hall.
- International Labor Organization (June 3, 2009). ILO Director-General calls for a global jobs pact to urgently tackle the employment and social protection consequences of the economic crisis. Retrieved April 18, 2011, from http://www.ilo.org/global/About_the_ILO/Media_and_public_information/Press_releases/lang--en/WCMS_107548/index.htm
- Jones, R., Scanland, K., & Gunderson, S. (2004). *The Jobs Revolution; Changing How America Works*. Tacoma, WA, USA: Copywriters Inc.
- Kauffman, S. (1995). *At home in the universe: The search for the laws of self-organization and complexity*. Oxford: Oxford University Press.
- Khan, L. W. (2007). The chaos of careers: A contextual view of career development. *Career Planning and Adult Development Journal*, 23(2), 65-72.
- Mamaghani, F. (2006). Impact of information technology on the workforce of the future: An analysis. *International Journal of Management*, 23(4), 845-850.
- Marion, R. (1999). *The edge of organization: Chaos and complexity theories of formal social systems*. Thousand Oaks, CA: Sage Publications.
- Marshall, M.N. (1996). Sampling for qualitative research. *Family Practice*, 13(6), 522-525
- McAdams, D. P. (1993). *The stories we live by: Personal myths and the making of the self*. New York: The Guilford Press.
- McMahon, M. (2005). Career counseling: Applying the systems theory framework of career development. *Journal of Employment Counseling*, 42, 29-38.
- McMahon, M., & Watson, M. (2007). An analytical framework for career research in the post-modern era. *International Journal for Educational and Vocational Guidance*, 7, 169-179.
- Miller, M. J. (1995). A case for uncertainty in career counseling. *Counseling and Values*, 39(3), 162-168.
- Mitchell, K. E., Levin, A. S., & Krumboltz, J. D. (1999). Planned happenstance: Constructing unexpected career opportunities. *Journal of Counseling & Development*, 77, 115-124.

- Murray, M. (2008). Narrative Psychology. In J. A. Smith (Ed.), *Qualitative psychology: A practical guide to research methods* (2nd ed., pp. 111-132). Maidenhead, UK: McGraw Hill.
- Nicholson, N. (1984). A theory of work role transitions. *Administrative Science Quarterly*, 29, 172—191.
- Nicholson, N. (1990). The transition cycle: Causes, outcomes, processes and forms. In S. Fischer & C. L. Cooper (Eds.), *On the move: The psychology of change and transition*. Chichester: John Wiley.
- Nicholson, N., & West, M. A. (1989). Transitions, work histories, and careers. In M. B. Arthur, D. T. Hall, & B. S. Lawrence (Eds), *Handbook of career theory* (pp. 181-201). Cambridge: Cambridge University Press.
- Niessen, C., Binnewies, C., & Rank, J. (2010). Disengagement in work-role transitions. *Journal of Occupational and Organizational Psychology*, 83, 695–715
- Office for National Statistics (November 2003). *Job mobility and job tenure in the UK*. Retrieved July 7, 2009 from http://www.statistics.gov.uk/articles/labour_market_trends/jobmobility_nov03.pdf
- Patton, W. (2007). Connecting relational theory and the systems theory framework: Individuals and their systems. *Australian Journal of Career Development*, 16(3), 38-46.
- Patton, W., & McMahon, M. (2006). The systems theory framework of career development and counseling: Connecting theory and practice. *International Journal for the Advancement of Counselling*, 28(2), 153-166.
- Pryor, R. G. L., Amundson, N. E., & Bright, J. E. H. (2008). Probabilities and possibilities: The strategic counselling implications of the chaos theory of careers. *The Career Development Quarterly*, 56, 309-318.
- Pryor, R. G. L., & Bright, J. E. H. (2003a). Order and chaos: A twenty-first century formulation of careers. *Australian Journal of Psychology*, 55(2), 121-128.
- Pryor, R. G. L., & Bright, J. E. H. (2003b). The chaos theory of careers. *Australian Journal of Career Development*, 12(3), 12-20.
- Pryor, R. G. L., & Bright, J. E. H. (2007a). Applying chaos theory to careers: Attraction and attractors. *Journal of Vocational Behavior*, 71, 375-400.
- Pryor, R. G. L., & Bright, J. E. H. (2007b). The chaos theory of careers: Development, application, and possibilities. *Career Planning and Adult Development Journal*, 23(2), 49-64.
- Pryor, R. G. L., & Bright, J. E. H. (2008). Archetypal narratives in career counselling: A chaos theory application. *International Journal for Educational and Vocational Guidance*, 8, 71-82.

- Pryor, R. G. L., & Bright, J. E. H. (2009). Game as a career metaphor: A chaos theory counselling application. *British Journal of Guidance & Counselling*, 37(1), 39-50.
- Reday-Mulvey, G., & Taylor, P. (1996). Why working lives must be extended. *People Management*, 16 May, pp. 24-29.
- Savickas, M. L. (1997). Career adaptability: An integrative construct for life-span, life-space theory. *The Career Development Quarterly*, 45, 247-259.
- Savickas, M. L. (2001). Toward a comprehensive theory of career development: Dispositions, concerns, and narratives. In F. T. Leong & A. Barak (Eds.), *Contemporary models in vocational psychology: A volume in honor of Samuel H. Osipow* (pp. 295-320). Mahway, NJ: Erlbaum.
- Schultheiss, D. E. P. (2007). Introduction to the thematic issue: New methods and emerging paradigms in vocational psychology. *International Journal of Educational and Vocational Guidance*, 7, 145-147.
- Slay, H. S. (2006). The influence of career identity and social networks on career transition magnitude [Abstract]. *Dissertation Abstracts International Section A: Humanities and Social Sciences*, 67(3-A), 1010.
- Smith, J. A. (1995). Semi-structured interviewing and qualitative analysis. In J.A. Smith, R.Jarré and L van Langenhore (eds). *Rethinking methods in psychology*. London Sage: 9-26.
- Stapleton, T. (2008). *Marketing in a complex world: Unit 2 Complexity*. Masters programme course notes, Open University Business School: Milton Keynes, UK.
- Stebbleton, M. J. (2010). Narrative-based career counselling perspectives in times of change: an analysis of strengths and limitations. *Journal of employment counselling*, 47, 64-78.
- Stone, W. (2007). Organizing serendipity: Four Tasks for Mastering Chaos. *Career Planning and Adult Development Journal*, 23(2), 73-81.
- Super, D.E. (1976). A life-span, life-space approach to career development. *Journal of Vocational Behavior*, 16(3), 282-298
- Trevor-Roberts, E. (2006). Are you sure? The role of uncertainty in career. *Journal of Employment Counseling*, 43, 98-116.
- Whiston, S. C., & Brecheisen, B. K. (2002). Practice and research in career counselling and development - 2001. *The Career Development Quarterly*, 51(2), 98-154.
- Wylleman, P., Alfermann, D., & Lavalley, D. (2004). Career transitions in sport: European perspectives. *Psychology of Sport and Exercise*, 5(1), 7-20.

Yang, E. & Gysbers, N. C. (2007). Career transitions of college seniors. *The Career Development Quarterly*, 56, 157-170.

