Career Development and Systems Theory

CAREER DEVELOPMENT SERIES

Connecting Theory and Practice Volume 1

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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

(Second Edition)

By

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PREFACE

Since the first edition of this book was published in 1999, debate in the career field has remained largely unchanged despite new theoretical accounts being advanced. 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 process of career development. Such a theoretical base, however, presents difficulties for instructors attempting to provide students with an integrated theoretical base on which to prepare for career practice.

The issue of whether career theories need integration or convergence has been debated and texts have been written on this issue. 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 is 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 second edition of our book, we acknowledge advancement in the field since the first international publication of the STF. In particular, we acknowledge the considerable influence of the constructivist worldview in both theoretical formulations and also in practice. As with the first edition 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 1, consisting of six chapters, presents a comprehensive review of the existing theoretical literature. While a number of comprehensive reviews of the literature exist (Brown & Associates, 2002; Brown & Brooks, 1990b, 1996b; Brown & Lent, 2005; Hackett & Lent, 1992; Hackett, Lent & Greenhaus, 1991; Osipow & Fitzgerald, 1996), 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.

Chapter 1 presents an overview of the field, and discusses the overall content and structure of the existing state of career theory. Chapter 2 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 person-environment fit emphasis. It includes the work of Holland, Bordin, Brown, Dawis and Lofquist, and the work in Big 5 personality theory. Chapter 3 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, Gottfredson, and the more recent work of Savickas. Theories which focus on content and process are reviewed in Chapter 4, including the work of Mitchell and Krumboltz, Mitchell, Levin and Krumboltz, Roe, the social cognitive approach of Lent and his colleagues, the cognitive information processing models of Peterson, Sampson, Reardon and Lenz, the developmental-contextual 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 2 through 4. Chapter 5 presents an overview of these main theories, including a discussion of their similarities and differences. Finally, Chapter 6 focuses on some of the areas which have been insufficiently dealt with in existing theories. It therefore reviews theories of women's career development, 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.

Part 2 of the book consists of three chapters. It represents the theoretical core of the book, and links parts one and two. Chapter 7 describes 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 8 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 9 outlines our Systems Theory Framework of career development and traces its development over a number of years. The discussion in this chapter emphasises the relationship of the framework with existing theories.

Part 3 of the book consists of five chapters which address the integration of theory and practice through the concept of lifelong learning systems. 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. In addition, the framework is presented in an unfolding series of graphic illustrations. These 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.

PREFACE

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 second edition of our book is an example of systems theory at work. It has evolved over a number of 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.

Many people have been invaluable parts of our system in this process. We would especially like to thank our students and colleagues. This second edition has been supported through the ongoing efforts of Andrea McCrindle and Anna Wilson and we are deeply appreciative.

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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 MAJOR 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 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 development 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 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 influences in career theory and 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. 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).

Thus 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) represents such an attempt. The purpose of this book, as with its first edition (Patton & McMahon, 1999), 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. 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, the present status of career development theory will be overviewed and its structure examined. 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. From the time of Parsons (1909), the terms career, vocation, and occupation have often been used synonymously (McDaniels & Gysbers, 1992). Traditional definitions restricted career to a professional work life which included advancement, and several researchers proposed the broadening of this conceptual definition. The Department of Education and Science (1989) defined career as "the variety of occupational roles which individuals will undertake throughout life. It includes: paid and self-employment; the different occupations which a person may have over the years and periods of unemployment; and unpaid occupations such as that of student, voluntary worker or parent" (p. 2).

Since the concepts of time and life have been included in definitions, the concept of career has broadened 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 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.

A number of writers have gone further and have proposed alternative terms to describe career (e.g., "working lives" Thomas, 1989; "work histories" Nicholson & West, 1989). These latter authors "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). However, Arthur et al. (1989) maintained that career "better captures the focal relationship between work and time" and are emphatic that "Everyone who works has a career" (p. 9), indicating that the term career can be a neutral descriptive term applied to all occupations. Richardson (1993, 1996, 2000) suggested that career is a limited and irrelevant concept and subject to a middle class bias in perception and ideology.

She proposed that theoreticians and practitioners focus 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). In this way, voluntary and unpaid work that involves community welfare and social activity, "caring work", is included in people's meaning of their career-related or work activity. Blustein (2001) asserted that viewing work in this way fosters a more inclusive psychology of working which addresses the limited way our field has addressed issues of gender, social class, family background, cultural characteristics and their impact on career development (see Chapter 6 in this book for further discussion on this topic).

Following a similar theme, 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 recent constructions of career, with Collin and Watts (1996) discussing the need to focus on career as a subjective construction of the individual rather than 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 more recent constructions of career, perceiving that an individual's career is developed by them on the basis of his/her perceptions of, and attitudes toward, career. Indeed Patton and McMahon (1999) defined career as "the pattern of influences that coexist in an individual's life over time" (p. 170).

Writing in the organisational literature, Hall and Mirvis (1996) suggested the concept of protean career, referring 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 path and acknowledges flexible and idiosyncratic career construction or 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 as the stage. This notion of career is also closely related to the boundaryless career (Arthur & Rousseau, 1996) which emphasises that career is about an individual organising, not organisations, and that the enactment of career reflects an intersection of self-organising and social phenomena (Littleton, Arthur & Rousseau, 2000).

Career development

These broader definitions of career draw attention to the concept of career development which 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).

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; Jarvis, 2002) from talking about career development to development through work and other life roles.

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, 1996, p. 46). 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 Arthur (2002) discussed "a continuing tension between leveraging past experience and positioning for future opportunity" (p. 27). In line with these other writers, 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., 2002, 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) referred to career construction and Hache, Redekopp and 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 Kolb (1980) presented a still relevant definition of career development.

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 & 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.

PRESENT STATUS OF CAREER DEVELOPMENT THEORY

A number of authors have highlighted the developmental infancy of career development theory (Brown, 1990; Hackett & Lent, 1992; Isaacson & Brown, 1993). While theoretical propositions and models have proliferated during the previous four decades, conclusions within the literature generally agree that it remains inadequate and incomplete and lacking in comprehensiveness and coherence (Brown, 1990, 2002a; Brown & Lent, 2005; Savickas, 2002), in particular in its failure to account for diversity within the population. In addition, it has been criticised for focusing on intraindividual issues to the detriment of contextual issues (Brown, 2002d; Collin & Young, 1986; Lent, 2001; Leong, 1995), and for being hampered by an overlap in conceptualisation of many elements (Borgen, 1991; Osipow, 1990; Patton & McMahon, 1999) and a proliferation of models (Guichard & Lenz, 2005).

Further, career theory has been criticised for being segmented both within the individual theoretical models (Super, 1990) and within the disciplinary field (Arthur, Hall & Lawrence, 1989; Brown & Lent, 2005; Hackett, Lent & Greenhaus, 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 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., Arthur, Hall & Lawrence, 1989; Hall, 1996; Hotchkiss & Borow, 1996) and as more integrated models across disciplines are being proposed (e.g., Guichard, 2005; Vondracek & Porfeli, 2002b). 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 (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., Gottfredson, 1983) have commented on the importance of the contributions made by the existing theories to our overall understanding of career behaviour. 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., Holland, 1985a, 1992, 1997; Super, 1990, 1992), and still more have been and continue to be developed (e.g., Brown, 1996a, 2002b, c; Lent, 2005; Lent & Brown, 2002; Lent et al., 1994, 1996, 2002; McMahon & Patton, 1995; Patton & McMahon, 1999; Savickas, 2001, 2002, 2005; Young, Vallach & Collin, 1996, 2002).

More recently, 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 has emerged (Borgen, 1991; Osipow, 1990) and promises to be the issue 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, Lent & Greenhaus, 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. Brown and Brooks (1996b) remain sceptical about the likelihood of convergence among theories and the emergence of an integrated theory, a position reiterated by Brown (2002a). In acknowledging the importance of this trend toward integration and convergence, we developed and refined the STF (McMahon & Patton, 1995; Patton & McMahon, 1999). 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 STF will be outlined in Chapter 9 following an explanation of systems theory in Chapter 8.

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 1. 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 Herr and Cramer (1992), Osipow and Fitzgerald (1996), Osipow (1990), Minor (1992), and Patton and McMahon (1999). These categories are depicted in Table 1.1.

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, Lent and Greenhaus (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.

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 this present edition, we have added the category of constructivist approaches. The theories contained in each category are indicated in Table 1.2. Each category will now be briefly described.

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 (Parsons, 1909; Holland, 1973, 1985a, 1992, 1997), Bordin's psychodynamic theory (1990), Brown's (1996a, 2002b, c) values-based theory, the work

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

adjustment person-environment correspondence theory (Dawis & Lofquist, 1984; Dawis, 1996, 2002, 2005), and the personality based five factor theory (McCrae & John, 1992). 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 Gottfredson (1981, 1996, 2002, 2005) specifically attempted to include both content and process variables into her model, she

Table 1.2. Structure of career theory

Theories of Content	Trait and factor theory Theory of personality Psychodynamic theory Values-based theory Work adjustment person-environment correspondence theory Five factor theory	Parsons (1909) Holland (1973, 1985a, 1992, 1997) Bordin (1990) Brown (1996a, 2002b, c) Dawis & Lofquist (1984); Dawis (1996, 2002, 2005) McCrae & John (1992)
Theories of Process	Developmental theory Life span life-space theory Theory of circumscriptions and compromise Individualistic approach	Ginzberg et al. (1951); Ginzberg (1972, 1984) Super (1953, 1957, 1980, 1990, 1992, 1994) Gottfredson (1981, 1996, 2002, 2005) Miller-Tiedeman & Tiedeman (1990); Miller-Tiedeman (1999)
Theories of Content and Process	Social learning career theory Social Cognitive Career Theory (SCCT) Cognitive Information Processing Approach (CIP) Developmental-contextual approach Contextual approach to career Personality development andcareer choice	Mitchell & Krumboltz (1990, 1996) Lent et al. (1996, 2002); Lent & Brown, (2002); Lent (2005) Peterson, Sampson, Reardon & Lenz (1996, 2002) Vondracek, Lerner & Schulenberg (1986) Young, Valach & Collin (1996, 2002) Roe (1956); Roe & Lunneborg (1990)
Wider Explanations	Women's career development Racial and ethnic groups Sexual orientation Sociological or situational approaches	Astin (1984); Hackett & Betz. (1981); Betz (2005); Farmer (1985, 1997); Betz and Fitzgerald (1987); Cook et al. (2002a, b) Arbona (1996); Brown (2002b); Hackett et al. (1991); Smith (1983) Fitzgerald & Betz (1994); Morgan & Brown (1991) Roberts (1977, 2005); Blau & Duncan (1967); Miller (1983); Hotchkiss & Borow (1996); Johnson & Mortimer (2002)
Constructivist approaches	STF Career construction theory Chaos theory Ecological approach	McMahon & Patton (1995); Patton & McMahon (1997, 1999, 2006) Savickas (2005) Pryor & Bright (2003a, b) Conyne & Cook (2004a)

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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 (Brown, 1996b, 2002; 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, more recently conceptualised as the social cognitive theory of Bandura (1986), include the learning theory of Mitchell and Krumboltz (1990, 1996), the social cognitive perspective (SCCT; Lent, Brown & Hackett, 1996, 2002; Lent & Brown, 2002; Lent, 2005), and the cognitive information processing approach (CIP; Peterson, Sampson, Reardon & Lenz, 1996, 2002). Context based approaches include Vondracek, Lerner and Schulenberg's (1986) developmental-contextual approach, and the contextual approach to career (Young, Valach & Collin, 1996, 2002). In addition, we include the work of Roe (1957) and Roe and 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 and gay men. 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, Heppner and O'Brien (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), Blau and Duncan (1967), 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; Brown, 2002b; Hackett, Lent & Greenhaus, 1991; Smith, 1983). While broader theories have attempted to acknowledge the effects of race (e.g., Gottfredson, 1981; Super, 1990), these perspectives generally have not been integrated within their theoretical models. 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, sex-

ual orientation, racial/ethnic minority, disability, and socioeconomic status. More recently 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. Morgan and Brown (1991) discussed three theories of women's career development (Astin, 1984; Farmer, 1985; 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. More recently Ragins (2004) developed an identity based theory of lesbian, gay and bisexual careers. These wider explanations will be described in more detail in Chapter 6.

Constructivist 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 theories include the STF of career development (McMahon & Patton, 1995; Patton & McMahon, 1997, 1999), career construction theory (Savickas, 2005), chaos theory (Pryor & Bright, 2003a, b) and ecological career theory (Conyne & Cook, 2004a). Constructivist 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, 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 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.

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 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, Gottfredson, Krumboltz, and sociological approaches. Theoretical perspectives characterised as emerging included 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).

Acknowledging the difficulty in categorisation and in ascertaining influence, 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 (fourth) edition of Brown's book include sociological perspectives (Johnson and Mortimer), developmental and postmodern theories (Gottfredson, Savickas, Young, Valach and Collin), theories anchored in learning theory (Lent, S.D. Brown and Hackett, Peterson, Sampson, Lenz and Reardon), and trait-factor theories (Holland, Dawis, D. Brown). Savickas' work is the new theory derived from Super's developmental theory and career construction theory. The new text by S.D. Brown and Lent (2005) included the theories of Dawis, Holland, Savickas, Gottfredson and Lent and his colleagues.

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 the first edition 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 career development theory

Traditional theorising about career has focused on identification of 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, career development theory has been influenced by the logical positivist worldview. More recently, there has been a rise in the influence of the constructivist worldview. At the outset, it needs to be stated that to portray these worldviews as opposites would be to oversimplify. Rather they have both made and continue to make significant contributions to the field. Increasingly their complementarities are being valued. By way of background to the discussion of

theories in Chapters 2–6, basic tenets of logical positivism and constructivism will be provided here.

Logical-positivist worldview

Core assumptions of logical positivism include the notion 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 (Brown, 2002a). 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.

Constructivist worldview

In contrast, 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 person-environment interactions. Constructivism therefore 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. Much of this activity focuses on ordering processes, that is patterning one's 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. The fourth assumption is that the 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 selfstability - we are all changing all the time and simultaneously remaining the same" (p. 209).

Savickas (2000a) attributes 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) 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. In reflecting on the move towards eclecticism in counselling, Corey (1991, p. 427) commented that "one reason for the trend towards eclectic and integrative perspectives is the recognition 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).

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, 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 are outlined here. They 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.

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 STF 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 develop the STF (Patton & McMahon, 1999) provided the following advantages (discussion of these will be expanded in Chapter 9):

- (a) the important contribution of all career theories can be recognised;
- (b) similarities, differences, and interconnections between theories can be demonstrated;
- (c) a systems theory perspective recognises the contribution to career development theory and practice of other fields, for example family therapy;
- (d) systems theory brings to career development a congruence between theory and practice, and new approaches for use in career practice;
- (e) 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;

- (f) 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
- (g) 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 (which will be 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 STF 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 decade since the first publication of the Systems Theory Framework of career development.

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 20th century. In essence, theories of content "predict career choices from individual characteristics" (Minor, 1992, p. 14). 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. 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 more recent 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 Brown (1996a, 2002b) and Bordin (1990) will be discussed as examples of theories focusing on content. Similarities and differences between these theories 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). He is seen by many as the founder of modern career guidance as his "work has had a lasting influence" on the field (McDaniels & Watts, 1994, p. 263). His best known contribution is his identification of three key elements of career selection. They are:

- First, a clear understanding of yourself, aptitudes, abilities, interests, resources, limitations and other qualities.
- Second, a knowledge of the requirements and conditions of success, advantages and disadvantages, compensation, opportunities and prospects in different lines of work.
- Third, 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 (Savickas & Walsh, 1996).

Parsons' approach to the first element, self-knowledge, "is strikingly consistent with the contemporary practice of career assessment" (Zytowski & Swanson, 1994, p. 305). 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 tools needed to efficiently enhance self-knowledge and provide links to the world of work were provided.

Parsons' second element relates to knowledge about the world of work, a concept he viewed as vital to comprehensive career planning and development, and a concept that is still 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. 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" is, in the opinion of Herr and Cramer (1992), his "most enduring contribution" (p. 5). While "true reasoning" was never fully explained, 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. However less attention 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 the applicant 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, Zytowski and Swanson (1994) claimed 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.

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 it has been suggested that "Parsons presaged the constructivist position" (Spokane & Glickman, 1994, 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.

Despite his dual contribution to career development theory, the dominant story for which Parsons is best known is that related to the logical positivist world view. In particular, Parsons' (1909) work represents the "first conceptual framework for career decision-making and became the first guide for career counsellors" (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 (Brown, 2002a). To this end he emphasised maximising the fit between individuals and occupations. This concept is as relevant today as it was in the days of Parsons. As testament to the longevity and influence of the work of Parsons, Spokane and Glickman (1994) noted that the counsellor directed approach to career counselling outlined by Parsons "would dominate the field for 70 or more years, as would the individual differences approach to assessment" (p. 302), a situation that has perpetuated until the present time.

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. Thus the psychology

of individual differences provided counselling psychology with a technology for client assessment based on the psychological test (Dawis, 1992). The influence of 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).

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 and most widely used of the career development theories (Sharf, 1992), the trait and factor approach. Betz (1992) claimed that the advent of the trait and factor approaches can be attributed to the combination of matching models such as that of Parsons (1909) with the concepts and technology of individual differences. The trait and factor and person-environment fit approaches emanate out of the logical positivist worldview that relies on measurement and objective data that is interpreted by an expert who, on that basis, also makes predictions. Trait and factor theory is founded on the notion that individuals are different, and that their different capacities can be measured and related to occupations.

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).

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 (Brown, 1990). "The terms trait and factor refer to the assessment of characteristics of the person and the job" (Sharf, 1992, p. 17). 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 (Chartrand, 1991). 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.

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 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 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.

Such thinking portrayed career decision-making as a cognitive process, in which decisions were made on the basis of objective data. There was little, if any, consideration given to subjective processes or contextual influences. The process presumed that choice was available for everyone. In addition, career choice was viewed as a single, static, point in time event where there was 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. "This theory greatly 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, the major contribution of trait and factor theory to career counselling has been in the development of many assessment instruments and techniques and occupational information (Isaacson & Brown, 1993).

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, 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.

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. For example, 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 (Roberts, 1977; an issue discussed further in Chapter 6). More recently, emotion and subjectivity have received more attention in relation to career decision-making (e.g., Patton & McMahon, 1999). 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. These criticisms have become even more relevant in the world of work of the 21st 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 have a "succession of jobs in a number of industries during their working lives" (Jarvis, 2002, p. 1). Isaacson and 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.

Criticism has also been leveled at trait and factor theory for failing to "adequately consider and define the universe of variables that impinge on the occupational choice-making process and define causal relationships among traits and variables (such as socioeconomic status)" (Brown, 1990, p. 346). Zunker (1994) is critical of the failure to account for growth and change in traits such as interests, values, aptitudes, achievements, and personalities.

Criticisms have also been leveled at counselling practices based solely on this model. Sharf (1992) describes the three step process as "deceptively simple" (p. 41), and expresses concern that the reliance on tests by career counsellors which seems to result in an authoritative position for the counsellor occurs at the expense of the development of a counselling relationship. Crites (1981) describes the trait and factor approach as a "test and tell" approach that occurs as "three interviews and a cloud of dust" (p. 49). 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). However, despite these criticisms, "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 a decade 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 of the approach is appealing to practitioners, if not to theorists (an issue discussed in Part 3).

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 (1992) noted that "There is little research supporting or refuting trait and factor theory itself as a viable theory of career development. Rather, the research that has been done, of which there is a large amount, has related traits and factors to one another or has established the validity and reliability of measurements of traits and factors" (p. 18). 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 recent work is more reflective of the person-environment fit theory and 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. "In the personality field, a consensus seems to be developing among trait theorists that there are five overarching factors termed the Big 5" (Walsh & Chartrand, 1994, p. 193), a hierarchical organisation of personality traits in terms of five basic dimensions: extraversion, agreeableness, conscientiousness, neuroticism, and openness to experience (McCrae & John, 1992, p. 175).

Drawing on the "lexical tradition" 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:

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

As illustrated in these descriptors, the "lexical tradition" assumes that "all individual differences of any importance find their expression in language" (De Raad, 1998, p. 116).

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, 1998; Pryor, 1993), 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". More recently, 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 has the ability to integrate a wide variety of personality constructs and as such 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 cross-cultural replication. For example it has been studied with samples of German, Japanese, Chinese and Dutch people, which in light of recent criticism based on the cross-cultural application of career theory, is a considerable point in its favour. More recently 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 is becoming in personality what the Holland hexagon has been in vocational interest measurement – the preeminent theoretical framework for practice in the field" (p. 15). 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).

Despite limitations 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 where "personality assessment has been employed" because it "provides a set of tools which can be used" (McCrae & John, 1992, p. 206). Possibly due to its developmental infancy and 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.

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. 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. 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 20th century. Chartrand (1991) identified three assumptions that have transferred to the person-environment approach from trait and factor theory. They are:

- "people are viewed as capable of making rational decisions . . .;
- people and work environments differ in reliable, meaningful, and consistent ways ...; and
- 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 $P \times E$ 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. This significant concept addresses some of the criticism that has been leveled 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 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 person-environment fit approach. They are:

- "(a) what kinds of personal and environmental factors are salient in predicting vocational choice and adjustment, and
- (b) 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). More recently, 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). 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.

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). Originally proposed as a theory of vocational choice (e.g., Holland, 1959, 1973, 1992), Holland's (1997) theory has more recently been titled "a theory of vocational personalities and work environments" to reflect theoretical refinements. In complimenting the significance of Holland's work, Weinrach and Srebalus (1990) claimed that it is the "most popular career theory of the last decade" (p. 47), a situation that remains unchanged today. For example, his book entitled *Making Vocational Choices* has been "the most cited work in the field of vocational psychology" (Savickas & Holland, 1999, p. 2). In a tribute to the work of Holland, a special issue of the *Journal of Vocational Behavior* was published in 1999 with Gottfredson claiming that Holland's theory "revolutionized the delivery of vocational assistance worldwide" (p. 15). 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. The basic concept of the theory is uncomplicated, and many assessment instruments derived from it have been produced to assist practitioners. Hackett, Lent and Greenhaus (1991) described Holland's theory as "simple and eminently practical" and praised Holland for "his continual revision and refinements" (p. 9). In essence, Holland's theory provides a parallel way of describing people and environments by classifying them according to six types (Gottfredson & Richards, 1999).

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 still being classified as a trait and factor theory in major texts (e.g., Brown & Associates, 2002). The person-environment fit perspective is reflected in three questions explained in Holland (1992). They are:

- 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 is 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 six personality/interest types. 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). Holland (1992, 1997) explained that individuals develop preferences for certain activities as a result of their interaction with "cultural and personal forces in-

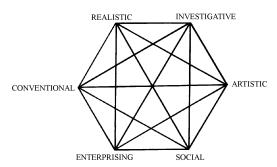


Figure 2.1. Hexagonal model for defining the relations among Holland's personality types and environments and their interactions (from Lokan & Taylor, 1986)

cluding 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" (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), or 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).

He proposed that these personality types are related to needs and 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 recent 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 (Gottfredson, 1999). Holland proposed that personality traits stabilise with age. While this could be seen as a static view of personality, 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, Luchetta & Richwine, 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 behaviour 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 (Holland, 1997, pp. 53–54).

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. 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.

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, Luchette & Richwine, 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.

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

Type	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 re- search	chemist; geologist; biologist; re- searcher				
Artistic	artistic or creative ability; uses in- tuition 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; psy- chologist; counsellor				
Enterprising	leadership, speaking and negotiat- ing 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 attend- ing to detail	banker; secretary; accountant				

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. 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.

Identity is a more recent 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, Luchetta & Richwine, 2002).

Congruence 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. In recent years, there has been 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 person-environment 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). More recently, it seems that this debate is not yet over as evidenced by Arnold (2004) who discussed the "congruence problem in John Holland's theory" (p. 95).

Holland's influence in career theory and practice has been significant (Brown, 1990; 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 & Campbell, 1981), the Self-Directed Search (Holland, 1985b) and the Vocational Preference Inventory (Holland, 1985c). Further, Holland has applied his RIASEC typology to occupations (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 (Gottfredson & Richards, 1999). However, his work with Gary Gottfredson on the Position Classification Inventory (PCI) (Gottfredson & Holland, 1991) which directly assesses environments according to his theory's constructs has opened up new research possibilities.

Refinements in Holland's theory have 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 (Holland, 1992). He also conceded that chance can play a role in vocational choice (Holland, 1985a). This addresses the criticism of Holland's approach as being simplistic and underestimating the need for career counselling (Weinrach & Srebalus, 1990). It is also reflective of recent trends in career counselling and the need to place career assessment within a framework of a dynamic interaction of multiple contextual factors. Gottfredson (1981) supported this no-

tion 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. 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.

Since his 1973 theory revision (Holland, 1973, 1997), Holland 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 leads to a series of success and satisfaction cycles" (p. 54). This is in line with Super's notion that career decision-making 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. He concentrated on the factors that influence career choice rather than on the developmental process that leads to career choice" (Zunker, 1994, p. 49). 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 also been criticised for not adequately addressing the career development of women, racial and ethnic, and other groups. For example, Watson, Stead and Schonevegel (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). Indeed, 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 Brown's (1987) concern about the usefulness of Holland's model to recent approaches to life career counselling. His concern stems out of Holland's lack of attention to other life roles and the relationships between them.

Possibly reflecting Brown's sentiments, it is interesting to note that Hansen (1997) makes no reference to the work of Holland in her approach to integrative life planning.

Theory of work adjustment

Similar to Holland's theory, Dawis and Lofquist's 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. It began in the 1950s as the theoretical framework for the University of Minnesota's Work Adjustment Project (Dawis, 2002, 2005). 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).

The theory of work adjustment "provides a model for conceptualizing the interaction between individuals and work environments" (Dawis & Lofquist, 1976, p. 55), and 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, individual 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 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 this theory, 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 met, is described as correspondence. "Correspondence – when person and environment are co-responsive to each other's requirements – is the ideal state" (Dawis, 1996, p. 85). "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. When correspondence occurs, both parties express satisfaction. However in this theory, the term satisfac-

tion 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.

Application of the theory of work adjustment to the career counselling process 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).

The theory of work adjustment not only includes descriptions of the characteristics of personality, but it also pays attention to the identification and labeling 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 an individual

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. "The duration of this persistence in adjustment behavior defines the worker's level of perseverance" (Dawis, 1996, p. 87). Thus an individual's adjustment style is determined by their flexibility, activeness, reactiveness, and perseverance, and is also related to their personality style discussed earlier.

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 been generalised to other environments through 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. For example, the work of Bordin was not referred to in the recent text by S.D. Brown and Lent (2005).

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. However, 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 the individual builds 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, the individual conducts a self assessment and gauges 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, he 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 is focused 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. His approach is clearly

a significant move away from the tradition of matching approaches with their emphasis on objectivity. The breadth of Bordin's approach is also reflected in the work of 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 Brown's theory, and as a result locate him in this chapter as a theory of content. However, his theory, described by Brown and Brooks (1996a) as an emerging theory, reflects the current state of career development theory and the move toward holistic approaches. Thus, while it emphasises the importance of a particular trait, values, it also acknowledges the concept of development and the broader context in which individuals exist. Such thinking is reflected in major revision of this theory that has focused on both work values and cultural values, with Brown claiming that career theory has all but ignored ethnic and cultural minorities (Brown, 2002b, c). Thus, 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 such as "individualism, future time orientation, moderate need for self-control, emphasis on activity, and a core belief that humans should dominate nature" (Brown, 2003, p. 48). Brown originally presented his theory in two discrete sections (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.

In essence, values are "beliefs that are experienced by the individual as standards regarding how he or she should function" (Brown, 2003, p. 49). Brown's thinking about values has been influenced by the work of Rokeach (1973). He claimed that individuals judge their own performance and that of others against a core set of beliefs or values (Brown, 1995), which are important not only in the selection of life roles but also in the satisfaction derived from life roles (Brown & Crace, 1996). Brown (1996a) claimed that expected outcomes are the most important source of motivation in decision-making, and that values are the basis on which individuals decide which outcomes are more important than others, that is "values form the basis for attributing worth to situations and objects" (Brown & Crace, 1996, p. 212). However, he also claimed that "Values have been the overlooked dimension in the counseling process as well as in the research that has been conducted on career development" (Brown, 1996a, p. 368). Therefore in his theory he attempts to draw attention to the function of values in decisionmaking and career counselling, as well as to set values into the broader context of life roles and life space. 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 (Brown, 2002c, 2003).

Brown and Crace (1996) advanced seven propositions about the function of values in decision-making, whereas Brown (1996a) advanced six, possibly a reflection of the developmental stage of this theory. In Brown's (2002b, c, 2003)

more recent 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 more recent work.

Fundamental to Brown's theory (1996a) is the concept that each person develops a relatively small number of values which "dictate cognitive, affective, and behavioral patterns" (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" (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 recency of this theory's development, 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 (Brown, 1996a). Values are said to be crystallised when they can be labeled and articulated by an individual which enables them to judge their own behaviour and compare themselves with others (Brown, 1995). Once values are crystallised, they can then be prioritised. 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. 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, 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" (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, 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.

Brown also advanced propositions that reflect the broadening of his theory to include consideration of cultural values. These propositions are presented slightly differently in versions of Brown's recent work with eight propositions being listed in Brown (2002b, c), while 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;
- 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 influences by them in the occupational decision-making process;
- 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;
- 5. 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;
- 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.

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 Brown's propositions varies (Brown, 2002b).

The second focus of Brown's theory is its contribution to career counselling, although in his more recent theoretical statements his emphasis on counselling has been reduced. In his earlier work (Brown, 1996a; 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. 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 more recent thinking about the importance of context and the place of work in people's lives (Richardson, 2000), and is in contrast with Holland's career counselling process which has been criticised as

being simplistic. Therefore just as values should not be considered in isolation, but rather in the context of all life roles, so too the work or job role needs to be considered in relation to other life roles. Life "roles may function synergistically, may be in conflict, or may be compensatory" (Brown, 1995, p. 8) in relation to the satisfaction of values. Brown discussed interrole and intrarole conflict, both of which result in a lack of satisfaction, and may lead to transitions. Intrarole 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 (Brown & Crace, 1996). Interrole 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 (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 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 Brown's assumptions. Dealing with such issues in career counselling draws attention to the links between career and personal counselling. In this regard, Brown (1996a) emphasised the importance of the counselling relationship which he regards as essential for success. Such thinking distances Brown from traditional exponents of trait and factor career counselling.

In the fourth of his assumptions, 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" (Brown, 1996a, p. 357). Following on from this is his fifth assumption, that "if clients understand their values and have values-based information, they will be able to make effective decisions" (Brown, 1996a, p. 357), a matching concept which aligns him with the trait and factor theorists.

Brown's (2002b) more recent 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 (Brown, 2002b, p. 491).

Brown's (1996a) contribution to career development is twofold. First, he has drawn attention to an important concept in career development, that of values,

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 forges 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. Further, he raises awareness of cultural sensitivity in the career counselling process. 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 STF 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. 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 person-environment fit will be discussed.

Self-knowledge

Each of the theories discussed 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

Table 2.2. Influences on career development – Theories of content

CONTENT INFLUENCES	PARSONS	FIVE FACTOR MODEL	HOLLAND	DAWIS & LOFQUIST	BORDIN	BROWN
Intrapersonal system						
ability						
aptitudes						
interests						
gender						
age						
skills						
ethnicity						
sexual orientation						
beliefs						
health						
disability						
values						
world of work knowledge						
personality						
self-concept						
physical attributes						
Social system						
family						
peers						
community groups						
education institutions						
media						
workplace						
Environmental-societal system						
political decisions						
historical trends						
employment market						
geographical location						
socioeconomic status						
globalization						
DDOCECC INEL HENCEC	1					
PROCESS INFLUENCES Recursiveness						
Change over time						
Chance						

nange over time						
hance						
No acknowledgment	A	cknowledgn	ment	Si	gnificant e	mphasis

of other self-knowledge. For example, Holland focused on a typology of interest/personality, Bordin on personality, Dawis and Lofquist and Brown on values. Further, 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" (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 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. 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, 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 centered 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 (Phillips, 1994).

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 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 Brown. However it is addressed more explicitly and comprehensively by Dawis and Lofquist than the other theorists.

Parsons' attempts to maximise the fit between individuals and jobs reflect the visionary nature of his work and has more recently 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 individual and their environment. Dawis (1996) extends knowledge of the adjustment process further by actually labeling 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, 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 (1996) as resulting from "incongruent interactions" (p. 50). Brown (1996a) also addressed discorrespondence or incongruent interactions by discussing intrarole conflict, conflicts in the workplace which lead to a lack of satisfaction and the need for adjustment. However, as the most recently developed theory, it extends the concept of congruence further by setting work into the context of life and discussing interrole conflicts which occur between the work role and other life roles. Of interest since the first edition of the present book, is 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 "today's 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 1950s to the beginning of the 21st century, 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. The most recent theory discussed in this chapter reflects yet another trend in the development of career theory, that of the acceptance of contextual influences. This is evident in Brown's consideration of work roles in relation to other life roles and his incorporation of cultural values into the more recent 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.