# **Career Development** and Systems Theory

**Connecting Theory and Practice** 

3rd edition

Wendy Patton and Mary McMahon



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# **Career Development and Systems Theory**

# CAREER DEVELOPMENT SERIES

Connecting Theory and Practice Volume 6

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# Scope

Recent developments in the literature on career have begun to reflect a greater global reach and acknowledgement of an international/global understanding of career. These developments have demanded a more inclusive understanding of career as it is experienced by individuals around the world. Related issues within the career literature include the relationships within the career theory literature, or theory integration and convergence, and between theory and practice. The influence of constructivism is another influence which is receiving sustained attention within the field.

The series will be cutting edge in focusing on each of these areas, and will be truly global in its authorship and application. The primary focus of the series is the **theory-practice** nexus.

# Career Development and Systems Theory

Connecting Theory and Practice

3rd Edition

# **Wendy Patton**

Queensland University of Technology, Australia

and

# Mary McMahon

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# **PREFACE**

Between the first (1999) and second (2006) editions of this book, debate in the career field had remained largely unchanged despite new theoretical accounts being advanced. Following the publication of the second edition in 2006, the field has advanced in a number of ways, in particular with the emergence of postmodern influences in the field of career development, including subjectivity, perspectivity, multiple truths, interpretivism, and context. Multiplicity in meaning moves discussion from an objective self with measurable interests, abilities, values to one that is socially constructed within relationships and contexts. The overall influence of constructivism and social constructionism is a major addition to the field. There is still little disagreement within the career theory field that, while there are a number of theoretical propositions and models accounting for career behaviour, the field remains segmented, incomplete, and lacking in comprehensiveness and coherence. Each theory or model offers explanations about differing parts of the content and process of career development. Such a theoretical base, however, presents difficulties for practitioners working with clients.

The issue of theoretical integration or convergence has been debated in a broad and growing literature. A related debate within the career field is the relationship between theory and practice, with authors suggesting that practitioners either disregard theory because of its irrelevance, or adhere rigidly to one theory only because of the confusion engendered by trying to come to terms with many theories. More recently, in the context of an increasingly globalised society, the Eurocentric emphasis of career theory and practice and its transferability and cultural appropriateness to a broad range of populations has been questioned and examined

It was against this background that we developed a metatheoretical framework for the integration of career theories using systems theory, and presented it in the first edition of this text. At that time we proposed the value of the Systems Theory Framework (STF) in developing a relationship between theory and practice, centred in the individual. While the challenge that originally drove the development of the STF was the desire to produce a metatheoretical framework through which the contribution of all theories could be recognised, its utility has become increasingly apparent through its application to a range of cultural groups and settings, qualitative assessment processes, career counselling, and multicultural career counselling. For these reasons, the STF continues to be a valuable addition to the field.

The principles of systems theory emphasise the self-organising nature of open systems. In viewing the field of career theory as a system, open to changes and developments from within itself and through constantly interrelating with other systems, we view the STF and this book as adding to the pattern of knowledge and relationships within the career field. The contents of this book will be integrated within the field as representative of a shift in understanding existing relationships within and between theories. In the same way, each reader will integrate the

contents of the book within their existing views about the current state of career theory and within their current theory-practice relationship.

# OUTLINE OF THE BOOK

In presenting this third edition of our book, we acknowledge advancement in the field since both the first and second international publications of the STF. In particular, we acknowledge the considerable influence of the social constructionist and constructivist worldviews in both theoretical formulations and also in practice. As with the first and second editions of our book, we begin with a comprehensive theoretical overview before presenting the metatheoretical Systems Theory Framework of career development. In the final section of the book, the integration of theory and practice is addressed through the application of the STF.

The book is divided into three parts. Part one, consisting of six chapters, presents a comprehensive review of the existing theoretical literature. While a number of comprehensive reviews of the literature exist (Betz, 2008; D. Brown & Associates, 2002; D. Brown & Brooks, 1990b, 1996b; S. D. Brown & Lent, 2005, 2013; Hackett & Lent, 1992; Hackett, Lent, & Greenhaus, 1991; Hartung & Subich, 2011; Osipow & Fitzgerald, 1996; Walsh, Savickas, & Hartung, 2013), the present review traces the progress of career theory from content or process approaches to those which reflect both content and process, and illustrates its movement to pursue theory integration and convergence. We have continued with a very comprehensive historical overview even though some of the theoretical formulations have not been added to since the previous edition. We believe that a full account of theory assists in an overall understanding of the field.

Chapter one presents an overview of the field, and discusses the overall content and structure of the existing state of career theory. It has been significantly updated to reflect the new developments in existing theories and the new theoretical formulations emerging. Chapter two introduces theories focusing on content (of the individual and the context). It therefore traces the field from the work of Parsons to those theories characterised as trait and factor, and the more recent personenvironment fit emphasis. It includes the work of Holland, Bordin, D. Brown, Dawis and Lofquist, and the work in Big 5 personality theory. Chapter three presents theories which focus on the process of career development, including the work of Ginzberg and his colleagues, Super, Tiedeman and O'Hara and Miller-Tiedeman and Tiedeman, L. S. Gottfredson, and the more recent work of Savickas. Theories which focus on content and process are reviewed in chapter four, including the work of L. K. Mitchell and Krumboltz, K. E. Mitchell, Levin and Krumboltz, Krumboltz' new happenstance learning theory, Roe, the social cognitive approach of Lent and his colleagues, the cognitive information processing models of Peterson, Sampson, Reardon and Lenz, the developmentalcontextual approach of Vondracek, Lerner and Schulenberg and Vondracek and Porfeli, and the action approach of Young, Valach and Collin, A table illustrating the content and process influences on career development and the theories reviewed, their major foci in terms of influence, and the diversity and commonality between and across them is presented at the end of each of chapters two through four. Chapter five presents an overview of these main theories, including a discussion of their similarities and differences. Finally, chapter six focuses on some of the areas which have been insufficiently dealt with in existing theories. It therefore reviews theories of women's career development (or women's working lives, as we have changed this descriptor to reflect the changes in this literature), and theories proposed to account for career development of racial and ethnic minorities, and other groups such as lesbians and gay men. It also reviews sociological theories which pay some attention to socioeconomic and related variables. In this third edition, chapter six includes two expanded discussions. It explores recent work on children's and adolescents' career development, and provides an updated overview of the increased focus on social justice in the field of career theory, in particular recent discussions on social class, and the recent focus on improving social and labour market integration for people with a disability.

Part two of the book consists of three chapters. It represents the theoretical core of the book, and links parts one and two. Chapter seven describes the philosophical underpinnings of the field, recent changes, and presents the history of previous integrative frameworks. It also outlines the moves toward integration and convergence in the career theory literature. Chapter eight describes the development of systems theory, and presents its important elements. The relationship between these elements and aspects of career theory and practice is included. Chapter nine presents a full outline of our Systems Theory Framework of career development, traces its development over a number of years, and documents its established position in the career theory and career practice literature. The discussion in this chapter emphasises the relationship of the framework with existing theories. An addition to this chapter is a section on the STF, culture and context that considers the western origins of the STF and it broader application in non-western contexts.

Part three of the book consists of five chapters which address the integration of theory and practice through the concept of lifelong learning systems. This part of the book attests to the utility of the Systems Theory Framework in practice as reflected through the expansion and refinement of its practical applications in career assessment, career counselling and career programs. A particular strength of the practical applications of the Systems Theory Framework is their foundation in learning which is viewed from constructivist and social constructionist perspectives. In particular, chapter 10 advances the concept of lifelong career development learning, emphasising the notion of career as being defined within the individual as learner. Chapter 11 examines the issue of learning from a systems theory perspective through the theme of learning systems, and presents the specific examples of the learning systems necessary for the training and preparation of career development facilitators and also of supervision. Chapters 12 and 13 apply the concept of learning systems to traditional career development learning settings. In particular, chapter 12 discusses career development learning in school settings, and chapter 13 describes career counselling as a process of learning from a systems

theory perspective. Finally, chapter 14 examines new relationships between organisational and individual career systems.

The first edition of the present book was the first text to offer an encompassing framework for career theory convergence using a metatheoretical approach. The framework is presented in an unfolding series of graphic illustrations. Such illustrations are also included as representations of learning systems in part three, which also includes specific examples of the use of systems theory elements in teaching and learning, and in counselling. Another unique feature of the book is the presentation of tables which illustrate similarities and differences between theories.

While each of the chapters of the book can be read separately according to the learning needs of the individual learner, within systems theory thinking each of the chapters contributes to a whole, and have been written as such. The whole story of the book will be less meaningful without attention to each of the parts as the following themes have been infused throughout the book:

- development and change within career theories;
- the trend toward integration and convergence of career theories;
- the role of systems theory and the Systems Theory Framework;
- the embeddedness of systems theory in career practice; and
- the embeddedness of lifelong learning in career development.

In order to encourage your exploration of the whole book, we have made frequent references to related chapters or parts where we believe this will help you develop your own sense of patterns and relationships within the book and your existing knowledge.

# **ACKNOWLEDGMENTS**

The production of this third edition of our book is an example of systems theory at work. It has evolved over more than 20 years, and our revisions have been related to our interactions with each other and with members of our interconnected systems. Thus it has evolved through ongoing learning, co-construction of ideas, and developments of new meaning. The book represents our understanding at this point in time, an understanding which has evolved (and which continues to evolve) through our involvement in relational contexts.

Many people have been invaluable parts of our system in this process. We would especially like to thank our students and colleagues who have provided feedback and insight over many years. This third edition has been supported through the ongoing efforts of Famena Khaya and Rachel Grace and we are very appreciative.

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Wendy Patton is Professor and Executive Dean of the Faculty of Education at the Queensland University of Technology, a role she has held for 8 years. She has published extensively in the area of career development and is currently on the editorial advisory boards of a number of national and international career development journals. She is the Series Editor of the Sense Publishers' Career Development Series which has contributed 5 books to the field of career development and vocational psychology since 2006.

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# PART 1

# **REVIEW OF EXISTING THEORIES**

# **CHAPTER 1**

RATIONALE FOR A SYSTEMS THEORY PERSPECTIVE

# **CHAPTER 2**

THEORIES FOCUSING ON CONTENT

# CHAPTER 3

THEORIES FOCUSING ON PROCESS

# **CHAPTER 4**

THEORIES FOCUSING ON CONTENT AND PROCESS

# **CHAPTER 5**

COMPARISON OF THE CURRENT THEORIES

# **CHAPTER 6**

THEORIES OF CAREER DEVELOPMENT: WIDER EXPLANATIONS

#### CHAPTER 1

# RATIONALE FOR A SYSTEMS THEORY PERSPECTIVE

Career development theory has had a relatively short history. In reflecting on this, Isaacson and D. Brown (1993) commented that "the behavioral sciences", of which career development theory is a part, "are still in a developmental stage" (p. 20). This is not surprising since vocational guidance, the precursor to career counselling, did not begin until the early 1900s. Parsons (1909) is credited with being the founder of vocational guidance and his work has had a profound influence on career theory and practice. He identified three elements of career selection as being self-knowledge, knowledge of the world of work, and "true reasoning on the relations of these two groups of facts" (Parsons, 1909, p. 5).

Out of these beginnings, a number of theories which focused on the content of career choice, such as characteristics of the individual and of the workplace evolved and became known as the trait and factor theories. Subsequent development in these theories led to their being viewed as person-environment fit theories. Following this, theories which placed more emphasis on the stages and process of career development were proposed and became known as developmental theories. Theoretical work published during the 1980s and early 1990s focused on both content and process, including the interaction between these and the role of cognition in the process. More recently, theorists have focused on constructivist and social constructionist influences in career theory, as well as on approaches to convergence of the many career theories.

The broadening of the concept of career development has far outpaced the development of theory to account for it. However, Amundson (2005) asserted that recent advances in constructivism, systems theory, action theory and paradoxical theory have emerged to support individuals and counsellors in constructing personal development in a world of unprecedented and ongoing rapid changes occurring within the workplace and in individual careers. M. Watson and Stead (2006) echoed this view noting that "career theories reflect the times they were constructed in" and emphasising that "they need to be refined over time to reflect the realities of an everchanging macroenvironment"(p. 14). Similarly, Guichard and Lenz (2005) identified three main characteristics evident in the international career theory literature: "(a) emphasis on contexts and cultural diversities, (b) self-construction or development emphasis, and (c) a constructivist perspective" (p. 17).

The field of career development theory continues to attempt to present flexible and adaptive theory. Indeed the development and subsequent refinement of the Systems Theory Framework of career development (STF; McMahon & Patton, 1995; Patton & McMahon, 1999, 2006a) represents such an attempt. The purpose of this book, as with its first and second editions (Patton & McMahon, 1999,

2006a), is to locate the development of the STF as an advancement within the history and context of career development theory and also to illustrate its application to career development practice. There has been considerable theoretical, research and practice activity on the STF since 1999 – this will be discussed within relevant chapters within the book. It is the purpose of this chapter to set the scene for the following chapters by providing an overview of essential understandings which underpin the career development field and the book. This chapter will first examine understandings of the core concepts of career and career development around which the field is constructed. Following this, we will present an overview of the present status of career development theory and examine a structural framework for this body of work. The philosophical underpinnings of career development theory will then be outlined. Finally a brief rationale for the development of a systems theory approach to account for career development, the STF, will be described.

#### DEFINITIONS

# The Meaning of 'Career'

The meaning and definition of career is still understood differentially. This lack of conceptual clarity maintains ambiguity and continues to prevent a common ground in thinking in this area. It also means that developing theoretical understandings is difficult. From the time of Parsons (1909), the terms career, vocation, and occupation have often been used synonymously (McDaniels & Gysbers, 1992) although D. S. Miller and McWhirter (2006) emphasised that the current literature provides for very real distinctions to the contemporary understanding of the terms work, career, and vocation. Traditional definitions have been criticised for their restriction of career to a professional work life which included advancement, and several researchers proposed the broadening of this conceptual definition to include prevocational and postvocational activities and other life roles and contexts. This broadening is reflected in the definition of career proposed by Super in 1976: "The sequence of major positions occupied by a person throughout his preoccupational, occupational and postoccupational life; includes work related roles such as those of student, employee, and pensioner, together with complementary vocational, familial and civil roles" (p. 20). A more concise definition, that of M. B. Arthur, Hall and Lawrence (1989), describes career as "the evolving sequence of a person's work experiences over time" (p. 8), again emphasising the centrality of the themes of work and time.

The term career has been criticised for its western middle class focus and the lack of its applicability across cultures and less developed countries (M. Watson & Stead, 2006). More recently the term 'work' has been applied to this area of human behaviour to provide a more inclusive and less conceptually and culturally complex term (Blustein, 2001, 2006; Richardson, 1993, 2000). Career and an understanding of human behaviour in the domain of work has largely been the realm of the field

of psychology and it is really only in the last 20 years that more broad understandings have been included within the literature.

The words which have common understanding in this field include 'work' which typically refers to the domain of life in which people, paid or unpaid, provide labour for an outcome of a service or a good. 'Job' refers to a specific work position which may be permanent full-time or part-time and in a particular role or organisation. 'Career' refers to the sequence of or collection of jobs held over an individual's life, although in western societies it has traditionally been conceptualised as a linear sequence of "jobs" which have a vertical 'advancement related' trajectory. M. B. Arthur, Hall and Lawrence (1989), described career as "the evolving sequence of a person's work experiences over time" (p. 8), Nicholson and West (1989) "recommend use of the more neutral term 'work histories' to denote sequences of job experiences and reserve the term 'career' for the sense people make of them" (p. 181).

Psychologists have referred to work as a means through which individuals "implement a self-concept" (Super, Savickas, & Super, 1996, p. 139). Writers in the organisation development field have referred to careers as "individual expressions of identity" (Inkson & Elkin, 2008, p. 76). It is these views that have been subject to criticism, with assertions that the term career implies choice and privilege and that much work does not afford a subjective sense of career and identity. Many individuals work for survival and this work may not contribute to any more than need fulfillment, as opposed to personal and public identity and fulfilling a "calling" (Blustein, 2006).

A related change in the literature concerns the role of the individual in his/her career, and in our understanding of career. In 1959, Tyler challenged the field of psychology to focus more on what she referred to as "a psychology of individuality" (p. 81) rather than a psychology of individual differences. In doing so she asserted that "each person is a self-made man. At each stage of our lives we impose limits on the next stage, by the choices we make and the ways in which we organize what we have experienced. There is an important something that each individual must do for himself" (p. 81). Tyler was setting the scene for the importance of focusing on the individual's role in his/her own development. The uniqueness of the individual in career, as opposed to individual differences, has extended in its influence. Miller-Tiedeman (1988, 1999) and Miller-Tiedeman and Tiedeman (1990) discussed the concept of lifecareer which incorporates the integration of career and other aspects of an individual's life. Again, this theme resonates within other constructions of career, with Collin and Watts (1996) discussing the need to focus on career as a subjective construction of the individual rather than as something that is objective, and Herr (1992) emphasising that careers do not exist as jobs or occupations do, rather they are created by individuals. We concur with these constructions of career, perceiving that individuals careers are developed by them on the basis of their perceptions of, attitudes toward, and actions in relation to, career. Patton and McMahon (1999) defined career as "the pattern of influences that coexist in an individual's life over time" (p. 170). The definition posited by Reardon, Lenz, Sampson and Peterson (2009) also

emphasises the individual, work-life, and time in a broad view — "a time extended working out of a purposeful life pattern through work undertaken by the person" (p. 6). These themes are also reflected in Savickas' (2002) definition, which also emphasises the objective-subjective distinction — "career denotes a reflection on the course of one's vocational behavior, rather than vocational behavior itself. This reflection can focus on actual events such as one's occupations (objective career) or on their meaning (subjective career)" (p. 152).

Extending this focus on the individual, and incorporating contextual challenges. Richardson (1993, 2000) suggested that career is a limited and irrelevant concept and subject to a middle class bias in perception and ideology. She proposed that focus should be on how people make their own meaning of work in their lives, and suggested that we should use the terms work, jobs and career in our discussion of work and career. Richardson (1993) defined work broadly as human activity that is initiated "for individual success and satisfaction, to express achievement and strivings, to earn a living... to further ambitions and self-assertions... and to link individuals to a larger social good" (p. 428). More recently Richardson and Schaeffer (2013) emphasised that the connection between paid work and career is an artifact of the rise of capitalism. The literature has not included discussion about care work until quite recently. Talking about unpaid work, care work, is a significant challenge to the social values understood within a capitalist hegemony. These authors proposed a dual model of working that addresses both market work and unpaid care work, emphasising that there are two kinds of work and that both are equally important.

The new model we propose is not a model that simply stitches together prevailing ways of talking and thinking about work and career into some kind of new arrangement or organisational structure. Instead, this new model challenges the prevailing discourse regarding how most people talk about and experience the work in their lives, that is, as career, and proposes that they talk about and experience this part of their lives as market work instead of career. It also proposes a second domain of work, that is, unpaid care work that most people, at least at this point, are not likely to talk about or experience as work at all. What we are proposing then is a radical reconfiguration of how people talk about and experience essential components of their lives having to do with the work they do. (p. 25)

Blustein (2001, 2006) also challenged the conventional language and understanding of work and career, acknowledging that the majority of women and men have limited choice in the work they undertake to support themselves and their families. He proposed that we develop a more inclusive psychology of working which addresses the limited way the field has addressed issues of gender, social class, family background, cultural characteristics and their impact on career development. Even for those with the privilege of choice, these factors may limit the range of alternatives.

In addition to these conceptual changes, much of the context in which work occurs has been significantly changed through political and economic impacts.

These contextual factors which are challenging structures of career opportunity are felt globally, and include political, economic, technological, demographic, nature and structure of work and organisational changes (see Inkson, 2007, for a comprehensive summary). These changes impact our understanding of the interaction between individual and organisational careers (Collin & Patton, 2009a; Patton & Collin, 2009). The emphasis has been shifted from the organisation to individual agency as crucial in developing a 21st career with notions of protean (Hall, 1996; Hall & las Heras, 2009) and boundaryless careers (M. B. Arthur & Rousseau, 1996; Sullivan & M. B. Arthur, 2006) creating positions within the literature. The concept of protean career refers to the notion that in order to adapt and survive in a changing world, the individual needs to be self-generating, that is, protean. The protean career displaces the notion of a linear and vertical career and acknowledges flexible and idiosyncratic career construction or career building; it includes all aspects of an individual's life as relevant to career, and places the individual at the centre of career and organisational and occupational contexts. This notion of career is also closely related to the boundaryless career (M. B. Arthur & Rousseau, 1996) which emphasises that career is about individuals organising their careers, not organisations, and that the enactment of career reflects an intersection of self-organising and social phenomena (Littleton, M. B. Arthur & Rousseau, 2000). Sullivan and M. B. Arthur (2006) have extended this discussion to note the importance of what they term physical (actual movement across jobs, organisations through to countries) and psychological mobility (a mobile mindset) for successful negotiation of boundaryless careers in the 21<sup>st</sup> century.

# Career Development

These broader definitions of career draw attention to the concept of career development which D.Brown and Brooks (1990b) described as being "for most people a lifelong process of getting ready to choose, choosing, and typically continuing to make choices from among the many occupations available in our society" (p. xvii). The concept of career development was first advanced by Ginzberg, Ginsburg, Axelrad and Herma (1951) who proposed that occupational choice is a developmental process that occurs over a number of years. Their original theory, which assumed that the process was completed in early adulthood, was later revised to recognise occupational choice as a lifelong process of decision making (Ginzberg, 1972, 1984). The importance of acknowledging career development over the lifespan is incorporated in the following definition: "Career development is the total constellation of psychological, sociological, educational, physical, economic and chance factors that combine to shape the career of an individual over the life span" (Sears, 1982, p. 139). Super's (1980) work included other life roles in his discussion of lifelong career development. Similarly recent work on relational and cultural influences on career development (Blustein, 2011; Richardson, 2012a,b; Schultheiss, 2009) emphasise the broader understandings we need to adopt when discussing work and career, and therefore career development.

A number of authors have identified the social and cultural shift which has impacted work life (Amundson, 2005; Savickas, 2000a; Storey, 2000). As such the notion of career development is also undergoing a significant paradigm shift (Hartung, 2002; P. S. Jarvis, 2003) from talking about career development to development through work and other life roles. The previous discussion about career has emphasized the increasing focus on life roles other than work. As such more recent discussions of career development incorporate broader notions – "Career development ... connotes a continuous stream of career-relevant events that are not necessarily linear or positive in impact and that may or may not be subject to personal agency (e.g., being born into poverty, losing a job due to the bankruptcy of one's company" (S. D. Brown & Lent, 2013, p. 10). These authors also note that development may involve forward and backward movements.

The changing macroenvironment emphasises that we are in an era of "do-it-yourself career management" where individuals are being challenged to play a greater role in constructing their own career development, an era where "Careers are now forged, not foretold" (Watts, 1996c, p. 46). Similarly, Savickas et al. (2009) have more recently used the term 'life designing' to describe the process of individuals constructing their careers. Younger workers are encouraged to act as free agents, developing personal enterprises and marketing personal skills. Individuals increasingly need to focus on employability rather than job security, and learn the skills which will assist them in taking responsibility for the direction and evolution of their own careers. What needs to be created as secure is the individual, and the individual's knowledge and skill currency, not the job. Career development is now viewed as multi-directional and multi-levelled.

As a result of this change in focus from linear career development, Amundson, Parker, and M. B. Arthur (2002) discussed "a continuing tension between leveraging past experience and positioning for future opportunity" (p. 27). They emphasised the imperative for individuals to learn to intentionally act on environments of change, drawing on an understanding of the individual as a self-organising, active system – "The common thread is that people make sense of the world of work through subjective interpretation of their own career experience. In living through the complexity of economic life, they draw new insights and formulate new strategies that make sense of this complexity" (Amundson et al., p. 27).

A number of authors have proposed alternatives to the notion of career development. For example, Redekopp and Day (1999) suggested that career building is more useful than career planning in an environment where an individual needs to take charge of short term goals and continuous decision-making, building on previous life/work activities with a direction in mind, and allowing all the while for serendipity [defined by Redekopp and Day as "the act of discovering something useful while one is pursuing something else", p. 276]. In a similar vein, Savickas (2002, 2005, 2013a) referred to career construction and Hache, Redekopp and P. S. Jarvis (2000) used the term 'life/work design' in identifying the career development competencies required by individuals to manage their learning and work across the lifespan.

The inseparability of work and life and the ongoing interrelationship between career and life has been recognised. Wolfe and D. A. Kolb (1980) presented a definition of career development that remains relevant today.

Career development involves one's whole life, not just occupation. As such, it concerns the whole person ... More than that, it concerns him or her in the ever-changing contexts of his or her life. The environmental pressures and constraints, the bonds that tie him or her to significant others, responsibilities to children and aging parents, the total structure of one's circumstances are also factors that must be understood and reckoned with. In these terms, career development and personal development converge. Self and circumstances – evolving, changing, unfolding in mutual interaction – constitute the focus and the drama of career development. (Wolfe & D. A. Kolb, 1980, pp. 1-2)

We continue to favour this dynamic definition, which encompasses the individual, the environment, interaction and change, as representing the key elements of a definition of career development.

# BRIEF HISTORY OF CAREER DEVELOPMENT THEORY

For over two decades authors have highlighted the developmental infancy of career development theory (e.g., D. Brown, 1990; Hackett & Lent, 1992; Isaacson & Brown, 1993). While theoretical propositions and models have proliferated, conclusions within the literature generally agree that it remains inadequate and incomplete and lacking in comprehensiveness and coherence (D. Brown, 1990, 2002a; S. D. Brown & Lent, 2005; Savickas, 2002, 2009a), in particular in its failure to account for diversity within the population (Blustein, 2006, 2011; Richardson, 1993, 2000, 2012a,b). In addition, it has been criticised for focusing on intraindividual issues to the detriment of contextual issues (D. Brown, 2002d; Collin & Young, 1986; Lent, 2001; Leong, 1995; Savickas, 2013a), and for being hampered by an overlap in conceptualisation of many elements (F. H. Borgen, 1991; Osipow, 1990; Patton & McMahon, 1999, 2006a) and a proliferation of models (Guichard & Lenz, 2005). The need to focus on work in a changing global world has also received attention (Krieshok, Motl, & Rutt, 2011; Reardon, Lenz, Sampson, & Peterson, 2011).

Further, career theory has been criticised for being segmented both within the individual theoretical models (Super, 1990) and within the disciplinary field (M. B. Arthur, Hall, & Lawrence, 1989; S.D. Brown & Lent, 2005; Hackett et al., 1991). For example, Super (1990) acknowledged that his theoretical formulation was segmental and represented a concerted effort to bring together concepts from various branches of psychology and S. D. Brown and Lent commented that career counsellors also need to access theories from personality and industrial-organisational psychology to have a more complete picture of career theory. In a similar vein, Jepsen (1996) spoke about career theorists as an "academic psychologist's club" (p. 144), although he acknowledged that this is changing as the work of theorists from other disciplines is being recognised (e.g., M. B. Arthur,

Hall, & Lawrence, 1989; Hall, 1996; Hotchkiss & Borow, 1996) and as more integrated models across disciplines are being proposed (e.g., Collin & Patton, 2009b; Guichard, 2005; Vondracek & Porfeli, 2002a). More recently, a number of writers have lamented the focus of traditional career theorising and have suggested the need to incorporate other psychologies into theoretical discussions. These include lifespan psychology (Vondracek, 2001) and organisational-industrial psychology (Collin & Patton, 2009b; G. D. Gottfredson, 2001). In reflecting on the growth of career development theory, Osipow (1983) commented that "vocational psychology seems to be moving towards a collection of miniature theories, each dealing with circumscribed, explicit segments of vocational behavior ..." (p. 323). This notion of miniature theories seems to have been an accurate prediction of the trend in career development theory. In 1996, Osipow and Fitzgerald maintained that little had changed. Despite this disparate picture, Osipow (1983) acknowledged the emerging nature of career development theory and assured researchers and practitioners that an incomplete theory is better than no theory. In addition, several authors (e.g., L. S. Gottfredson, 1983) have commented on the importance of the contributions made by the existing theories to our overall understanding of career behaviour. We believe that a comprehensive book on career theory needs to provide the historical journey that the field has travelled.

As we prepared this third edition of the book, it was illustrative to note just how much recent attention has been forged in some of these particular areas. The field of career theory has experienced considerable growth in recent years, and while some theoretical formulations have been afforded reduced importance (e.g., Ginzberg, 1984; Roe & Lunneborg, 1990), others have been expanded and refined (e.g., Hartung, 2013b; Holland, 1985a, 1992, 1997; Nauta, 2010, 2013; Super, 1990, 1992; Super et al., 1996), and still more have been and continue to be developed (e.g., D. Brown, 1996a, 2002b, c; Krumboltz, 2009, 2011; Krumboltz, Foley, & Cotter, 2013; Lent, 2005, 2013; Lent & S. D. Brown, 2002, 2008; Lent et al., 1994, 1996, 2002; McMahon & Patton, 1995; Patton & McMahon, 1999, 2006a; Reardon, Lenz, Sampson, & Peterson, 2011; Savickas, 2001, 2002, 2005; 2013a; Valach & Young, 2009; Young, Valach, & Collin, 1996, 2002; Young, Domene, & Valach, 2014).

Career development theory in the 21<sup>st</sup> century is responding to challenges from three key issues – the need for integration or convergence of theories, the importance of including other fields in this integration, and the influence of constructivism and social constructionism. Theorists have acknowledged the value to be gained from attempting to provide a more integrative theoretical picture of career development. Noting the disparate nature of the plethora of existing theories, and the need to use more than one theory to describe the complexity of career development, the concept of integration or convergence within career development theory emerged over two decades ago (F. H. Borgen, 1991; Osipow, 1990) and promises to remain one of the key issues of the 21st century in this field. Each of these authors identified similarities and differences within current theoretical explanations. Osipow noted how their evolution is toward a similar theoretical picture, although the importance of various elements and themes varied in different

theories. Other authors have called for the integration of career theory through the development of an overarching theory or framework of career development (Dawis, 1994; Hackett et al., 1991).

Convergence in career development theory was the specific focus of a 1992 conference, papers from which were published in Savickas and Lent (1994). This conference illustrated the importance of the trend toward integration between career theories, despite varying views of the definition of convergence, its value, and the form it might take. D. Brown and Brooks (1996b) remained sceptical about the likelihood of convergence among theories and the emergence of an integrated theory, a position reiterated by D. Brown (2002a). This issue will be explored in more detail in chapter 7.

Integrating vocational psychology with other fields is another key issue. The second edition of this book addressed this in an additional chapter in 2006. Subsequently, Collin and Patton (2009b) drew together authors writing from vocational psychology and organisational psychology to work toward a multidisciplinary dialogue on career. This key issue will be addressed further in chapter 14.

A third key issue of the 21<sup>st</sup> century will be the increasing influence of constructivism and social constructionism. A monograph was devoted to social constructionism in vocational psychology and career development (McIlveen & Schultheiss, 2012) with chapters focusing on the self, social constructionist theories, philosophical understandings, and practice. Savickas (2013b) asserted that he has used social constructionism to integrate the segmental theories of career development. Patton (2008) claimed that career construction theory and the Systems Theory Framework are the only two theoretical positions wherein both the influence of convergence and social constructionism are evident. Further work to demonstrate the integration and the influence of social constructionism, and the importance and value of theoretical developments learning from and building on each other have also been identified. These include connecting the STF and relational theory (Patton, 2007a); testing theoretical integration as demonstrated by STF and dialogical self theory (McIlveen, 2007b); reflections on similarities and differences between career construction theory and the STF (Patton, 2008); and identifying the joint contributions of contextual action theory and the STF to career counselling (Patton, 2014). These theoretical discussions will be expanded in chapter 7.

In acknowledging the importance of this trend toward integration and convergence, we developed and refined the STF (McMahon & Patton, 1995; Patton & McMahon, 1999, 2006a). Fundamental to the development of the STF is our belief that systems theory can provide the basis of an overarching framework within which commonalities and relationships in existing career development theory can be identified. The issue of integration and convergence will be expanded in chapter 7, and the Systems Theory Framework will be outlined in chapter 9 following an explanation of systems theory inchapter 8.

# CHAPTER 1

# THE STRUCTURE OF CAREER DEVELOPMENT THEORY

This section provides an overview of the structure of career theory and presents the framework within which the theories will be discussed in more detail later in part one. The segmental nature of career development theory discussed previously is reflected in attempts to categorise and group the theories. Herr and Cramer (1992) identified eight different groupings which had been offered by a number of authors, including those of Crites (1969) and Osipow (1968). Other authors who have proffered categories or groupings of career theories include Osipow (1990), Herr and Cramer (1992), Minor (1992), Osipow and Fitzgerald (1996), and Patton and McMahon (1999, 2006a). These categories are depicted in Table 1.1.

Table 1.1 Categories of career theories

Authors	Categories
Crites (1969)	Psychological theories Non-psychological theories
Osipow (1968)	Trait and factor approaches Sociology and career choice Self-concept theory Vocational choice and personality theories
Herr & Cramer (1992)	Trait and factor Actuarial or matching Decision Situational or sociological Psychological, and developmental
Osipow & Fitzgerald (1996)	Trait-factor Society and career choice Developmental/self-conceptions Vocational choice and personality Behavioural
Osipow (1990)	Developmental Trait oriented Reinforcement based Personality focused.
Minor (1992)	Theories of content Theories of process

Patton & McMahon (1999, 2006a)

Theories of content Theories of process Theories of content and process Wider explanations

In reflecting on the different groupings, Herr and Cramer (1992) commented that "the categories depicted are not mutually exclusive or independent, but they attempt to explain differential career behavior and choice from somewhat different vantage points" (p. 156). Hackett et al. (1991) noted that "theories generally highlight the content and/or process of decision making ..." (p. 4). As indicated in Table 1.1, we have chosen content and process as the "vantage point" (Herr & Cramer, 1992, p. 156) in categorising career development theories, a structure also adopted by Minor (1992). Historically, career development theory focused on either content or process. Content refers to the influences on career development, such as interests and values, and process refers to accounts of change over time and decision making processes. Clearly, there is no agreement on the categorisation as evidenced in Table 1.1. Indeed, Osipow and Fitzgerald (1996) acknowledged the arbitrariness of their categorisation. However, similarities between categories are reflected in Table 1.1.

Chapters 2-6 provide a comprehensive historical overview of the extant theories and their evolution. In some theoretical fields, considerable growth and development has occurred, while in others there has been little theoretical expansion/refinement. The categories we used to structure the review of career development theory contained in chapters 2, 3, 4, and 6 of the first edition of this book were theories of content, theories of process, theories of content and process, and wider explanations. In the second edition, we added the category of constructivist approaches. In this third edition, we have acknowledged the complexity of the constructivist/social constructionist terms and have therefore used both as a category name (Young & Collin, 2004). We have also acknowledged the extension of Social Learning Career Theory (SLTC) to Happenstance Learning Theory (HLT) (Krumboltz, 2011; Krumboltz et al., 2013). The theories contained in each category are indicated in Table 1.2. Each category will now be briefly described.

*Table 1.2 Structure of career theory* 

Theories of Content				
Trait and factor theory	Parsons (1909)			
Theory of personality	Holland (1973, 1985a, 1992, 1997); Nauta (2010, 2013)			
Psychodynamic theory	Bordin (1990)			
Values-based theory	D. Brown (1996a, 2002b, c)			

### CHAPTER 1

Work adjustment person-environment correspondence theory	Dawis & Lofquist (1984); Dawis (1996, 2002, 2005)	
Five factor theory	McCrae & John (1992); McCrae & Costa (1996, 2008)	
Theories of Process		
Developmental theory	Ginzberg et al. (1951); Ginzberg (1972, 1984)	
Life span life-space theory	Super (1953, 1957, 1980, 1990, 1992, 1994); Super et al. (1996); Hartung (2013b)	
Theory of circumscription and compromise	L. S. Gottfredson (1981, 1996, 2002, 2005)	
Individualistic approach	Miller-Tiedeman & Tiedeman (1990); Miller-Tiedeman (1999)	
Theories of Content and Process		
Social learning career theory (SLTC)	L. K. Mitchell & Krumboltz (1990, 1996)	
Happenstance Learning Theory (HLT)	Krumboltz (2009, 2011); Krumboltz et al., 2013)	
Social Cognitive Career Theory (SCCT)	Lent et al. (1996, 2002); Lent & Brown (2002); Lent (2005, 2013)	
Cognitive Information Processing Approach (CIP)	Peterson, Sampson, Reardon, & Lenz (1996); Peterson Sampson, Lenz, & Reardon (2002); Reardon, Lenz, Sampson, & Peterson (2011); Sampson, Reardon, Peterson, & Lenz (2004)	
Developmental-contextual approach	Vondracek, Lerner & Schulenberg (1986); Vondracek & Porfeli (2008)	
Contextual approach to career	Young, Valach & Collin (1996, 2002); Valach & Young (2009); Young, Domene, & Valach (2014)	
Personality development and career choice	Roe (1956); Roe & Lunneborg (1990)	
Wider Explanations		
Women's career development	Astin (1984); Hackett & Betz, (1981); Betz (2005); Farmer (1985, 1997); Betz & Fitzgerald	

	(1987); Cook, Heppner, & O'Brien (2002a, b); Richardson & Schaeffer (2013); Schultheiss (2009, 2013)			
Racial and ethnic groups	Arbona (1996); D. Brown (2002b); Hackett, Lent, & Greenhaus, (1991); E. J. Smith (1983)			
Sexual orientation	Fitzgerald & Betz (1994); K. Morgan & L. Brown (1991)			
Sociological or situational approaches	Roberts (1977, 2005, 2012); Blau & Duncan (1967); M. J. Miller (1983); Hotchkiss & Borow (1996); Johnson & Mortimer (2002)			
Constructivist /Social Constructionist Approaches				
Systems Theory Framework	McMahon & Patton (1995); Patton & McMahon (1997, 1999, 2006a)			
Career construction theory	Savickas (2001, 2002, 2005, 2011a, b, 2013a)			
Chaos theory	Pryor & Bright (2003a, b, 2011)			
Ecological approach Narrative	Conyne & Cook (2004a) Bujold (2004); L. Cochran (1997); McIlveen & Patton (2007a, b)			
Relational/Cultural	Blustein (2001, 2006, 2011); Schultheiss (2009) Schultheiss (2013)			
Contextual Action theory	(see under Theories of content and process)			

### Theories of Content

Content refers to the influences on career development which are either intrinsic to the individual themselves or emanate from within the context in which the individual lives. In general, individual influences have been afforded more attention in career theory than contextual influences. Major theories focusing on the 'content' of career development include the psychological approaches of trait and factor theory (Holland, 1973, 1985a, 1992, 1997; Parsons, 1909), Bordin's (1990) psychodynamic theory, D. Brown's (1996 a, 2002 b,c) values-based theory, the work adjustment person-environment correspondence theory (Dawis & Lofquist, 1984; Dawis, 1996, 2002, 2005), and the personality based five factor theory (McCrae & John, 1992; McCrae & Costa, 1996, 2008). Theories of content will be described in more detail in chapter 2.

## Theories of Process

Process refers to interaction and change over time and is depicted in some theories as a series of stages through which individuals pass. The stage or developmental theories of Ginzberg and his colleagues (1951), Ginzberg (1972, 1984) and Super (1953, 1957, 1980, 1990, 1992, 1994) have attempted to account for the process of career development. While L. S. Gottfredson (1981, 1996, 2002, 2005) specifically attempted to include both content and process variables into her model, she has been categorised with the process theories as she focused on developmental stages. This categorisation of her work as developmental has also been made by others (D. Brown, 1996b, 2002a; Osipow & Fitzgerald, 1996). The work of Miller-Tiedeman and Tiedeman (1990; Miller-Tiedeman, 1999) also focused on stages and is included in this grouping. Theories of process will be described in more detail in chapter 3.

## Theories of Content and Process

More recently the need for theory to take into account both content (characteristics of the individual and the context), and process (their development and the interaction between them), has been recognised. Theoretical models based on the social learning theory, conceptualised as the social cognitive theory of Bandura (1986), include the learning theory of L. K. Mitchell and Krumboltz (1990, 1996) and the Happenstance Learning Theory (Krumboltz, 2009, 2011; Krumboltz et al., 2013), the social cognitive perspective (SCCT; Lent, 2005, 2013; Lent & S. D. Brown, 2002; Lent, S. D. Brown & Hackett, 1996, 2002), and the cognitive information processing approach (CIP; Peterson, Sampson, Reardon, & Lenz, 1996; Peterson, Sampson, Lenz, & Reardon, 2002; Reardon, Lenz, Sampson, & Peterson, 2011). Context based approaches include Vondracek, Lerner and Schulenberg's (1986) developmental-contextual approach, and the contextual approach to career (Young, Valach, & Collin, 1996, 2002; Valach & Young, 2009; Young, Domene, & Valach 2014). In addition, we include the work of Roe (1957; Roe & Lunneborg, 1990) in this section as her work included content of the individual and of the context. Theories of content and process will be described in more detail in chapter 4.

## Wider Explanations

Much of the existing theory has been criticised for not adequately taking into account issues of socioeconomic status, women and racial and ethnic groups, and other minority groups such as lesbians, gay men, bisexual and transgendered individuals, and people with disabilities. Thus, a body of theory has been developed to attempt to explain the career development issues of individuals in these groups. In particular, Astin (1984), Hackett and Betz (1981), Betz (2005), Farmer (1985, 1997), Betz and Fitzgerald (1987) and Cook et al. (2002a, b) have presented theoretical explanations for the career development of women. While

sociological or situational approaches are often categorised as content and process theories, we have included them in this section focusing on issues which have received too little attention. In particular, we focus on the work of Roberts (1977, 2005, 2012), Blau and Duncan (1967), M. J. Miller (1983), Hotchkiss and Borow (1996) and Johnson and Mortimer (2002).

Theorising about career development of racial and ethnic groups is at a particularly early stage of development (Arbona, 1996; D. Brown, 2002b; Hackett et al., 1991; E. J. Smith, 1983). While broader theories have attempted to acknowledge the effects of race (e.g., L. S. Gottfredson, 1981; Super, 1990), these perspectives generally have not been integrated within their theoretical models. L. S. Gottfredson's (1986) concept of 'at risk' factors in career choice, while proposed as a framework for assessment and intervention in career counselling, is especially useful in considering the barriers to career choice of factors such as gender, sexual orientation, racial/ethnic minority, disability, and socioeconomic status. More recently D. Brown (2002b) has proposed the integration of culture into his theory of work values.

Another "major individual difference category" (p. 112) identified by Fitzgerald and Betz (1994) is that of sexual orientation. K. Morgan and L. Brown (1991) discussed three theories of women's career development (Astin, 1984; Farmer, 1985; L. S. Gottfredson, 1981) and identified propositions from which practitioners can extract relevant elements in working with lesbians and gay men. The authors stressed, however, that existing theories in general are inapplicable to the career development concerns of lesbians and gay men. Ragins (2004) developed an identity based theory of lesbian, gay and bisexual careers. More recently, Prince (2013) has attempted to evaluate existing theories in relation to their usefulness with lesbians and gay men, although he concludes that the literature is limited. These wider explanations will be described in more detail in chapter 6. More recently, there has been increased attention to career development of children and adolescents, career development for individuals with a disability, and social justice issues in career development. These areas of focus, new to this edition of the book, are also included in chapter 6.

The work of Blustein (2006, 2011), Richardson and Schaeffer (2013) and Schultheiss (2009, 2013) have challenged the literature in relation to the relevance of existing theories to a broad culturally and socioeconomically diverse population. We will discuss this work within chapter 6, although it will be discussed also under integrative frameworks in chapter 7.

## Constructivist/Social Constructionist Approaches

More recently, theoretical propositions have emerged that clearly reflect the influence of the constructivist worldview with its emphasis on holism and the individual as central to the construction of their lives and careers. Such theoretical propositions include the Systems Theory Framework of career development (McMahon & Patton, 1995; Patton & McMahon, 1999, 2006a), career construction theory (Savickas, 2005, 2013a), the chaos theory of careers (Pryor & Bright,

2003a, b, 2011) and ecological career theory (Conyne & Cook, 2004a). In identifying social constructionist theories in vocational psychology, Young and Popadiuk (2012) acknowledged that constructivism and social constructionism have both generated a number of perspectives which enhance our understanding of career. Further to Young and Collin's (2004) assertion that the terms are used similarly, Young and Popadiuk commented that the perspectives identified "reflect a social explanation for the construction of career" (p. 11). It is interesting that authors themselves use the terms interchangeably. For example, Savickas (2005) labelled career construction theory as constructivist and referred to using social constructionism to unite segmented career theories in 2013. While emphasising that these were theoretical approaches or perspectives, not necessarily theories, Young and Popadiuk listed the following within their categorisation, and we have included these in our book: narrative (Bujold, L. Cochran, Savickas, McIlveen, & Patton); relational (Blustein, Schultheiss); systems theory (Patton & McMahon), cultural (Blustein, we would add Schultheiss, 2013) and contextual action theory (Young, Collin, & Valach) (see Table 1.2 for full references). Constructivist/social constructionist approaches will be described in more detail in chapter 7.

## Issues Related to Categorisation

Some theoretical models are less easily categorised into one group. For example, L. S. Gottfredson's (1981, 1996, 2002, 2005) circumscription and compromise theory proposed a stage model of the development of the self-concept, but also included contextual variables. It could therefore be grouped with the theories of content and process. The model proposed by Miller-Tiedeman and Tiedeman (1990) also focused on context and proposes a stage approach to an individual's career choice and implementation. Both of these theories have been grouped within the developmental theories in this text.

The work of Vondracek et al. (1986) also drew heavily from the principles of developmental psychology, although we have grouped it with the theories of content and process. In raising the importance of environmental variables, the work of L. S. Gottfredson has also been classified under social systems perspectives by other authors. In addition, its acknowledgment within theories of career development of women and racial and ethnic groups has been noted.

Within our earlier editions, contextual action theory was grouped under Theories of Content and Process. Young and Popadiuk (2012) have identified this work as social constructionist.

Just as there is no agreement in the literature on the grouping of career development theories, there also is no agreement on which theories remain the most influential. The review by Osipow (1990) focused on the work of Holland, Super, Dawis and Lofquist, and Krumboltz. Watkins (1994a) referred to "the real Big Five", the theoretical models of Bordin, Dawis and Lofquist, Holland, Krumboltz, and Super, as those which continue to be strongly influential. The third edition of D. Brown and Brooks (1996a) restricted theories to those which are "currently influencing either research or practice" (p. ix), and included the work of

Holland, Dawis, Super, L. S. Gottfredson, Krumboltz, and sociological approaches. Theoretical perspectives characterised as emerging included D. Brown's values-based model, social cognitive (Lent et al., 1996) and cognitive information processing (Peterson et al., 1996) approaches, and the contextual approach of Young et al. (1996).

It is also important to note just which theories remain as key in the US and international literature. Writing in the International Handbook of Career Guidance (Athanasou & Van Esbroeck, 2008), Leung (2008) identified the following theories as the "big five", acknowledging that they are all theories developed in the US – Dawis and Lofquist's Theory of Work Adjustment, Holland's personality and work environment theory, Super's life-span life-space theory and Savickas's extension and update, career construction theory, L. S. Gottfredson's circumscription and compromise theory and Lent and colleagues' social cognitive career theory. The first edition of the text by S. D. Brown and Lent (2005), Career Development and Counseling: Putting Theory and Research to Work, included the theories of Dawis. Holland, Savickas, L. S. Gottfredson and Lent and his colleagues. The theories presented in the second edition (S. D. Brown & Lent, 2013) include these theories but not that of L. S. Gottfredson. In her review of vocational theories, Betz (2008) focused on "those theories that have received the most empirical attention over roughly the past 10 years: Holland's theory, social cognitive career theory, and developmental-contextual theories" (p. 357). Betz also acknowledged the inclusion of the theory of work adjustment and L. S. Gottfredson's theory of circumscription and compromise. Similarly Hartung and Subich (2011) focused on what they termed the "predominant theoretical models of career choice and development: person-environment fit (P-E fit), developmental, socio-cognitive-behavioral, and constructionist" (p. 6). The differential focus on theories in major texts was also noted in Walsh, Savickas and Hartung's (2013) 4th edition of the Handbook of Vocational Psychology.

This continuing focus on traditional theoretical formulations has drawn a number of criticisms. Reardon et al. (2011) have been critical of the restricted attention given to new and developing theoretical formulations – "In addition, there appears to be an inherent bias or selectivity regarding which knowledge or theories merit attention in the field of vocational psychology. CIP theory provides an example of failure to use new knowledge available in the literature" (p. 243). These authors go on to emphasise that while CIP theory has been "identified as a 'career theory' in at least eight major career textbooks and other professional books, and its development, research, and application to practice is documented in a 20 page bibliography ... it is noticeably absent in other publications ..." (p. 243). We would concur with what we see as a narrow and very selective view of the available theory for review and understanding of career behaviour – we note that this is the third edition of the present book and the STF has drawn considerable attention in many countries with both its theoretical approach and its application to practice and research; Blustein published a book on the psychology of working perspective in 2006, a perspective which has drawn much attention in research and practice suggestions; Pryor and Bright published a book on their chaos theory of careers in 2011, again a perspective which has drawn considerable research and practice support; and two books on contextual action theory and its application to practice have been published (Young, Domene, & Valach, 2014; Young, Marshall, Valach, Domene, Graham, & Zaidman-Zait, 2011), building on a strong research and practice literature.

Another perspective on this criticism may be to look at some of the previous work that has not received attention, until recently. Savickas (2013b) acknowledged the work of Leona Tyler and her move to criticise individual differences in psychology and an ultimate call to focus on individuality. Similarly, Savickas (2008a) acknowledged the early work of David Tiedeman, acknowledging that as "the first psychologist to systematically apply constructivist epistemology to the comprehension of careers, Tiedeman broke with intellectual traditions to lead the counseling profession in a new direction" (p. 217). Savickas further commented that Tiedeman should be acknowledged as "the prime engineer of career construction" (p. 223), the theory that Savickas has been developing. It may be that new theoretical formulations need to continue to press their place in the literature to emphasise the insights that they can bring to our theory, research and practice.

Acknowledging the difficulty in categorisation and in ascertaining influence, D. Brown (2002a) named all theories as being derived from the disciplines of psychology and sociology and from the philosophical underpinnings of logical positivism and social constructionism. The theories included in the 2002 (4th) edition of D. Brown's book include sociological perspectives (Johnson & Mortimer), developmental and postmodern theories (L. S. Gottfredson, Savickas, Young, Valach, & Collin), theories anchored in learning theory (Lent, S. D. Brown, & Hackett, Peterson et al.), and trait-factor theories (Holland, Dawis, D. Brown). Savickas' (2002) work is the new theory derived from Super's developmental theory and career construction theory. The 4<sup>th</sup> edition omitted the work of Krumboltz as it had had limited research focus.

In attempting to trace the progress of career development theory away from either content or process thinking to a more integrated perspective, the review which follows in chapters 2 through 6 provides as comprehensive a review as possible. Further, like the review of Osipow and Fitzgerald (1996) and the focus of both the first and second editions of this book, we take a broad view of what is important and influential in career development theory. We include a large number of theories, with the aim of focusing on the attention each has played in the development of the body of literature referred to as career development theory. In particular, we will attempt to focus on how each theory has developed in response to others, and the similarities and differences between them. We believe all theories have a place in our understanding of career behaviour.

# Philosophical Underpinnings of Our Understandings of Career

Traditional theorising about career has focused on identification of various relevant constructs and attempts to relate them to career behaviour. More recent approaches

have emphasised that "the complexities that occur within and among the intrapersonal traits and interpersonal interactions are simply too complicated to understand and therefore, we should stop trying to do it, except on an individual basis" (Brown, 2002a, p. xii). Such difference in career theories may be accounted for by the philosophical positions or worldviews that underpin them.

For most of its history, understandings of career have been influenced by the logical positivist worldview which emphasises rationality based on an objective value free knowledge; objectivity over subjectivity, facts over feelings. Logical positivism is underpinned by the following core assumptions: that individual behaviour is observable, measurable and linear; that individuals can be studied separately from their environments; and that the contexts within which individuals live and work are of less importance than their actions. The trait and factor theories illustrate the assumptions of logical positivism. Positivists emphasise rationality based on an objective value free knowledge; objectivity over subjectivity, facts over feelings.

The rise to prominence of the influence of the constructivist worldview has made a significant impact in the career discourse (McIlveen & Schultheiss, 2012). Constructivists argue against the possibility of absolute truth, asserting that an individual's construction of reality is constructed "from the inside out" through the individual's own thinking and processing. These constructions are based on individual cognitions in interaction with perspectives formed from personenvironment interactions. Constructivism views the person as an open system, constantly interacting with the environment, seeking stability through ongoing change. Mahoney (2003) presented five basic assumptions which can be derived from theories of constructivism: active agency, order, self, social-symbolic relatedness, and lifespan development. Active agency implies that individuals are actively engaged in constructing their lives. Constructivism emphasises the proactive nature of human knowing, acknowledging that individuals actively participate in the construction of their own reality on the basis of its coherence with related systems of personally or socially held beliefs. The second assumption identified by Mahoney (2003) emphasises the ordering processes, that is the patterning of individuals' experiences to create meaning. The third assumption is that this ordering of personal activity is mainly self-referent, that the focus is on personal identity, with the fourth assumption being that this development of self is embedded in the social and symbolic systems or contexts within which the individual lives. A final core assumption of constructivism is that the activities of the previous assumptions are embedded in an ongoing developmental process that emphasises meaningful action by a developing self working towards a homeostasis. Mahoney and Lyddon (1988) emphasised the change and stability notion as follows: "Embedded with self-change is self-stability – we are all changing all the time and simultaneously remaining the same" (p. 209).

Within this philosophical paradigm, the early thinking about career focused on the individual as operating quite separately from context, a reflection of the industrial era ethos of autonomy and choice. While early theorists began to identify relevant contextual influences (e.g., Super 1957, 1980), it was the development of

social cognitive theory (SCCT, Lent et al., 1994) and developmental contextualism (Vondracek et al., 1986) which introduced the relevance of context to understanding career. More recently a number of theoretical discussions have embedded relationship in discussion of work and life (e.g., psychology of working paradigm, Blustein, 2006, 2011; relational cultural paradigm, Schultheiss, 2013; career construction and life design paradigm, Savickas, 2013a). Proximal relationships such as family, peers and mentors have received some attention in the literature, however Richardson (2012a, b) and Schultheiss (2013) have emphasised that distal social structures and culture inevitably impact proximal relationships. The relational cultural paradigm (Schultheiss) emphasises that relationships cannot be understood outside their social and cultural contexts.

Savickas (2000a) attributed the influence of constructivism to the change in the structure of work and the emphasis on individuals becoming agents in their own lives and careers as it provides an alternate perspective from which to conceptualise careers in post-industrial societies. Constructivism represents an epistemologic stance which emphasises the self-organising and self-management positions of individuals outlined in discussions of career and career development earlier in this chapter. Constructivists assert that individuals actively construct their own reality, and are able to actively construct a meaningful position within the work context. Savickas (2000a) identified the influence of constructivism in the work of personal construct psychologists, and proponents of biographical-hermeneutical and narrative models. More recently, he identified the career construction theory (Savickas, 2001, 2002, 2005, 2013a) as being positioned within the metatheory of social constructionism. Constructivism and its associated worldview will be discussed in more detail in chapter 7.

## Applying Systems Theory to Career Development

The roots of thinking about the perspective of the present authors, that is the potential of systems theory to provide an overarching framework for career theories, are in the field of counselling theory. Parallels can be drawn between the theoretical bases of career development and that of counselling and psychotherapy as both are documented by a diverse range of theoretical views. In counselling and psychotherapy, this diversity has been addressed by the concept of eclecticism. Corey (1991, p. 427) commented on reasons for the move toward eclecticism noting that "no single theory is comprehensive enough to account for the complexities of human behavior, especially when the range of client types and their specific problems are taken into consideration". Corey further claimed that "eclecticism should instead be thought of as a way to harmoniously blend theoretical concepts and methods into a congruent framework" (1991, p. 426). It offers the opportunity to integrate existing perspectives and transcend individual models.

It is instructive to examine the implications of these comments in relation to career theory. First, given the diverse and complex range of influences and theoretical perspectives on career development, it is probable that no single theory can be comprehensive enough (Super, 1992). Second, it is improbable that one theory can adequately account for the career development of all individuals in all epochs. Third, acceptance of one comprehensive theory raises doubts about the future of the more "narrow' schools" (Corey, 1991, p. 426). Thus the question is raised whether the career development literature needs, or indeed can provide, one comprehensive theory which synthesises and incorporates all others, or whether it needs a "congruent framework" that is able to "harmoniously blend theoretical concepts and methods" (Corey, 1991, p. 426).

Young and Popadiuk (2012) have commented that although there are many approaches, theories and paradigms within the career field, it is important that they are recognised as "important ways to both organize our thinking about career and career intervention, and at the same time, critique that organization" (p. 12). Acknowledging the potential of systems theory to facilitate that organisation is the underlying premise of the work developed in section 2 of this book. Applying this approach to practice is outlined in section 3.

The perspective presented in this book therefore draws on the learning in the field of counselling theory, and systems theory (Plas, 1992; von Bertalanffy, 1968). While systems theory is a well established concept in other fields of literature, for example family therapy, it is a relatively new concept to career development theory. While its potential was acknowledged as early as 1983 (Osipow, 1983), and theorists and researchers have commented on its applicability at various levels (e.g., Collin, 1985; Krumboltz & Nichols, 1990 – see chapter 8 for an expansion of this discussion), its potential as an overarching framework has not been explored. Systems theory is broadly based and is able to take into account the diversity and complexity of the influences on career development, and thus more accurately reflect the complexity of career development. Its elements are present in a number of perspectives being discussed in relation to careers and career development. For example, L. S. Hansen (1997) developed her integrative life planning perspective on principles of interconnectedness, relatedness and wholeness, emphasising that all parts must work together to maintain the whole. In a similar way, Hall (1996) asserted that we need a relational approach to career which features mutuality and interdependence.

Each of these concepts is derived in some part from systems theory. While this theory will be described in considerably more detail in chapter 8, an overview of key principles is presented here. These principles include the following:

- wholeness and interrelationship of parts within a whole;
- the whole is greater than the sum of its parts;
- an acknowledgment of elements which exist within systems theory as well as within particular disciplinary fields (for example, while developmental psychology refers to the importance of a stage approach to career development and sociology raises the importance of socioeconomic status, both are relevant in varying ways to individuals' systems); and
- mutuality of action and interaction, that is the individual and the context impact on each other in a dynamic and recursive manner.

#### CHAPTER 1

The emphasis in systems theory is on the recursiveness, or ongoing relationship, between elements or subsystems of the system and the changes that occur over time as a result of these continual interactions. The application of systems theory to career development allows the disparate concepts addressed in the literature to be drawn together under one theoretical framework. This does not make the existing theories redundant nor are they be devalued, rather each are viewed in the context of all available theory.

Thus the present book is centred around a framework which demonstrates a systems theory perspective on career development. The concept for this framework was first presented as a contextual model for understanding adolescent career decision-making (McMahon, 1992). The concept was further broadened to develop the Systems Theory Framework of career development on the basis of two premises; one, that context is an integral part of systems theory, and two, that decision-making is an integral part of career development (McMahon & Patton, 1995). Broadening the original model to further develop the STF (Patton & McMahon, 1999, 2006a) provided the following advantages (discussion of these will be expanded in chapter 9):

- the important contribution of all career theories can be recognised;
- similarities, differences, and interconnections between theories can be demonstrated;
- a systems theory perspective recognises the contribution to career development theory and practice of other fields, for example family therapy;
- systems theory brings to career development a congruence between theory and practice, and new approaches for use in career practice;
- the emphasis is placed on the individual and not on theory. Therefore systems
  theory can be applicable at a macrolevel of theory analysis, as well as at a
  microlevel of individual analysis;
- a systems theory perspective enables practitioners to choose from that theory which is most relevant to the needs and situation of each individual, thus drawing on key constructs of all theories; and
- systems theory offers a perspective that underlies the philosophy reflected in the move from positivist approaches to constructivist approaches.

While not preempting a fuller discussion of the STF (discussed in chapter 9), it is necessary here to outline the variables (termed influences) which are included in the framework as they will form the basis of the comparison tables in chapters 2 through 4. These influences have been derived from the career theory literature. Systems theory is used to illustrate their interrelationships with each other in the context of individual career development. Systems theory provides the framework for a macrolevel analysis of theory, and also facilitates a microlevel analysis of an individual's career development.

The STF is composed of several key interrelated systems, including the intrapersonal system of the individual, the social system and the environmental-societal system. The processes between these systems are explained via the recursive nature of interaction within and between these systems, change over time, and chance. The individual system is composed of several intrapersonal content

influences which include gender, age, self-concept, health, ability, disability, physical attributes, beliefs, personality, interests, values, aptitudes, skills, world of work knowledge, sexual orientation, and ethnicity. Influences representing the content of the social system include peers, family, media, community groups, workplace, and education institutions. Environmental-societal system influences include political decisions, historical trends, globalisation, socioeconomic status, employment market, and geographical location. Process influences include chance, change over time, and recursiveness.

#### CONCLUSION

This book presents a review of the existing theoretical literature, charting its early development through to recent attempts which aim to account for the complexity of career development more comprehensively. Moves toward integration and convergence of the theory literature are examined, and the development of a Systems Theory Framework designed to provide conceptual unity to the field of career development theory is described. We believe that such a framework can forge a new pattern of relationships between existing theories and between theory and practice. Indeed the formation of such relationships has been increasingly evidenced throughout the almost two decades since the first publication of the Systems Theory Framework of career development (e.g., STF and relational theory, Patton, 2007a); STF and dialogical self theory, McIlveen, 2007b; career construction theory and the STF, Patton, 2008; contextual action theory and the STF, Patton, 2014). We will discuss the extensive overall contribution of the STF specifically in chapter 9 and throughout the book.

## THEORIES FOCUSING ON CONTENT

A study of theories focusing on content historically takes us to the origins of career development theory and the work of Frank Parsons at the turn of the twentieth century. In essence, theories of content propose that career choices may be predicted on the basis of individual characteristics (Minor, 1992) especially aptitudes, achievements, interests, values, and personality (Sharf, 2013). This "individual differences" view of career development represents the first of what Savickas (2002, pp. 149-150) describes as two grand perspectives in vocational psychology. The second perspective, the "developmental differences" view, will be elaborated in chapter 3.

Parsons' (1909) work gave rise to what became known as trait and factor theory, which in turn has given rise to the more dynamic person-environment (PE) fit theories. Despite criticism, discussed later in this chapter, trait and factor models based in the early theorising of Frank Parsons have continued to dominate career practice throughout its history (Lent & S. D. Brown, 2013). A study of theories focusing on content is important from two perspectives. First it introduces many of the key concepts essential to an understanding of career development, and second it provides an historical overview of the evolution of this field of study.

This chapter will trace the historical development of career theory, in particular theories focusing on content. The dominant theoretical approaches of trait and factor theory and the subsequent formulation of person-environment fit theory will be discussed. The work of Parsons (1909) and the five factor model or Big Five (McCrae & John, 1992; Pryor, 1993) will be examined as examples of trait and factor theory, and the work of Holland (1966, 1973, 1985a, 1987, 1992, 1997) and Dawis and Lofquist (1976, 1984) and Dawis (1992, 1994, 1996, 2002, 2005) will be examined as examples of person-environment fit theory. In addition, the work of D. Brown (1996a, 2002b) and Bordin (1990) will be discussed as examples of theories focusing on content. It is noticeable that, since the previous edition of this book, most of these theoretical perspectives have not been advanced. Considerable research has however, been conducted, including much related to Holland's theory. This limited theoretical advancement of theories of content may reflect the field's move towards more dynamic and complex accounts of career development. Similarities and differences between the theories of content will be examined.

#### THE WORK OF FRANK PARSONS

Frank Parsons is "... credited with founding the career counselling specialization of modern day professional counselling and the related fields of vocational psychology and counseling psychology" (Pope & Sveinsdottir, 2005, p. 105). With

an intense commitment to assisting young adolescents transition from school to work, Parsons founded the Vocational Bureau in Boston and is regarded as the founder of modern career guidance because of the lasting influence of his work. His book, *Choosing a Vocation*, published in1909, is seminal in the field and was "the signal event that incited the vocational guidance movement" (Savickas, 2009a, p. 195) at the time of its publication.

Parsons' best known contribution to the field of career development is his identification of three key elements of career selection. They are:

- 1. A clear understanding of yourself, aptitudes, abilities, interests, resources, limitations and other qualities.
- A knowledge of the requirements and conditions of success, advantages and disadvantages, compensation, opportunities and prospects in different lines of work.
- 3. True reasoning on the relations of these two groups of facts (Parsons, 1909, p. 5).

Each of these three elements represents a major contribution to career theory and practice, both of which "formed a seamless amalgam to Parsons" (Spokane & Glickman, 1994, p. 299), a point which in itself is significant given debate on the links between theory and practice (e.g., Savickas & Walsh, 1996).

In reflecting on Parsons' approach to the first element, self-knowledge, Zytowski and Swanson observed in 1994 that it was "strikingly consistent with the contemporary practice of career assessment" (p. 305). Twenty years on, this observation holds. His format for career counselling interviews was designed to gather comprehensive information from individuals through a course of questioning by the end of which the counsellor was "able, as a rule, to classify the applicant with a reasonable degree of accuracy" (Parsons, 1909, p. 19). In so doing, Parsons acknowledged that individuals differ in terms of their interests, abilities, values, personality and skills. Parsons suggested this process would take fifteen minutes, a length of time which by today's counselling standards seems remarkably short. He also developed the first self-assessment form where clients completed a comprehensive questionnaire comprising over 100 questions prior to their career counselling interview. His assessment and interview process "established the format for career counselling" (Holland, 1987, p. 29). Thus, while Parsons introduced the concept of career assessment, it was not until the development of the psychometrics movement (discussed later in this chapter) that the instruments needed to efficiently enhance self-knowledge and provide links to the world of work were provided. In this regard, Parsons began a brief association with Hugo Münsterberg, the most famous psychologist of the time, and the "founding father of applied psychology" (Porfeli, 2009, p. 227) in order to develop a scientific base for vocational guidance (Savickas, 2009a). While Münsterberg admired Parsons' work, he believed that Parsons' vocational guidance method could benefit from a more scientific approach especially in relation to assessment (Porfeli). Indeed, Münsterberg proposed the first theory of vocation, which although not widely adopted or accepted was the only such theory until Holland proposed his theory in 1959 (Porfeli).

Parsons' second element relates to knowledge about the world of work, a concept he viewed as vital to comprehensive career planning and development, and that has always been viewed as critical in career development work (DeBell, 2001). Parallels can be drawn between the information sources advocated for use by Parsons with those used by modern day career counsellors, including lists and classifications of industries, information on training and courses, and general industry information. For example, Holland's (1997) occupational classification, the O-Net career information system in the United States, and Australia's national career information system (myfuture.edu.au) are present day examples of the importance of world of work knowledge. Thus the development of career information delivery systems so essential to modern career guidance also has its origins in the work of Parsons.

Parsons' concept of 'true reasoning' remains to the present day his "most enduring contribution" (Herr & Cramer, 1992, p. 5) to the field. While 'true reasoning' was never fully explained by Parsons, it seems that he saw cognitive processes and analytical skills as fundamental to career selection. This reflects the visionary nature of his work and again emphasises its relevance to modern career guidance.

It is these three concepts which are much cited and for which Parsons (1909) is best remembered. Less attention however, has been given to some aspects of his "personal record and self-analysis" (p. 27) questionnaire. As well as gathering information on abilities and interests, it also invites individuals to reflect on contextual influences such as family, health, resources, including their financial situation, relatives and friends, lifestyle, and mobility. While Parsons did not explain how this information was used, he did at least include it in the assessment process, a point that seems to have been overlooked in the development of the trait and factor theories. In this regard, since Zytowski and Swanson's (1994) claim that vocational psychology has always struggled with the issue of self-assessment and how much confidence to place in it despite evidence that attests to its validity, the field has moved more towards approaches that actively encourage self-assessment. Specifically, the field's moves towards narrative approaches to career counselling grounded in constructivist and social constructionist theory value the personal agency of clients and thus their capacity to actively engage in telling stories about and reflecting on their careers in order to identify the themes and patterns located within them.

While Parsons' work is most commonly associated with the logical positivist worldview, his emphasis on intrapersonal and interpersonal concerns in career decision-making processes (O'Brien, 2001) and his acknowledgement of a broader context and the active role of the client in their own career decision-making processes do not sit well with this worldview. Rather, they sit more comfortably with the constructivist worldview that was previously described in chapter 1. Indeed Spokane and Glickman (1994) have suggested that "Parsons presaged the constructivist position" (p. 298). In addition, Parsons was "an advocate for youth, women, the poor, and the disadvantaged" (O'Brien, 2001, p. 66) and as such pioneered the notions of individualised approaches to career counselling and

advancing social justice through career development work (O'Brien). Thus it seems that Parsons' work is multistoried (McMahon & Patton, 2006b) and has contributed to both the logical positivist and constructivist positions on career development work.

Parsons believed that counsellors were best positioned to achieve "personvocation matching" whereas his colleague Münsterberg believed that "at least the assessment of the client was best left to methods developed by psychologists or those trained and closely supervised by them" (Porfeli, 2009, p. 228). In essence, Münsterberg saw his "scientific vocational guidance" as being supported by "the vocational guidance movement of Parsons, and the scientific management movement" (Porfeli, 2009, p. 230), the forerunner of industrial and organisational psychology. The tension between science and practice perceived in Munsterberg's views polarised the vocational movement at the time which resulted in his theory not receiving support and may have perpetuated a division in the field that has remained to the present day (Porfeli, 2009) despite calls for greater unity (e.g., Collin & Patton, 2009a; Sampson, 2009; [see chapter 14]) and practice examples being offered (e.g., McMahon & M. Watson, 2012a, b). Porfeli draws attention to the three elements of Münsterberg's theory, specifically thinking, feeling and doing which, to some extent, echo recent calls for the field to take greater account of the subjective career.

Despite Parsons' dual contribution to career development theory, the dominant story for which he is best known is that related to the logical positivist worldview. In particular, Parsons' (1909) work represents the "first conceptual framework for career decision-making and became the first guide for career counsellors" (D. Brown & Brooks, 1996b, p. 1). It was Parsons' hope that individuals who actively engaged in the process of choosing their vocation would be more satisfied and more efficient with their work resulting in a decrease in employers' costs (D. Brown, 2002a). To this end he emphasised maximising the fit between individuals and occupations. This concept is as relevant today as it was in Parsons' time. As testament to the longevity and influence of the work of Parsons, Spokane and Glickman (1994) noted more than two decades ago that the counsellor directed approach to career counselling outlined by Parsons had dominated the field for more than 70 years as had the individual differences approach to assessment. This situation has perpetuated until the present time with Lent and S. D. Brown (2013) concluding that "Parsons' simple formula still serves as a fundamental blueprint for the practice of career choice counselling" (p. 21). In the 21st century, the growing emphasis on narrative approaches, client agency and meaning making may see the lesser told story of Parson's work gain more recognition.

#### DIFFERENTIAL PSYCHOLOGY

While Parsons understood the importance of self-knowledge to career selection, he had to rely to a large extent on self-study by clients due to a lack of appropriate assessment instruments. However during the early part of the 1900s there was also growth in the differential psychology movement with its emphases on individual

differences and the use of psychometric assessment which provided counselling psychology with a technology for client assessment based on psychological tests (Dawis, 1992). The movement toward individual differences "shifted the emphasis in vocational guidance to the assessment of individual's abilities, interests, and personality traits in relation to occupational requirements and occupational adjustment" (Dawis, 1992, p. 10), a process that gained considerable momentum with the advent of each of the world wars. Now, as then, assessment is used in career counselling "to help clients gather and interpret information relevant to career decision-making" (Forrest & Brooks, 1993, p. 233). Assessment is used as a stimulus for both career exploration and self-exploration (de Bruin & de Bruin, 2006) and it assists individuals with decision making (Sampson, 2009). Despite the pervasive influence of the differential psychology movement in the field of career psychology, several authors have cautioned about the uncritical use of career assessment (e.g., Sampson, 2009) and others have emphasised the need to use it to facilitate self-exploration (e.g., Blustein & Flum, 1999; Hartung & Borges, 2005).

## Trait and Factor Theory

The technology provided by the psychology of individual differences such as inventories and psychological tests paved the way for the development of what is the oldest, most widely used, and most durable of the career development theories (Zunker, 2011), the trait and factor approach. Zunker explains that the key assumption of trait and factor theory is that individuals have unique traits that can be objectively measured and matched against the requirements of occupations. Essentially, Parsons' (1909) process of studying individuals, considering occupations and matching them provided the foundation for trait and factor theory. Emanating out of the logical positivist worldview, trait and factor theory relies on measurement and objective data that is interpreted by an expert who, on that basis, also makes predictions about an individual's suitability for future jobs.

Two main thrusts developed out of the emergence of the psychometric movement in the early 1900s, specifically the measurement of individual differences and the identification of the traits needed by individuals for successful job performance. The development of tests of abilities and aptitudes and inventories of interests which were increasingly used in the counselling process complemented and broadened the work of Parsons in particular and vocational guidance generally (McDaniels & Gysbers, 1992). Indeed the use of assessment continues to be a point of difference between counselling and career counselling.

According to trait and factor theory, choosing an occupation involves trying to match an individual to a job so that their needs will be met and their job performance will be satisfactory (Zunker, 2011). The terms trait and factor "refer to the assessment of characteristics of the person and the job" (Sharf, 2013, p. 25). Traits are individual characteristics which can be measured through testing, and factors are characteristics required for successful job performance. Traits were originally viewed as being biologically based and therefore unchanging, and later as learned and subject to change. The term 'trait and factor' implies a matching

between individuals and jobs, and career selection occurs as a result of understanding the relationship between knowledge about self and knowledge about occupations (Sharf, 2013; Zunker, 2011). This process clearly reflects Parsons' (1909) concept of vocational guidance and in doing so establishes his place as the founder of what is now known as trait and factor theory.

Over two decades ago, D. Brown (1987) noted that the traits of greatest interest to career counsellors such as interests and aptitudes are viewed as relatively stable. In addition, he described five characteristics of trait and factor theory which reflect its origins in differential psychology. The first is that traits are not independent of each other and that there is interaction between them which leads to behaviour patterns. However the links remain unclear. In line with differential psychology, the second characteristic identified by D. Brown is the value placed on the quantification of data to trait and factor theorists and the objective use of inventories, tests and other measures. Related to this is the third characteristic, external validation, where individuals are compared with reference groups in particular work environments. The fourth characteristic relates to the interactive nature of trait and factor theory and the influence of the environment on the personalities of individuals, and in turn their influence on the environment as they attempt to satisfy their needs. This has been emphasised more with the evolution from trait and factor approach to the person-environment fit approach. The fifth and final characteristic discussed by D. Brown is that the "average or typical individual has the innate ability to make adequate decisions if both personal and environmental data are available to him or her" (p. 14), the process described by Parsons as true reasoning.

Trait and factor thinking portrays career decision-making as a cognitive process in which decisions are made on the basis of objective data. There is little, if any, consideration given to subjective processes or contextual influences. The process presumes that choice is available for everyone. In addition, career choice is viewed as a single, static, point in time event where there is a single right answer.

Theorists and practitioners of trait and factor theory have developed and used a number of assessment instruments to objectively identify the profile of traits possessed by an individual. In particular, interests, aptitudes, values, personality and achievement can be measured by inventories and psychological tests. Occupations can also be considered by the 'amounts' of individual traits they require. When the profile of a person is matched with the profile of an occupation, the degree of fit between the person and the occupation can be seen. Trait and factor theory also "influenced the study of job descriptions and job requirements in an attempt to predict future job success from the measurement of traits that are job related" (Zunker, 1994, p. 26). In fact, major contributions of trait and factor theory to career counselling have been the development of many assessment instruments and techniques and also occupational information that includes occupational descriptions, classifications of occupations and the trait and factor requirements of each occupation (Sharf, 2013). Indeed, many countries have invested considerably in developing occupational information systems to assist the career decision making of their citizens.

Until the 1950s, trait and factor theory was the preeminent approach in vocational psychology. However its shortcomings were gradually realised (Super, 1992). At the same time, challenges to it emerged "as Rogerian psychotherapy permeated the counselling field, and developmental (Super, 1957) and social learning approaches (Krumboltz, A. M. Mitchell, & Jones, 1976) to career counselling matured" (Chartrand, 1991, p. 519). Thus as different conceptualisations of career development and the counselling process emerged, awareness of the limitations of the trait and factor approach was also heightened. In recent times, this awareness culminated in an unhelpful division in the field between proponents of approaches that are more consistent with the logical positivist philosophy and its trait and factor approaches and proponents of more recent constructivist theories and approaches. This division has been described by Sampson (2009) as an "unnecessary divorce" (p. 91) and he called for the field to recognise and value the contributions of both theoretical positions. Despite a broader range of career theories and approaches to career counselling, the trait and factor approach has remained a dominant force in the field with Zunker (2011) concluding that it has an "important role in future career development theory and career counseling" (p. 27).

## Limitations and Criticisms of Trait and Factor Theory

It is useful to examine some of the limitations and criticisms of the trait and factor approach, as it paves the way for discussing the evolution of the person-environment model. Criticism has generally been directed to the approach as a theory of career development and to the counselling process derived from it. Both will be discussed here.

The assumptions previously discussed invite criticism. At a fundamental level, trait and factor theory may be viewed as "superficial" because of the limited attention it pays to contextual factors such as social influences and processes such as work adjustment (Sharf, 2013, p. 433) and that it is static rather than developmental (Zunker, 2011). Further, it has been questioned whether people actually use reasoning in all career choices and whether in fact all people actually have a reasoned choice in relation to career (Blustein, 2006; Roberts, 1977, an issue discussed further in chapter 6) with Roberts (2012) raising concerns about the effects of social class on employment opportunities. More recently, emotion and subjectivity which are not features of trait and factor theories have received more attention in relation to career decision-making (e.g., Kidd, 2004, 2008, 2011; Patton & McMahon, 2006a). It has also been questioned whether occupational choice is a single event, whether single types of people are found in each type of job or whether there is a single right goal for each career decision maker (Zunker, 2011). Zunker also is critical of the failure to account for growth and change in traits such as interests, values, aptitudes, achievements, and personalities. These criticisms have become even more relevant in the world of work of the twenty-first century where it is predicted that individuals will engage in career decisions about learning and work several times in their lifetime and that they will change jobs several times during their working lives (P. S. Jarvis, 2003; Savickas et al., 2009). Isaacson and D. Brown (1993) claimed that trait and factor theory does not account for the way in which there are a broad range of individual differences in every occupational group.

Criticisms have been levelled at counselling practices based solely on this model for over three decades. For example, Crites (1981) described the trait and factor approach as a "test and tell" approach that occurs as "three interviews and a cloud of dust" (p. 49). Sharf (2013) describes the three step process as "deceptively simple" (p. 41). Concerns have been expressed about its dependence and overreliance on assessment results (Zunker, 2011) which seems to result in an authoritative position for the counsellor that occurs at the expense of the counselling relationship. Indeed, Sharf (2013) regards trait and factor theory as the "simplest and least sophisticated career development theory that provides few guidelines for counsellors" (p. 433). These criticisms have come more sharply into focus as constructivist approaches to career counselling have become more influential (see chapter 13 for a more extensive discussion of this topic). Despite such criticism, "trait-and-factor theory, as it is understood today, continues to undergird counselling for career development" (McDaniels & Gysbers, 1992, p. 32). McDaniels and Gysbers' comment is as applicable today as it was over two decades ago despite challenges to career counselling to revise its practice in order to remain relevant in the 21st century (see McMahon & Patton, 2006a). It seems that the simplicity and easy guidelines of the approach are appealing to practitioners (Sharf, 2013), if not to theorists (an issue discussed in part three of this book).

D. Brown (1996b) claimed that "In its current state, trait and factor theory cannot stand alone as an explanatory system for occupational choice making and has even less validity as an explanatory system for the career development process" (p. 347). By way of explanation, Sharf (2013) noted that there is little research to support or refute trait and factor theory as a viable theory of career development. Rather, Sharf notes that the "extensive and vast research that has been done has related traits and factors to one another or has established the validity and reliability of measurements of traits and factors" (p. 26). Thus it would be fair to say that trait and factor theory is not a theory of career development, but rather a collection of theories based on influences which contribute to career development. Typical of these theories are the five factor model (McCrae & John, 1992; Pryor, 1993) which will be discussed here, and the early work of Holland (1966, 1973, 1985a, 1987). However Holland's original work has been refined to the point where his later work (Holland, 1997) is more reflective of the personenvironment fit theory. Therefore it will be discussed as an example of that theory later in this chapter.

## Five Factor Model of Personality

Since the growth of the differential psychology movement and its emphasis on assessment, personality has been one of the traits which has attracted most focus,

and the development of the five factor model corresponds with this. For over a decade, little has been written in the field of career development about the five factor model which is based on five overarching factors on which trait theorists agreed and termed "the Big 5" (Walsh & Chartrand, 1994, p. 193). The Big 5 is a hierarchical organisation of personality traits in terms of five basic dimensions: extraversion, agreeableness, conscientiousness, neuroticism, and openness to experience (McCrae & John, 1992). Emanating from the field of personality, the five factor model has been of great use in "integrating and systematizing diverse conceptions and measures" (McCrae & Costa, 2008, p. 159).

The five traits are best explained through the use of adjectival descriptors such as those used by Wayne, Musisco and Fleeson (2004) which reflect a consensus of opinion of authors before them, specifically:

- 1. *Conscientiousness*: achievement oriented, organised, thoughtful, planful, responsible, hardworking, thorough;
- 2. Neuroticism: anxious, insecure, defensive, tense, worried;
- 3. Extraversion: active, assertive, energetic, enthusiastic, outgoing, talkative;
- Agreeableness: cooperative, likeable, forgiving, kind, sympathetic, trusting;
   and
- 5. *Openness to experience*: intelligent, unconventional, imaginative, curious, creative, original.

As illustrated in these descriptors, individual differences may find their expression in language (De Raad, 1998).

Significantly, while these five terms are widely used, consensus has not been reached about either the names (De Raad, 1998; McCrae & John, 1992; Pryor, 1993) or the number of factors (De Raad; Pryor), a topic which is discussed at length by McCrae and John. For example, in 1993 Pryor suggested that researchers were moving away from neuroticism towards 'emotionality' or 'emotional stability'. De Raad (1998) referred to "Emotional stability (or neuroticism)" (p. 113), whereas Wayne, Musisca and Fleeson (2004) used the term neuroticism. In addition, De Raad used the term "autonomy (or Culture, Intellect, Openness to Experience)" (p. 113). Each dimension represents groups of traits, and five factor theorists claim that these can be found in almost all personality instruments. However McCrae and John (1992, pp. 194-195) raised the question: "Precisely which traits define each factor, and which are central and which are peripheral?"

Because of the comprehensiveness of the model, there is no overarching theory, but rather a number of complementary theories, each accounting for various sections of the model. The debate in five factor theory about the titles of the factors mentioned previously stems out of two predominant traditions in five factor theory – the 'lexical tradition' and the 'questionnaire tradition' (McCrae & John, 1992). The 'lexical tradition' holds that throughout the development of a language all traits will have been observed by the speakers of that language and encoded. Thus, by decoding the language, researchers can "discover the basic dimensions of personality" (p. 184). However, questionnaires have been used as the basis for most personality research. While there has been "considerable redundancy in what

they measure" (McCrae & John, 1992, p. 185), the major contribution of the questionnaire tradition is in fact a body of theory.

McCrae and John (1992) claimed that the five factor model has appeal on three levels. First, it integrates a wide variety of personality constructs and provides an umbrella under which researchers of different orientations can communicate. Second, it is comprehensive and its measurement of all five factors mitigates against relevant personality traits being neglected in studies and in career counselling practice. Third, it is efficient in providing "at least a global description of personality with as few as five scores" (p. 206). In addition, the model has crosscultural replication. For example it has been studied with German, Japanese, Chinese and Dutch samples, which in light of criticism based on the cross-cultural application of career theory, is a considerable point in its favour. However, the cross cultural application of the big five factors has been questioned with De Raad (1998) suggesting that three or four of the factors can be identified in different languages and that the fifth factor "remains troublesome" (p. 122). In this regard De Raad raises the question about whether it is time to disregard the fifth factor and direct energy "toward articulating a universal Big Four" (p. 122) but concludes that there are reasons to retain the hypothesis of the big five.

Pryor (1993) observed that the five factor model was becoming as influential to personality measurement as Holland's hexagon has been to vocational interest measurement. In keeping with the psychology of individual differences, Digman (1990) noted that "at a minimum, research on the five factor model has given us a useful set of broad dimensions that characterize individual differences" and that they "provide a good answer to the question of personality structure" (p. 436). More recently, McCrae and Costa (2008) have described five factor theory as a "contemporary version of trait theory" (p. 176) and as a grand theory that attempts to provide "an overview of the functioning of the whole person across the lifespan" (p. 176). Indeed unlike trait theory, five factor theory depicts a dynamic personality operating system that takes account of self-concept, cultural adaptations, external influences and objective biographical (emotional reactions) (McCrae & Costa, 1996).

Despite shortcomings which include limited consensus on the nature of the factors, and limited prediction and explanation capabilities, Pryor (1993) maintained that the five factor model of personality has much to offer the understanding of the construct of personality in career development theory. For example, it has relevance for organisational, industrial and educational psychologists, and in any field that uses personality assessment because it provides useable instruments (McCrae & John, 1992). Possibly due to its origins in personality psychology, the five factor model has still not had wide application in the field of career theory despite Pryor's predictions. However, the influence of the five factor model continues to permeate career development through its application in research (e.g., Gardner, Reithel, Cogliser, Walumbwa, & Foley, 2012; Wille, Beyers, & De Fruyt, 2012).

The five factor model typifies the trait and factor models. It is static in nature, relies on the measurement of individual differences, and does not describe the

process of development. However, in a similar way to Parsons (1909), McCrae and John (1992) acknowledged the "richness of human individuality" (p. 207) and life contexts and history. Unlike Parsons, they did not explain how they would gather this data. Thus while there is acknowledgment in trait and factor theory of contextual variables, in their application they rely heavily on the measurement of individual traits and matching processes.

#### Person-Environment Fit

Clearly evidenced in the five factor model is the static nature of the trait and factor theories and their lack of emphasis on development. As the notion of development was embraced by career theorists, proponents of trait and factor theory could no longer ignore criticism of its static approach. Consequently, over time there has been an evolution from this static approach of trait and factor theory where a person is matched with an occupation to the more dynamic approach of person-environment fit (P-E fit). P-E fit could be regarded as an "optimal outcome" (Rottinghaus & Van Esbroeck, 2011, p. 36) of career guidance interventions.

Savickas (2007) explained that there are actually two models of personenvironment fit, complementary and supplementary. Complementary fit applies when a worker and an organisation offer what each other needs. For example, an organisation requires a set of skills that is provided by a worker who needs a salary. The Theory of Work Adjustment (TWA; Dawis & Lofquist, 1984; Dawis, 2005) described later in this chapter best represents a complementary fit model. Supplementary fit applies when a worker and an organisation have similar characteristics. For example, a teacher works in the social environment of a school. Supplementary fit is illustrated by Holland's (1997) theory described later in this chapter.

The term "fit" has been used interchangeably with those of "congruence" and "correspondence" (Tinsley, 2000), each of which will be explained later in this chapter in the work of Holland and Dawis respectively. In essence, the construct of "fit between a worker and a job has provided a framework for comprehending vocational behavior" (Savickas, 2000b, p. 145) since the beginning of the twentieth century. Chartrand (1991) identified three assumptions that have transferred to the person-environment approach from trait and factor theory. They are:

- 1. "people are viewed as capable of making rational decisions ...;
- 2. people and work environments differ in reliable, meaningful, and consistent ways ...; and
- 3. the greater the congruence between personal characteristics and job requirements, the greater the likelihood of success" (p. 520).

Although the assumption of congruence between personal characteristics and job requirements as a predictor of job satisfaction is central to both approaches, the concept of dynamic reciprocity is a feature of the person-environment fit approach (Rounds & Tracey, 1990). This concept indicates an ongoing process of adjustment as environments are influenced by individuals and individuals are influenced by environments. "The P x E fit perspective explicitly assumes that people and

environments change continually in ongoing adjustment" (Chartrand, 1991, p. 521), and that individuals seek out congruent environments, thus reflecting a shift from the trait and factor approach. Savickas (2007) explains that the interrelated but independent constructs of complementary and supplementary fit relate to the way in which individuals adapt to and stabilise in work environments. The notion of adaptation to an environment addresses some of the criticism that has been levelled at trait and factor theory. These include Crites' (1969) criticism that trait and factor theory focuses only on content and does not account for the process of career development, and D. Brown's (1990) criticism that trait and factor theory does not have "validity as an explanatory system for the career development process" (p. 347).

Chartrand (1991) suggested that there are two questions which guide the personenvironment fit approach. They are:

- 1. "what kinds of personal and environmental factors are salient in predicting vocational choice and adjustment, and
- 2. how is the process of person and environment interaction best characterized" (p. 520).

The first question is typical of the purely descriptive, static matching model of trait and factor theory, whereas the second reflects the move to a more dynamic, process oriented person-environment fit approach and is illustrative of the acceptance of career development as a lifelong developmental process (discussed further in chapter 3). Person-environment fit theory has come under close scrutiny with Tinsley (2000) in a major review concluding that the "P-E fit model provides a valid and useful way of thinking about the interaction between the individual and the environment" (p. 173).

More recently, Rottinghaus and Van Esbroeck (2011) concluded that the P-E fit will likely "remain omnipresent" (p. 47) because it is so integral to career theory and practice. This is reflected in its application to a Retirement Transition and Adjustment framework proposed by Hesketh, Griffin and Loh (2011) to account for individuals transitioning to retirement. Of interest for 21st century career development practitioners is the notion that 'best fit' may not always be possible for clients who may need to consider a 'good enough fit' or 'acceptable fit' depending on their circumstances (Rottinghaus & Van Esbroeck). As circumstances and individual's perceptions of their environments change, so too may their perceptions of 'good enough fit'. Two theories will be presented to illustrate the person-environment fit approach, Holland's theory of vocational choice and Dawis and Lofquist's theory of work adjustment, both of which Leung (2008) identified as two of five theories that have "guided career guidance and counselling practice and research in the past few decades in the USA as well as internationally" (p. 115). Similarly, Rottinghaus and Van Esbroeck (2011) regard the work of Parsons (1909), Holland (1959), and Dawis, England, and Lofquist (1964) as "pillars of vocational scholarship that have inspired leading scholars from diverse perspectives to debate the utility of P-E fit throughout the years" (p. 35).

# Holland's Theory of Vocational Personalities and Work Environments

First proposed in 1959, Holland's theory was conceptualised as a trait and factor theory and "remains in the tradition of differential psychology" (Weinrach & Srebalus, 1990, p. 47). For almost four decades Holland (1959, 1966, 1973, 1985a, 1992, 1997) revised and refined his theory. In 2010, the "50th anniversary of the introduction of John L. Holland's (1959) theory of vocational personalities and work environments" to the field (Nauta, 2013, p. 11) was celebrated by an article in the *Journal of Counseling Psychology*. In reflecting on Holland's contribution to the field, Savickas (2007) concluded that "Holland's RIASEC vocabulary and typology provide an invaluable resource for articulating accounts of work and workers" (p. 84).

Originally proposed as a theory of vocational choice (e.g., Holland, 1959, 1973, 1992), Holland's (1997) theory was titled "a theory of vocational personalities and work environments" to reflect its theoretical refinements. In a 2013 chapter on Holland's theory, Nauta used the title "Holland's theory of vocational choice and adjustment" (p. 55) despite the fact that Holland has not significantly addressed adjustment as a process of career development. Weinrach and Srebalus (1990) noted the significance of Holland's work and claimed that it was the "most popular career theory of the last decade" (p. 47), a situation that remains unchanged. In a 1999 tribute to the work of Holland, a special issue of the *Journal of Vocational Behavior* was published with G. D. Gottfredson claiming that Holland's theory "revolutionized the delivery of vocational assistance worldwide" (p. 15). It remains one of the most influential theories in career guidance and counselling (Nauta, 2013). Significantly, Holland's work has influenced the development of interest inventories, career assessment, the classification of occupational information, and career counselling.

Holland set out to write a theory that was simple and practical, and its success can be attributed to the achievement of these goals, its user friendliness and its testability (Nauta, 2010). The basic concept of the theory is uncomplicated, and many assessment instruments derived from it have been produced to assist practitioners. In essence, Holland's theory provides a parallel way of describing people and environments by classifying them according to six types (L. S. Gottfredson & Richards, 1999). Interrelationships between the types provides a means of predicting the career choices of individuals, how easy it will be for them to choose, how satisfied they will be with their career, and how well they will perform (Nauta, 2013).

Holland's (1959, 1966, 1973, 1985a, 1992, 1997) typological theory illustrates a person-environment perspective and he remains a major proponent of the person-environment fit approach, despite being classified as a trait and factor theory in major texts (e.g., D. Brown & Associates, 2002; Betz, 2008). The person-environment fit perspective is reflected in three questions explained in Holland (1992). They are:

#### CHAPTER 2

- 1. What personal and environmental characteristics lead to satisfying career decisions, involvement, and achievement, and what characteristics lead to indecision, dissatisfying decisions, or lack of accomplishment?
- 2. What personal and environmental characteristics lead to stability or change in the kind of level and work a person performs over a lifetime?
- 3. What are the most effective methods for providing assistance for people with career problems? (p. 1).

Underlying Holland's theory is the assumption that vocational interests are one aspect of personality, and therefore a "description of an individual's vocational interests is also a description of the individual's personality" (Weinrach & Srebalus, 1990, p. 39). Weinrach and Srebalus (1990) described Holland's theory as 'structural-interactive' because of the links it provides between personality and job types. Holland (1992) described his typology as the structure for organising information about jobs and people, whereas his assumptions about people and environments acting on each other are the interactive component of his theory. In this regard, he claimed that "jobs change people, and people change jobs" (Holland, 1992, p. 11). His model may be summed up in the following propositions:

- 1. In our culture, most persons can be categorized as one of six types: Realistic, Investigative, Artistic, Social, Enterprising, or Conventional.
- 2. There are six model environments: Realistic, Investigative, Artistic, Social, Enterprising, or Conventional.
- People search for environments that will let them exercise their skills and abilities, express their attitudes and values, and take on agreeable problems and roles.
- 4. Behavior is determined by an interaction between personality and environment (Holland, 1997, p. 4)

Holland's theory describes the career decision maker using personality/interest types. He claimed that by late adolescence most people can be characterised according to their resemblance to these types (Nauta, 2013). These six types are "theoretical organizers for understanding how individuals differ in their personality, interests and behaviours" (Spokane, 1996, p. 40), or "models against which we can measure the real person" (Holland, 1992, p. 2). Although explaining how these types develop in individuals was not a focus of Holland's work (Nauta, 2013), he did explain that individuals develop preferences for certain activities as a result of their interaction with "cultural and personal forces including peers, biological heredity, parents, social class, culture, and the physical environment" (1992, p. 2), and that these preferences become interests in which individuals develop competencies. As a result of his/her interests and competencies, an individual develops a "personal disposition that leads him or her to think, perceive, and act in special ways" (Holland, 1992, p. 2). Personality types are therefore indicated by choice of school subjects, hobbies, leisure activities and work, and vocational interests and choices are reflected by personality. In choosing or avoiding certain environments or activities, types are seen to be active rather than passive (1992).

As mentioned previously, Holland's (1985a, 1992, 1997) typology categorises people into one of six broad types of personality, specifically Realistic (R), Investigative (I), Artistic (A), Social (S), Enterprising (E), Conventional (C). As a result, Holland's type theory is commonly referred to as the RIASEC model (Holland, 1985a) and is represented diagrammatically using a hexagon which provides a visual representation of the relationships between the personality or occupational types (see Figure 2.1). Research has generally provided support for the ordering of Holland's types. However there is less support for the hexagonal representation (Nauta, 2013) with some researchers (e.g., Armstrong & Rounds, 2008; Darcy & Tracey, 2007; Tracey & Rounds, 1993) lending support for a circular or circumplex structure (Nauta, 2013; Tracey & Gupta, 2008). Indeed, Tracey and Gupta (2008) claim that the hexagon is "often interchangeably referred to as a circular structure" (p. 528) because a circle can be "super-imposed onto the equilateral hexagon" (p. 529).

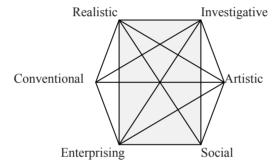


Figure 2.1 Hexagonal model for defining the relations among Holland's personality types and environments and their interactions (Reproduced by special permission of the publisher, Psychological Assessment Resources, Inc. 16204 North Florida Ave, Lutz, FL33549, from Making Vocational Choices, 3rd Ed, Copyright, 1973, 1985, 1992, 1997 by PAR, Inc. All rights reserved).

Holland proposed that these personality types are related to needs and that an individual's type is indicative of their major needs. In addition, the nature of the work environments can be classified in a similar way. Holland claimed that individuals seek out work environments which are compatible with their attitudes and values and allow them to use their skills and abilities, a corollary of which is that people in similar jobs will have similar personalities. Behaviour is determined by interaction between the individual and the environment and determines factors such as job satisfaction, stability and achievement, educational choice, and personal competence and susceptibility to influence. These outcomes can all be predicted from a knowledge of personality types and environmental models (Holland, 1992, 1997). While matching is still central to Holland's approach, it is his attention to interaction, a feature of later refinements of his theory, that locates

him under the umbrella of the person-environment fit theories rather than the trait and factor theories.

In relation to interaction, Holland suggested that children's biological dispositions in interaction with their early life experiences produce learned preferences for some activities and not others. These preferences in combination with learned skills and competencies shape values, beliefs and styles (G. D. Gottfredson, 1999). Holland proposed that personality traits stabilise with age. While this could be seen as a static view of personality, G. D. Gottfredson claimed that it implies an interactional process between people and environments where they "make choices, display competencies, seek pleasure and avoid punishing experiences are due in part to underlying dispositions" (p. 30). In other words, "The individual is viewed as a relatively stable entity who moves in and out of environments when the perceived fit is no longer optimal" (Spokane, Luchetta, & Richwine, 2002, p. 379).

Holland (1997) advanced four propositions relating to interaction between people and work environments which have received less attention in the literature (Spokane et al., 2002). These propositions reflect the interactive nature of Holland's theory and illustrate why it is aptly termed a person-environment fit theory.

- People find environments reinforcing and satisfying when environmental
  patterns resemble their personality patterns. This situation makes for
  stability of behavior because persons receive a good deal of selective
  reinforcement of their behavior.
- 2. Incongruent interactions stimulate change in human behavior; conversely, congruent interactions encourage stability of behavior. Persons tend to change or become like the dominant persons in the environment. This tendency is greater, the greater the degree of congruence is between the person and the environment. Those persons who are most incongruous will be changed least.
- 3. A person resolves incongruence by seeking a new and congruent environment or by changing personal behavior and perceptions.
- 4. The reciprocal interactions of person and successive jobs usually lead to a series of success and satisfaction cycles [pp. 53-54] (Spokane et al., 2002, p. 388).

In keeping with its origins in differential psychology, many assessment instruments have been developed in conjunction with Holland's theory. One such instrument is the Self-Directed Search (SDS), developed to measure Holland's six personality types. Holland did not assume that individuals would resemble only one type, but that they would resemble a dominant type and also have some resemblance to one or more other types (Nauta, 2013). Thus, individuals who complete the SDS receive a score on each of the six types, and typically an individual's profile would contain characteristics of each of the six types. However subtypes are ascribed using a three letter code representing the three most prevalent types in a profile. The types can best be described using both descriptors and examples of occupations which would match each type as illustrated in Table 2.1.

Table 2.1 Types, descriptors, and occupations according to Holland's typology

Туре	Descriptors	Occupations	
Realistic	has practical abilities and would prefer to work with machines or tools rather than people	mechanic; farmer; builder; surveyor; pilot	
Investigative	analytical and precise; good with detail; prefers to work with ideas; enjoys problem solving and research	chemist; geologist; biologist; researcher	
Artistic	artistic or creative ability; uses intuition and imagination for problem solving	musician; artist; interior decorator; writer; industrial designer	
Social	good social skills; friendly and enjoys involvement with people and working in teams	nurse; teacher; social worker; psychologist; counsellor	
Enterprising	leadership, speaking and negotiating abilities; likes leading others towards the achievement of a goal	salesperson; television producer; manager; administrative assistant; lawyer	
Conventional	systematic and practical worker; good at following plans and attending to detail	banker; secretary; accountant	

Several "secondary assumptions" (Holland, 1992, p. 4) are fundamental to the work of Holland and are related to his use of the hexagon as a diagnostic system termed calculus (Spokane & Cruza-Guet, 2005; Spokane et al., 2002). In essence, this diagnostic system, or calculus, may be used to describe the relationships within and between the types and environments ordered according to the hexagonal model. Central to calculus are four diagnostic indicators, consistency, differentiation, identity and congruence.

Consistency means that some types have more in common than others, and is best illustrated using the first two letters of the three letter code. Diagrammatically types which are adjacent on the hexagon (for example SA) have more in common than types which are opposite (for example SR). Therefore individuals demonstrate high consistency when the first two letters of their three letter code adjoin on the hexagon, for example a realistic investigative (RI) profile, medium consistency when the first two letters of their code is separated by a letter on the hexagon, for example a realistic artistic (RA) profile, or low consistency when two letters on the hexagon separate the first two letters of their code, for example a realistic social

(RS) profile. Individuals with consistent types may find career decision making easier (Nauta, 2013). By contrast, types which are seen as being inconsistent, that is non-adjacent or opposite on the hexagon, may have difficulty finding employment that accommodates all aspects of their personality.

Differentiation relates to individual profiles. An individual who has a clearly defined type is regarded as well differentiated whereas an individual who fits several types is regarded as undifferentiated, which when taken to extreme would be represented by a "flat profile with identical scores on all six types" (Spokane, 1996, p. 45). Differentiation refers to how well crystallised an individual's interests are. Holland posited that individuals who have more highly differentiated profiles will find career decision making more easy (Nauta, 2013)

Identity represents an addition to Holland's (1992) theory, and refers to the degree of clarity and stability an individual has about their goals, interests and talents. An individual who has many goals would be referred to as having low identity. Identity is related to differentiation and consistency in defining the strength of personalities and environments (Spokane & Cruza-Guet, 2005; Spokane et al., 2002).

Congruence, described by Nauta (2013) as the most important part of Holland's theory, refers to the degree of fit between the individual's personality and work environment. This would be represented by a similar three letter code for the personality and the work environment, for example an artistic type working in an artistic environment. Thus, the more similar a person is to their working environment the higher the degree of congruence (Nauta, 2013). In practice, Holland posited that individuals aspire to environments that are congruent with their personalities and if this is achieved, they will be more satisfied and successful, and therefore stay in those careers longer (Nauta, 2010, 2013). There has been ongoing debate about Holland's concept of congruence (e.g., Arnold, 2004; Chartrand & Walsh, 1999; Hesketh, 2000; Tinsley, 2000). For example, in a major review on the construct of congruence in a special issue of the Journal of Vocational Behavior, Tinsley (2000) found support in general for personenvironment fit models as a useful way of thinking about the interaction between individuals and their environments but raised questions about elements of Holland's theory such as its usefulness as a predictor of vocational outcomes such as satisfaction, stability, achievement persistence and job performance. A range of opinions were presented in this special issue in response to Tinsley's paper (e.g., Dawis, 2000; Gati, 2000; Hesketh, 2000; Prediger, 2000). Debate continued with Arnold (2004) discussing the "congruence problem in John Holland's theory" (p. 95). Congruence however, has been extensively studied and research attests to its usefulness as a construct (Betz, 2008) although it has modest predictive power (Nauta, 2010). The extent of the relationship between congruence, work satisfaction and performance is not as great as Holland may have expected (Nauta, 2013). Betz noted that consistency, differentiation and identity have not been extensively studied since 2000 and support for his predictions related to these constructs is mixed (Nauta, 2010, 2013).

Holland's influence in career theory and practice has been significant (D. Brown, 1990; Leung, 2008; Spokane, 1996), as demonstrated by its application to a wide range of career materials such as interest inventories, occupational information, books and computer programs. Several instruments have been developed to specifically measure personality according to Holland's theory. These include the Strong Vocational Interest Blank (Strong & D. P. Campbell, 1981), the Self-Directed Search (SDS; Holland, 1985c) and the Vocational Preference Inventory (Holland, 1985b). Further, Holland has applied his RIASEC typology to occupations (G. D. Gottfredson, Holland, & Ogawa, 1982), so that occupations can be coded in the same way as personality. Thus, in applying Holland's theory, the degree of fit, or congruence, between personality type and occupational type is also used to indicate the level of job satisfaction and stability. Holland's influence in career research has also been significant. His work has stimulated more research about vocational behaviour than about vocational environments (L. S. Gottfredson & Richards, 1999). Holland's work with Gary Gottfredson on the Position Classification Inventory (PCI) (G. D. Gottfredson & Holland, 1991) enables jobs to be rated according to the frequencies of activities, values, and perspectives that may also be organised according to his theory's RIASEC types (Nauta, 2013).

Holland's (1992) theory emphasised that an individual's heredity and interactions with their environment contribute towards the development of type, and that vocational predictions for a person based on his theory work better when contextual variables such as age, gender and socioeconomic status are taken into account. He also conceded that chance can play a role in vocational choice (Holland, 1985a). This addressed criticism of Holland's approach as being simplistic and underestimating the need for career counselling (Weinrach & Srebalus, 1990). It is also reflective of trends in career counselling and the need to place career assessment within a framework of a dynamic interaction of multiple contextual factors. L. S. Gottfredson (1981) supported this notion and indicated that there is value in the career assessment devices, but that they need to be viewed in the light of the career decision maker's situation, that is, context. Moreover, given the modest potential of Holland's congruence construct to predict work satisfaction (Nauta, 2010), career counsellors should encourage their clients to see their RIASEC scores as "only one of a complex array of individual difference variables that might be used to identify potentially good-fitting work environments" (Nauta, 2010, p. 17). Thus the onus is on users of specific career assessment devices such as Holland's Self-Directed Search and the Strong Interest Inventory to not use them in isolation without addressing the contextual issues relevant to the individual. This is evident in the application of the Integrated Structured Interview process (McMahon & M. Watson, 2012b) which demonstrates how results from the Self-Directed Search may be incorporated by career counsellors in a holistic narrative career counselling interview process. Nauta (2010) suggests that Holland's theory may be useful in times of rapid change as the RIASEC codes may provide clients with families of occupations rather than single occupational titles. Nauta cautions however, that many individuals have limited options available to them and that interests may not be the basis on which career choice is made.

Since his 1973 theory revision (Holland, 1973, 1997), Holland's theory has more adequately reflected the life-span perspective of career development, therefore addressing the notion of development over the life-span. In terms of the process of career development, Holland (1992) claimed that "the reciprocal interactions of persons and successive jobs usually lead to a series of success and satisfaction cycles" (p. 54). This is in line with Super's notion that career decisionmaking is a developmental process. In particular, Holland discussed the relationship between the individual and the environment in terms of congruence, satisfaction and reinforcement (Holland, 1992), and suggested that incongruence is resolved by changing jobs, changing behaviour or changing perceptions. However Holland's theory remains "primarily descriptive, with little emphasis on explaining the causes and timing of the development of hierarchies of the personal modal styles" (Zunker, 2006, p. 35). Holland focused on the factors influencing career choice rather than on the developmental process leading to career choice (Zunker). Holland (1996b) concurred with this sentiment, claiming that a lack of information on development issues or the process of change is a weakness of his and other typologies. In considering revisions of his theory, Holland (1996a) emphasises his determination not to lose what he sees as a virtue of typologies, that is their capacity to "organize large amounts of information about people and environments in an economical and accessible fashion" (p. 404).

Holland's theory has been researched in nearly every continent (Fouad, 2007). While there is general support for his structure in the United States (Fouad), his theory has also been criticised for not adequately addressing the career development of women, racial and ethnic, and other groups. For example, women tend to score more highly than men on the Social type while men score more highly than women on the Realistic type (Nauta, 2013). M. Watson, Stead and Schonegevel (1998) found that Holland's hexagon does not adequately account for the structure of interests of black South African adolescents. These authors remind practitioners who use instruments based on Holland's theory of the need to do so "in the context of relevant information about possible cultural, gender and socioeconomic status differences in the structure of interests of their clients" (p. 26). In the Chinese context, in a study of Hong Kong high school students, Leung and Hou (2005) found mixed support for Holland's structure of vocational interests. In a meta-structural analysis of Chinese data, Long and Tracey (2006) cautioned about using and interpreting RIASEC measures in non-US countries, Holland (1992) himself cautioned that "age, gender, social class, physical assets or liabilities, educational level attained, intelligence, and influence" (p. 12) may affect the successful application of his theory. As illustrated by the previous example, much research has been generated to examine the applicability of Holland's theory to women and across cultures and more is needed. In relation to culture, Spokane and Cruza-Guet (2005) concluded that "definitive conclusions may be some years away" (p. 34). This issue is discussed in more detail in chapter 6.

While Holland's contribution to career development theory is unquestioned, his theory provides only a partial, though detailed, account of career development, which gives rise to D. Brown's (1987) concern about the usefulness of Holland's model to life career counselling. His concern stems from Holland's lack of attention to other life roles and the relationships between them.

# Theory of Work Adjustment

Similar to Holland's theory, Dawis and Lofquist's (1984) theory of work adjustment (TWA) reflects a long history of research and strong links to the psychology of individual differences with its emphasis on measurement and quantification of data. Considered as a person-environment fit model (Betz, 2008; Swanson & Schneider, 2013), the theory of work adjustment evolved from trait and factor models and has been described as a matching model (Betz, 2008). TWA began in the 1950s as the theoretical framework for the University of Minnesota's Work Adjustment Project (Dawis, 2002, 2005). D. Brown (2003) described TWA as "one of the most carefully crafted theories of career choice and development" (p. 32) with carefully defined constructs that have been operationalized through a number of assessment instruments. While the theory has been refined over time and the number of propositions has grown from 17 in 1984 (Dawis & Lofquist) to 19 in 2005 (Dawis), "the content and substance remain the same" (Dawis, 2005, p. 20) and there has been no reformulation or restatement since 2005. While TWA may be used to assist individuals to make career choices, its primary emphasis is on the how individuals adjust to work environments (Swanson & Schneider, 2013).

The theory of work adjustment "provides a model for conceptualizing the interaction between individuals and work environments" (Dawis & Lofquist, 1976, p. 55) and may be regarded as a person-environment interaction model (Dawis, 2005). While person-environment fit applies to similarity between individuals and their work environments, person-environment interaction refers to a reciprocal interaction between individuals and their environments (Swanson & Schneider, 2013). Dawis (2005) explained that TWA is comprised of two models. The first, a predictive model, focuses on how individual's satisfaction with and satisfactoriness for their work environment may predict tenure. The second, a process model, focuses on how fit between individuals and work environments is achieved and maintained.

Betz (2008) explained that the focus of TWA is the two individual variables of needs and skills and that the corresponding environment variables are reinforcers and skill requirements. TWA is "founded on four basic psychological concepts: ability, reinforcement value, satisfaction, and person-environment correspondence" (Dawis, 1994, p. 34). Person-environment correspondence, the central construct in TWA, relates to the fit between person and environment and also to the coresponsiveness of person and environment to each other (Dawis, 2005). In essence, individuals exist in a dynamic relationship with their work environments, in which they seek to develop satisfactory relationships by making continual adjustments. However the theory of work adjustment places greater emphasis on adjustment

over time than Holland's (1997) theory, and in so doing more clearly establishes its place as a person-environment fit theory. It also reflects a move away from point in time career choice to adjustment over the lifespan, another difference between trait and factor theory and person-environment fit theory, and a point on which Holland's theory is less clear.

According to TWA, an individual has requirements or needs of a work environment, and a work environment in turn has needs or requirements of a worker. For example, a worker may need money or good working conditions, whereas a work environment may need certain work skills. A situation where the interaction is mutually satisfying (Dawis, 1996, 2005), that is, when the needs of both the individual and the environment are co-responsive to each other's needs, is described as correspondence; "Correspondence ... is the ideal state" (Dawis, 1996, p. 85). When correspondence occurs, both parties are satisfied. In this theory, the term satisfaction is reserved for the individual's experience of the environment, and the term satisfactoriness is reserved for the environment's experience of the individual, that is, whether the individual is meeting the expectations of the environment. Thus correspondence occurs when the worker is both satisfied and satisfactory (Dawis, 1996, 2005). Correspondence can lead to stability and tenure. The concept of tenure which is based on satisfaction and satisfactoriness is fundamental to the TWA's predictive model (see Dawis, 2005) and to career planning using this model. When the individual and the environment are in equilibrium, work adjustment has been achieved (Swanson & Schneider, 2013). Dissatisfaction of the individual or the environment results in disequilibrium in the system and thus serves as motivation for change. Dissatisfied individuals may choose to either change themselves or change the environment. When individuals are unsatisfactory, they may decide themselves to upskill or the environment could choose to retrain them or discontinue their employment (Swanson & Schneider, 2013). "Whatever satisfies needs are called reinforcers because they can maintain or increase the rate of behavior" (Dawis, 1996, p. 80). Examples of reinforcers include achievement, advancement, co-workers, activity, security, social service, social status, and variety. Individuals and environments behave in order to have their needs met.

Application of the theory of work adjustment may facilitate better understanding of work trends, career stages, and career adaptability for diverse cultural groups (Swanson & Schneider, 2013). Swanson and Schneider (2013) suggest that TWA may be useful for understanding how ongoing change affects individuals, the work environment and the relationship between them. In relation to career counselling, TWA draws heavily on the psychology of individual differences. Specifically, the matching process first articulated by Parsons, and the quantification of data, that is assessment, are important components. Both ability and values are measured as part of the assessment process. It is the belief that if a person can be described in certain terms and environments can be similarly described, as in Holland's theory, then matching can occur. The theory of work adjustment considers work skills and work needs. While it is acknowledged that all individuals have a range of skills, it is also acknowledged that they have abilities, that is, "the potential to acquire the

skills required by a task and – by extension – a job or occupation" (Dawis, 1996, p. 83). Dawis (1994) described skills and needs as surface traits and abilities and values as source traits. Source traits provide the structure of personality and generally remain stable over time, whereas surface traits may change with time or in response to situations. This is clearly acknowledgment of the individual's capacity to change over time, and recognition of a process variable in career development. The measurement of abilities enables a matching of a much wider range of occupations than does the measurement of skills. Underlying work needs are the reinforcers or values. Thus a dynamic interaction occurs between the needs of the individual and the needs of the work environment. The individual's behaviour is reinforced when needs are met, and reinforcement generally occurs when the values of the individual and the work environment correspond. "Thus, personality structure for TWA is constructed from abilities and values" (Dawis, 1996, p. 84). TWA may be useful in understanding individuals who are dissatisfied with their work or alternatively are unsatisfactory (Swanson & Schneider, 2013).

The theory of work adjustment not only includes descriptions of the characteristics of personality, but it also pays attention to the identification and labelling of process variables. The terms used to describe work behaviour include "celerity, to denote the quickness with which the worker initiates interaction with the work environment; pace, to denote the level of effort expended in the interaction; rhythm, to denote the pattern of pace in the interaction, whether steady, cyclical, or erratic; and endurance, to denote how long the worker remains in the interaction" (Dawis, 1996, p. 85). Over time an individual will develop unique behavioural tendencies which in this theory are equated with personality style. The process variables described above can also be used to describe the environment.

However the needs of the work environment and the needs of the worker are not static. Change in either may lead to dissatisfaction. Work adjustment, therefore, is a dynamic and ongoing process between the individual and the environment who are continually trying to satisfy and be satisfied. Discorrespondence occurs when correspondence is not reached. The degree to which individuals can tolerate discorrespondence depends on their flexibility. During these times the individual and the environment may make adjustments to improve satisfaction or satisfactoriness. Individuals who are more flexible can "tolerate greater degrees of discorrespondence and are less easily dissatisfied" (Dawis, 1996, p. 86). During times of discorrespondence, the individual may adjust in one of two ways; they may try to change the environment, described as active mode, or they may try to change themselves, described as reactive mode. For example, an individual who prefers to work on his/her own may move to another room (active mode) or may rationalize that his/her concentration will not be disturbed by the presence of others (reactive mode). When adjustment fails, the worker may leave the work environment. How long a worker persists in trying to adjust may indicate their level of perseverance (Dawis, 1996). Thus an individual's adjustment style is determined by their flexibility, active adjustment, reactive adjustment, and perseverance (Swanson & Schneider, 2013), and is also related to their personality style discussed earlier. Flexibility refers to the amount of discorrespondence an

### CHAPTER 2

individual can tolerate before they move to make an adjustment. Active adjustment refers to individuals making a change to the environment (e.g., trying to adjust the environment's expectation of or rewards for them) whereas reactive adjustment refers to individuals making an adjustment to themselves (e.g., to their needs). Perseverance refers to how long an individual will tolerate discorrespondence before making an adjustment.

More recently, TWA has been associated with positive psychology because of its emphasis on satisfaction (Swanson & Schneider, 2013). Consistent with positive psychology, satisfaction promotes well-being and alleviates distress. For most of its history, the theory of work adjustment has focused on one environment, specifically the work environment. However, its constructs and relations have also generalised other environments through been to person-environment correspondence (PEC) theory (Lofquist & Dawis, 1991; Dawis, 2002). Fundamental to person-environment theory is the notion of two entities, person and environment, interacting (Dawis, 2002). For a detailed description of PEC theory see Dawis (2002). The emphasis on ability and values in the theory of work adjustment establishes it as a theory of content, while the dynamic interaction described delineates it as a person-environment fit theory.

# BORDIN'S PSYCHODYNAMIC MODEL OF CAREER CHOICE

Bordin's (1990) psychodynamic model of career choice synthesises previous applications of psychodynamic theory to career choice. Since this theory was first proposed, it has received little subsequent attention and has essentially become of historic interest in the field. In line with the psychodynamic perspective, Bordin turned to development in early childhood to account for work motivation, and in particular focused on the development of personality. His emphasis is on the development of personality in relation to the role of work and play in an individual's life. Essentially, Bordin suggested that people seek work which they "find intrinsically interesting or from which they can derive pleasure" (Lent & S. D. Brown, 2013, p. 3). Research is yet to provide a strong empirical base for Bordin's hypotheses on work and play. A basic tenet of the theory is that individuals seek enjoyment in work as in other areas of their lives. Bordin proposed that play is intrinsically satisfying, and it is the satisfaction of simply engaging in an activity which distinguishes play from work. Individuals express their need for play in work as in other areas of their lives by looking for something they will enjoy doing.

Bordin claimed that in young children play and work are fused, and that through the process of development and socialisation, play and work become demarcated. He accounted for this demarcation in terms of "spontaneity, which is used to refer to elements of self-expression and self-realization in our responses to situations" (Bordin, 1990, p. 105). In essence, this means that the activities of young children are intrinsically satisfying. However as they mature, play becomes more complex and they become aware of the effort needed to achieve mastery as well as the external pressures of others, for example parents and care givers, to achieve

mastery, sometimes perceived in terms of rewards and punishments. A process of socialisation and "external pressures from parents and caretakers" (p. 107) affects how an individual distinguishes play from work. In particular, Bordin (1990) claimed that "overemphasis on analysis, activation of self-consciousness, and overambition may be intimately tied to failures to fuse work and play" (p. 108). Extreme effort converts spontaneity into compulsion, that is, activities are performed out of a need or compulsion to do them rather than out of an intrinsic desire to do them because they are enjoyable. In adults, this process is reflected in the reality of needing to earn a living and the desire for personal meaning and creative expression.

It is also during these early years that individuals build a unique identity, drawing to some extent from the influences of their parents. This point illustrates the developmental and contextual themes of Bordin's (1990) theory related in particular to identity development. He acknowledged the influence of biologically and culturally determined sex roles in identity development, as well as the level of parental support and nurturance, and the need to be unique from but connected to others. However Bordin claimed that development is largely an unconscious process where the individual draws from aspects of both parents as well as the extended family. While Bordin's (1990) theory is "directed towards the participation of personality in career development and the series of choices that comprise it" (p. 104), he also acknowledged the interaction of a number of influences including economic, cultural, geographic, biological and accidental factors, and in turn their influence on personality.

In terms of career choice and satisfaction, Bordin described the evolution of personality as the mechanism which guides cognitive processes at times of career choice, whether those points have arisen for external or internal reasons. External reasons include particular stages of the education system, and internal reasons include the desire for increased work satisfaction. In making choices, individuals conduct a self assessment and gauge the probabilities of success based on intrinsic satisfaction, which may include "curiosity, precision, power, expressiveness, and concern with right and wrong and justice, as well as ... nurturance" (Bordin, 1990, p. 114).

While Bordin's theory has been discussed as a theory of content, it is clearly much more broadly based than traditional theories in this area, for example the work of Holland. In this regard, Bordin questioned traditional career guidance practices and their emphasis on the realities of work, for example monetary reward, rather than on self-realisation through work. His emphasis in career counselling focuses much more on the individual striving for inner meaning. He advocated the use of guided fantasy, dreams, examining life histories, and imaginative approaches. He also advocated examining client's feelings, an approach which still remains underemphasised in the field (Kidd, 2004, 2011). Bordin's approach is clearly a significant move away from the tradition of matching approaches with their emphasis on objectivity and more in line with recent narrative approaches founded in constructivism and social constructionism that are more accommodating of qualitative assessment and creative processes. The breadth of

Bordin's approach is also reflected in the work of D. Brown who focuses on a particular trait but sets the counselling process into a much broader context.

### BROWN'S VALUES-BASED THEORY

Values are central to D. Brown's (1996a, 2002b) theory, and as a result locate him in this chapter as a theory of content. However, his theory reflects the trend in career development theory to move towards holistic approaches. Thus, while it emphasises the importance of a particular trait, values, D. Brown's theory also acknowledges the concept of development and the broader context in which individuals exist. D. Brown claimed that career theory has all but ignored ethnic and cultural minorities (D. Brown, 2002b, c) and in his later work focused on both work values and cultural values. Thus, D. Brown's theory is indicative of the significant shift that has taken place in theorising about career development and recognition that career theory focused too much on Eurocentric values (Šverko. Babarović, & Šverko, 2008) such as "individualism, future time orientation, moderate need for self-control, emphasis on activity, and a core belief that humans should dominate nature" (D. Brown, 2003, p. 48). D. Brown originally presented his theory in two discrete sections (D. Brown, 1996a, 2002b), the first focusing on values and the role they play in career choice, and the second focusing on career counselling. These will be discussed separately.

Influenced by the work of Rokeach (1973), D. Brown (2003) defined values as "beliefs that are experienced by the individual as standards regarding how he or she should function" (p. 49). He claimed that individuals judge their own performance and that of others against a core set of beliefs or values (D. Brown, 1995), which are important not only in the selection of life roles but also in the satisfaction derived from life roles (D. Brown & Crace, 1996). D. Brown (1996a) claimed that expected outcomes are the most important source of motivation in decision making, and that individuals decide on the basis of values which outcomes are more important than others, that is "values form the basis for attributing worth to situations and objects" (D. Brown & Crace, 1996, p. 212). D. Brown (1996a) claimed that values have been overlooked in career development counselling and research. Therefore in his theory he attempted to draw attention to the function of values in decision-making and career counselling, as well as to set values into the broader context of life roles and life space. D. Brown's choice of focus on work values and cultural values is related to the identification of work values as a critical variable in career development, and evidence that cultural values also play an important role in career development (D. Brown, 2002c, 2003).

D. Brown and Crace (1996) advanced seven propositions about the function of values in decision making, whereas D. Brown (1996a) advanced six, possibly a reflection of the developmental stage of this theory. In D. Brown's (2002b, c, 2003) subsequent theoretical statements, he described eight propositions which reflect the incorporation of propositions related to cultural values into his theory. The concepts proposed in his earlier work will be discussed first followed by the propositions of his later work.

Fundamental to D. Brown's theory (1996a) is the concept that each person develops a relatively small number of values which "dictate cognitive, affective, and behavioral patterns" (D. Brown, 1996a, p. 341). Individuals are exposed to values laden messages throughout their lives from a variety of sources including family, friends and the media. Values therefore "develop as a result of the interaction between inherited characteristics and experience" (D. Brown, 1996a, p. 340). Cultural background, gender, and socioeconomic status influence opportunities and social interaction and thus there is variation of values both within and between subgroups of society. Acknowledgment of such issues reflect the more recent development of D. Brown's theory and the trends towards contextualism which are discussed in chapter 4.

As values are formed they become crystallised in the mind of the individual and prioritised, and the extent to which this occurs relates to cognitive clarity (D. Brown, 1996a). Values are said to be crystallised when they can be labelled and articulated by an individual which enables them to judge their own behaviour and compare themselves with others (D. Brown, 1995). Once values are crystallised, they can then be prioritised. D. Brown and Crace (1996) claimed that individuals who are described as "high functioning people" (p. 219) have values which are well crystallised and prioritised.

In order to make decisions, it is desirable that individuals have their values crystallised and prioritised. D. Brown and Crace (1996) went on to claim that "Values with high priorities are the most important determinants of choices made, providing that the individuals have more than one alternative available that will satisfy their values" (p. 212). Thus individuals are most likely to be satisfied when their choice is compatible with their values. Clearly then, they also need information about their options in order to determine whether their values will be satisfied by a decision. In the case of career decision-making, this clearly reflects the trait and factor principle of matching self-knowledge with world of work knowledge. However unlike trait and factor theorists, and possibly a reflection of the development of this theory in the 1990s rather than earlier, D. Brown acknowledged life roles other than worker and the interaction of these roles, and included them as an integral part of his theory. In particular he acknowledged that different roles may satisfy different values. "The result of role interaction is life satisfaction, which differs from the sum of the marital, job, leisure, and other roles satisfaction indices taken separately" (D. Brown & Crace, 1996, p. 217). However, a combination of factors, not only satisfaction of values, determines success in a role. While it is yet to be studied, D. Brown (1996a) predicted that "a combination of role-related skills and aptitudes and values congruence between the individual and the principal person(s) in the environment will be the best predictor of success in a role" (p. 355). This prediction of success differs from both the theory of work adjustment and Holland's theory as neither one makes predictions about success.

D. Brown also advanced propositions that reflect the broadening of his theory to include consideration of cultural values. These propositions are presented slightly differently with eight propositions being listed in D. Brown (2002b, c), while D.

Brown (2003) lists seven. Subsections are included in four of the propositions. In summary, his propositions are:

- 1. Highly prioritised work values are the most important determinants of career choice for people who value individualism if their values are crystallised and prioritised;
- 2. Individuals who hold collective social values and come from families and/or groups who hold the same social value either defer to the wishes of the group or family members or are heavily influenced by them in the occupational decision-making process;
- 3. When taken individually, cultural values regarding activity (doing, being, being-in-becoming) do not constrain the occupational decision-making process;
- 4. Because of differing values systems, males and females and people from differing cultural groups enter occupations at varying rates;
- The process of choosing an occupation involves a series of "estimates" of
  one's abilities and values, skills and abilities required to be successful in a
  particular occupation, and the work values that the occupational alternatives
  will satisfy;
- 6. Occupational success is related to job-related skills acquired in formal and informal educational settings, job-related aptitudes and skills, SES, participation in the work role and the extent to which discrimination is experienced, regardless of the social relationship value held; and
- 7. Occupational tenure is partially the result of the match between the cultural and work values of the worker, supervisors and colleagues.

D. Brown's eighth proposition which is not presented in his 2003 work relates to the primary bases for job satisfaction. In essence, he proposed different bases for people with an individualist social value compared with those who hold a collective social value. Research support for D. Brown's propositions varies (D. Brown, 2002b).

The second focus of D. Brown's theory is its contribution to career counselling, although in later theoretical statements his emphasis on counselling has been reduced. In his earlier work (D. Brown, 1996a; D. Brown & Crace, 1996) outlined five assumptions underlying his 'values-based approach to career counselling' which deviate considerably from the predominantly matching process of trait and factor theory and person-environment fit theory. In particular, his first assumption stresses the importance of considering career decisions in relation to other life roles rather than as isolated events. D. Brown (1996a) claimed that "a central premise of the theory is that, because people function holistically, career counseling should only be conducted in the context of the entire life space and other life roles" (p. 368). This is in line with conceptualisations about the importance of context and the place of work in people's lives (Blustein, 2006; Richardson, 2000), and is in contrast with Holland's career counselling process which has been criticised as being simplistic. Therefore just as values should be considered in the context of all life roles, so too should the work or job role. Life "roles may function synergistically, may be in conflict, or may be compensatory" (D. Brown, 1995, p. 8) in relation to the satisfaction of values. D. Brown discussed inter-role and intrarole conflict, both of which result in a lack of satisfaction, and may lead to transitions. Intra-role conflict occurs when the values of the individual are not reinforced in the workplace, for example a worker may have different values from his/her supervisor (D. Brown & Crace, 1996). Inter-role conflict occurs when the current job is in conflict with another role, for example, when a less satisfying role (work) takes time away from a more satisfying role, parenting (D. Brown & Crace, 1996). These conflicts may be compared with the concept of change in the theory of work adjustment which brings about the need for adjustment.

The concept of role conflict leads into the second of D. Brown's assumptions, the need for the counsellor to assess the degree of crystallisation and prioritisation of values and role relationship problems. In addition, counsellors need to be able to assess mood problems such as anxiety or depression, the third of D. Brown's assumptions. Dealing with such issues in career counselling draws attention to the links between career and personal counselling. In this regard, D. Brown (1996a) emphasised the importance of the counselling relationship which he regards as essential for success. Such thinking distances D. Brown from traditional exponents of trait and factor career counselling.

In the fourth of his assumptions, D. Brown acknowledged the importance of other variables such as career interests in the career counselling process, and advocated that counsellors should be able to "translate various types of psychological data into values-based terms" (D. Brown, 1996a, p. 357). Following on from this is his fifth assumption, that clients will be able to make effective decisions if they "understand their values and have values-based information" (D. Brown, 1996a, p. 357), a matching concept which aligns him with the trait and factor theorists.

- D. Brown's (2002b) later theoretical statement with its increased emphasis on cultural values makes four suggestions for career counsellors and then elaborates them with nine assumptions that underpin his own career counselling work. He suggested that career counsellors be prepared to:
- help their clients become familiar with the values-laden expectations in the workplace
- identify ways that their values may diminish their success in the Eurocentric workplace
- encourage clients to maintain their cultural values while adapting to the Eurocentric workplace in some instances
- become advocates for change in the workplace so that people who hold values that may not be those of the dominant culture can be successful (D. Brown, 2002b, p. 491)

Emanating from D. Brown's theory, and in the tradition of trait and factor theories, the Life Values Inventory (LVI) was developed (D. Brown & Crace, 2002; Crace & Brown, 2002) and is freely available online. Designed for both adolescents and adults to assist in decisions about life roles, the LVI measures the 14 life values of Achievement, Belonging, Concern for the Environment, Concern for others, Creativity, Financial prosperity, Health and activity, Humility,

Independence, Interdependence, Objective analysis, Privacy, Responsibility and Spirituality. D. Brown and Crace (2002) suggest that the LVI may be useful in a range of counselling situations (e.g., careers, retirement, leisure, and team building).

D. Brown's (1996a) contribution to career development is threefold. First, he has drawn attention to values, an important concept in career development which had previously received little in depth attention. In particular, he has drawn attention to the importance of cultural values in the career development process and in career decision-making. Second, he forged important links between the positivist approach of trait and factor theory and more recent approaches to career counselling, and to some extent demonstrates how they can co-exist. He does this in the counselling process by combining a focus on a trait, values, with the concept of interconnected life roles. Third, he raised awareness of cultural sensitivity in the career counselling process. Despite this important contribution to the field, there has been little subsequent development of D. Brown's theory for over a decade. D. Brown's theory draws attention to the developmental status of career theory and highlights some of the similarities and differences between the theories of content. A discussion of similarities and differences between the theories of content will conclude this chapter.

# SIMILARITIES AND DIFFERENCES BETWEEN THEORIES OF CONTENT

In this chapter and in each of chapters 3 and 4, a table will be presented to illustrate the similarities and differences between the theories discussed in the chapter. Listed on the X axis are the influences on career development discussed in chapter 1, and presented in the Systems Theory Framework in chapter 9. On the Y axis are listed the theories discussed in the chapters. Shading on the table illustrates the degree of emphasis placed on particular influences by each theory. The tables compare the emphasis of theories within chapters, and may also be used to compare across chapters.

The theories of content have played a useful role in elaborating influences on career development. As illustrated in Table 2.2, individual influences such as abilities, interests, personality and values have been focused on more than the contextual or process influences. As mentioned previously, in the main these theories do not account for development, either development of the focus variable of the theory or the broader issue of career development. Similarly, while most of the theorists discussed in this chapter acknowledge the influence of contextual variables on career development, they do not do so in any systematic way and this has not been the focus of their work. They also acknowledge the interaction of different traits, yet do not expound on the links between them. These acknowledgments could be seen as recognition of the issue of rapprochement and convergence, although this is not stated. What is evident since the second edition of this book is that a considerable body of research is still being generated in relation to the theories of content, primarily related to the work of Holland. Despite this, to date, there have been no significant advances or restatements of the theories of

content although research may stimulate theoretical advances. The following discussion will be structured around the three main elements of this theory group – the content variables of self-knowledge and work environment, and the process variable of matching which constitutes the major approach to career decision making in this group of theories. In addition the process variable of personenvironment fit will be discussed.

# Self-knowledge

Each of the theories discussed in this chapter emphasises the importance of self-knowledge in the decision making process. Self-knowledge covers a broad array of information. However most theories emphasise knowledge about one trait at the expense of other traits. For example, Holland focused on a typology of interest/personality, Bordin on personality, Dawis and Lofquist and D. Brown on values. Further, D. Brown's emphasis on cultural values has for the first time in a career theory of content provided an emphasis on non-Eurocentric culture and its implications for career choice and decision-making.

Clearly then, the same traits can be addressed by theorists, but they can be conceptualised differently. For example, "Bordin, unlike Holland, does not posit that personality is static" (D. Brown, 1990, p. 353), and claimed that as a result of the changing personality different career needs emerge. Thus Bordin's conceptualisation of personality is more dynamic than Holland's. Dawis and Lofquist and Brown both focused on values, but D. Brown placed greater emphasis on the importance of values in career choice. However in both theories work satisfaction is connected to values being met in the workplace. According to Dawis (1996), reinforcers or values such as achievement, social service or status, can satisfy needs. These are similar to Holland's concepts of satisfaction, stability and achievement when congruence is achieved.

In line with differential psychology, the self-knowledge described by all of the theories is quantifiable. It is only Bordin who deviates from this by drawing attention to the importance of subjective self-knowledge. D. Brown (1996a) also deviated away from the objective by drawing attention to the affective components of anxiety and depression, but in line with the quantifiable nature of self-knowledge in these theories, suggested that these should be assessed.

## Work Environment

Parsons and Holland have made the most significant contribution in terms of knowledge about the world of work, Parsons through what he termed the industrial investigation and Holland through his classification of occupations and work environments. Parsons developed a classification of industry groups and aligned this with what he described as "the conditions of efficiency and success" (p. 47). These were "fundamentals" (p. 27) such as health, enthusiasm, reliability, and interest, and knowledge pertinent to a particular industry, such as "ability to draw and work by drawings" (p. 51) for the "mechanical trades, manufacturing and

construction, transportation, etc." (p. 51) industries. This information clearly paved the way towards a matching process in career decision making between self-knowledge and work-knowledge, the process of "true reasoning" previously discussed. Holland's theory also typifies this approach. He emphasised the characterisation of work environments by the people who occupy them. Work environments can be classified by type in the same way as individuals because their chief characteristics reflect the personalities of the individuals who work in them. This is a point of considerable variation from the theory of work adjustment where the work environment is viewed independently of the characteristics of the workers. Holland's theory implies that matching self-knowledge with knowledge about the type of individuals who characterize particular occupations or work environments will lead to person-environment congruence. In a welcome addition to career theory, D. Brown drew attention to the cultural values of workplaces which may tend to be Eurocentric and the implications of this for individuals who hold different cultural values.

## Person-environment Fit

Much of the criticism that has been centred on these theories concerns their perceived static nature. However Rounds and Tracey (1990) disputed this critique, claiming that it has never been assumed that individuals are incapable of change. In fact dynamic interplay is evident in the descriptions of most of the theories.

Since the days of Parsons, the essence of these theories has remained the same, that is, a matching process between self-knowledge and world of work knowledge which leads to career choice. Little has changed in the decision-making processes advocated by these approaches since the days of Parsons, and there is still a heavy reliance on methodical, rational, cognitive processes which presumably result in a choice of best fit for the individual.

The exception to this is again found in the work of Bordin who allowed for subjectivity to enter into the decision making process. Bordin's allowance for the subjective experience of the individual distinguishes him from the other content theorists and is more reflective of the constructivist approaches, such as that of Young et al. (1996) discussed in chapter 4. Exception is also found in the work of D. Brown who takes into account mood problems such as anxiety and depression.

With the move from its trait and factor origins to person-environment fit approaches discussed previously in this chapter, there has been a shift in the theories of content away from matching for an initial career choice as in the days of Parsons to adjustment throughout the lifespan. This is evident in the work of Holland, Dawis and Lofquist, and D. Brown. However, it is addressed more explicitly and comprehensively by Dawis and Lofquist than by the other theorists.

Parsons' attempts to maximise the fit between individuals and jobs reflect the visionary nature of his work and has been termed 'congruence' by theorists such as Holland. Holland (1994) claimed that his concept of congruence equals the concept of correspondence proposed by Dawis and Lofquist to explain the fit between the

Table 2.2 Influences on career development – Theories of content

No acknowledgement	Acknowledgement			ıt 🔃	Significant emphasis		
CONTENT INFLUENCES	Parsons	Five Factor Model	Holland	Dawis & Lofquist	Bordin	D. Brown	
Intrapersonal System					•		
- ability							
– aptitudes							
- interests							
– gender							
– age							
– skills							
- ethnicity							
<ul> <li>sexual orientation</li> </ul>							
- beliefs							
- health							
<ul><li>disability</li></ul>							
– values							
<ul> <li>world of work knowledge</li> </ul>							
- personality							
- self-concept							
<ul> <li>physical attributes</li> </ul>							
Social System							
– family							
– peers							
<ul> <li>community groups</li> </ul>							
<ul> <li>education institutions</li> </ul>							
– media							
<ul><li>workplace</li></ul>							
Environmental-Societal System	1						
<ul> <li>political decisions</li> </ul>							
<ul> <li>historical trends</li> </ul>							
<ul> <li>employment market</li> </ul>							
<ul> <li>geographical location</li> </ul>							
<ul> <li>socioeconomic status</li> </ul>							
<ul><li>globalisation</li></ul>							
PROCESS INFLUENCES							
Recursiveness							
Change Over Time							
Chance							

individual and their environment. Dawis (1996) extends knowledge of the adjustment process further by actually labelling the process variables of celerity, pace, rhythm, and endurance, which describe interaction between the individual and the work environment or work behaviour.

Parsons believed that congruence not only had benefits for both employees and employers, but that it also served as a motivator. This is reflective of the theory of work adjustment's concepts of satisfaction and satisfactoriness which describe a situation where the needs of both the work environment and the individual are met. Significantly Parsons did not view congruence as static but rather as a fluid construct responding to individual's development and adaptation, a concept in keeping with person-environment fit theory, in particular, the theory of work adjustment (Dawis, 1994). In this regard, Dawis and Lofquist also introduced the notion of discorrespondence, which describes the situation where the needs of one or both parties are not being met which results in a period of adjustment and could be followed by the individual changing jobs, an outcome described by Holland (1994) as resulting from "incongruent interactions" (p. 50). D. Brown (1996a) also addressed discorrespondence or incongruent interactions by discussing intra-role conflict, conflicts in the workplace which lead to a lack of satisfaction and the need for adjustment. However, as one of the more recently developed theories, it extends the concept of congruence further by setting work into the context of life and discussing inter-role conflicts which occur between the work role and other life roles. Of interest since the first edition of the present book, is D. Brown's attention to cultural values and its impact on the fit between workers and environments (2002b, c).

### CONCLUSION

In this discussion of the similarities and differences between the theories of content, it can be seen that the "person-environment congruence model is a direct descendant of Parsons' formula" (Zytowski & Swanson, 1994, p. 309), and that his formula provides a conceptual consistency through this group of theories. The development of the theories presented in this chapter spans the period from the early 1900s to the present time, and as such reflects developmental trends in conceptualisations of career theory. For example, early theories such as those of Parsons and the early work of Holland are less dynamic as they pay less attention to process, and while not ignoring contextual influences do not adequately address them. Refinements of Holland's work and theories proposed later, for example the work of Dawis and Lofquist reflect acceptance by the early 1970s of the concept of development. However unlike Holland's theory where the inclusion of process is a refinement of the theory, process in the form of adjustment was included as an integral part of Dawis and Lofquist's work. In fact, the process variable of adjustment is much more integrated into the theory of work adjustment than it is into the work of Holland, and indicates how this group of theories can be viewed as dynamic. D. Brown's theory reflects yet another trend in the development of career theory, that of the acceptance of contextual influences. This is evident in D. Brown's consideration of work roles in relation to other life roles and his incorporation of cultural values into the latest version of his theory. Thus there is a clear historical trend in this chapter which reflects a broadening of the base of career development theory.

However, it is clear from this discussion of the theories of content, that they tell only part of the story of career development. Significantly, it is the process of career development that is to a large extent overlooked in these theories. This is reflected in criticisms, discussed previously, that the theories are static and not dynamic. These theories have attempted to address such criticism by moving towards a person-environment fit approach and acceptance of the concept of career adjustment in addition to career choice. However, despite these efforts, the theories of content do not provide extensive or satisfactory explanations of the process of career development, and this omission paved the way for the promotion of theories which addressed the issues of process in career development. The theories of process will be discussed in chapter 3.