ARTICLES

★ Children’s career development: A metatheoretical perspective
Mark Watson and Mary McMahon

★ Creating career stories through reflection: An application of the systems theory framework of career development
Mary McMahon, Wendy Patton and Mark Watson

★ ‘I had seen order and chaos, but had thought they were different.’
The challenges of the chaos theory for career development
Robert Pryor and Jim Bright

★ International talent flow and careers: An Australasian perspective
Kerr Inkson and Stuart C. Carr

★ Career in a globalised economy: Researching the implications in a one-industry town
Suzette Dyer and Fiona Hurd

★ How employees remain happy: Explaining a paradox
Dorothy M. Hutton, Barbara Atkinson, Priva Judd, Julie Darling, Linh Tran and Robert A. Cummins

★ A judgement-based framework for analysing adult job choices
James A. Athanasou

★ Facilitating post-modern career counselling in the Limpopo province of South Africa: A rocky ride to hope
Jacobus G. Maree and Jacob M. Molepo

★ Coaching for career development and leadership development: An intelligent career approach
Polly Parker and Michael B. Arthur

★ Job seeking and job acquisition in early adolescence
Peter Creed, Frances O’Callaghan and Fiona Doherty
NOTES FOR CONTRIBUTORS

General Principles

Material will be considered for submission if it meets one or more of the following criteria:

- it expands the body of knowledge;
- it informs in a manner that will develop people's professional understanding or help in their understanding;
- it provides concrete assistance in professional practice;
- it raises philosophical questions related to the field of careers practice; or
- it opens a new frontier of knowledge and ideas related to professional practice.

Sections of the Journal

1 Case Studies

Case studies concerning innovative programs and individual work may be submitted. They should be both descriptive and analytical, providing the merits and shortcomings of the situation. Concise presentations are preferred.

2 Articles

Research articles are invited dealing with career development, planning, guidance and education, labour market and training issues, vocational education and training, occupational information, career management policy, practice and programs. Normally they should be a maximum of 4500 words.

3 Research Reports

Recently completed research relevant to careers practitioners is invited. This provides scope for shorter research reports and dissemination of findings and outcomes.

4 Practice Application Brief

This section comprises a review and summary of practical applications and techniques in the area of career development, guidance, placement or counselling services. It offers a concise, coherent and easy-to-read summary of a relevant topic for practitioners.

5 Reviews

Books, reports, packages, computer programs or any other material relevant to career practitioners are reviewed in this section.

6 Careers Forum

This is the place in the journal for news, trends and comments on relevant issues to stimulate discussion and debate. Comments may relate to material in earlier editions of the Journal or to issues you are facing in your day-to-day work. Brief reports of relevant conferences, seminars and events may also be included.

Effect Size, Confidence Intervals


Review of Articles

Manuscripts are evaluated by a blinded reviewing system in which the author's identity is anonymous to the referee and vice versa. Therefore, there should be a separate title page showing the title of the manuscript, author's names, their academic position or employment title, the address of institution/s and the date the manuscript is submitted. The first page of the manuscript should include the title of the manuscript but omit the authors' names and affiliations.

Artwork

Materials need to be of high quality with good resolution to allow for reproduction in printing. JPG file format is preferred.

Manuscript Submission

Manuscripts in hard copy or preferably as an e-mail attachment should be submitted to the editor

James A. Athanasou

Faculty of Education

University of Technology, Sydney

PO Box 123, Broadway NSW 2007, AUSTRALIA

Tel: (02) 9514-3712 Fax: (02) 9514-3939

Email: Jim.Athanasou@uts.edu.au

Effect Size, Confidence Intervals


Review of Articles

Manuscripts are evaluated by a blinded reviewing system in which the author's identity is anonymous to the referee and vice versa. Therefore, there should be a separate title page showing the title of the manuscript, author's names, their academic position or employment title, the address of institution/s and the date the manuscript is submitted. The first page of the manuscript should include the title of the manuscript but omit the authors' names and affiliations.

Artwork

Materials need to be of high quality with good resolution to allow for reproduction in printing. JPG file format is preferred.

Manuscript Submission

Manuscripts in hard copy or preferably as an e-mail attachment should be submitted to the editor

James A. Athanasou

Faculty of Education

University of Technology, Sydney

PO Box 123, Broadway NSW 2007, AUSTRALIA

Tel: (02) 9514-3712 Fax: (02) 9514-3939

Email: Jim.Athanasou@uts.edu.au

Indexing

The Australian Journal of Career Development is indexed in EERC (Educational Resources Information Centre), Australian Education Index (AEI) and Australian Public Affairs Information Service (APAIS).

Disclaimer

The opinions expressed in the journal are those of the individual authors and are not necessarily those of the Editor, or of the Australian Council for Educational Research or the University of Technology, Sydney.
Australian Journal of Career Development

Volume 13, Number 3, Spring 2004

EDITOR
Associate Professor James A. Athanasou
Faculty of Education
University of Technology, Sydney

EDITORS ADVISORY BOARD
Dr Anna Lichtenberg
Edith Cowan University, WA
Dr Robert Pryor
Congruence Pty Ltd, NSW
Col McGowan
Meredith Shears
Queensland University of Technology, Qld
Department of Employment Education and Training, NT
Professor Wendy Patton
WorkWare Solutions, Vic

EDITORIAL CONTACTS FROM CAREERS ASSOCIATIONS
Judith Leeson
Australian Association of Career Counsellors
Naomi Corlett
Career Education Association of Vic
Gwen Cartwright
Counselling University of Waikato National Institute for Careers Education
Diana McDougall
Career Education Association of ACT
Michael McGregor
Australian Human Resources Institute

INTERNATIONAL ADVISERS
Professor Norm Gysbers
College of Education
University of Missouri
Columbia, USA
Dr Suzette Dyer
University of Waikato
Hamilton, New Zealand

Professor Mark Savickas
Northeastern Ohio Universities College of Medicine
Ohio, USA
Professor Tony Watts
National Institute for Careers Education and Counselling
Cambridge, UK

NOTES FOR CONTRIBUTORS

General Principles
Material will be considered for submission if it meets one or more of the following criteria:

- it expands the body of knowledge;
- it informs in a manner that will develop people’s professional understanding or help improve their understanding;
- it provides concrete assistance in professional practice;
- it raises philosophical questions related to the field of careers practice; or
- it opens a new frontier of knowledge and ideas related to professional practice.

Sections of the Journal

1 Case Studies
Case studies focusing on innovative programs and individual work may be submitted. They should be both descriptive and analytical, providing the merits and shortcomings of the situation. Concise presentations are preferred.

2 Articles
Research articles are invited dealing with career development, planning, guidance and education, labour market and training issues, vocational education and training, occupational information, career management policy, practice and programs. Normally they should be a maximum of 4500 words.

3 Research Reports
Recently completed research relevant to career practitioners is invited. This provides scope for shorter research reports and dissemination of findings and outcomes.

4 Practice Application Brief
This section comprises a review and summary of practical applications and techniques in the area of career development, guidance, placement or counselling services. It offers a concise, coherent and easy-to-read summary of a relevant topic for practitioners.

5 Reviews
Books, reports, packages, computer programs or any other material relevant to career practitioners are reviewed in this section.

6 Careers Forum
This is the place in the journal for news, trends and comments on relevant issues to stimulate discussion and debate. Comments may relate to material in earlier editions of the Journal or to issues you are facing in your day-to-day work. Brief reports of relevant conferences, seminars and events may also be included.

Manuscript Standards
All submissions are required in MS Word format. Copy should be typed double-spaced. Submission as an email attachment is preferred and will expedite the review process.

Article and Case Study submissions should be preceded by an abstract of 100–150 words. Tables should be typed on separate pages with appropriate location indicated in the text. References are given at the end of the text and only references cited in the text should appear in the reference list. Spelling should conform to the Macquarie Dictionary and language should be gender inclusive. Authors should keep a copy, as manuscripts will not be returned.

More detailed information on style can be found in the Publication Manual of the American Psychological Association (5th ed.). From 2005, each article should be accompanied by: (a) a brief biographical note about the author(s) and a black-and-white high-resolution passport-sized photograph, saved as a JPEG file. Upon acceptance authors will be asked to submit a short Theory and Practice section at the conclusion of the article, which will be boxed. This will contain around 3–5 questions and answers from the paper for practitioners and will highlight the professional practice implications of the paper.

Effect Size, Confidence Intervals

Review of Articles
Manuscripts are evaluated by a blind reviewing system in which the author’s identity is anonymous to the referees and vice versa.

Therefore, there should be a separate title page showing the title of the manuscript, author(s) names, their academic position or employment title, the address of institution/s and the date the manuscript is submitted. The first page of the manuscript should include the title of the manuscript but omit the authors’ names and affiliations.

Artwork
Materials need to be of high quality with good resolution to allow for reproduction in printing. JPEG file format is preferred.

Manuscript Submission
Manuscripts in hard copy or preferably as an e-mail attachment should be submitted to the editor.

James A. Athanasou
Faculty of Education
University of Technology, Sydney
PO Box 123, Broadway NSW 2007, AUSTRALIA
Tel: (02) 9514-3172 Fax: (02) 9514-3939
Email: jim.athanasou@uts.edu.au

Indexing
The Australian Journal of Career Development is indexed in ERIC (Educational Resources Information Center), Australian Education Index (AEI) and Australian Public Affairs Information Service (APAIS).

Disclaimer
The opinions expressed in the journal are those of the individual authors and are not necessarily those of the Editor, or of the Australian Council for Educational Research or the University of Technology, Sydney.

Published and distributed by the Australian Council for Educational Research, Private Bag 55, Camberwell 3124.
Copyright © 2004 Australian Council for Educational Research. ISSN 1038-4012
CONTENTS

Editorial  2
Roundtable of career researchers

Career Profile  4
Interview with Malcolm McKenzie

Articles  7
Children’s career development: A metatheoretical perspective
Mark Watson and Mary McMahon

Creating career stories through reflection: An application of the Systems Theory Framework of career development
Mary McMahon, Wendy Patton and Mark Watson

'I had seen order and chaos, but had thought they were different.’ 18
The challenges of the chaos theory for career development
Robert Pryor and Jim Bright

International talent flow and careers: An Australasian perspective 23
Kerr Inkson and Stuart C. Carr

Career in a globalised economy: Researching the implications in a one-industry town 29
Suzette Dyer and Fiona Hurd

How employees remain happy: Explaining a paradox 34
Dorothy M. Hutton, Barbara Atkinson, Priya Judd, Julie Darling, Linh Tran and Robert A. Cummins

A judgement-based framework for analysing adult job choices 42
James A. Athanasou

Facilitating post-modern career counselling in the Limpopo province of South Africa: A rocky ride to hope 47
Jacobus G. Maree and Jacob M. Molepo

Coaching for career development and leadership development: An intelligent career approach 55
Polly Parker and Michael B. Arthur

Job seeking and job acquisition in early adolescence 61
Peter Creed, Frances O’Callaghan and Fiona Doherty

Book Reviews  67

Careers Forum  73
Careers Digest
Information and Resources  76
News  77
Forthcoming Conferences  78
From the Journals  79
Reviewers for 2004  80
Breaking News from CICA  81
Welcome to this special issue of the journal, which is reporting on the research roundtable held in conjunction with the 13th AACC National Conference and publishing papers from participants at that roundtable.

The inclusion of a roundtable of career researchers at the AACC National Conference represents an exciting and significant initiative, and a milestone in profiling the significant career development research being undertaken in Australia, New Zealand and South Africa. The guest editors convened the roundtable in response to an increased awareness in the career industry of growth in the development of a research culture in career development in Australia. In addition, the AACC had attracted a number of internationally-renowned career researchers to present and we believed this provided us with a unique opportunity for a research day. We were very fortunate to have Professor Mark Savickas facilitate the process on the day and share with us his reflections and challenges for the future.

The roundtable initiative was significant, because it was the first time researchers from Australia and a number of other countries were able to meet in such a forum. In addition, it provided an opportunity to share current research interests and to plan collaborations for future research projects. The informative and influential Annual review: Practice and research in career counseling and development—2002 (Flores et al., 2003) emphasised the increasing focus on international concerns in career development research and the growing trend for work from international researchers to be published in North American journals. The authors went on to encourage ‘US and international practitioners and researchers (to) establish a greater number of collegial working relationships. The creation of international collaborations will help to generate theory-driven interventions, as well as the use of research to address cutting edge issues in different countries’ (p. 122).

Invitees to the day were researchers who have made a significant contribution to career development research through sustained publication in national and international refereed journals. An exciting outcome of the day was a commitment to acknowledge the contribution of emerging researchers in Australia through a biennial research roundtable, we hope as an adjunct to AACC conferences. As such another roundtable with a larger number of researchers will be held in Sydney during 2006.

And so we move to the papers in this special edition. All papers illustrate the innovative work being done by the attendees. Mary McMahon, Wendy Patton and Mark Watson update their cross-national work on the development of a qualitative career assessment measure which has been derived from the Systems Theory Framework, and describe the development and trialling of the ‘My System of Career Influences’ (MSCI) reflection activity. The work from South Africa in these papers shares the common theme of working to provide relevant career counselling experiences for disadvantaged groups in the country. Jacobus Maree and Jacob Molepo describe their research of working towards the development of multiple approaches to assist disadvantaged...
learners make appropriate career choices in the Limpopo province of South Africa. Mark Watson and Mary McMahon present a metatheoretical overview of children’s career development, a traditionally under-researched topic.

Researchers from New Zealand focus on globalisation and its different effects on career opportunities and patterns. Kerr Inkson and Stuart Carr describe an extensive research program which explores the career patterns of New Zealand workers who have undertaken overseas experience. Reminiscent of early single town studies conducted during the 1930s, Suzette Dyer and Fiona Hurd describe their research program which seeks to understand the implications of global changes in labour practices on careers in a New Zealand town which relies on one major industry. Polly Parker and Michael Arthur examine coaching for career development.

In addition to the cross-national work involving Australians already described, Robert Pryor and Jim Bright, Jim Athanasou, Peter Creed, Frances O’Callaghan and Fiona Doherty, and Dot Hutton and her colleagues present work that represents theoretical advancements. Robert Pryor and Jim Bright describe how their chaos theory of careers provides a new perspective on five commonly held assumptions in the career field. Dot Hutton and her colleagues present a brief report on their research on workplace wellbeing, which has resulted in the development of a new measure. Peter Creed and his colleagues propose the theory of planned behaviour as a possible model for examining the experiences of paid employment for adolescents at school. Jim Athanasou describes his work on developing a judgement-based framework that may assist in the analysis of job choices.

This collection of papers reflects the breadth and innovative nature of career research in Australia, New Zealand and South Africa—pursuing issues which are unique to those countries and which have resonance internationally. The body of work presented here shows new directions in theory building, in practice, and in research design. It is an exciting time to be a career researcher and we hope this collection of articles will enthuse others in their work.

Mary McMahon and Wendy Patton

REFERENCES
Malcolm, how did you come into career work?
In a previous life I was a secondary school social science teacher. I was teaching such riveting things as the Australian banking system, buying a house etc to a Year 9 commerce class at a high school in the western suburbs of Sydney. Not surprisingly they didn’t see this stuff as too interesting. Then we moved onto the topic of getting a job—all of sudden they were alive; here was information that they saw as directly relevant. One thing led to another, I applied to do the Department of Education’s Careers Advisers Retraining Course and was successful.

From that time I have worked as a careers adviser in schools in Sydney’s South West and St George areas, spent a short period writing careers ‘lessons’ at the Correspondence School, co-ordinated the then Department of Education’s Careers Advisers Retraining Course, co-authored a National Board of Employment, Education and Training (NBEET) report on the competencies of careers co-ordinators, was employed as the career education consultant to the old Metropolitan East region and then business/education consultant to that region, and finally moved to UTS in the mid 1990s.

You currently work in a university setting. Can you tell our readers something about the careers service provided at the University of Technology, Sydney?
Prior to my appointment the service was run by the Student Union. A decision was made to transfer responsibility for the service to the university and I was appointed the university’s first manager of the careers service. We started with three empty rooms and a fourth room filled with boxes of all sorts of materials. None of the staff had worked in a university careers service before, so we were all on a vertical learning curve. The advantage of this was that we absorbed everything we could, picked and/or modified what we learnt, and then were able to apply it in the context of a new service at UTS.

I have two careers counsellors, an information officer and two administrative assistants. So, including myself, a team of six people to provide services to 27,000 students aged from their late teens to who knows how old, currently spread over three campuses and nine faculties. Our client groups could broadly be described as enrolled students, staff of the university, graduate recruiters and professional associations.
The service has evolved over time, particularly in terms of our planning, partnering with faculties and our marketing. While the way we provide services to students has changed, the three main services we provide—career development, information and resources and advertising jobs—have remained the same.

Today we are concentrating on the use of the Internet to provide information, resources and services to students. We have created databases which are served to our website and provide students with 24x7 access to relevant careers information. We see our website as our major tool to alert students of events, resources and our services. Employers also use the website to log jobs onto our employment service and/or book into activities.

What pressures are careers services facing nowadays? A recent report put together by a number of heads of university careers services sums this up very nicely. Staff of careers services are working in an increasingly complex environment characterised by:

- diverse and increased student populations, some with high needs and the requirement for high assistance with their transition to university and then to employment;
- changed student expectations of the services provided, often due to increased numbers of international and postgraduate students, and increased fees for local students;
- a graduate labour market increasingly influenced by global developments;
- knowledge and expertise to utilise technology as a tool to deliver services to students, and, in particular, to overcome problems faced by multi-campus institutions, poorly resourced services, regional universities etc.;
- demand from within universities for a wider range of services, information and expertise from careers service staff;
- the need for staff to be trained to be able to provide the quality and provision of careers services in higher education that meet the needs of students, employers and the university;
- the relationship between faculties and careers services, which may be tested if careers services are unable to meet the increased demands for their services; and
- changes to government policy/legislation—particularly in relation to the evaluation of outcomes—may impact on the work of careers services.

To successfully operate in this diverse landscape, universities need to ensure that their careers service is adequately resourced and has appropriately trained staff.

Do you have a particular philosophy or orientation that characterises your work as a career practitioner? I try to focus on getting the student to take responsibility for his or her own decisions, planning and actions. In practice, this means supporting or steering students towards gaining the appropriate skills, accessing current and authoritative information or resources, and helping them identify strategies to overcome obstacles that may prevent them achieving their goals.

Who has been influential in your thinking about careers? In terms of a theorist, I am probably most drawn to the work of Krumboltz. Throughout my time in careers work I have also been very fortunate to learn from a number of highly talented practitioners. I could probably say that two of these people have mentored me during much of my time. Through working with these people and being in regular contact with others, I have not only been able to improve my practical skills, but also my understanding of much broader issues impacting on people in the profession.

I know that over the years you have trained careers advisers and that you are widely known for this contribution—would you be able to say something about this aspect of your work? I very much enjoyed my time training careers advisers and my involvement in the NBEET project on identifying competencies required by careers counselors. If nothing else, these were fantastic professional development opportunities for me. I was learning as much as the people on the course, often learnt from them, and I got to meet many of the major players in the profession.

My experience as co-ordinator also taught me the importance of determining criteria and guidelines for the selection of people to work as careers advisers in
secondary schools. It is not good enough to rely on recommendations from school administrators.

**From your vantage point, what do you see as the future needs of our profession?**

The announcements by Brendan Nelson at the AACC conference in April 2004 have given us a great opportunity, one that we should not lose. For me this is the major priority for the profession in the short- to medium-term.

We need to identify the competencies required by people working as careers counsellors. This would lead to the development of minimum training levels for people working in different areas of the profession. From here professional standards and accreditation procedures could also be developed. The Careers Industry Council of Australia (CICA) should be the driving organisation undertaking these developments. This will not happen quickly, nor will it be an easy process to manage. But the results achieved to date and the co-operation displayed by people involved with CICA gives me great hope that this body can move the process forward.

**Where do you see careers work heading in the future?**

The day-to-day work of people in the profession will see the increasing use of technology as a tool to support the work being undertaken. Technology will not replace people, but people will have to come to terms with how to use a range of technologies effectively and efficiently to provide information and advice to clients.

**And finally, can we say something about Malcolm McKenzie outside his formal careers role?**

Nirvana: sitting on a sunny, deserted beach on the south coast of NSW (a cold beer in the nearest fridge would be handy). Reality: Dad’s taxi spends weekends ferrying my two sons to various sporting events all over Sydney.

Malcolm McKenzie, on behalf of our readers thank you for this interview with the *Australian Journal of Career Development*; thank you also for your contribution in many ways to the field of career development in Australia.
CHILDREN’S CAREER DEVELOPMENT: A METATHEORETICAL PERSPECTIVE

MARK WATSON
University of Port Elizabeth, South Africa

MARY McMAHON
Queensland University of Technology, Australia

Career development is regarded as a lifespan process; however, the career development of children has received little theoretical and research attention. This article reflects on the breadth and depth of understandings about children’s career development from the metatheoretical perspective of the Systems Theory Framework of career development (Patton & McMahon, 1999). The relationship between career development literature and career practice for children is discussed.

Recent conceptualisations of career development reflect a lifespan approach (Patton & McMahon, 1999; Super, 1990). However, there is a lack of emphasis in career theory and research on the span of life when individuals are children. Given the disparate nature of the career literature, an holistic structure is needed in order to examine the breadth and depth of understandings of children’s career development and its possible relationship to practice. Such a structure is provided by the metatheoretical Systems Theory Framework (STF) of career development (Patton & McMahon, 1999).

The Systems Theory Framework of Career Development
The STF (Patton & McMahon, 1999) presented the first, and currently the only, unifying metatheoretical framework within which to locate and use extant theories on career development. As an overarching framework focusing on all parts as well as the whole, new or revised theoretical developments may be accommodated along with existing theories. The STF provides the breadth necessary to unite career theories, while individual career theories provide the depth needed to account for specific concepts.
The STF provides a framework of influences on career development. The notion of influence represents a dynamic term under which the content and process of career development may be examined. Central to the STF is a circle representing the individual. Contained within the circle is a range of intrapersonal content influences traditionally represented in career theory, such as age, personality, gender and ethnicity. Further content influences are illustrated in the STF by the contextual system within which the individual lives. For example, social influences such as family, friends, school and peers are illustrated. At an even broader level, environmental/societal influences such as geographical location, socio-economic circumstances and the political climate are represented. Thus, the STF contains three interconnected systems of content influences: the individual system, the social system and the environmental system.

A strength of the STF is its recognition of the influence of the process within and between these systems. Process influences reflect the dynamic nature of career development. Recursiveness, the interaction within individuals and between individuals and their environments, is the first of these process influences. Recursiveness is also reflected in the second of the process influences—change over time, which accounts for the micro-process of decision making and the macro-process of lifespan development. The third of the process influences is chance, the unpredicted events that may determine career development.

The dynamic nature of the STF allows for the dual role of influences as both content and process. For example, while core constructs in career development theory such as self-concept and self-efficacy may initially be viewed as intrapersonal content influences, their development over time and their recursive interaction with other influences enables them to be also viewed as process influences. In essence, these developmental concepts are influenced by experience, and they in turn influence experience. Thus, for the purpose of this article, these core constructs will be termed recursive influences. Content, process and recursive influences will guide this metatheoretical perspective of children’s career development. Thereafter, the relationship between career literature and practice will be discussed. An article of this length does not permit detailed examination of the career literature related to children. Rather a perspective is provided that is informed by previous extensive reviews of career theory (Patton & McMahon, 1999) and research of children (Watson & McMahon, 2004).

A Metatheoretical Perspective

Content Influences
Several career theories draw attention to the content of career development, but few relate content specifically to the career development of children. Further, most theories focus on intrapersonal and social influences on children’s career development. Age and gender are the predominant intrapersonal influences described in the literature (see Gottfredson, 2002; Super, 1990). Social influences such as family and school are mentioned in several theories (e.g., Mitchell & Krumboltz, 1996; Roe, 1957; Super, 1990). For example, Roe focused on the nature of the relationship between parent and child, and how the child’s needs are met; claiming that childhood environments may be predictors of person- or non-person-oriented occupations. Similarly, Bordin (1990) acknowledged the level of parental support and nurturance as being influential on the vocational identity development of children.

Some career theories acknowledge the environmental/societal influences of socio-economic status on opportunities and social interaction in career development (e.g., Brown, 2002), but few do so in relation to children. Socio-economic status along with other environmental/societal influences—such as the labour market, social policy and the impact of technology—are also considered as career development influences in a number of more holistic career theories (Patton & McMahon, 1999; Super, 1990), but again none specifically address these influences in relation to children.

In essence, the relevance of content influences to children’s career development is more implied than described in the literature. The nature of this relevance remains uncertain, with more attention focused on intrapersonal and social influences than on environmental/societal influences. Further, within these broad categories, knowledge of specific influences is differentially understood.
Process Influences

Process influences in career development theory also remain lacking in detail as process is described broadly in terms of the interaction between children and their environment or the stages through which children pass. For instance, fantasy, play and learning experiences are described as processes that enable children to develop concepts of themselves in adult roles (e.g., Bordin, 1990; Mitchell & Krumboltz, 1996; Super, 1990).

However, other authors are less specific about describing the application to the career development of children when discussing the influence of the processes. Holland (1997) describes a process whereby individuals develop preferences for certain activities as a result of their interaction with ‘cultural and personal forces including peers, biological heredity, parents, social class, culture and the physical environment’ (p. 2), with these preferences becoming interests in which individuals develop competencies. Similarly, theorists such as Lent, Brown and Hackett (2002) describe the career development process as an interaction with the environment. For example, they describe a process of learning through personal performance accomplishments, vicarious learning, social persuasion, and physiological and affective states.

A number of theorists (Ginzberg, 1984; Gottfredson, 2002; Super, 1990) describe a more specific process of career development: a sequence of stages beginning in childhood. In general, these stages are consistent with four major tasks of vocational development that Savickas (2002) believes are imposed on children by society: recognising a future work role; increasing personal control over vocational activities; forming conceptions about making educational and vocational choices; and gaining the confidence to implement these choices. For example, Super describes a growth stage when a child develops concepts of himself in an adult role through fantasy and play. During this stage, children attend school, develop work habits and become more future-oriented.

Gottfredson’s (2002) theory of circumscription and compromise presents a theory of four stages that begins in early childhood and ends in late adolescence. The first three stages of her model are particularly relevant to children. Children from the ages of three to five orientate to size and power and recognise that working is a part of the adult world. As children’s ability to think in concrete terms and make simple distinctions develops, they begin to orientate to sex roles and actively reject cross-sex behaviour between the ages of six and eight. Increasingly, children develop an awareness of distinctions in social class as they move into the third stage, where they orientate to social valuation between the ages of nine and 13. During this stage, children become more aware of the connection between employment and income, and begin to identify what they perceive as lower- and higher-status occupations. Corresponding with this, they become aware of the concrete representations of social class including clothing and possessions.

As with content influences, process influences are variably described in the career literature. However, the stage theories do provide a more substantive description of the nature of process influences.

Recursive Influences

While the predominant focus of the previous sections is on content or process influences, some influences...
more clearly illustrate the recursive nature of the metatheoretical framework used in this article. These influences are essentially related to developmental concepts such as self. The importance of self is acknowledged by Super (1992), who describes the development of self-concept as a ‘product of the person and the environment’ (p. 42). Self-concept is moulded over time through social learning as individuals interact with their environments, with a desired outcome in individuals’ career development identified as career maturity—that is, the readiness to make effective career choices. Centred around the formation of self-concept, Gottfredson’s (2002) theory differs from others in that it focuses on the development of the social self rather than the psychological self. Gottfredson draws attention to the social aspects of self, such as gender, social class and intelligence, rather than the more psychological aspects of self, such as personality and values.

In a similar way, self-efficacy beliefs (Lent, Brown, & Hackett, 2002) and values (Brown, 2002) are shaped through interaction with environmental influences, such as cultural background, gender, and socio-economic status, all of which influence opportunity and social interaction. The recursiveness of these influences is reflected in the way they shape and are shaped by interaction with the environment.

Recursiveness is a core element that emphasises the dynamic nature of career development and is recognised in several key concepts in the career literature. The nature of recursiveness is acknowledged in the literature, but the process by which it occurs is not sufficiently explained. While there is widespread acceptance of the notion of career development as a dynamic process, most of the influences represented in the metatheoretical framework have not been represented in the literature in such a dynamic way.

As discussed earlier, the metatheoretical perspective of the STF (Patton & McMahon, 1999) illustrates the breadth of career development. Individual career theories should demonstrate the depth needed to understand career development. However, as evidenced in children’s career development literature, a depth of understanding is lacking in the career literature. Thus, at a broad level the dynamic nature of children’s career development is understood, but in-depth accounts of this dynamic nature have not been fully described. Further, while depth of understanding is evident in some career literature, it is not evident across the literature generally.

**Career Literature and Practice: A Relationship**

Within the relationship between career literature and practice, breadth and depth need to be discussed. The breadth of the metatheoretical perspective adopted in this article is reflected in recent national frameworks developed by the USA (National Occupational Information Coordinating Committee (US), 1996), Canada (Hache, Redekopp, & Jarvis, 2000) and Australia (Miles Morgan Australia, 2003) to guide career practice across the lifespan. While the metatheoretical perspective may be reflected in both career literature and practice, the lack of direct links between career literature and practice limit the depth of our understanding.

For example, in recent years there has been criticism of a schism between career theory, research and practice (Savickas & Walsh, 1996). Nowhere is this more evident than in the career development of children. The holistic, lifespan perspective of career development theory (Patton & McMahon, 1999; Super, 1990) that emphasises the content and lifespan process of career development is not reflected in children’s career research in two important ways. First, the career development of children as a significant stage in the lifespan process is under-researched, and, second, most research on children’s career development has been skewed towards content influences such as occupational aspirations, age and gender (Watson & McMahon, 2004).

Consequently, the applicability of these theories to the career development of children and to career practice remains uncertain.

The recursiveness of these influences is reflected in the way they shape and are shaped by interaction with the environment. Recursiveness is a core element that emphasises the dynamic nature of career development and is recognised in several key concepts in the career literature. The nature of recursiveness is acknowledged in the literature, but the process by which it occurs is not sufficiently explained. While there is widespread acceptance of the notion of career development as a dynamic process, most of the influences represented in the metatheoretical framework have not been represented in the literature in such a dynamic way.

As discussed earlier, the metatheoretical perspective of the STF (Patton & McMahon, 1999) illustrates the breadth of career development. Individual career theories should demonstrate the depth needed to understand career development. However, as evidenced in children’s career development literature, a depth of understanding is lacking in the career literature. Thus, at a broad level the dynamic nature of children’s career development is understood, but in-depth accounts of this dynamic nature have not been fully described. Further, while depth of understanding is evident in some career literature, it is not evident across the literature generally.
children may provide greater insight into the career development of adults, enhance career practice, and enable greater and more informed facilitation of the career development of children. While the breadth of the metatheoretical perspective allows us to understand children’s career literature and practice more holistically, it also reveals a lack of depth in that same literature and practice. Clearly, there is much to be done in order to realise a more in-depth understanding of the career development of children.

REFERENCES


What is the purpose of taking a metatheoretical perspective in order to understand children’s career development?
Answer: Given the disparate nature of the career literature, an holistic structure is needed in order to examine children’s career theory, research and their possible relationship with practice. A metatheoretical perspective helps us to differentiate between the breadth and the depth of understandings of the career development of children. A metatheoretical perspective enables us to reflect on the breadth. However, depth should be provided by individual career theories and this is lacking as there have been few theories directly or specifically applied to children.

This section is designed as a brief professional review of the article. It provides relevant study questions and answers for readers to test their knowledge of the article.

What is the purpose of taking a metatheoretical perspective in order to understand children’s career development?
Answer: Given the disparate nature of the career literature, an holistic structure is needed in order to examine children’s career theory, research and their possible relationship with practice. A metatheoretical perspective helps us to differentiate between the breadth and the depth of understandings of the career development of children. A metatheoretical perspective enables us to reflect on the breadth. However, depth should be provided by individual career theories and this is lacking as there have been few theories directly or specifically applied to children.

Australian Career Development Studies (ACDS) is an exciting initiative of the Australian Government Department of Education, Science and Training, and is designed to broaden access to career development learning opportunities. ACDS is currently being developed by Miles Morgan Australia, in collaboration with a team of highly respected career educators and specialists.

Australian Career Development Studies is a resource for anyone interested in maximising their own career development or assisting others to do so. All three programmes within the ACDS are holistic, self-contained and pitched at an introductory level, although they differ in their level of complexity and detail, as well as the time needed to complete them. All will be provided in web-based, print and CD-ROM formats and all will be publicly available from February 2005. The three programmes will be:

- **Awareness of Career Development** — an introductory programme for those wishing to learn the basics of career development in a brief, enjoyable and easily understood format;
- **Elements of Career Service Delivery** — three accreditable units at Certificate IV level of the AQF (plus an assessment module), for those who are currently involved, or would like to be involved, in delivering career development services to individuals in the community. There will be a pilot release of this programme to DEST contractors in September 2004; and
- **Career Development Studies** — an accreditable unit, including an assessment module, at Post-Graduate Certificate level. This programme will be useful to anyone wishing to expand and consolidate their career development learning.

Please feel free to email info@milesmorgan.com.au at any time for further information.
CREATING CAREER STORIES THROUGH REFLECTION: AN APPLICATION OF THE SYSTEMS THEORY FRAMEWORK OF CAREER DEVELOPMENT

MARY McMAHON and WENDY PATTON, Queensland University of Technology, Australia
MARK WATSON, University of Port Elizabeth, South Africa

The Systems Theory Framework (STF) of career development represents a metatheoretical account of career development that is consistent with the constructivist worldview. Presented as a framework of influences, the STF clearly illustrates the content and process of career development. The STF has provided the stimulus for the development of a qualitative career assessment process, a guided reflection titled ‘My System of Career Influences’ (MSCI) (McMahon, Patton, & Watson, 2003a). Using the content subsystems as aspects in a process of guided reflection, clients engage in the construction of their own career stories by reflecting on their system of career influences. A series of questions guide reflection on the meaning of these influences. The MSCI reflection activity may be completed individually, in groups, or with the assistance of a career counsellor or career teacher. The development and trialling of the MSCI will be outlined in this paper.

Career assessment has played a pivotal role since the early beginnings of career counselling. To date, most career assessment has been quantitative in nature, thus exemplifying the traditional ‘test and tell’ approach to career counselling. More recently, the adequacy of this approach in meeting the complex
career needs of individuals in the 21st century has been questioned (McMahon & Patton, 2002a; 2002b; Patton & McMahon, 1999; Savickas, 1993). For example, more holistic understandings of career and career development (Patton & McMahon, 1999; Super, 1990; Vondracek, Lerner & Schulenberg, 1986) are reflected in a broader range of career issues that career counsellors deal with, rather than simply occupational choice. Further, the increasing influence of the constructivist worldview, with its emphasis on relationship, story and meaning-making, has posed challenges for this traditional approach. Essentially, there has been greater recognition of interconnection between people and their environments. In addition, there has been greater acceptance that people are ‘actively oriented toward a meaningful understanding of the world in which they live’ (Niemeyer & Niemeyer, 1993, p. 3). To this end, greater emphasis is being placed on the relationship in career counselling and the co-construction of meaning.

While assessment remains a widely accepted feature of career counselling (Chartrand & Walsh, 2001), the traditional ‘test and tell’ assessment method is less acceptable in a climate where meaning making is perceived as a desirable outcome of the counselling process. Indeed, Savickas (1993) suggests that career counselling needs to become less expert dominated, less focused on fit, and more focused on stories than scores. To this end he suggests that ‘acting as co-authors and editors … counsellors can help clients: 1. authorize their careers by narrating a coherent, continuous, and credible story; 2. invest career with meaning by identifying themes and tensions in the story line; and 3. learn the skills needed to perform the next episode in the story’ (pp. 210–213).

THE SYSTEMS THEORY FRAMEWORK OF CAREER DEVELOPMENT

The Systems Theory Framework (STF) of career development (McMahon & Patton, 1995; Patton & McMahon, 1999) represents a metatheoretical account of career development that is consistent with the constructivist worldview and calls for changes in the nature of career counselling. Presented as a framework of influences, the STF clearly illustrates the content and process of career development. Further, it provides a map that can guide career counselling and the co-construction of career stories. The term influence was deliberately chosen by the developers of the STF as a dynamic term capable of reflecting both content and process components of career theory. Content influences include intrapersonal variables, such as personality, gender, abilities and age, and contextual variables, which comprise social influences such as family, and environmental/societal influences such as geographic location. These influences are represented in the framework as three interconnected systems: the individual system, the social system and the environmental/societal system.

The first of the process influences is the recursive interaction within the individual, as well as between the individual and the context. The second of the process influences emphasises how recursive interaction contributes to the micro-process of career decision making and the macro-process of change over time. The third of the process influences represented is chance. Importantly, the content and process influences are located in the context of time, to incorporate past, present and future considerations in clients’ career development. Patton and McMahon (1999) propose that at a given point in time individuals are able to represent visually the constellation of influences connecting with their career situation. In their theoretical presentation of the STF, Patton and McMahon outline the sequential development of the interconnections between the intrapersonal system, the social system, the environmental/societal system, and the influences of past, present, future and chance. At a practical level, McMahon and Patton (2003) describe the application of the STF as an activity for use in career counselling.

QUALITATIVE CAREER ASSESSMENT

As suggested by Patton and McMahon (1999), the STF may be used as a qualitative career assessment tool. Qualitative career assessment is perhaps best described as ‘informal forms of assessment’ (Okocha, 1998, p. 151). Such assessment provides an opportunity for client and counsellor to co-construct a story around a process that is flexible and collaborative rather than expert driven (Peavy, 1996). The use of qualitative assessment in career counselling suggests a process other than the traditional linear view of career counselling. The process informed by the constructivist worldview centres around story and
meaning. It also emphasises the importance of the counsellor entering the client’s life space and developing a collaborative relationship with him or her in order that the client’s career story can be told, meaning explored, and new meaning co-constructed. Through this process, the next chapter of the client’s career story can be written through their actions.

McMahon and Patton (2002b) proposed guidelines for incorporating qualitative career assessment into career counselling. For example, they suggest that counsellors need to consider a range of client and assessment issues. Client considerations include: entering the client’s world and acknowledging the client as an expert in that world; and exploring that world and the meaning the client has made of it. The client may have already engaged in self-assessment and thus the career counsellor would need to negotiate with the client to determine the need for further assessment. Where further career assessment is agreed to, there is a second set of considerations to take into account. These are: selecting from a variety of assessment processes on the basis of the career story and the needs of the client; involving clients actively in the assessment process; and incorporating assessment results into the process of meaning making. Further career action or plans are negotiated then between client and counsellor on the basis of co-constructed meaning.

THE MY SYSTEM OF CAREER INFLUENCES REFLECTION ACTIVITY

The STF has provided the stimulus for the development of a qualitative career assessment process, a guided reflection titled ‘My System of Career Influences’ (MSCI) (McMahon, Patton, & Watson, 2003a). As with many other qualitative assessment processes, the STF (and consequently the MSCI) is grounded broadly in constructivist theory. Using the content subsystems of the STF as aspects of a process of guided reflection, clients engage in the construction of their own system of career influences. Reflection on the meaning of these influences is guided by a series of questions. The MSCI was developed according to the guidelines suggested by McMahon, Patton, and Watson (2003b).

The development of the MSCI has been conducted in a three stage cross-national process. Stage 1 was based on the pilot version of the instrument (McMahon, Patton, & Watson, 2000) and involved groups of masters level students enrolled in career development courses in university settings in Australia and South Africa. Feedback from this first stage suggested that the MSCI was worthwhile for participants as they were able to meaningfully create their own career stories through reflection. Further, participants recommended that an adult and adolescent version be developed. Stage 2 was based on the adolescent version (McMahon, Patton, & Watson, 2003a) with a similar sample to that in Stage 1, most of whom worked with adolescents. Stage 3 was conducted in an individual setting with adolescents in South Africa.

The MSCI is a booklet of nine pages that guides participants through a reflection process on their current career situation that may be completed individually, in groups or with the assistance of a career counsellor or career teacher. Each page introduces a new aspect of reflection and provides participants with brief information, guided instructions, examples and a place to respond. Each aspect will now be briefly described. My present career situation consists of seven open-ended questions inviting participants to reflect on elements of their
career such as occupational aspiration, work experience, life roles, previous decision making and support networks. The next three aspects of the reflection process, thinking about who I am, thinking about the people around me, and thinking about society and environment, invite participants to reflect on a range of influences and select, detail and prioritise them. The next aspect of the reflection process, thinking about my past, present and future, invites participants to reflect on past career influences, present circumstances and anticipated lifestyle. After this guided reflection process, participants are invited to diagrammatically represent the influences they have reflected on. A page titled Representing my system of career influences and a chart titled My system of career influences guide participants in this reflective process. A final process titled Reflecting on my system of career influences invites participants to reflect on insights they have gained throughout the process and facilitates the telling of their career stories.

Applications
The MSCI reflection process may be self-guided. However, it is preferable that career counsellors or teachers interact with clients throughout the process, and provide support and clarification where necessary. The MSCI also accommodates the time demands of different settings. While the MSCI may be completed in a 30-minute session, a degree of flexibility is also possible. For example, it is possible for participants to complete discrete phases of the MSCI in their own time or to return to it several times. Further, participants could revisit their MSCI over time and modify aspects of their responses according to changes in their lives or new insights or awareness.

The MSCI lends itself to a variety of practical applications. For example, it may be incorporated into individual career counselling in several ways. It may be used as a stand-alone process or as a precursor to more extensive career counselling. Similar applications apply to group career counselling. In career education settings, facilitators may use the MSCI as a single lesson or embed it into a series of career education lessons. Where the MSCI is used in group settings, processes of interaction and sharing between participants can be facilitated. The use of the MSCI as an educational process may even be extended to career counsellor training. For example, students may be encouraged to reflect on their own system of influences in order to understand themselves better, to develop an understanding of holistic conceptions of career development, and consequently a greater sensitivity to client issues.

To date, the development of the MSCI has involved a rigorous process of theoretical, conceptual and practical refinements over a three year period. Feedback on the MSCI as an application of the STF indicates that clients are able to meaningfully create their own career stories through reflection. At the time of writing, the MSCI has reached its final stage of refinement prior to its publication and availability for public use.

References
In what ways does qualitative career assessment differ from more traditional assessment processes?

Answer: Traditional career assessment implies a linear approach where the counsellor is the expert in the assessment process. Using a traditional approach, career assessment is likely to produce scores or codes which then guide predictions about the career choice process. Qualitative career assessment recognises clients as experts in their lives, places emphasis on the counselling relationship, and thus is more likely to engage client and counsellor in a collaborative assessment process that generates meaning and through which stories are co-constructed.

What does the MSCI offer that is new for qualitative assessment?

Answer: The MSCI is a guided reflection process that engages clients in different learning mediums including visual, auditory, kinaesthetic and verbal interactions. It is grounded in career development, constructivist and assessment theory. However, it also offers broad application to individuals and groups in career counselling, career education and career counsellor training settings.
‘I HAD SEEN ORDER AND
CHAOS, BUT HAD
THOUGHT THEY WERE
DIFFERENT.’
THE CHALLENGES OF THE
CHAOS THEORY FOR
CAREER DEVELOPMENT

ROBERT PRYOR and JIM BRIGHT
School of Psychology, University of New South Wales

This paper highlights five challenges to the accepted wisdom in career development theory and practice. It presents the chaos theory of careers and argues that the chaos theory provides a more complete and authentic account of human behaviour. The paper argues that positivism, reductionism and assumptions of linearity are inappropriate for capturing career behaviour. Equally, predicting effect from cause is difficult and often impossible given the complexities of modern life. This paper calls for career development theory to accept a broader purview and concludes that ignoring other aspects of life both limits and undermines the utility of narrowly defined theories. Traditional notions of logic, rationality and objectivity are called into question. Finally, it is argued that chaos theory provides a natural connection between science and spirituality.

The quotation title of this paper is a paraphrase of a line from T. S. Eliot’s poem ‘Journey of the Magi’ (Eliot, 1969), in which one of the three astrologers at the end of his life reflects that the revelation they witnessed at Bethlehem did not lead to certitude, but to a whole new series of questions— that is a chaotic perspective on reality.
CHAOS THEORY

Chaos theory views reality as complex dynamical systems which have a number of distinctive characteristics (Pryor & Bright, 2003a; 2003b). The term 'complexity' recognises that reality has to be comprehended in its totality, despite what challenges of investigation this poses (Lewin, 1999). The more complex chaotic systems are, the more likely it is that unpredicted events will begin to appear in the course of the functioning of the system. The unpredictability of the weather is a classic illustrative case. The dynamical nature of chaotic systems is a consequence of complex systems' sensitivity to change that can be quite disproportionate to the alteration in the initial conditions. This is popularly known as the 'butterfly effect'.

Up to this point, chaos theory may appear to be only about chaos or disorder, when in fact it is also about order (Kellert, 1993). The systemic component of chaos theory emphasises the interconnectedness of elements which, when functioning as a system, begin to display characteristics of pattern and order. Chaos theory recognises order as the emergent and often synergistic properties of systems functioning (Morowitz, 2002). The leaves on a particular species of gum tree all produce recognisably similar configurations. Order is a consequence of the boundedness of the functioning of a system. This is known in mathematical systems theory as the attractor. Chaos theory introduces the idea of the strange attractor, which is essentially the self-organising patterning of a system which repeats itself, but not in such a way that can always be predicted (Kellert, 1993). That is what it means to be a complex dynamical system. But where does this so-called 'theory of everything' (Morowitz, 2002) intersect with career development theory and practice, and what are some of the consequent implications? This paper addresses some of these issues.

SOME CHAOTIC CHALLENGES TO RECEIVED WISDOM

Five areas of career development are briefly outlined in which chaos theory provides a new perspective on issues that many of us thought were accepted truths.

1. Positivism, reductionism and linearity

Most of us have been taught that the scientific method is exemplified in the laboratory, where the manipulation of predictor variables leads to measured changes of criterion variables, according to stated hypotheses, under conditions in which the effects of all extraneous variables are nullified or controlled. Chaos theory challenges the notion that reality can always be subdivided, partialled out, sample stratified and subjected to ANOVA and regression assumptions of the relationships between variables. If human experience is not understood in terms of the complex interrelatedness of people to others and to their world at one and the same time, then such positivist approaches will fail to capture the emergent properties of such experience, which are often the characteristics about ourselves that we most value such as identity, integrity and meaningfulness. Moreover, if change in complexity is non-linear, then it may be the outlier influence which needs to be investigated rather than disregarded in the attempt to fit regression lines to data. The ‘real world’ calls for designs that are field-oriented, qualitative, flexible, have an open system and mixed-method (Robson, 2002).

2. Predicting effect from cause

The traditional scientific paradigm assumes that the universe operates on a cause-effect chain such that, in theory at least, every effect is predictable. For example, the fact that our ability to predict the everyday behaviour of humans is very poor is typically attributed exclusively to our lack of knowledge of all the necessary and sufficient conditions for that behaviour to occur.

In direct contradiction to this, chaos theory asserts that randomness, chance and unpredictability are not merely consequences of the limits of human knowledge at a particular time, but are instead intrinsic to reality. The more complex a system is, the greater the likelihood that unpredictable outcomes will occur, even with the mathematical precision of initial known formulae (Holland, 1995). Career counsellors have led the way in pointing to the effects of the unplanned on career development. Our own research (Bright, Pryor & Harpham, in press; Bright, Pryor, Wilkenfeld & Earl, in press) has demonstrated that around 70 per cent of various samples of the population can clearly indicate the impact of unplanned events, however defined, on their careers and that such results cannot be accounted for by attribution response sets. It has become fashionable to include, ad hoc, a chance
variable recently in career development formulations; however, only chaos theory has such phenomena as an integral component in its explanation of reality and individuals’ career development experience.

3. Career development theory and only career development theory
In methodology and conceptualisation career development theories have tended to mimic physical sciences. As well, they have borrowed perspectives from other intellectual currents in psychology such as life-span psychology (Savickas, 1997; Super, 1994), social learning theory (Mitchell, Jones & Krumboltz, 1979) and information processing (Peterson, Sampson, Reardon & Lenz, 1996). However, as a rule, career development theories have tended to be formulated and refined within the narrow domain of vocational psychology. Even those working in the closely allied field of vocational rehabilitation typically have bemoaned the lack of incorporation of disability, accident and misadventure into mainstream career development theories (e.g., Jacques & Kauppi, 1983; Szymanski & Hershenson, 1997).

Counter to this trend to insularity, chaos theory is fundamentally a formulation about the nature of reality as a whole. In this, it has application across all fields of human endeavour to understand and interact with reality. As a result, it is possible to have a wide range of chaos theories spanning politics, economics, physics, biology, theology, education and psychology—all the way to career development theory and practice (Morowitz, 2002). The same broad principles which govern the universe as a complex dynamical system are applicable to every individual’s career decision making (Strogatz, 2003). Therefore, in principle, the chaos theory of careers is able to incorporate complex and multivariate influences on decision making, such as globalisation policy, meteorological variation, media bias, cultural stereotyping, history, geography, plague, all the way down to the specifics of the impact of a single motor vehicle accident on someone’s career development.

4. Logic, rationality and objectivity
Although it has been acknowledged for decades that individuals adopt different career decision-making styles, it was always either tacitly or explicitly asserted that the rational and logical use of objective information about self and occupations was the most superior approach and the one that should be taught to counselling clients. The simple problem is that we can decide things irrationally without adverse consequences and most of us do not have minds of logical rigour. Moreover, even if we can rise to the occasion in deciding, and exhibit logic and rationality, the information we use will repeatedly fail the test of objectivity due to the selective perception of the decider, unrepresentative exposure to information, bias in information sources, unstated underlying assumptions of the information, the datedness of the data and so on.

Without a complete knowledge of initial conditions we cannot hope to know in any objective or complete sense how a system will function. This necessarily limits our knowledge, not only of the universe, but for each of us it limits our knowledge of ourselves. All we can do is map parts of the fractal of our own and others’ lives. Some things will always remain hidden (Amundson, 2003).

Moreover, the inherent unpredictability of complex dynamical systems will confound, at some points, our best rational and logical predictions (Holland, 1995). This lays open the potential for the unplanned and serendipitous in the form of magic. Increasingly writers are noting the importance of the possibilities of magic in our experience (Gellat, 1991; Vallence & Deal, 2001). An exclusive emphasis on logic, rationality and objectivity will ultimately stifle some of the essential qualities needed to deal with a complexly changing world of work, such as creativity, imagination and intuition.

5. Science and spirituality
The accepted wisdom among psychologists used to be that these two domains of human experience do not have much overlap and that while psychology may contribute to the understanding of religious behaviour, spirituality really had nothing to tell hard-nosed empiricists and conceptually confined theoreticians.

The resurgence of interest in spirituality in the general community is becoming increasingly reflected in the career development literature. Counselling strategies and assessment techniques abound which deal with spiritual concepts such as purpose, meaning, balance, harmony, passion, mission, commitment, contribution and integrity (Anderson, 1998; Bloch,
Chaos theory stresses pattern and emergent order as characteristics of the functioning of complex dynamical systems. The pattern or fractal of a person’s life and career development are functions of each individual’s strange attractor. The strange attractor can be understood in terms of what really matters to someone, their ‘ultimate concern’, the paradigm they have for perceiving, understanding and acting in the world. Thus, chaos theory draws no distinction between the scientific and the spiritual. They are both elements in the functioning of the complex dynamical system that we call our human existence (Morowitz, 2002).

EPILOGUE

What is being claimed is not that all these new currents of thinking, conceptualising and counselling practice owe their origins to chaos theory. These new realities have derived principally from careers counsellors confronting the daily challenges of 21st century career development, not theorists. Rather, what is being claimed is that chaos theory can provide a coherent understanding of such new currents’ significance, their links to each other and to reality in general.

If a lot of this sounds abstract and theoretical, let us conclude by bringing it down to some real life clients. Recently, a couple who had been involved in a very bad motor vehicle accident two and a half years ago were referred to one of the authors. They had been partners and sole owners of a home handyman business. They had both sustained many severe injuries and the wife had come close to death. Treatment had been long, arduous and painful. As they contemplated the rest of their lives and the future of their work, they agreed that the whole experience had helped them to appreciate the preciousness of each day and to recognise the limits of their control and knowledge, and the tenuousness of all their plans and goals. They were resolved to make the best of the rest of their lives—and to contribute to the lives of others. Their experience over the last two years had infused their lives with a new sense of reality and meaning. They had learned what it is for them to live on the edge of chaos—in fact that is where all of us live our lives.

ACKNOWLEDGEMENT

The authors wish to acknowledge that their work on the chaos theory of careers has been supported by a university research support grant from the University of New South Wales.

REFERENCES

What is the relevance of chaos theory to contemporary career development theory, research and practice?

Answer: Chaos theory provides a coherent theoretical framework for understanding career development thinking and behaviour at both the conceptual and the counselling levels, which incorporates many of the lived realities of contemporary career decision making and career management. Chaos theory integrates chance, uncertainty, spirituality, constructivism, complexity and change—all of which constitute some of the major challenges confronting both counsellors and their clients. In doing so, it offers new perspectives and connections on such challenges, and out of which promising new counselling techniques are being derived. We believe there is a high probability that chaos theory and its derivatives represent the new face of 21st century science in general and career psychology in particular.
Globally, some careers have always been international. Migration is a common human response to hardship at home or to the desire for a better life. Over the last two centuries, Australia and New Zealand have been populated by generations of such migrants. Yet, even migrants’ careers have tended, after migration, to be geographically bounded. Two generations ago, having found the ‘lucky country’, most Australians planned their careers in the context of their own holding, town or district.

After WWII, many of yesterday’s generation extended their attention beyond local and state boundaries to consider careers in a national, if not international, context. ‘Overseas experience’ (OE) has increasingly been considered a birthright and rite of passage for many young Australians and New Zealanders. Nowadays, there is increasing concern—particularly among organisations representing or relying on qualified professional staff such as scientists, engineers, technologists and medical personnel—about the so-called ‘brain drain’ of people educated and trained in one country who choose to develop their career elsewhere (Australasian Research Management Society, 2004).

Globalisation affects not just product and service markets, but also labour markets, as qualified people from poorer countries offer their talents to richer ones where standards of living may be higher and political...
freedom greater. As countries strive to make up the shortfall, immigration continues and expands, bringing in a diversity of new migrants who have chosen to redirect their own careers. Some migrants choose to move on again, or even become citizens of the world, transients with no firm national identity. ‘Global careers’ become objects of study (Inkson & Thomas, 2003). In recent years, Australia and New Zealand have experienced massive inflows of qualified people from Asian countries. Both export their citizens into global careers and are hosts to the global careers of others.

Understanding international migration is of interest not just to geographers and demographers, but also to those who determine national immigration policies, and those whose organisations depend on a supply of skilled labour. Since international migration is a feature of more and more careers, those interested in career development also need to appreciate the ways that careers are interrupted and sometimes promoted by international migration.

Demographic studies often give us an accurate picture of numbers of migrants leaving and entering different countries, and the length of time they stay; however, they fail to help us understand the psychology of migration and the effects on people’s careers. Although internationalisation clearly affects many careers, you will find little if any reference to it in careers textbooks, and the understanding of international career phenomena is not part of the normal armoury of career practitioners and counsellors. We need to open our eyes a little wider.

In this paper we outline a program of research that we have been engaged in sporadically, with various collaborators, for the past seven years. During this time, we have tried to gain a better understanding of the psychodynamics and behavioural characteristics of international careers, particularly the internationalised careers of New Zealanders. No doubt some of the results apply equally to Australians. This research commenced with consideration of OE, progressed to a major study of brain drain, and we plan to proceed to the immigration-oriented topics of brain gain (the acquisition of new talent, the opposite of other countries’ loss) and brain waste (the under-utilisation of such talent through their unemployment and under-employment). An overview of the field and a conceptual scheme for the program is provided by Carr, Inkson and Thorne (2004).

THE BIG OVERSEAS EXPERIENCE
Many research programs start fortuitously. In 1995–96 we were involved in a major career study of New Zealanders’ careers from 1985–95 (Arthur, Inkson, & Pringle, 1999). This era had been a period of dramatic political and business-induced change from a relatively stable careers environment, and the research showed interesting patterns of career resilience and revitalisation under trying circumstances (see also Inkson, 2002).

Examining the data, we noticed the prevalence of OE experiences among young and middle-aged members of our sample, and its distinctive patterns of unplanned, open-ended, improvisational career development in pursuit of geographical and cultural exploration and self-development rather than career development. Despite these characteristics, OE appeared in these cases to have assisted participants substantially, if serendipitously, in their career development. Conceptualised as an increasing worldwide phenomenon not confined to Australians and New Zealanders, OE could be regarded as a form of self-initiated apprenticeship in the new, uncertain, boundary free, globalised world of work promised for the new millennium (Inkson, Arthur, Pringle, & Barry, 1997). The benefits of OE in terms of skill acquisition by the individual might collectively render it a source of national competitiveness (Inkson, Thomas, & Barry, 1999).

The New Careers cases (Arthur, Inkson, & Pringle, 1999) suggested that OE was far from being solely, or even mainly, a career phenomenon. It was also intimately connected with the psychological, self-expressive, social, cultural, and family characteristics and influences of the individual. In 1999–2001 Barbara Myers and Inkson conducted intensive semi-structured interviews with a snowball sample of 50 recently-returned OE’ers living in Auckland, to determine the motivations, predisposing factors, processes, experiences, priorities, and effects of their OE.

The main findings (for a more complete account see Inkson & Myers, 2003; Myers & Inkson, 2003) were:
• OE is largely undertaken for non-career reasons such as desire for travel, geographical exploration, cultural improvement, adventure and escape from current constraints;
• OE is strongly socially sanctioned and supported, especially in family circles;
OE is typically conducted with a minimum of planning. For example, the vast majority of OE’ers have no job to go to. The average time planned to be spent abroad is two years; the average time actually spent is nearly four. OE is exciting and seductive to participants;

- The initial motivation for OE is geographical and cultural exploration and adventure, and it has little direct connection with careers. However, many OE’ers gradually focus on career development more as their overseas time increases, and become more strategic in their choice of work and the priority they give to work experiences;
- OE from New Zealand is mostly (though not wholly) based in the UK. It is extended elsewhere through vacations, particularly in Europe;
- OE is a social experience, frequently undertaken in company with friends and partners. It is complicated by the development, and sometimes the loss, of intimate personal relationships. For example, many OE’ers (about 50 per cent in our sample) who go overseas single, return with a partner, in an interesting form of reverse brain drain;
- Virtually all OE’ers report major personal development in areas such as interpersonal skills, self-confidence and cultural awareness;
- The main reasons OE’ers return are family considerations, particularly concern for ageing parents and other relatives. Home country identity also plays a major part; and
- On return, many OE’ers face major problems of re-adjustment, particularly to a world of work experiences and organisations which is typically much less exciting than the one they have just left. Common responses are major career shifts, taking new tertiary qualifications, and returning abroad for a second OE.

Inkson and Myers (2003) concluded that as career experience, as it emerged in these 50 cases, OE is a benign experience with a strong and productive focus on learning. However, a major limitation of their study was that it covered only OE’ers who had returned home. It did not consider those who were still overseas and who had become part of the brain drain. Such people are a major concern to Australia and New Zealand, for though they presumably develop their skills to at least the same extent as OE returnees, they continue—perhaps to the end of their careers—to employ these skills in the service of other societies and economies, and their talents are lost to their homelands. Therefore, it appeared to be of value to determine the thinking of current OE’ers and longer-term expatriates in relation to their lives and careers overseas, and the possibility of returning home.

**TALENT FLOW**

With the assistance of a research grant from the Massey University College of Business, we set up the ‘New Zealand Talent Flow Programme’. The aim of the program is to examine not just OE and brain drain, but also brain gain through immigration. We are particularly interested in scientific, technical, professional, entrepreneurial and other skilled people who power societal and economic development. Our focus is on the psychology, circumstances and motivation of migrants—an aetiology of migration, perhaps—rather than on raw numbers.

In talking of talent flow, we use the term ‘talent’ rather than ‘brain’ because of the rather exclusive capture of the term ‘brain’ in this context by science and technology groups, in contrast to our focus on all productive talent including professional and business people. We use the term ‘flow’ instead of ‘drain’ because of the wholly negative connotations of the latter term. The literature suggests that the forces governing talent flow are particularly complex, and that any notion of ‘drain’ and/or ‘gain’ based on analysis of numbers is a gross oversimplification (Carr, Inkson & Thorne, 2004).

Our initial project involves the motivation and likely talent flow of current expatriate New Zealanders, both recent OE’ers and long-term emigrants. Ostensibly, the latter group represents a real brain drain—a major loss of human capital from New Zealand. The former group represents a potential loss, if they do not return. Our interest is in their intentions to return, and their reasons for those intentions.

In late 2003 we set up a website (www.newzealandersabroad.org.nz), and posted a questionnaire designed to be completed by expatriate New Zealanders (citizens and permanent residents) providing information on their intentions to remain overseas or return to NZ, their sense of identification with NZ and/or other countries, the factors which attract them to return and those which attract them to remain overseas. We then asked 20 professional
organisations in New Zealand (including professions in business, science, engineering, health, information technology and many others) to draw the website to the attention of their overseas members. Responses from different sources varied markedly according to the vigour with which the professional groups had promoted the exercise.

By the end of November 2003 when we closed the questionnaire, 2210 usable questionnaires had been completed and returned by expatriate Kiwis. We believe our survey is the first substantial study of talent flow so far undertaken in New Zealand. Sixty-three per cent of respondents were male; ages ranged from 20 to over 60, with the mean being in the late thirties; 85 per cent identified as European, 1.3 per cent as Maori, and 6 per cent as Asian; 40 per cent were currently resident in the UK, 27 per cent in Australia, 13 per cent in North America, 9 per cent in Asia, and 5 per cent in areas of Europe other than the UK.

Due to the particularly strong promotion of the survey by professional groups associated with business, many respondents (60 per cent of the total) were accountants, financial analysts, managers and entrepreneurs. As stated above, these are not the groups normally thought of as brain drain—the term used more in relation to scientists, engineers and information technologists. However, business professionals, particularly senior managers and entrepreneurs, are arguably even more important to a country’s economic development. In any case, over 90 per cent of the total sample had at least a bachelor’s degree, over 60 per cent a master’s degree or other postgraduate qualification, and nearly 5 per cent (106 respondents) had doctorates. We believe these people represent vital potential Kiwi resources currently overseas.

The sample included approximately 800 people who saw themselves as doing a first or subsequent OE; 1130 who described themselves as ‘permanently settled’ overseas; and another 270 indeterminate. Despite the high proportion permanently settled overseas, over 90 per cent said they still identified as New Zealanders, though in many cases they shared this identification with another country. Forty-four per cent said they were certain or likely to return to NZ, 27 per cent that they were certain or likely to remain overseas, and 29 per cent were unsure.

In order to identify factors which attract people either to return or to remain overseas, we listed 26 potential factors derived from an analysis of the literature on migration, including factors relating to aspects such as career, family, recreation, money and lifestyle. Respondents were asked to rate each factor on a five-point scale where +2 meant the factor provided a strong attraction to return to New Zealand, and −2 meant it provided a strong attraction not to return. The figures enabled us to construct an ‘attraction to NZ’ score for each factor. We were also able to identify a ‘yawn’ factor based on the percentage of the sample who said the factor drew them equally in both directions or was irrelevant. The results are shown in Table 1.

These results are not surprising. Family, security, lifestyle, social and recreational factors attracted expatriates back to New Zealand; but salaries, career opportunities and business opportunities tended to keep them overseas. Because only 10 per cent of the sample had an outstanding student loan, this factor made little impact, but it can be expected to increase in importance as more and more young people go offshore.

As stated above, this represents only the beginning of our analysis of results. We will produce more detailed reports in the coming months and years. We are completing factor analyses of the attraction-repulsion items to determine their underlying structures. We are investigating differences according to sex, age, occupation and other factors. We have measures of the underlying motivation (for example, achievement motivation) of respondents enabling us to determine whether there are differences between those who intend to return and those who intend to stay away. We will be conducting regression analyses with ‘intention to return’ as the dependent variable and factors such as sex, age, occupation, length of time overseas and motivation as independent variables. We have also collected qualitative data including critical incidents.

**Future Studies**

We are considering replications and more in-depth studies. We hope that researchers from other countries with talent flow issues will be interested in replicating our work. The study is already being replicated by researchers at the Australian Centre for
Research in Employment and Work, Monash University, Australia. We have further studies planned of talent gain: the attraction and utilisation of skilled immigrant labour in New Zealand. We also believe our research has major ramifications for government and business policies regarding immigration, education, human resource development and incentives for mobility and entrepreneurship. In

<table>
<thead>
<tr>
<th>Factors (in order of attraction back to NZ)</th>
<th>Attraction to NZ</th>
<th>Yawn factor %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Parents/older relations</td>
<td>+1.10</td>
<td>15</td>
</tr>
<tr>
<td>Bringing up children</td>
<td>+0.95</td>
<td>13</td>
</tr>
<tr>
<td>Being close to relatives</td>
<td>+0.95</td>
<td>18</td>
</tr>
<tr>
<td>Safety and security</td>
<td>+0.73</td>
<td>30</td>
</tr>
<tr>
<td>Lifestyle</td>
<td>+0.71</td>
<td>14</td>
</tr>
<tr>
<td>Sense of identity</td>
<td>+0.63</td>
<td>40</td>
</tr>
<tr>
<td>Sports and recreational opportunities</td>
<td>+0.54</td>
<td>32</td>
</tr>
<tr>
<td>Friends</td>
<td>+0.39</td>
<td>41</td>
</tr>
<tr>
<td>Home ownership</td>
<td>+0.38</td>
<td>38</td>
</tr>
<tr>
<td>Cost of living</td>
<td>+0.28</td>
<td>38</td>
</tr>
<tr>
<td>Educational opportunities</td>
<td>+0.05</td>
<td>44</td>
</tr>
<tr>
<td>Having fun</td>
<td>−0.07</td>
<td>44</td>
</tr>
<tr>
<td>Developing new relationships</td>
<td>−0.16</td>
<td>64</td>
</tr>
<tr>
<td>Freedom to do what I like</td>
<td>−0.16</td>
<td>44</td>
</tr>
<tr>
<td>Tax system</td>
<td>−0.20</td>
<td>48</td>
</tr>
<tr>
<td>Partner (long term)</td>
<td>−0.22</td>
<td>49</td>
</tr>
<tr>
<td>Ethnic mix</td>
<td>−0.24</td>
<td>61</td>
</tr>
<tr>
<td>Paying off my student debt</td>
<td>−0.25</td>
<td>81</td>
</tr>
<tr>
<td>Tall poppy syndrome</td>
<td>−0.34</td>
<td>67</td>
</tr>
<tr>
<td>Arts opportunities</td>
<td>−0.38</td>
<td>56</td>
</tr>
<tr>
<td>Learning for life</td>
<td>−0.38</td>
<td>50</td>
</tr>
<tr>
<td>Cultural opportunities</td>
<td>−0.47</td>
<td>45</td>
</tr>
<tr>
<td>Challenge</td>
<td>−0.68</td>
<td>36</td>
</tr>
<tr>
<td>Business opportunities</td>
<td>−0.70</td>
<td>31</td>
</tr>
<tr>
<td>Career opportunities</td>
<td>−1.27</td>
<td>14</td>
</tr>
<tr>
<td>Salaries</td>
<td>−1.32</td>
<td>13</td>
</tr>
</tbody>
</table>
an increasingly globalised and competitive world, international talent flow appears to be a phenomenon well worth researching.

REFERENCES

AUTHORS
KERR INKSON is Professor of Management at the Albany (Auckland) campus of Massey University, New Zealand. He has been involved in careers research for 12 years and his areas of research include new career forms, temporary and contract work in careers, metaphors for career, international careers and careers in cross-cultural context. His most recent book is Cultural intelligence: People skills for global business, published by Berrett-Koehler.

STUART C. CARR is Associate Professor and Program Co-ordinator of Organisational Psychology at Massey University, New Zealand. His research interests include expatriate and migration motivation, especially as these relate to community and organisational development. Stuart has conducted and published research on these topics in East Africa, Australia, South East Asia and the South Pacific. His most recent book is Globalization and culture: Exploring their combined glocality, published by Kluwer Academic Publishers.
It is well rehearsed that the shape of employment has changed over the last 20 years. In light of these changes, careers academics, governments, businesses and individuals alike have taken a new interest in understanding what it means to have a career. For example, contemporary career theorists note that there are new opportunities available to us in an environment characterised by more flexible forms of work, which now exist in a global arena of employment (e.g., Greenhaus & Callanan, 1994; Hall, 1996; Handy, 1994). Governments have an interest in helping individuals to understand the evolving changes to the world of work and to learn how to manage their careers accordingly (OECD, 2004). Changes to the structure of firms have challenged old practices of career incorporating notions of tenure, upward mobility and professionalism (Moss Kanter, 1989). Within these new flattened structures (just-in-time workforces, minimal hierarchical levels, and continued redundancies) many firms have abdicated responsibility for career management to individuals. Thus, individuals are now expected to become aware
of the changes to work and to act accordingly to create an employable self through careful career management. We have taken these issues as the basis for our research in a small one-industry town. The studied firm has undergone systematic restructuring and workforce reduction in the last decade, and we are interested in how such restructuring affects individual career prospects and the wider community.

**THE NEW CAREER**

Several assumptions underpin the new career discourse. It is assumed that individuals can no longer expect continued life-long employment. Changes to the structure of employment can be traced to the 1980s; a time when business leaders worldwide argued that increased international competition required labour and organisational flexibility to enable them to be more responsive to changing markets and to help reduce the cost of production to remain economically viable (Brunhes, 1989). The 1980s was a decade of mass redundancies in many countries, industries and firms—including the government sector.

It is also assumed that within a global economy the changes of the 1980s will continue in order to create global competitive strategies for business (Giddens, 1998). This not only means that job security remains uncertain, but the types of work available within any region or nation may change rapidly due to new technology, plant relocation or closure.

It is assumed that a number of individual, business and societal benefits can be gained through individuals actively managing their careers in a volatile environment (Greenhaus & Callanan, 1994). For example, individualised career management is said to lead to the creation of an employable self and more fulfilling lifestyles. Improved career choices are believed to result in lower turnover; hence, reducing the cost of recruitment, and training and development to businesses. The social costs borne by government (e.g., education and social welfare provision) are also believed to be reduced as a result of individual career planning leading to employability.

Another assumption is that individuals can and ought to manage their careers in an environment characterised by continued downsizing and redundancies, and increases in employment insecurity, part-time employment, casualisation, and short-term contracts, and paradoxically longer working hours for some (McBride, 1999). Further, the assumption that merely planning for self-change in this environment will lead to improved lifestyles for all is not supported by global trends of downward pressure on incomes, and a widening gap between the rich and poor within and between nations (Chomsky, 2001; Mander, 1996).

Despite the trends towards more global restructuring of employment, insecure forms of employment and unequal wealth distribution, many governments and businesses continue to insist that individuals are responsible for managing their own careers. Further, many Western governments argue that individuals need to accept greater responsibility for providing for themselves through attachment to paid employment. The provision of careers education, guidance, advice and information has been accepted as one mechanism to help individuals achieve satisfying careers and fulfilling lifestyles by ensuring updated skills and continued employability.

We accept that the fabric of career has changed significantly as a result of globalisation and the underpinning practices of organisation and labour flexibility. However, we have become concerned by the significant evidence that these changes have led to disparate, rather than equitable, outcomes on a global scale. Drawing on these themes, we have begun a research project that attempts to gain insight into the impact of globalisation and organisational flexibility on careers and the wider community in a one-industry town. This project is in the beginning phases, and what we report here is a brief outline of the work we have done to date.

**GLOBAL MEETS LOCAL: A BRIEF HISTORY OF THE TOWNSHIP**

The town that we are conducting our research in may be illustrative of many small one-industry towns throughout the world. The town has one major employer that officially opened in 1954 to help the government solve certain socio-political and economic concerns of the time; notably, to turn a vast forestry estate into saleable products and to generate employment (Healy, 1982). In the past, the firm and industry have been the focus of tight government intervention; not only in the creation of the industry, but also in determining product range and level of competition, and by guaranteeing prices through a combination of...
TRADE TARIFFS AND SUBSIDIES (Roche, 1990). Throughout the 1980s and continuing to the present time, these socio-political and economic concerns (that are tightly aligned to Keynesian macro-economic management) gave way to the incoming neo-liberal sentiments illustrated by the rapid deregulation of the New Zealand economy (Kelsey, 1999). These concessions to the political and economic climate are reflected in mill management (Birchfield & Grant, 1993). For example, the workforce peaked at 5500 in 1980, to rapidly decline to 1500 in 1992 (Hurd, 2004), and currently stands at 770 (Watkin, 2002).

SETTING THE AGENDA: OUR RESEARCH INTEREST IN THIS TOWN
We became interested in researching this one-industry town in 2003, at which time a major strike lasting 12 weeks was underway (Dearnaley, 2003). The strike was in response to management announcements that half the existing workforce would be made redundant, of which, half would be re-hired through an international contracting firm (Graham, 2002). A number of research themes arose from these announcements, three of which are relevant to this paper. These themes are:

- What are the understandings of the townspeople of the restructuring?
- What are the implications of the firm restructuring on the employees that have lost their jobs?
- What are the implications of the restructuring on the township?

These research themes form the basis of the exploratory research phase reported here, which was designed specifically to gain insight into the various issues the townspeople face.

METHOD: PHASE ONE
We conducted six semi-structured interviews with people who have lived or are currently living in the town. Three participants were obtained by emailing all students in our management school inviting participation. We then used the snowball technique, and these participants recommended an additional three respondents. From the outset we set a limit of six interviews. Five respondents were currently student respondents had returned to university as adult students, one of whom had been made redundant from the firm. All of the respondents either had worked at the firm or had family members that worked at the firm. The interviews were specifically designed to obtain these students’ understandings about the changes at the firm over time and the implications of these changes for themselves, the firm and the wider community.

PHASE ONE: GAINING INITIAL INSIGHT
The respondents identified a number of themes that the constant restructuring of the firm had for themselves, their family, the wider community and the firm. These issues primarily related to lost employment. They identified that lost employment had led to community decline as families relocated to find alternative employment. This theme is reflected in the town’s population statistics that show steady decline between 1980 and 2000 (Hurd, 2004). Two of the respondents had in fact lost their jobs through restructuring and had relocated to find alternative employment.

The respondents noted that not all those made redundant could easily relocate or find alternative employment. The themes of age, narrow skill base, economic ties to the town in terms of house purchases and family, and lack of alternative employment in the town were viewed as barriers to leaving and finding employment quickly or at all.

The respondents were able to offer insight into the impact that lost income was having on various members of the remaining community. There was a belief that those with young families were in a difficult position because of the expense associated with young children. They also noted that those with older children and with longer attachment to the labour market would not be as negatively affected by lost income, because their children had left or were about to leave home, and that the parents had a greater number of working years to gain financial security. Some of the respondents believed that lost income was resulting in family pressures, including family violence.

Issues for the township included the impact of lost income on small business survival and loss of social services. For example, one respondent explained how
he had lost his mechanics apprentice as a result of an earlier strike, because less money was spent in the town. The closure of small businesses in the town was also noted. Others knew of diminishing social services provided by government, for example, the systematic downgrading of hospital services. Despite this, one respondent firmly believed that the town still had abortion services but not emergency surgical services (an issue as yet to be verified, however).

Finally, the two participants who had worked at the firm identified a number of issues relating to its long-term survival. Interestingly, neither of these respondents was concerned about their own job loss, and supported the firm’s redundancy decisions due to the high level of ‘slack’. However, they both believed the latest restructuring would impact on the firm’s long-term survival because of reduced training leading to an eventual skilled-labour shortage. They also believed this lack of training would result in increased accidents.

CONCLUSION: PREPARING FOR PHASE TWO
While the themes listed above are not exhaustive, they do indicate the variety of issues that small one-industry towns have when the major employer downsizes. These themes will now be used to begin the next phase of our research, that of interviewing particular ‘groups’ of people—for example, current employees, those made redundant, business owners, service sector organisations and families. Their stories will be located within the socio-political and economic trends that are associated with the town—for example, lost jobs, the growing gap between rich and poor, decreased social services and decreased population. Our third and final stage will be to attempt to gain access to the firm to obtain their perspective on the restructuring strategies. We believe that our findings will provide insight for careers academics, careers practitioners and government.

REFERENCES
Articles

Why do we need to consider social, political and economic issues when discussing career?

Answer: In the large part, the career opportunities available to us are constrained by the number, quality and location of employment. Without full consideration of these issues any discussion on career choice is limited at best and counterproductive at worse.

AUTHORS

SUZETTE DYER has been researching and teaching in the area of careers for eight years. Her particular interests include the impact of globalisation and workplace flexibility on the shape of employment, and the careers of women and disenfranchised people.

FIONA HURD has been engaged in research for three years. Her particular interests include an understanding of the implications of industrial relations frameworks on the organisations, the working lives of employees and the wider community.

THEORY AND PRACTICE

This section is designed as a brief professional review of the article. It provides relevant study questions and answers for readers to test their knowledge of the article.

Are you interested in writing?

ACER Press is keen to expand its list for professionals in Human Resources and Career Development. We would like to talk to you about any ideas you may have. We are particularly interested in manuscripts that are practical and help professionals to develop and implement their skills and knowledge. Publishers at ACER Press can guide you in developing your ideas or research projects for publication.

To discuss proposals for publication, please contact:

Joy Whitten
Tel: 03 9835 7415
Mobile: 0408 034556
Email: whitten@acer.edu.au

Anne Peterson
Tel: 03 9835 7461
Mobile: 0417 386 891
Email: peterson@acer.edu.au

347 Camberwell Rd (Private Bag 55), Camberwell VIC 3124
Visit: <www.acerpress.com.au>
This paper is an abbreviated report on research that examines workplace wellbeing using a model drawn from subjective quality of life (QOL) theory. This underlying theory covers the mechanisms governing subjective wellbeing; the life domains relevant to QOL and their operationalisation; and the psychometric considerations in measuring QOL. If it could be shown that QOL theory applies to wellbeing at work, then we could gain a more holistic understanding of employee work life experience than that provided by the constructs and theory underlying either job satisfaction or work satisfaction. This paper presents an outline of the QOL theory, and describes the constructs and operationalisation of these constructs in the Workplace Well-being Index, which is based on the QOL work of Cummins (1995). It also presents findings from three studies that used the Workplace Well-being Index.

Evidence has emerged over the past 60 years indicating that a fundamental cognitive process governs individuals’ perceptions of wellbeing at work. The data from satisfaction surveys were always moderately negatively skewed (Robinson, 1955), and researchers between the 1940s and the 1970s found unchanging scores on satisfaction measures, in spite of different working conditions (Quinn, Staines, & McCullough, 1974).

Despite the greater sophistication in measurement development, it is noteworthy that more recent studies have shown similar results to the earlier findings. The scores from these studies have been converted to lie on a 0–10 scale to allow for comparisons. One study of 8622 employees in ten countries (Near & Rechner, 1993), that all used the same single item measure of job satisfaction, found that the data were moderately skewed, as expected. The aggregate
of the means in the ten countries was 7.1. Findings from nine other recent studies using faceted measures from many occupations, where working conditions varied widely, were somewhat less skewed. The aggregate mean across these studies was 6.2. Nationally, on the global job satisfaction item the lowest score was for the Italian sample (mean = 5.8) and the highest was for the Danish sample (mean = 7.9). Occupationally, on the faceted measures Palestinian nurses in acute care hospitals were at the lower end of the scores (mean = 5.5) and food services managers were at the upper end (mean = 6.7).

The limited range of means on job satisfaction measures in the studies mirrors that found in the subjective QOL literature. Thus, mechanisms that govern QOL may well apply to job satisfaction. Quality of life theory was developed to explain why satisfaction scores show little variation, despite reflecting widely-differing life conditions. Several genetic mechanisms for the positive bias apparent in the disjunction of environmental influence and subjective wellbeing have been proposed, including personality and homeostasis theory (Cummins, 2003). According to Cummins, Gullone and Lau (2002), the personality traits of neuroticism and extraversion contribute on average 19 per cent and 13 per cent of variance, respectively, to subjective QOL; and traits of extraversion and neuroticism contribute 25 per cent to perception of satisfaction. In relation to these traits, cognitive beliefs of perceived control, optimism and self-esteem combine to give a set point for happiness.

One of the remarkable findings that support subjective QOL homeostasis is the stability of findings with different populations. Cummins (1995; 1998) found the normal range for Western population mean scores to be 7–8 on a 10-point scale. More recently, the data from a single population study shows even greater predictability. The Australian Unity Wellbeing Survey measures the subjective QOL of the Australian population on a quarterly basis. Since April 2001, nine surveys have been conducted, each involving a random national sample of 2000 people. The subjective QOL of the Australian population has varied between 7.3 and 7.6 on a 10-point scale during this time. Moreover, with the exception of the estimate taken immediately following September 11, adjacent surveys have differed from one another by less than 0.1. It is apparent from these surveys that the mean subjective QOL of the Australian population is highly stable.

Despite this stability at a population level, the Australian Unity Wellbeing surveys have identified many population sub-groups whose mean falls below the normative range (Australian Centre on Quality of Life, 2001). Such low values signal a situation where group members are living under sufficiently adverse conditions for homeostatic defeat to be commonplace.

Based on the assumption that subjective wellbeing at work would mirror subjective wellbeing in general, the Personal Wellbeing Index measure was adapted for use in the workplace in the present research. The Personal Wellbeing Index has been under development since 1991, and since then the domains that are most important for the perception of subjective wellbeing have been isolated and validated (Cummins, 1996). The use of these domains in a measure of workplace wellbeing ensures a more holistic approach to measuring people’s experience at work. Furthermore, since the domains cover key areas of perceived quality of life, we predicted that the new measure, which was called the Workplace Wellbeing Index, would be equally valid across all occupational groups and across all levels of an organisation.

The Workplace Wellbeing Index is intended for use in studies of quality of life in workplaces. The index contains a wellbeing faceted scale of seven items and two global wellbeing items. The seven items measuring wellbeing at work cover the key domains of the Personal Wellbeing Index: standard of living, health, achievement, relationships, safety, feeling part of a community and future security. A single global job satisfaction item is typically used in organisational research and so has been included as the first item of the index. A global happiness at work item has also been included.

In the present research, the adapted measure was used in multivariate studies in three different areas: psychological contracts, retention and workplace safety. Only the findings on the Workplace Wellbeing Index are reported here in detail. The hypotheses were:

- Hypothesis 1: The data will be moderately skewed on both the single items and the faceted scale;
- Hypothesis 2: The seven items in the faceted measure will form one construct interpretable as quality of work life, with all of the items contributing to the construct and no redundant items; and
• Hypothesis 3: The means from the two global satisfaction items and the means from the faceted measure will lie within the range of 6–8 (using a 0–10 scale) across the three different employment groups: process workers, employment officers and nurses.

The data from the three groups were also compared to examine the assumption that a measure of workplace wellbeing could provide meaningful information about employee quality of work life over global satisfaction measures.

**METHOD**

**Participants**

Participants were recruited from a food processing company in the Western District of Victoria (n = 72), from a large metropolitan employment agency (n = 80) and from a large teaching hospital in Melbourne (n = 183). Eighty per cent of the participants were female and most of the male participants came from the processing company. The process workers had less job security because the number of operators in the industry was reducing. In contrast, nurses were in short supply and they faced an expanding job market. Such differences should be reflected in the data, and the differences should be viewed as part of a snapshot in time of the companies and not characteristic of these occupations across time. If group differences are found that reflect known circumstances of employees, they will help to support the validity of the measure.

**Procedure**

Questionnaires and a letter explaining the research and the voluntary nature of participation were left at work stations for volunteers to take and return directly to the researchers. The response rate was about 40 per cent.

**Measure**

The nine items in the Workplace Wellbeing Index are shown in Table 1 beside the items comprising the Subjective Wellbeing Index. They all commence with the words ‘How satisfied are you with...'. Responses were given on a scale of 0 (not at all satisfied) to 10 (completely satisfied).

**RESULTS**

The means and the standard deviations on the two global items were very similar, as shown in Table 2. The data were moderately negatively-skewed, as was predicted in Hypothesis 1. A factor analysis of the

<table>
<thead>
<tr>
<th>Table 1: Modification of Subjective Wellbeing Items</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Subjective wellbeing items</strong></td>
</tr>
<tr>
<td>How satisfied are you with...</td>
</tr>
<tr>
<td>Global personal wellbeing</td>
</tr>
<tr>
<td>your life as a whole?</td>
</tr>
<tr>
<td>Personal life domains</td>
</tr>
<tr>
<td>your standard of living?</td>
</tr>
<tr>
<td>your health?</td>
</tr>
<tr>
<td>what you achieve in your life?</td>
</tr>
<tr>
<td>your personal relationships?</td>
</tr>
<tr>
<td>how safe you feel?</td>
</tr>
<tr>
<td>your feeling of community connectedness?</td>
</tr>
<tr>
<td>your future security?</td>
</tr>
<tr>
<td>Happiness</td>
</tr>
<tr>
<td>your own happiness?</td>
</tr>
</tbody>
</table>
seven faceted items could not be rotated because only one factor was present in the data. The alpha coefficient of reliability for the seven-item scale was 0.88, and the corrected item total correlation ranged between 0.48 and 0.68, indicating that all items contributed to the construct and no item was redundant. Thus, all components of Hypothesis 2 were confirmed.

Hypothesis 3 predicted that the means would lie between 6 and 8. This was confirmed for the faceted measure in the Workplace Wellbeing Index, where the value lies at the bottom of this range. Both global measures fell below the subjective QOL range, but remained within the small range of means from international studies reported in the introduction to this paper.

Table 3 provides the findings on global and domain differences between the three occupations. No differences are apparent on either of the global measures or the Workplace Wellbeing Index score (domain totals), as predicted from the theory of homeostasis. However, employment officers scored more highly than nurses in the domains of standard of working conditions and safety. Process workers had the lowest sense of job security. These findings reflect the known circumstances of the three groups, supporting the validity of the measure.

Where a homeostatic effect is demonstrated, a mechanism of domain compensation operates (Cummins, 1999). The homeostatic effect is caused by a cognitive set point in perceived wellbeing. If scores are low on some of the domains, then other domains must be bolstered so that a perception of wellbeing is maintained. By converting the means of each domain into a percentage of the total of domain satisfaction, the proportion contribution of each domain is obtained (Best, Cummins, & Lo, 2000) (see Table 4) and the mechanism of domain compensation can be observed. Differences between groups were found on five of the seven domains in their percentage of job satisfaction. The groups did not differ on the domains of health at work or achievement.

Examining between group differences does not demonstrate domain compensation. Domain compensation is shown through examining the extremes in the profiles of the domains within each group. For ease of comparison, Figure 1 shows graphically the mean domain percentage scores of domain satisfaction. It shows that process workers relied most heavily on relations (16.55 per cent) and did not rely on future job security (11.28 per cent). This is an example of domain compensation. Nurses displayed a similar effect with a low score on working conditions (12.04 per cent), and a relatively high score on relationships (15.76 per cent).

**DISCUSSION**

The key findings from this research are: the Workplace Wellbeing Index meets the standards for a psychometrically sound and valid measure; and valid interpretations of findings on subjective wellbeing at work are not simple, and require an understanding of homeostasis and domain compensation.

The theory of homeostasis predicts that employees will adjust their levels of perceived wellbeing to a preset standard. In this study, the finding that there were no differences across three different measures of subjective wellbeing at work, and across three occupational groups where objective conditions vary, supported the explanation that workplace wellbeing is...
### TABLE 3: GROUP DIFFERENCE FOR FOOD PROCESSING WORKERS (N = 72), EMPLOYMENT OFFICERS (N = 80) AND NURSES (N = 183)

<table>
<thead>
<tr>
<th>Personal work-life domains</th>
<th>Mean</th>
<th>SD</th>
<th>F</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>How satisfied are you with...</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>your job as a whole?</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Process workers</td>
<td>6.32</td>
<td>2.63</td>
<td>0.754</td>
<td>0.471</td>
</tr>
<tr>
<td>Employment officers</td>
<td>6.66</td>
<td>1.73</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Nurses</td>
<td>6.75</td>
<td>2.21</td>
<td></td>
<td></td>
</tr>
<tr>
<td>your own happiness at work?</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Process workers</td>
<td>6.33</td>
<td>2.66</td>
<td>0.65</td>
<td>0.523</td>
</tr>
<tr>
<td>Employment officers</td>
<td>6.70</td>
<td>1.97</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Nurses</td>
<td>6.73</td>
<td>2.47</td>
<td></td>
<td></td>
</tr>
<tr>
<td>total workplace wellbeing?</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Process workers</td>
<td>6.91</td>
<td>1.69</td>
<td>1.58</td>
<td>0.208</td>
</tr>
<tr>
<td>Employment officers</td>
<td>7.33</td>
<td>1.39</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Nurses</td>
<td>7.02</td>
<td>1.56</td>
<td></td>
<td></td>
</tr>
<tr>
<td>the standard of your working conditions?</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Process workers</td>
<td>6.58</td>
<td>2.17</td>
<td>6.14**</td>
<td>0.002</td>
</tr>
<tr>
<td>Employment officers</td>
<td>7.10</td>
<td>2.07</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Nurses</td>
<td>6.19</td>
<td>2.44</td>
<td></td>
<td></td>
</tr>
<tr>
<td>your health at work?</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Process workers</td>
<td>6.58</td>
<td>2.62</td>
<td>1.24</td>
<td>0.292</td>
</tr>
<tr>
<td>Employment officers</td>
<td>7.14</td>
<td>1.80</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Nurses</td>
<td>6.81</td>
<td>2.38</td>
<td></td>
<td></td>
</tr>
<tr>
<td>what you can achieve in your job?</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Process workers</td>
<td>6.92</td>
<td>2.31</td>
<td>0.578</td>
<td>0.562</td>
</tr>
<tr>
<td>Employment officers</td>
<td>7.14</td>
<td>1.64</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Nurses</td>
<td>7.18</td>
<td>1.88</td>
<td></td>
<td></td>
</tr>
<tr>
<td>your relationships with people at work?</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Process workers</td>
<td>7.88</td>
<td>2.05</td>
<td>0.467</td>
<td>0.627</td>
</tr>
<tr>
<td>Employment officers</td>
<td>7.66</td>
<td>2.03</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Nurses</td>
<td>7.43</td>
<td>2.06</td>
<td></td>
<td></td>
</tr>
<tr>
<td>how safe you feel at work?</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Process workers</td>
<td>7.43</td>
<td>2.05</td>
<td>6.00**</td>
<td>0.003</td>
</tr>
<tr>
<td>Employment officers</td>
<td>7.88</td>
<td>1.84</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Nurses</td>
<td>7.03</td>
<td>2.15</td>
<td></td>
<td></td>
</tr>
<tr>
<td>feeling part of your work community?</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Process workers</td>
<td>7.40</td>
<td>2.08</td>
<td>2.047</td>
<td>0.131</td>
</tr>
<tr>
<td>Employment officers</td>
<td>7.44</td>
<td>1.83</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Nurses</td>
<td>6.99</td>
<td>2.08</td>
<td></td>
<td></td>
</tr>
<tr>
<td>the security of your job or work?</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Process workers</td>
<td>5.58</td>
<td>3.12</td>
<td>20.02***</td>
<td>0.000</td>
</tr>
<tr>
<td>Employment officers</td>
<td>6.94</td>
<td>2.26</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Nurses</td>
<td>7.58</td>
<td>2.07</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Note: **p<0.01; ***p<0.001
a phenomenon that obeys the principles of homeostasis found in studies of subjective wellbeing generally. This means that differences will only be found when the conditions are sufficiently extreme to breach the homeostatic thresholds. Thus, all low results outside the standards should be treated as serious danger signals of homeostatic breakdown that should be investigated in the workplace.

Many workplaces conduct interventions to reduce turnover and use satisfaction as an indication of achieved outcomes. The present research demonstrates that both global measures and faceted measures of subjective wellbeing at work are unlikely to show change over time, and it demonstrates that organisations need to use measures specific to the area of the intervention. Norms have not yet been set for the Australian workforce on the Workplace Wellbeing Index; thus, as a rule of thumb and based on the present findings, a mean scale score of around 7 on a 10-point scale can be expected. Should scores on the faceted measure fall below 6.7 (2SD), some investigation of the cause would be warranted.

In addition to demonstrating homeostasis at work, the findings also showed domain compensation similar to that shown in the findings of Best, Cummins, and Lo (2000). Best et al. supported Cummins’ (1999) proposition that a process of domain compensation maintains homeostasis. According to this theory, in a stable workplace employees adjust

---

**TABLE 4: MEAN DOMAIN PERCENTAGE OF TOTAL DOMAIN SATISFACTION FOR PROCESS WORKERS, EMPLOYMENT OFFICERS AND NURSES**

<table>
<thead>
<tr>
<th>Domain</th>
<th>Process workers % total domain satisfaction</th>
<th>Employment officers % total domain satisfaction</th>
<th>Nurses % total domain satisfaction</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Mean</td>
<td>SD</td>
<td>Mean</td>
</tr>
<tr>
<td>Working conditions***</td>
<td>13.52</td>
<td>3.23</td>
<td>13.69</td>
</tr>
<tr>
<td>Health at work</td>
<td>3.31</td>
<td>4.19</td>
<td>13.91</td>
</tr>
<tr>
<td>Achievement</td>
<td>14.39</td>
<td>4.18</td>
<td>14.18</td>
</tr>
<tr>
<td>Relationships*</td>
<td>16.55</td>
<td>4.17</td>
<td>14.93</td>
</tr>
<tr>
<td>Safety at work***</td>
<td>15.57</td>
<td>4.29</td>
<td>15.52</td>
</tr>
<tr>
<td>Feeling part of work community*</td>
<td>15.37</td>
<td>3.58</td>
<td>15.36</td>
</tr>
<tr>
<td>Future job security***</td>
<td>11.28</td>
<td>5.55</td>
<td>13.22</td>
</tr>
<tr>
<td>Total percentage#</td>
<td>99.99#</td>
<td>100.01#</td>
<td>99.99#</td>
</tr>
</tbody>
</table>

Note: Between groups differences on percentage of job satisfaction: *p<0.05, **p<0.01, ***p<0.001.

# Variation due to rounding to two decimal points.

**FIGURE 1: DOMAIN PROFILES SHOWING DOMAIN COMPENSATION**
their evaluations of the domains in order to maintain their perceived level of wellbeing. The idea of domain compensation might be further extended to include a hierarchy among the domains. For example, several of the domains could be considered to impact on perceptions of survival, including working conditions, safety and security. As the contribution of these domains to satisfaction decrease, then relationships increase. This could be called an ‘in the trenches’ effect. Many stories are told about lifelong friendships forming when people are thrown together in very difficult circumstances and people often come to value their experiences together because of these ties.

Domain compensation raises serious issues of interpretation of findings on the domains. For example, straightforward between-group comparisons are not meaningful when taken at face value. The shape of the profile of each group needs to be considered separately. The more differentiated the domains, the more likely it is that a process of domain compensation is operating. Domain compensation is an indication that workplace wellbeing is under some stress and has become unbalanced.

In this research we tested the soundness of a well-based measure of subjective wellbeing at work and found that it meets the requirements of a good measure. Furthermore, we considered homeostasis in the perception of quality of work life and showed that it provides a reasonable explanation of decades of consistent findings on satisfaction, as well as of the present findings. We have also described a way of looking beyond global satisfaction to the salient domains influencing satisfaction and happiness at work. It has been shown that satisfaction measures scores should be interpreted as a profile to take account of domain compensation. This research has resulted in a new measure that has the potential to further open up the theoretically-based study of subjective wellbeing at work for human resource managers and careers counsellors.

References
A person’s perception of their wellbeing at work is generally stable over time and over a wide variety of circumstances. What are the implications for measuring the various forms of satisfaction, if this is the case?

Answer: This stability in a person’s perception of their general wellbeing will mean that global measures will not show significant changes over time. However, changes will be seen on specific domains of subjective wellbeing. Therefore, if single item measures of job satisfaction are used, they should only be used in conjunction with faceted measures.

Since a person’s general level of perceived wellbeing is stable, they adjust their thinking to maintain this. Which domain of wellbeing was scored more highly by those groups who score quite low on some of the domains?

Answer: People in groups that score quite low on some domains scored themselves highly on relationships. This is called domain compensation. By elevating their level of satisfaction with relationships at work, people were able to maintain stability in their perception of their subjective wellbeing. This shows that it is necessary to interpret scores on faceted measures as a profile.
Explanations of career development range from very specific person-environment fit perspectives to broader accounts of career development as a personally or socially constructed process (Savickas & Lent, 1994). This paper offers a macro-level of analysis for adult job and career choices that was derived from my colleagues Hager and Halliday (2002), who first set out a relationship between context, judgement and learning. Following Dewey, they emphasised the contextual aspects of higher-level learning as concerned with judgements that are sensitive to circumstances (Hager, 2001; Halliday & Hager, 2002). In this paper, each of our career decisions is seen as both specific to a situation, as well as the judgemental outcome of a lifelong learning process.

This adult social judgement perspective was translated into a testable perceptual–judgemental–reinforcement model (Athanasou, 2002; 2003; 2004) that is depicted in Figure 1. The framework is relevant for vocational decision making because it categorises career influences neatly within a structure of implicit or explicit factors that serve a range of external or internal purposes. In this framework there is no intention to provide a general listing or a priori classification of elements, rather it is considered that they are varied and idiosyncratic. This framework offers a skeletal structure on which one can superimpose aptitudes, interests, values, temperament, cultural determinants, health, geographic, labour market, socioeconomic, age, gender or any other personal constructs or influences relevant for each individual. Of course, there will be commonalities across groups, but these will only be determined with the benefit of hindsight.

Starting from the left-hand side, the outline in Figure 1 categorises and explores the contextual...
antecedents of vocational judgements as implicit or explicit. The explicit factors in a situation are those elements recognised by everyone as relevant to a specific career decision. However, the implicit factors in a situation are assumptions that may be probabilistic, complex or uncertain. For instance, Athanasou (2003) analysed nine case studies of job choice based on seven implicit factors (e.g., size of the occupation, proportion of full-time workers, earnings, job prospects, gender dominance, unemployment level and age structure) and concluded that job choice was idiosyncratic, that individuals lacked insight into their job choices and probably relied on a few unstated cues.

The right-hand side of the schematic outline in Figure 1 also comprises purposes, which are both antecedents and consequences of judgements. The purposes involve external goods such as earnings, status, prestige, power or influence that may be obtained in many different ways. Some may view these as extrinsic reinforcers. However, the internal goods are vastly different, and represent the powerful and intensely personal aspects related to our principles, emotions and values. Some readers may wish to include intrinsic reinforcers within this category. One may also wish to include negative career reinforcers or vocational punishments within either of these two groups. The following sections of this paper will now focus only on the three major parts of the perceptual–judgemental–reinforcement process (see also Athanasou, 2003; 2004, for earlier accounts of this framework with an adult learning emphasis and the description in this paper follows that presentation closely).

**Perception**

The framework argues that the career decision-making process may be studied in terms of the content modules outlined in the previous section (i.e., explicit or implicit features; external or intrinsic goods), as well as the three interacting, concurrent and major psychological processes—namely perception, judgement and reinforcement. An individual’s perceptions are also coloured by their values, intentions and goals, that is, the external or internal goods described earlier. Parkin (1996) described this unique aspect in terms of developing relevant cognitive schemata:

![Figure 1: The Hager-Halliday approach expressed as a perceptual–judgemental–reinforcement framework (note the model is recursive – after Athanasou, 2002).](image)

The decision maker approaches the decision scene equipped with a frame consisting of a set of schematics (knowledge structures) about such situations. The situation is recognized and the appropriate frame is put in place. This frame defines the status quo and any decision making will result in a change to the frame (p. 127).

It is suggested that career decision making will react to both implicit and explicit features of a career situation in lawful but idiosyncratic ways. This hypothesis lends itself to a focus on intensive investigation of a few individuals using social judgement analysis; and a useful tool for analysing the role of factors in judgement is the lens model approach that allows one to determine the specific influence of cues in a situation (see Athanasou, 1999; Athanasou & Cooksey, 2001).

**Judgement**

An image theory approach to human decision making (see Beach & Mitchell, 1996) is used as the engine for the analysis of judgements in this framework, but the reader may favour other decision-making approaches. Image theory sees decision making ‘as guided by the beliefs and values that the decision maker, or a community of decision makers, holds to be relevant...’ (Beach, 1998, p. x). It takes as its starting point the principles held by each person (i.e., the self-evident truths). It also acknowledged that each person has a ranking of goals that they seek to achieve. Finally, it is accepted that plans or actions are adopted for the achievement of goals. The metaphor of the image arises from visualising or imagining potential...
consequences. Three mental representations contain our principles and goals:
1. value image (our personal values, morals, principles, norms)
2. trajectory image (our goals or aspirations for the future)
3. strategic image (our plans, forecasts or the ways we wish to attain goals).

The two types of decisions, as well as the two types of tests, that are derived from image theory are summarised briefly in Table 1.

It is also recognised that human judgements are influenced by well-documented heuristics and biases (Tversky & Kahneman, 1974) including, inter alia:
• Availability—We tend to use the most readily available information from memory to judge how likely something is. We base this on how easy it is to recall similar examples from our experiences rather than searching for all information that might be important;
• Representativeness—Representativeness is the tendency to judge category membership based on how closely it matches a prototype of the category;
• Anchoring—Anchoring occurs when a starting point limits our thinking;
• Sunk cost effects—The sunk cost effect is the inclination to continue an action that has cost time, money and effort; or
• Confirmation bias—Confirmation bias is the search for information that will confirm one’s suspicions or hunches and the tendency to overlook information that is not consistent.

The evidence is that actual decisions diverge from a rational model. We are not able to deal with large amounts of information at once, so we simplify situations and highlight some aspects. The shortcuts and rules of thumb are developed as heuristics. Moreover, under conditions of complexity and uncertainty, human judgements tend to be notoriously unreliable or inaccurate (see Galotti, 2002). There is every reason to believe that these findings from judgement research also apply to career decision making.

REINFORCEMENT

The third process is conditioning (mainly through reinforcements and punishments), and this has been studied as a formal factor in the psychology of learning from the time of Thurstone. This aspect is not discussed in detail in this paper. Reinforcement is seen not only in the satisfaction related to the internal and external goods, but it also feeds into the future decisions and actions that make the model recursive. Reinforcement, together with perception and judgement, forms the psychological foundations of this framework. But even decision making (which is a covert aspect of human behaviour) ultimately has to be expressed in some form (i.e., performed) in order for an external observer to say that it has occurred. This may include actions, choices or preferences and it is the hallmark of a vocational judgement.

Table 1: Decisions and decision tests in image theory

<table>
<thead>
<tr>
<th>Decisions</th>
<th>Decision tests</th>
</tr>
</thead>
<tbody>
<tr>
<td>Adoption decisions</td>
<td>• adoption screening involves discarding options that are not acceptable;</td>
</tr>
<tr>
<td></td>
<td>• adoption choice involves choosing the most favourable outcome.</td>
</tr>
<tr>
<td>Progress decisions</td>
<td>• incompatibility is assessed as the weighted sum of the violations of one's principles, goals and plans;</td>
</tr>
<tr>
<td></td>
<td>• profitability refers to the strategies available as a function of the nature of the choice (e.g., unfamiliar, complex, ambiguous, unstable), the context for a decision (e.g., irreversibility, iterative, significance, constraints) and the decision maker’s own characteristics (e.g., strategy knowledge, motivation, ability).</td>
</tr>
</tbody>
</table>

Source: Athanasou, 2004
CONCLUDING COMMENTS
The framework that has been developed has combined a range of theoretical standpoints and is not intended for application in everyday professional settings. It has synthesised a number of perspectives into a psychological framework for the study of individual career choices. The aim has been to provide a structure that is flexible, but substantively independent of the phenomenon it is trying to explain. The focus is clearly on mapping an individual’s responses, rather than making statements about group performance or providing a prescriptive basis for career decisions.

This paper took judgements as its focal point and then set this out as a synthetic model for the study of adult job choices. Some testable propositions from the model are:
• there are implicit and explicit factors in one’s career decision making process;
• there are external, as well as internal, goods affecting one’s career judgements;
• the decision frame for judgements comprises principles, plans and goals;
• career judgements encompass adoption or progress decisions;
• there are screening, choice, incompatibility or profitability tests in decisions;
• repeated judgements follow a learning curve for cognitive skills;
• career judgements make use of heuristics; and
• repeated judgements result in discrimination of implicit and explicit contexts.

To summarise, it is proposed that this set of contexts, purposes and cognitive processes might be helpful to describe usefully the judgements involved in career development. No claim is made that this depicts or predicts career development over time. It merely provides an empirical basis for the analysis and description of decision-making at a point in time across a range of contexts and individuals. For the time being the aim has been to provide a framework with which we can analyse job choices in a coherent and structured fashion.

ACKNOWLEDGEMENTS
Preparation of this paper was assisted by a grant from the Australia Research Council. An earlier version of this paper was also presented at the 12th National Vocational Education and Training Research Conference, Perth, July 2003.

REFERENCES
**What are the implications of this framework for the study of educational and vocational guidance?**

**Answer:** The major implication is that career development needs to be studied intensively at an individual level. The inputs into this analysis are the implicit or explicit features of the situation, together with the external or internal goods that are relevant for the person. Superimposed on this are the three major processes of perception, judgement and reinforcement.

---

**What are the implications for the practice of career counselling?**

**Answer:** It may be too soon to speculate that the framework has any practical implication. Rather, the framework suggests that intense consideration must be given to those factors that speak directly to the heart of the individual and that are personally relevant to his or her thinking. It is possible that many of the premises on which career information, guidance services and counselling have been predicated are not germane to our clients.
The South African occupational landscape is characterised by a number of gross imbalances. Higher education institutions currently yield a 49:26:25 per cent output (humanities: business and commerce: science, engineering and technology) (Department of Education, 2001), whereas the ideal output is 40:30:30 per cent. A ‘chronic mismatch [exists] between the output of higher education and the needs of a modernising economy’, and this is evident from the ‘shortage of highly trained graduates in fields such as science, engineering, technology and commerce [which] has been detrimental to social and...
economic development’ (Department of Education, 2001, p. 3). Despite the effect of affirmative action, blatant racial imbalances still define the South African occupational landscape (see Table 1 below). Very few schools in the country have access to the services of trained career counsellors, despite the fact that Cosser (2002, p. 93) found that ‘career guidance, in whatever form … has a positive effect on intention to enter higher education’. This highlights the need not only to improve the quality of career counselling in schools where this facility is available, but, more importantly, to initiate this service in schools where such a service is not offered.

Stead and Watson (1998) contend that career theories have generally been accepted in South Africa, with much of their application focused on white South Africans only. With little or no effort to test underlying assumptions in the South African context, South African career counsellors have traditionally depended on ‘proven’ assessment methods, which were often used in isolation. As the rapidly changing career situation demands a contemporary approach, it is essential for career counsellors to take cognisance of the shift and adjust their academic discipline to accommodate these changes. According to Maree, Bester, Lubbe and Beck (2001) the modified discipline needs to reflect innovative methods, techniques and structures to ensure effective career counselling. Watson and Stead have noted that ‘clearly emerging from more recent career literature in South Africa is the question of what our theory base should be’ (2002, p. 29). To understand the picture more fully, some background information is essential.

**Background to the Current Research**

**Prior study**

In 2001–2002 we investigated the inadequate approach to teaching mathematics to students in the Limpopo Province (one of the poorest provinces in South Africa, it has a predominantly rural population, with high levels of poverty and unemployment, and no access to social and economic infrastructure), to establish the degree to which improving these students’ mathematical problem-solving skills and their approach to studying mathematics could facilitate better achievement. Intervention was aimed at teachers and students in our ‘experimental’ group of schools. Intervention was initially intended to increase teachers’ understanding and acquisition of a problem-centred (problem-solving) approach towards the study of mathematics. Teachers in the ‘experimental’ group received training and were expected to introduce these principles into their teaching and learning of mathematics.

**Results of the prior study**

For the current research, the prior study produced two statistically significant findings: the mean of the paired differences between pre-test and post-test grades obtained in Maree, Prinsloo and Claassen’s questionnaire (1997), as well as in mathematics grades and English grades, differed for the two experimental groups. The worst results for students in both groups were in field 5 of the questionnaire (study environment), which is not at all surprising. Achievement in

<table>
<thead>
<tr>
<th>Profession</th>
<th>N*</th>
<th>N (BLACK MEMBERS)</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chartered accountant</td>
<td>21,422</td>
<td>337</td>
<td>1.6</td>
</tr>
<tr>
<td>Engineer</td>
<td>14,687</td>
<td>347</td>
<td>2.4</td>
</tr>
<tr>
<td>Medical doctor</td>
<td>33,354</td>
<td>2,500</td>
<td>7.5</td>
</tr>
<tr>
<td>Dentist</td>
<td>4,024</td>
<td>63</td>
<td>1.6</td>
</tr>
<tr>
<td>Actuary</td>
<td>497</td>
<td>12</td>
<td>2.4</td>
</tr>
</tbody>
</table>

*Keep in mind that the population ratio black-white is approximately 89:11 (Shan, 2003).*
field 5 did not differ significantly from achievement in
field 2 (maths anxiety), which is to be expected, considering the circumstances of these students.

Sequel
Facilitation of career counselling was virtually non-
existent in schools in the Limpopo region. Our initial
aim of improving mathematics achievement in the
Limpopo Province became less significant. It makes
little sense to help students achieve better in
mathematics, unless they are simultaneously assisted
in making better career choices to allow them to use
their mathematical skills.

PROJECT TWO: THE LIMPOPO PROJECT

General overview
In June 2002 during the latter part of our previous
project, we set out to recruit 100 of the brightest young
minds in the Limpopo Province to enter the
University of Pretoria as first-time student teachers in
the Faculty of Education. Only 58 students were
admitted to the University of Pretoria, mainly because
a number had either failed or had not obtained
sufficiently high matriculation results.

The admitted students were eager to learn and
excited about the prospect of becoming teachers. Most
had studied in schools operating under severe
disadvantage—often with 70–130 students cramped
into a single, often dilapidated, classroom. To ensure
their success, the faculty introduced a comprehensive
support package to assist these students.

The students entered into a rigorous four-year
teacher education program, being taught for at least
40 per cent of their time by the top teachers in science,
mathematics and the humanities in the faculty’s
partnership schools. The faculty offered career
counselling, emotional and spiritual counselling,
academic tutoring, and life skills and physical
development support, which complemented their
academic work. Each of the 58 students was assigned
a personal mentor who met the student weekly for
general support, guidance and encouragement. The
university’s Department of Educational Psychology
supported this mentorship through regular
monitoring and feedback on each student with the
goal of providing optimal levels of support on a
sustained basis. The University of Pretoria invested
considerable resources in this initiative. During 2003,
the faculty spent about R300,000 (AUD$70,000) to
cover initial entrance test fees, miscellaneous hostel
fees, and various other costs for stationery, books,
clothing and pocket money. In addition to funding,
senior faculty staff and lecturers have devoted
considerable time and expertise to the initiative, for
instance by volunteering to serve as mentors.

The first year: Findings
Of 58 students enrolled, 50 passed (86.21 per cent)—
which was beyond our expectations. Clearly, the
innovative package mentioned above bore fruit, as
demonstrated in the outstanding performance of the
Limpopo students at the end of 2003, despite the
obvious disadvantages they faced.

Student migration in 2004—lessons learnt
In 2004, over 50 per cent of students in the Limpopo
group had dropped out of the project to enrol in
different fields of study. This migration was
prompted by a number of factors.

Students were given the opportunity to have career
counselling. In the majority of these cases, student
profiles showed a number of significant changes from
the profiles obtained during previous assessments.
Furthermore, fellow students and lecturers had
cautioned students that education as a field of study
was a cul de sac, and that, ‘You will never have a job
if you carry on studying education’. Also, after having
been exposed to a much wider range of careers, and
after having grown as persons, their needs, interest
profiles and values had changed drastically, prompting a major shift in career configuration. Such factors need to be factored into any post-modern, narrative career strategy.

**OUR CURRENT PROJECT**

**Rationale**

Every headmaster we spoke to during our previous research urged us to facilitate career counselling to schools in the region. In conjunction with our own observations, these requests prompted the current research project, which commenced in April 2004 (funded by the National Research Foundation).

**Aim of the research**

We believe an important part of career counselling is the process that empowers clients to add their own meaning to the counselling process. While the primary focus of career counselling in South Africa is still on using the results of diagnostic measuring instruments, the client's point of view and version of events should enjoy priority. The general aim of this project is to encourage a changed focus of career counselling in South Africa. The specific aim of the project is to assess the possible value of a post-modern, narrative approach to career counselling for students in the Sekhukhuneland, Nebo and Apel regions in the Limpopo Province. The strategy for career counselling which is being piloted in these schools could be developed to serve as a blueprint for other schools in the Limpopo Province and the rest of South Africa.

**Research design**

The overall research design involves a combination of quantitative and qualitative methods. As a part of the qualitative methods, the authors chose an interpretative approach, implying that the aim was to understand the results epistemologically; nonetheless accepting that researchers’ perceptions of reality not only vary, but differ greatly (Denzin & Lincoln, 2000, p. 23).

**Population and sample**

The population was defined as all pupils in Grades 9 and 11 from secondary schools with an enrolment of at least 500 in the Sekhukhuneland, Nebo and Apel regions of the Limpopo Province. The population was stratified as follows: firstly, the strata corresponding to grades (as mentioned above) were identified, the proportion of boys was established for each selected school, and the numbers of girls and boys in each grade were randomly and proportionally selected.

**Intervention**

Intervention is aimed at facilitating students’ and teachers’ understanding and acquisition of a post-modern, narrative approach to career counselling. Visits to schools occur approximately every two months for the duration of a year (eight visits in total).

Three questionnaires were administered to students in the control group: the Rothwell-Miller Interest Blank (RMIB) (Hall, Halstead & Taylor, 1986); the South African Vocational Interest Inventory (SAVII) (Du Toit, Prinsloo, Gevers & Harilall, 1993); and the Career Development Questionnaire (CDQ) (Langley, 2000). Students in the experimental group completed an individual, informal workbook that deals with the identification, scholastic image, free time and relaxation, values and career interests, as well as a career counselling self-knowledge questionnaire. Furthermore, all students complete collages (in order to explore their values, interests and choices) and lifelines (Cochran, 1997). Teachers provided information gained from observing individual students; parents or caretakers (significant others) wrote biographies on individual students; and students submitted autobiographies to the researchers. Group work was conducted to further access and understand students’ strengths and weaknesses, as well as to help each student understand himself better.

**Preliminary results**

The CDQ did not yield any meaningful results, which could be attributed to students having problems understanding the language in the questionnaire. Many of the profiles from the administration of the SAVII either yielded low figures or the profiles were flat and undifferentiated. Although many of the careers on offer were foreign to students, the RMIB yielded the most substantial results, inasmuch that profiles were more clearly discernible. Fields were ranked on mean scores as: outdoors, practical, mechanical, musical, aesthetic, scientific, literary, persuasive, social service, computational and clerical.

In many cases, analysis of the qualitative data yielded rather alarming results. Two examples should suffice to make this point. The following extract from
the life story of a girl (aged 16) shows the extent to which South African society is traumatised by crime and violent behaviour:

‘In 2002, I had to be witness in a court because my little sister was raped by five thugs. I will never forget that evening, when we were dragged to the river in the dark. I still hear her screams. They leave me alone and they grab her, I don’t understand why. It is good to talk about it now, it is the only way I can share the pain with you.’

The lifeline in Figure 2 provides some insight into the extent to which many students in the research region have been traumatised by circumstances beyond their control.

**DISCUSSION**

Generally, South African career counsellors are still caught up in the Western approach to counselling, which uses psychometric tests to guide adolescents to make responsible career choices and decisions (Lubbe, 1999). Career counselling in South Africa is available primarily to people who are able to afford this expensive service (Nicholas, Pretorius, & Naidoo, 1999).

A post-modern approach to career counselling addresses a number of flaws in the traditional approach, especially in respect of disadvantaged students. However, the practical implementation of a post-modern approach shows that there are still many challenges to be met (Arnott, Kubeka, Rice, & Hall, 1997; Blankley, 1994; Howie, 1997; 2001; Maree & Beck, 2004; Reynolds & Wahlberg, 1992):

- **Logistics**—Career counselling services are often not available in traditionally disadvantaged neighbourhoods;
- **Cost**—A post-modern approach to career counselling is still fairly expensive;
- **Time**—A post-modern approach is a relatively lengthy process;
- **Awareness**—There is a lack of student support material to facilitate adequate career counselling, a

![Figure 2: Lifeline of a student from the sample, showing positive and negative experiences.](image-url)
lack of role models, and an almost complete lack of exposure to careers; and

• Language problems—Unless most students are addressed in their mother tongue, career counseling cannot yield optimal results.

The successful implementation of a post-modern, narrative approach to career counselling depends on a number of factors. It is clear that career counselling in South Africa could gain by the implementation of this approach, if the existing shortcomings are effectively researched and addressed.

This paper confirms the need for multiple and flexible approaches, both objective and subjective—since both objective and subjective data are necessary for making a well-informed or appropriate career decision. We realise that the traditional approaches to career counselling also recognise the value of subjective data. If considered in isolation from the others, each of the ‘traditional’ approaches would suffer the limitations of not being capable of providing sufficient information to assist a client in making appropriate career choices. The fact that a number of traditional career choice or development theories recognise that choosing a career is not an impromptu affair, but rather a process that is developmental in nature, attests to comprehensive information (both objective and subjective) being necessary for making an appropriate career choice. Both Super’s view of a career choice as an implementation of the individual’s self-concept (1990) and Roe and Lunneborg’s needs theory (1990) have implications for procedures when collecting subjective data such as ‘creation of collage’, ‘story telling’ and ‘family relationships’. Whether traditionally advantaged or disadvantaged, students need comprehensive objective and subjective information for appropriate career decision making.

Limitations
The limitations of the study include:

• The general value of the research findings is limited, as only a limited number of schools were used, which may not be representative of the population of students who need and deserve career counselling.

• Subjective interpretation, as other researchers could interpret the results and information differently.

• The narrative basis of the model used could limit the effectiveness of the process among clients with language barriers, as the latter would be detrimental to the counselling process.

• It cannot be assumed that the findings would be the same for all traditionally disadvantaged students.

CONCLUSION
The recommendations are not only aimed at improving career counselling practice, but also to serve as a passionate appeal to all stakeholders—namely the government, corporate business, community, schools, career counsellors, parents and students—to become involved in the refinement of the career counselling process. The current perturbing trend in South African schools is to replace qualified career counselling teachers with persons who teach an academic subject. The fact that they know even less about the spectrum of careers from which students may choose indicates that this alarming tendency should be dealt with expeditiously. Students are rarely informed about higher-order needs, which are essential for self-development. Factors like work ethics and remuneration should not be the only measure of career satisfaction.

As in any intervention strategy, the individual and his or her environment must be treated holistically. In addition, Savickas (1993) reminds us that counselling approaches should fit the spirit of the age, if clients are to accept them as useful. We also realise that superficial attempts to deal with scholastic underachievement and career counselling will simply amount to window-dressing.

The major challenge is to provide some hope to many students who will, without our intervention, be doomed to a life of extreme poverty. The success of our research thus far certainly bodes well for the future of the current project, which has the potential to impact on South Africa in a much bigger way.

REFERENCES


In which ways does the research reported in this article illustrate the need for researchers to be flexible in their approach to research and theory building?

Answer: Having set out to conduct research in a disadvantaged region, the researchers soon realised that their quantitative research design was not entirely appropriate for the specific context. Moreover, they realised that the research question being investigated was embedded in a deeper-lying problem. It was essential that the researchers change their strategy during their follow-up project and adopt a flexible, multi-dimensional approach.
COACHING FOR CAREER DEVELOPMENT AND LEADERSHIP DEVELOPMENT: AN INTELLIGENT CAREER APPROACH

POLLY PARKER
University of Auckland, New Zealand

MICHAEL B. ARTHUR
Suffolk University, USA

Change, ambiguity and shifting relationships are recurrent themes in contemporary career development. In turn, personal success in the unfolding knowledge economy calls for self-awareness, adaptability and the ability to work with others. A challenge in career coaching is to help people better develop these kinds of skills, and in turn to help people to contribute better to the contemporary knowledge-driven organisation (Drucker, 1999). A similar coaching challenge applies when working with current or aspirant leaders, namely those charged with helping or seeking to help the knowledge-driven organisation succeed. These leaders need to be successful in their own careers, and to simultaneously encourage and support other people’s contributions to the organisation. In the knowledge economy, a different, more relational, style of leadership is required (Shamir, 1999).

As leaders develop their own careers, and as organisations seek to benefit from leadership behaviour, the twin challenges of career development and leadership development come together. Moreover, contemporary firms must ‘increasingly rely on the knowledge, skills, experience, and judgement of all their people’ (Dess & Picken, 2000, p. 18). In other words, the challenges of career development and
leadership development often reside in the same individual, and are broadly distributed among an organisation’s workforce.

This paper suggests an approach to facilitate both career development and leadership development in a dynamic, knowledge-driven world. The point of departure is the ‘intelligent career’—a theoretically based model that has proven effective in eliciting and working with subjective career data.

**The Intelligent Career Model**

Organisations in the knowledge economy need to broadly practise ‘intelligent enterprise’ (Quinn, 1992) through the application of distinct knowledge-based competencies. Quinn and other writers concur that these organisational competencies fall into three broad areas: culture—reflecting the organisation’s overall sense of mission and purpose; know-how—reflecting what the organisation has the ability to do; and networks—reflecting the organisation’s overall links with suppliers, customers and other business connections.

The three areas of organisational competencies are interdependent. Organisational culture may drive or inhibit the application of effective know-how, for example through the collective efforts of a project team. The development of new know-how may contribute to the development of new customers, and thereby the organisation’s networks. Those networks may also influence the overall culture of the organisation through the kind of work they expect it to perform.

The concept of the intelligent career responds to the three broad areas of organisational competency outlined above. Accordingly, intelligent career theory posits three ‘ways of knowing’, called knowing-why, knowing-how and knowing-whom (Arthur, Claman & DeFillipi, 1995). Specifically, knowing-why connects with company culture, knowing-how connects with company level know-how and knowing-whom corresponds to the company’s networks, as described below.

Knowing-why involves themes of individual motivation, the construction of personal meaning and identification. As such, it incorporates traditional career development concerns about individual uniqueness, reflected in constructs such as personality, aptitudes, values and interests. Knowing-why further incorporates attitudes to family, lifestyle, and other non-work factors that affect career choice, adaptability and commitment.

Knowing-how reflects an individual’s repertoire of job-related skills and expertise. These may include formal qualifications and training, as well as informal and tacit knowledge that emerges from work experience. People may have, or may wish to develop, a broader set of knowing-how skills than their present job demands, and, therefore, may seek to expand or change their work arrangements to enhance career opportunities and employability.

Knowing-whom involves a person’s work relationships and includes supplier, customer, industry, occupational and internal company connections that can support his or her unfolding career. Knowing-whom also incorporates broader contacts with family, friends, fellow-alumni, and professional and social acquaintances. Any of these contacts can enhance a career by providing support, transmitting reputation or affording access to information.

The three ways of knowing are illustrated in Figure 1. They not only correspond to unfolding organisational competencies, but also are interdependent with one another, as the following section illustrates.

**Intelligent Career Development**

Although intelligent career theory is grounded in the three ways of knowing, most career development...
occurs through the interaction among them. Specifically, there are six uni-directional combinations that may be considered.

Knowing-why to knowing-how: A link in this direction occurs when a person comes to understand how his or her values and interests (knowing-why) can lead to the application of specific skills and job-related expertise (knowing-how). Much like traditional vocational guidance theory, intelligent career theory suggests a range of exploratory knowing-why topics, including values, interests, identity and the balance of work and family, that may influence a person’s choice of education, occupation or work experience.

Knowing-how to knowing-whom: A link in this direction reflects how the application of individual skills (knowing-how) may result in new contacts and relationships (knowing-whom). In the work environment, successfully drawing on specific job-related knowledge and expertise may also promote reputation among colleagues or customers. In situations involving teamwork, an individual contribution may add to the effectiveness of the team, as well as to individual or shared reputations.

Knowing-whom to knowing-why: The relationships that comprise an individual’s network (knowing-whom) may be influential in affirming or challenging a person’s identity and self-image (knowing-why). Links in this direction may reflect the impact of specific connections such as mentors and friends. Other links in the same direction can involve colleagues either reinforcing or dampening a person’s motivation to engage in shared activities.

The directions between the three ways of knowing may also move in an anti-clockwise direction in Figure 1.

Knowing-why to knowing-whom: Someone motivated to interact with certain colleagues (knowing-why) would be likely to seek new career opportunities to work with them (knowing-whom). This can include seeking out new opportunities to learn from other people, for example by volunteering to work in a particular team, or under a particular mentor.

Knowing-whom to knowing-how: An example of a link in this direction is when collaborations with colleagues (knowing-whom) lead to opportunities to apply job related skills and expertise (knowing-how). Reputation within a social group may bring referrals for work in other areas in which the individual is unknown. Another way to benefit from a group is to seek feedback that may contribute to enhanced competence, as is reflected in models of ‘360° feedback’.

Knowing-how to knowing-why: A link in this direction occurs when the results of formal or informal performance feedback (knowing-how) have an impact on an individual’s motivation to work (knowing-why). Simply, the perception of one’s performance (perhaps stemming from a lack of feedback), or the direct experience of a work assignment, can have an impact on self-esteem. This can in turn impact on subsequent attitudes towards further work assignments.

In sum, the complexity of career development can be organised into a series of six links between any two ways of knowing. The links provide a structure for considering the separate effects of each way of knowing on other ways of knowing, that is of the six arrows included in Figure 1. The structure also provides a way to integrate separate elements in career development into an holistic view of the person. In the following section, we suggest that this same process may be effective in considering the practice of leadership development.
INTELLIGENT LEADERSHIP DEVELOPMENT

At the same time as ideas underpinning career development have changed, so too have ideas about leadership development. Older, relatively rigid, prescriptions of leadership seem incongruent with ‘intelligent enterprise’ and related new organisational forms. Moreover, evidence of the broad applicability of intelligent career theory (Eby, Butts & Lockwood, 2003) in determining career success suggests the theory may also be applicable to the careers of leaders. The paragraphs below propose some of the ways in which the same links described above may apply in leadership development.

Knowing-why to knowing-how: A link in this direction is evident when a leader is motivated (knowing-why) to act as a role model (Kouzes & Posner, 2003) and consequently demonstrates particular job-related skills and expertise (knowing-how). The motivation may be stronger when coupled with a positive self-image that engenders confidence in applying the relevant skills. Effective ‘situational leadership’ can occur when the required skills are already part of the leader’s repertoire.

Knowing-how to knowing-whom: This link is demonstrated when the application of leadership capability (knowing-how) is recognised by others (knowing-whom). In formal situations, such as in project management, the leader is directly accountable for the work of the followers. In informal situations, knowing how to persuade or convince others to support an agenda illustrates how a leadership competency (influencing others) links to the leader’s intended audience.

Knowing-whom to knowing-why: This link reflects the role expectations of the leader’s intended followers (knowing-whom), the accompanying attitudes with which their expectations are expressed, and their effect on the leader’s motivation (knowing-why). As organisations make the transition from traditional to more team-based structures, the acceptance of leader behaviour by team members becomes a more critical issue, as does the leadership capacity of the team as a whole (Horner, 1997).

Knowing-why to knowing-whom: This process is illustrated in classic trait-factor theories that suggest how particular traits or characteristics possessed by a leader (knowing-why) may be used to influence others (knowing-whom). One application of these theories is to simply place people who exhibit necessary traits into leadership positions (Horner, 1997). However, a more adaptive application can address a person’s motivation to develop the emotional intelligence needed to become a better leader.

Knowing-whom to knowing-how: This link reflects what has been called ‘followership’, involving the way people (knowing-whom) respond to a leader’s behaviour (knowing-how). Followers may either reinforce or challenge the skills that a leader brings to a situation. One outcome can be for the leader to simply become more aware of the situations in which he or she is effective (Fiedler, 1967). However, another outcome can be for a coach to help the leader perform more effectively in a problematic situation.

Knowing-how to knowing-why: Direct feedback from leadership experiences (knowing-how) may provide new data that contributes to the development of the leader’s self-concept (knowing-why). This may be driven by self-reflection, or it may emerge as the direct result of work or project experience that affects the motivation to repeat the experience. In particular, success in the application of existing leadership skills may lead to higher motivation to learn additional skills (Bennis, 1989).

TWO COACHING EXAMPLES

One way that career development and leadership development can be simultaneously facilitated involves application of the intelligent career card sort (ICCS®) career exploration system (Amundson, Parker, & Arthur, 2002). The ICCS® was developed to reflect the three ways of knowing previously described. Working with the ICCS® involves having a client select and rank seven items from around 40 cards three times, once each for knowing-why, knowing-how and knowing-whom card subsets respectively. The cards reflect a range of alternative career behaviours related to the underlying intelligent career model. However, the selected cards are used only as stimuli to elicit subjective data from the client, and in turn to draw on these data in further consultation or coaching.

The particular application of the ICCS® that concerns us here involves linking between themes of career development and leadership development as the conversation unfolds. The following excerpts from two client conversations illustrate how the process can work.
Bill selected the knowing-why card ‘I like to gain a sense of achievement from my work’ and began to talk about the stretch targets he had as a result of his recent promotion. As a young engineer he had always experienced and enjoyed success, and he felt highly motivated and confident in his ability to perform (knowing-why to knowing-how). His confidence was reinforced through previous bonus awards, which were well publicised within the company and, Bill felt, resented by some of his colleagues. Bill further volunteered that he was now in a new leadership position where he had to consider ways to apply his knowledge and skills without upsetting team members (knowing-how to knowing-whom).

Later in the coaching session, Bill moved on to consider his knowing-whom card selection ‘I work with people who can learn from me’. Bill began to acknowledge that what others perceived as an arrogant attitude could bring about a negative reaction from those reporting to him (knowing-whom to knowing-why). He became aware that a focus for his leadership development was to work on his ability to bring people along with him, rather than come across as the ‘lone achiever’ ahead of everyone else.

Jane, a civil servant in a leadership position, selected the knowing-why card ‘I like to influence others through my work’ and explained that she was much more comfortable with an influencing, cajoling approach than with a control and command style (knowing-why to knowing-whom). She proudly described how many of the people she had positively influenced had moved on to better things. However, during her coaching session she realised that although she felt good about her influence on other people’s careers, she also felt she was being left behind.

When Jane moved on to considering her knowing-how selection ‘I seek to become a better leader’, she became aware that her present behaviour was inadequate to maintain her leadership profile. She needed to seek out opportunities to demonstrate skills herself (knowing-how to knowing-whom), as well as facilitating the career progress of others. Over time, Jane became better at representing her own contribution. One outcome was an increased confidence in her ability to take greater initiative without fearing this would be interpreted by others as controlling behaviour (knowing-how to knowing-why).

These brief examples highlight the potential that exists for overlapping and mutually-beneficial coaching for career development and leadership development. Through the application of the ICCS®, the coach can work with the particular meaning that a client attributes to selected cards. The client can then be invited to integrate his or her own subjective data, and consider its relevance and implications under different contexts. The three ways of knowing inherent in intelligent career theory provide an organising framework through which both career development and leadership development may be facilitated.

In some cases, one form of development may take precedence for a client over the other form. In other cases, a client’s priorities may shift over time, or in response to the coaching conversation. In all cases, the approach allows the coach to address issues of both career development and leadership development in an holistic and integrative way.

**References**


AUTHORS

POLLY PARKER is a Senior Lecturer in the University of Auckland Business School, New Zealand. She has a lifelong interest in teaching and learning, which she has applied in both academic and corporate settings. Her PhD is in career management and her current interests and expertise are in the areas of career development, executive coaching and leadership development.

MICHAEL B. ARTHUR is a Professor in the School of Management, Suffolk University, Boston, USA. He has written extensively on career development and also contributed to the literature on charismatic leadership. His current interests lie in extending career theory to accommodate the knowledge economy, as well as in examining how career behaviour itself can stimulate knowledge generation across organisational and industry settings.

Type and Careers

**Type and Retention**

*Allen L. Hammer*

CPP 2003

Studies show that motivation and job satisfaction are directly linked. Yet different employees are motivated by different tasks, values, organisational cultures, and respond to different kinds of rewards and incentives. Understanding these differences can help to improve your chances of retaining your employees and finding the best fit between an individual and an organisation.

**Type and Retention** can help you increase retention of talented and valued employees in your organisation by individualising your retention efforts through the use of type. Designed for organisations, this guide shows how to match individual types to appropriately effective retention efforts for each of the 16 personality types. Ideal for HR professionals, managers, executive coaches, and all others in training and development dealing with retention issues in organisations.

10258K $ 36.95

**Introduction to Type® and Communication**

*Donn O'Day*

CPP 2003

With today’s emphasis on team-based and collaborative management and decision making, communication can make or break an organisation. **Introduction to Type® and Communication** provides a concise overview of communication skills and strategies, practical tips for communicating with others, and developmental tips for each of the 16 MBTI® types, as well as an introduction to differences in communication styles.

10208K $ 26.25

Australian Council for Educational Research
It is increasingly common for young people to be working in casual or part-time paid jobs while still at school. These jobs are either in term-time or vacations, and are typically low wage and in the service sector (Reiter, 1996). In Australia, the proportion of 17 year olds who were employed part-time rose from 21 per cent to 30 per cent between 1982 and 1992 (Australian Bureau of Statistics, 1998; Robinson, 1996). In 1990, 34 per cent of full-time students were working part-time. This proportion increased marginally to 35 per cent in 1995, and jumped substantially to 42 per cent in 2000 (Australian Bureau of Statistics, 2002). This 42 per cent of full-time students equated to some 543,000 young Australians engaged part-time in the labour market while studying full-time. Of these, 42 per cent were full-time students at secondary school, 11 per cent attended TAFE, 40 per cent were in higher education institutions, and 3 per cent were in other educational institutions. Overall, females (58 per cent) were more likely to be in paid part-time work than males. In 1995, full-time students worked an average of 10 hours per week, while in 2000 this was 11 hours per week (Australian Bureau of Statistics, 2002). Similar trends are observed overseas (see Labour Market Trends, 1998; Loughlin & Barling, 2001).

School-aged adolescents who work in part-time or casual employment are motivated by a number of...
Factors. Financial need can be an important consideration (Curtis & Lewis, 2001), even though adolescents from higher income families are more likely to work than adolescents from lower income families (Wright & Carr, 1995). From the student’s perspective, financial need appears to be associated with having disposable income, for example, to buy clothes and consumables (Bedenbaugh & Garvey, 1993), or even to buy things they do not need (Waldman & Springen, 1992). Employment is also seen by the student and others to bestow a number of benefits, such as ‘real world’ experience, and facilitating the transition from school-to-work. Students are seen to benefit from accepting the responsibilities associated with work (Bachman & Schulenberg, 1993), by gaining generic and specific occupational skills (Lucas & Lammont, 1998), gaining interpersonal and social skills (especially for students who lack family and/or school support) (Chaplin & Hannaway, 1996), and being educated about business, economics and consumer affairs (Curtis & Lewis, 2001). Academic motivation and performance are thought to improve from working, as are career development and later employment prospects (McKechnie, Hobbs, & Lindsay, 1999).

In contrast to these benefits to working, other research suggests that part-time employment during secondary school places adolescents at risk, particularly when students work more than 20 hours per week. Longer working hours have been associated with poorer school performance, increased drug and alcohol use, increased delinquency, poorer relationships with family and friends, and higher levels of depression (e.g., Mortimer, Finch, Ryu, Shanahan, & Call, 1996). These differing outcomes have led researchers to hypothesise that it is not just employment status (i.e., employed versus not employed) or work intensity (i.e., number of hours work) that is important for adolescents, but rather it is the quality of work that is important. Greenberger, Steinberg and Ruggiero (1982) have suggested that the quality of adolescent jobs could be compared along three dimensions: opportunities for learning or skill use; social interaction; and exercising initiative or autonomy. Of these, skill use has received the most research attention, with studies showing greater psychological benefit when adolescents use or enhance their skills. For example, skill use in the workplace was found to be associated with a stronger work ethic (Mortimer, Pimentel, Ryu, Nash, & Lee, 1996). Moreover, for males, the acquisition of useful skills on the job has been found to be associated with decreased depressive affect (Shanahan, Finch, Mortimer, & Ryu, 1991) and improved family relationships (Mortimer & Shanahan, 1994).

Although this focus on the relationship between the workplace and adolescent development has been useful, the conclusions that can be drawn from such research remain limited. This is primarily because almost all of the studies conducted to date were cross-sectional in nature. Consequently, it remains unclear whether the differences identified between employed and unemployed youths are outcomes of employment or whether they reflect pre-existing characteristics and experiences. Where longitudinal designs have been utilised, results suggest that adolescents with poorer adjustment may select jobs of a poorer quality (Mortimer, Harley, & Staff, 2002). What is clear is that the vast majority of school-aged adolescents want to work as soon as they are old enough, and of those working part-time, a substantial majority want to increase their hours of employment (Creed, O’Callaghan, & Doherty, 2004).

Benefits also accrue to the employers of adolescent students. Students tend to work in retailing, tourism, hotel and catering industries, where part-time and casual work is considered to be structural. These industries are characterised by long opening hours, competitive markets and intensive labour practices (Curtis & Lewis, 2001). Employers benefit as they are able to pay students lower rates, and part-time workers are less likely to receive work-related training (Arulampalam & Booth, 1998). Students are considered to be more flexible, with employers able to increase/decrease hours or hire/fire at short notice (Lucas & Ralston, 1996). Students are more functionally flexible, that is, they are more responsive to undertaking a wider range of tasks than other employees (Lucas, 1997). They are also perceived as more motivated, responsible, reliable and to have higher inherent ability (Lammon & Lucas, 1999). This means they are perceived to have better social and communication skills, to be more likely to follow instructions, and to be faster learners. Students often take the initiative to find work and are therefore easier and cheaper to recruit (Lucas & Ralston, 1996).
A young workforce is also popular with those employers who are attempting to attract young customers (Lucas, 1995). Seventy-one per cent of the McDonald’s workforce, for example, is under the age of 21 years (Royle, 1999).

Getting and having paid part-time or casual work, then, can be important activities in a student’s life, and adolescent employment constitutes a significant component in a country’s labour market. In this process, job seeking identifies the potential number of jobs from which the student may choose, or be chosen (Barber, Daly, Giannantonio, & Phillips, 1994). It has an important influence on whether the student becomes employed, and influences the quality of that employment (Kanfer, Wanberg, & Kantrowitz, 2001). Job seeking includes activities such as preparing a resume, reading job advertisements, contacting employers and going to job interviews.

Considerable research effort has been expended on identifying the antecedent predictors of job-seeking behaviours in adults. These include personality (e.g., personality will determine the type of job seeking strategy to be used; Kanfer et al., 2001), generalised expectancies (e.g., individuals with an internal locus of control will see getting a job as being under their control), self-evaluation (e.g., individuals with high job seeking self-efficacy will engage in more job seeking and be more likely to persist in the face of setbacks; Kanfer, 1990), motives (e.g., individuals with financial obligations have a greater need for employment), social support (e.g., this is likely to help with the negative aspects of job seeking; Gowan, Riordan & Gatewood, 1999), life history variables (e.g., previous job seeking/work experience [Kanfer et al., 2001], work qualifications [Marshall, 1985], and job search barriers, such as disability [Wanberg, Kanfer & Rotundo, 1999]).

Despite this considerable body of research examining the predictors and outcomes of adult job seeking, no studies have investigated the predictors of job seeking for school-aged adolescents. The main groups examined to date have been new-entrant college graduates, the unemployed, and job-to-job seekers (Kanfer et al., 2001). Research in this area has also largely been atheoretical, although studies have utilised expectancy-valence models (see Feather, 1989) and social-cognitive theories, most recently the theory of planned behaviour (TPB; Ajzen, 1991), which incorporates expectancy-valence components. According to this theory, the immediate determinant of a behaviour is the person’s intention to perform that behaviour. Intention, in turn, is determined by the attitudes held about the behaviour, the subjective norms regarding performance of the behaviour, and the perceived control the person has in carrying out the behaviour. Control influences behaviour both directly and indirectly, via intentions—see Figure 1.

Underlying attitudes are beliefs about the likely outcomes of engaging in the behaviour weighted by the importance of such beliefs. Underlying subjective norms are beliefs about the normative expectations of significant others weighted by the individual’s motivation to comply with these individuals. A belief-based measure of control consists of beliefs about the presence of factors that may encourage or hinder performance of the behaviour, together with self-efficacy beliefs about carrying out the behaviour. Thus, applied to adolescent job seeking, the TPB would predict that job seeking is determined by the student’s intention. Job-seeking intention, in turn, is predicted by the extent to which the student believes there will be positive outcomes from job seeking and the importance of these outcomes; the student’s perception of social pressure and their willingness to respond to this pressure; the level of confidence the student has to engage in job seeking; and their perceived control in the situation.

The TPB has demonstrated its usefulness in predicting a range of behaviours, most notably health and risk-related behaviours (for reviews, see Ajzen, 1991; Armitage & Conner, 2001; Sutton, 1998). A small number of studies have also applied the theory to the prediction of job-seeking behaviour in unemployed individuals (e.g., van Ryn & Vinokur, 1992) and in graduating students (Caska, 1998), and it is put forward here as a possible model with which
to examine the experiences of paid employment for adolescents at school.

Given the potential importance of having labour market experiences while at school, and the crucial role of job seeking in gaining these experiences, more research focus needs to be applied to this area. The predictors of job seeking in school-aged adolescents are still to be identified, and the consequences of engaging in paid work while at school remain to be clarified. Few studies have tracked students longitudinally in an attempt to tease out the causal effects of working while at school. For example, is it that students benefit from working or is there a selection effect for students who get a job? What role do significant others play in students gaining and maintaining their jobs? What is the relative importance of the quality and quantity of social interaction and the ability to exercise initiative or autonomy? What is the relationship between the quality and quantity of student work and positive versus negative outcomes for the employer? Further, no studies have examined the developmental effects associated with not getting work when work is wanted (i.e., the effects of being an unemployed student), or not getting more work when more work is wanted (i.e., being an underemployed student). Only when answers to these questions are provided will policy makers be able to determine the need for practical interventions to advantage students at this interface between school and employment.

REFERENCES


**AUTHORS**

DR PETER CREED is Associate Professor in Organisational Psychology at the School of Applied Psychology, Griffith University, Gold Coast Campus, and member of the university’s Service Industry Research Centre. His research interests include the effects of unemployment on wellbeing and confidence, school-to-work transition, career psychology and psychometrics.

DR FRANCES O’CALLAGHAN is a Senior Lecturer in Health Psychology at the School of Applied Psychology, Griffith University, Gold Coast Campus, and member of the university’s Psychological Health Research Centre. Her research interests include attitude-behaviour relationships, adolescent risk-taking, and the effects of unemployment and other factors on wellbeing.

FIONA DOHERTY is a doctoral student and sessional staff member in Organisational Psychology at the School of Applied Psychology, Griffith University, Gold Coast Campus. Her research interests include school-to-work transition, organisational learning, coaching and strategic planning.
Why is it important to understand the implications of paid work for full-time students?

Answer: An increasing proportion of students are engaged in paid employment at the same time as they are studying. Many students who are not employed want to work, and many students who are employed want to work longer hours.

What are the benefits to students of working part-time?

Answer: The evidence for benefits to students is mixed, with some research showing it does advantage students developmentally to join the labour market early, while other research suggests there are risks associated with working. Recent research has suggested that the quality of employment is more important than the amount.

Do others benefit from students working?

Answer: Industries such as retailing, tourism, hotel and catering, which tend to be the major employers of students, benefit directly. The economy as a whole might benefit indirectly from students having early work experience. Little is known about the impact of student employment on the students’ families; for example, the effect of this paid employment on financial status or social cohesiveness.

How important are job-seeking skills for the student?

Answer: Job-seeking skills include activities associated with identifying and gaining work, including preparing a resume, reading job advertisements, contacting employers and going to job interviews. These skills, which are crucial to finding a job, are quite variable among students, meaning that many students never obtain part-time work even though they want it. Importantly, these skills also determine the quality of the job obtained.

What is known about student job-seeking activities?

Answer: Quite a lot is known about how adults find jobs or transfer from one job to the next, but less is known about job seeking in students. Also, much of the research in this general area has been atheoretical. We have proposed a model, the theory of planned behaviour, which has been helpful in other areas, and is likely to be of use here. Still, we need to know much more about student job seeking and student employment to assist policy makers and enable useful interventions to be developed.

Why is it important to consider theory-based approaches to research in this area?

Answer: Theory-based research provides a framework within which to structure and measure variables that have been found to be significant in particular domains. The theory of planned behaviour, in particular, provides a parsimonious model for explaining the key factors underlying a person’s behaviour and for predicting future instances of such behaviour.
At first glance, this title conjures up a focus on economics, but on reading through the contents list, the reader can immediately see that the dual concepts of life and work are covered in historic, social and economic terms.

Charles Birch is better known as a writer on ecology and biology, while David Paul has a background in human resources and workplace issues. The authors see their work as relevant to a wide range of readers—corporate executives, students and managers and others ‘fundamentally concerned with both lifting profit margins and also the quality of life of their employees’. They have brought together their diverse interests, expertise and knowledge in this investigation of why we are the way we are, how we go about what we do, and where we fit in the global working environment—in an attempt to answer the question ‘What is the point of working?’.

In Part 1, the theme quality of life builds on the inspired answer by a Brazilian, who when asked ‘What do you do?’ came up with the answer ‘Why, I live here’. This sets the scene for a chapter on the social responsibility of organisations, which examines whether work contributes to quality of life and discusses how this quality can be measured.

Part 2 focuses on the quality of working life and the factors that impinge on the maintenance of the historically high Australian standards. The book studies the relationship between work and family life, and the hazards encountered at work, and looks at the modern phenomenon of stress.

The third part concentrates on a global approach to enhancing the quality of life through a renewal of organisational culture. This is based on the quotation ‘Man is born free but everywhere he is in organizations’ (p. 109), and has many references to the Universal Declaration of Human Rights, with its implications for the rights of workers. Female and child workers and their rights are given some separate attention, but overall economic ‘man’ applies to both genders and all ages.

The data in the text is from mid-1990s data, which no doubt was the most recent available at the time of publication. All the data is based on Australian research into workplace accidents, working conditions or labour force restructuring. The last chapter contains recent statistical research and anecdotal evidence, and the conjunction of ecology and people management ideas is most evident in this section.

The chapter ‘Brave new world’ concludes with ‘Ten core principles for increasing quality of life in the workplace’, after outlining a number of examples of the inability or ability of organisations to anticipate the future.

The comprehensive reference list and detailed index add to the value of this publication as a text for students, teachers and lecturers in this original book, and it is most suitable for use in organisational change management, human resource management and work studies courses. The publication is commended highly in the foreword and I can only agree.

Ruth Chapman
Swinburne University of Technology
Book Reviews

THE AUSTRALIAN RÉSUMÉ GUIDE (3rd ed.)

At a first glance, the third edition of Paul Stevens’ The Australian Résumé Guide looks very similar to the 1998 second edition. In general this edition appears the same as the previous one, but it includes two new chapters, only one of which I found really useful. That chapter is ‘Electronic resume design’. It seems to me that Stevens has developed some of his ideas from Chapter 3 of the second edition (Producing your resume) to create this chapter in the new edition. He has added extra useful, current information, which ties in fluidly with the ensuing chapter ‘Websites for jobseekers’—which is not new, but has been expanded in this edition and placed more appropriately than it was before.

The other new chapter is ‘Test your job hunt preparation’, and it is really a checklist which you can use to review your progress. The main problem I have found with these self-audits is that people seem loath to properly consider their responses to them in sufficient depth in order for it to be a constructive tool. However, it could be a constructive vehicle to be used in a life-coaching sense for example. I have found that some clients seem more accountable for the depth of their responses if they are negotiating their progress with another party, rather than with themselves!

I found Stevens’ design tips, keywords and definitions to be timely and current because they align with the growing global trend of e-resumes. In his foreword, Stevens has expanded his discussion on the range of career movements that can sometimes be seen as problem changes in one’s resume: such as having incomplete tertiary education; having had your own business; or having transferred from one career path to another. This is useful because it follows the trend that working people now build up a portfolio of career experiences rather than follow a linear career progression. I have observed in practice that some people express discomfort in tying their varied and seemingly dissonant career experiences together during interviews, especially if they were not in control of the changes in their work life (e.g., becoming redundant due to downsizing, or the job being redesigned). Stevens highlights the need for people to search their past employment experiences for keywords and skills that align with those stated in the required job advertisement or statement of duties. This puts the focus on learned transferable skills, rather than on the specific past employment categories, and takes the stress away.

In summary, this edition is very similar on first appearances to the previous edition. However, I suppose ‘when you’re on a good thing…’ applies as each chapter has been reworked so that it is more relevant and user-friendly. Sample resumes (pp. 46–164) is still the main chapter of use, and that is the book’s key selling point.

The Australian Résumé Guide is an appropriate resource in today’s volatile employment market. It provides many sample resumes for students and others, on which they could model their own resumes. It also provides many examples of both solicited and unsolicited cover letters. It is a useful adjunct to any working career office.

Helgi Anderson
Wollongong West TAFE
Richard S. Sharf’s *Applying Career Development Theory to Counseling* provides a solid link between career development theory and its use in the practice of individual counselling. Its step-by-step approach to theory, and its effective use in counselling, makes it an ideal foundational text for courses in career development, career counselling and career guidance. Sharf explains:

The book is intended for a beginning graduate course of which career issues are a major component. The book can be used differently, depending on whether the emphasis of the course is career counselling, career testing, career guidance, or career theory (p. vii).

It is also an ideal desktop companion for the experienced, and not so experienced, career practitioner.

The third edition of this text includes a number of significant updates and extensions, including a new chapter on constructivist approaches (Chapter 11)—specifically personal construct theory and narrative counselling—which replaces a previous chapter on psychodynamics. Chapter 12, ‘Parental influence theories’, explores recent research on attachment theory as it relates to career development. Chapter 13 ‘Krumholz’s social learning theory’ has been substantially re-written, as has Chapter 14 ‘Career decision making theory’, which investigates the emerging interest in spiritual concerns and its relationship to career development.

Keeping pace with current trends in social theory, Sharf has made additions to each chapter by exploring feminist and multicultural (Native American Indian, African-American and Hispanic) issues in career development and counselling. The growth in this intellectual and moral trend reflects the growing dissatisfaction with the often narrow, white, eurocentric, male perspectives on which the majority of traditional psychological, sociological and economic theory is based.

This edition is divided into an introduction and four parts, ‘Trait and type theories’, ‘Life-span theory’, ‘Special focus theories’ and ‘Theoretical integration’. The text also contains numerous case examples illustrating how each of the career development theories relates to counselling practice—an important feature of the book.

The introduction explores the basic precepts underpinning the various career development theories, as well as an introduction to counselling skills (e.g., attending behaviour, questioning, reflection, reinforcement and testing). Chapters Two to Five investigate four different trait and type theories, which include trait and factor theory, work adjustment theory, Holland’s theory of types and the ubiquitous Myers-Briggs type theory. The ‘trait and type theories’ Sharf notes:

(W)ere the first career development theories to be described … In general, they were developed to analyze traits or characteristics of individuals so these traits could be matched with qualifications required by jobs. Groups of traits or characteristics could be combined so that types of individuals could be identified. Likewise, qualifications of jobs and work requirements could be combined to describe types of work (p. 23).

Part Two ‘Life-span theory’ applies a developmental lens to the career phenomenon by studying individuals across the course of life. Chapter Six reviews Super’s theory which integrates developmental stages, life roles, biological characteristics and the self-concept to create an archway of career determinants. The next chapter explores career
development in childhood through Super’s work, which emphasises the development of self-concept along with the influence of parents and educational institutions on the young person’s life. Chapter Eight continues on to cover the development of interests, capabilities and values in adolescence, and its importance to career decision making. The next chapter ‘Late adolescent and adult career development’ focuses on two main concepts, life roles and life stage. Sharf notes:

Throughout the life span, the importance of roles may change, varying with the stages. When one is first exploring the type of work that he or she would enjoy and trying to choose among occupations, the career concerns are very different from when one is trying to establish oneself in a job, trying to become a dependable worker, and learning how to advance in the profession (p. 247).

Chapter Ten explores the various career transitions (job or career change) and crises (redundancy, accident) that can occur as an adult. It presents models which conceptualise the reactions to these transitions and crises. It also contains an interesting section on the unique career crises that affect women, such as sexual harassment and leaving and returning to work after childbirth.

Part Three investigates the application of constructivist and learning theory to career development, as well as the often forgotten contributions from sociology and economics. Chapter 11 ‘Constructivist approaches to career development’ introduces personal construct psychology, a theory that seeks to empower clients by assisting them to develop their own personal constructs (based on life experience and knowledge) concerning themselves and the world around them. It also introduces narrative counselling; the goal of which is to facilitate an in-depth approach to self-assessment. This facilitates a greater understanding of self-identity and the various meanings constructed around important life events. In the final stage, the counsellor elicits a future narrative that emphasises purpose and potential new roles, careers, and occupations.

The next chapter presents recent research on attachment theory and its application to career development; raising a number of interesting questions about family influence on career choice. Chapter 13 explores social learning and cognitive theory, which argues that individual personalities grow and develop through learning experiences—which have a greater influence on human development than genetic or intrapsychic processes. Krumboltz advocates a cognitive behavioural approach to career counselling, by elaborating a range of techniques that include modelling, role-playing, simulation, goal clarification, countering troublesome beliefs and cognitive rehearsal.

Chapter 14 compares three different types of career decision-making theories—a process, spiritual and cognitive approach. Chapter 15 focuses on the wider perspective of work and the role it plays in Western societies from a sociological and economic perspective. It has a specific focus on the labour market, and the influence of social and economic factors on individual career development.

The final part illustrates how each of the major theoretical orientations can be combined in the practice of career counselling. It also discusses the relevance of career development theories to special issues such as non-counselling interventions, group counselling and some job placement issues. The appendix provides a very useful list of tests and inventories referred to in the text and their publishers’ addresses.

My main concern with this text is the often uncritical nature in which Sharf presents the various theories throughout. This is not to say that the book is devoid of any critical discussion at all, rather in some cases I felt the discussion wasn’t thorough enough. For example some of the trait and factor theories are almost a century old now, and present an archaic and simplistic approach to career counselling. Furthermore, I felt that greater critique was required on the use of psychometric testing (e.g., Myers-Briggs Type Indicator), which has been criticised within the career development and psychology fields over the last ten years.

Potential enhancements would include an initial chapter exploring some of the philosophical perspectives on the historical meaning of work and career, the manner in which it has changed in the present and will continue to do so into the future. The reader would be better served with a sociological perspective that focuses on the changes in work and employment.
What stood out from the start of this comparative report is that the authors Sweet and Watts intended for it to be read widely, rather than gathering dust on a government official’s bookshelf. Understanding that people are busy, and that interest can wane, they provide instructions on how to read sparsely but still obtain the most useful information.

That said, most of those who pick up the report will probably not be too fazed. It is only 171 pages long and the readability level is high, with interesting insights into career development programs in several countries which complement the drier reportage.

Those of us in the career industry will have been watching the unfolding of the Australian Blueprint for Career Development with a level of understanding as to its background. It has sprung, in large part, from the same research base for this report: a review of career guidance policies in 14 OECD countries, which included two international symposia in 1999 and 2001. This report also bases its findings on parallel reviews conducted by agencies of the European Commission and by the World Bank.

One of the main purposes of the OECD review was to make observations about current career guidance practices, and to suggest ways in which governments could more effectively harness career guidance as a tool for achieving public policy objectives for the implementation of ‘active labour markets’. There was a strong focus on expanding the concept of career guidance beyond schools, and to identify existing lifelong learning policies and career services throughout the lifespan, which are conducted in a wide range of settings, locations and times, and reflect the diversity of client needs. For those who want to read more about the actual review, comprehensive up-to-date information is available at www.oecd.org/document/35/0,2340,en_2649_34511_1940323_1_1_1_1,00.html.

There are several recurring themes in this report: the use and potential use of information and communications technologies (ICT); the need for governments to form partnerships and to co-operate with communities; the development of flexible, comprehensive programs which reflect individual client needs; and appropriate training and development for people involved in careers work. (In Australia, results are already being observed via the development of partnerships between leaders in the careers industry and government.) The report stresses that change is required at the system level, rather than making small changes at functional levels.

The first chapter addresses the need of policy makers for career guidance services to improve the likelihood of all citizens to be gainfully employed (and consequently less reliant on government and taxpayer
Book Reviews

support) for as much of their lives as possible. The next chapter discusses ways that career guidance services might be delivered more effectively to ensure that this happens, with the emphasis on longer-term strategies rather than short-term fixes. The report then looks at specific groups: Chapter Three focuses on young people (both in and out of school, and tertiary students), and Chapter Four focuses on adults.

Ensuing chapters are devoted to alternative methods of career guidance (e.g., group guidance; self-help services, including use of ICT; using community members to deliver parts of programs; creation of open-access resource centres; wider use of support staff; and outreach methods), the need for good quality career information (about self, education and training opportunities, and about occupations), staffing, training of career professionals and funding.

The role of governments is discussed in Chapter Nine, with two main foci: to provide strategic leadership, but in co-operation with other stakeholders; and in gathering evidence and data, seen as important tools for policy making and to strengthen the voice of consumers (taking the form of, for example, client need and satisfaction surveys, and community consultations).

The final chapter presents several key challenges that face policy makers in designing lifelong guidance systems, and the choices involved in creating practical programs. There is a heavy emphasis on the need to create systems that promote career decision-making and career self-management skills, and which produce high quality impartial career information. These systems also need to be flexible, matching the level of personal help to individual needs. A tall order indeed!

As a career professional, I was particularly drawn to Chapter Seven, which looks at the issues of staffing career guidance programs. Asking the question, ‘Is career guidance a role, an occupation or a profession?’ the report argues that the career guidance workforce is weakly professionalised in most countries. One reason is this: even though career professionals are usually highly qualified (many have post-graduate certificates and diplomas), career guidance is often not a specialised function. Rather, it is one that is provided by a person of another profession (for example, teaching or counselling). As a Victorian, I was interested to find out that career guidance specialists are employed in secondary schools in New South Wales. In Victoria this is still, lamentably, very much a closed shop, at least in government sector schools. Often teachers with no training at all are handed the role, and only those who are genuinely interested seek out professional development for themselves. More may be inclined to do so following Dr Brendan Nelson’s recent announcement of a scholarship program.

Those in private practice will be interested in the chapter on funding. This has traditionally been a low priority, with emphasis on cheaper services, except in the areas of outplacement services and published materials. One unresolved issue faced by private practitioners is what I call the ‘Who pays?’ syndrome. Tied to the lack of status and recognition of career professionals, many people who can afford the service don’t see the value, while those in desperate need are often the least equipped to pay a reasonable rate. As an issue this is not substantially addressed, yet it is a real problem for those of us who need to feed ourselves while at the same time viewing what we do as a worthy vocation.

If this report has a fault, it is mainly due to factors outside the control of the authors. The information contained therein is fast becoming outdated. Due to the dynamic nature of the employment industry and current government policy (no doubt creditably due to the work of the authors), and this being a hard-copy edition, I feel, especially with the progression of time, it will best be read as a historical document rather than as a guiding tool. However, the issues raised should remain topical for some years to come, and there is plenty of food for thought. I would recommend it to anyone who is interested in global and/or national practices or policies in the dynamic field that is career development. You can obtain further information about the current status of Australian Blueprint for Career Development on the Miles Morgan website: www.milesmorgan.com.au

Julie Farthing
Career Consultant
Career Dimensions, Victoria

72 Australian Journal of Career Development Volume 13, Number 3, Spring 2004
Globalisation engenders widely divergent opinions and projections, ranging from rosy depictions of a flexible, worldwide borderless labour market to dire scenarios of severe polarisation between labour market ‘winners’ and ‘losers’. Is the positive potential of globalisation being realised? Are transnational careers becoming a reality? What effects are uncertainty and continuous change having on career development? This publication explores such questions related to careers in the global environment.

Are Companies Exporting More and More of Their Work?
The reduction of trade barriers, opening of new international markets, and advanced information and communication technologies have had a resounding effect on the job market. It is estimated that over two million workers in the US have lost their jobs in the last several years due to business closures and layoffs (Benjamin & Perry, 2003). Although higher productivity and new management and hiring practices have had some influence on the loss of jobs, a growing number of companies are moving their operations to other countries where the cost of wages is cheaper than in the US (Benjamin & Perry, 2003). Many of these job losses have been in the manufacturing industry, involving mostly blue-collar workers. However, more recently, many white-collar jobs are going to India (for financial services) and China (for manufacturing) (Benjamin & Perry, 2003; Edgardio et al. 2003; Kelly, Brannick, Hulpke, Levine, & To, 2003; Lee, 2003; Rossheim, 2003). In the next few years, US financial institutions plan to ship more than 500,000 jobs abroad as a way to reduce their operating costs (Benjamin & Perry, 2003; Lee, 2003). ‘John C. McCarthy of Forrester Research Inc. predicts that at least 3,300,000 white-collar jobs and $136 billion in wages will shift from the US to low-cost countries by 2015’ (Edgardio et al., 2003, p. 51).

Haglund (2003) contends that it is the increased productivity of American workers, rather than globalisation, that is costing jobs in the long run. New technologies have made us more efficient and productive, thus reducing the demand for more workers. Reich (2002) asserts that as the mix of jobs changes, workers must be prepared to upgrade their education and skills or they will lose ground. He states that ‘even if a country were to erect a wall around itself and secede from the global economy, many jobs would still disappear and the people who once performed them would be likely to find themselves in new jobs paying less than the old, especially if they lack the skills for the new’ (p. 120). Thus, once again, we hear that work in the knowledge economy requires continuous lifelong learning (World Bank, 2003).

Do Career Benefits Occur from Global Integration?
Workers who are educationally, socially and mentally prepared for a changing workplace will be able to reap benefits from global integration. The demand will be for workers who are creative and innovative, who have the basic skills and technological competence to succeed in a changing work
environment. Instead of task-specific skills, these workers must have decision-making and problem-solving skills and be able to learn on their own and with others (World Bank, 2003).

Education and flexibility will be the key for many workers. Newbury (2001) found that employees who work in more interdependent offices, where they are exposed to shared clients from other countries, are more likely to see the career benefits from global integration than do those in more locally-embedded offices. Although change is difficult for many workers, those who embrace change are seeing benefits. For example, David Nowicki, a marketing director for Bytemobile, a wireless-telecom company, spends about 50 per cent of his time on business overseas, which could interfere with his family life. However, he has chosen to have his wife and son accompany him. His family has ‘ridden elephants in Thailand, explored the pyramids in Egypt, and hiked the Great Wall of China. “We’re enriching our lives with this incredible global experience,” says his wife Laura’ (Gimbel & Springen, 2003, p. E4). Unfortunately, these options are available to a precious few, most certainly those with high levels of education.

Globalisation can also have a positive effect on jobs in the US. Based on a report of the Census Bureau, it is estimated that labour demand will exceed supply by 2013. And, by 2031, ‘the American work force may be 27.9 million short of the 57.1 million new workers the country will need’ (Osterman, Kochan, Locke, & Piore, 2002). These shortages will be primarily in fields that require higher degrees in education and increased skill levels realised through post-secondary training (Reich, 2002). Thus, although globalisation may result in the loss of lower-end jobs to other countries, jobs in fields where the level of expertise is high will remain in the US (Rossheim, 2003).

**WILL LOW-SKILLED WORKERS FACE UNEMPLOYMENT?**

Experiencing the downside of globalisation are those workers who have high school education or less. ‘From November 2000 to November 2001, the unemployment rate for persons with less than a high school diploma increased from 8.2 per cent to 10.0 per cent’ (Osterman et al., 2002, p. 740). Many of the job losses were in assembly and machine operating, production crafts, services and transportation occupations. At the same time, jobs in managerial, technical specialities, professional groups and protective services grew by one million (Osterman et al., 2002). There is no question that education will play an increasingly important role in the employment scene.

Education affects not only the skill and earning power of workers in this country, but those in other nations as well. There has been an explosion of college-educated men and women in New Delhi, Manila, Shanghai, Budapest, Bulgaria, Romania and South Africa who are being tapped by the global market for their services (Edgardio et al., 2003). Low-end jobs are going to countries where labour is cheap, and jobs that are mentally challenging and require high levels of expertise are going to countries where workers are educated (Cohen & Zaidi, 2002; Rossheim, 2003). When the global transfer of skilled workers is coupled with the advent of new information and communication technologies, it exacerbates the gap that already exists between the haves and the have nots. The highest skills and jobs tend to be concentrated among the most privileged groups in all nations (Nadesan, 2001).

Although jobs in the service areas—particularly those in the health service field—are increasing, whereas those on the assembly lines are disappearing, most of these jobs are traditionally low paying. They do not provide health care insurance, pension benefits or even a living wage. People in these jobs tend to be allocated the worst hours and are not entitled to sick leave or vacation benefits (Benjamin & Perry, 2003).

Lifelong learning appears to be the only key to secure employment. Education affects not only the skill and earning power of workers, but also the economy as a whole. Crime reduction, social cohesion, income distribution, charitable giving and more efficient labour market search can be attributed to education (World Bank, 2003).

**ARE JOBS IN THE NEW ECONOMY LESS LIKELY TO REFLECT TRADITIONAL EMPLOYMENT?**

Careers in today’s economy are no longer characterised by upward moves that result in increased income, status and power. Today, career moves are lateral and characterised by job switches and temporary moves that reflect both upward and down-
ward turns (Kelly et al., 2003). There is significant global movement towards the hiring of temporary skilled workers, particularly in countries where skill shortages require that temporary workers be imported until the country can develop its own pool of skilled workers (Iredale, 2001). The facilitation of such work transfers is justified on the basis that these transfers are temporary and that the transferred workers are mobile and do not want to remain in the country permanently (Iredale, 2001).

Thus, work in organisations is increasingly portfolio-centred, rather than position-centred (Templer & Cawsey, 1999). Employees are being hired to accomplish specific tasks and when those are finished, their continued employment depends on their ability to accomplish other pertinent tasks, whether within that organisation or another. The high cost of health insurance and pension benefits has contributed to this trend towards temporary or flexible employment, as many organisations will not provide these benefits to their temporary employees.

Workers in the fastest-growing industries are more likely to be in contingent or alternative employment relations (Newmark & Reed, 2000). The increase in older workers, working mothers and retired workers re-entering the workforce has also contributed to flexible staffing arrangements. For many of these workers, flexibility has been the impetus triggering their engagement in a specific organisation and sometimes in the workforce in general.

From the standpoint of globalisation, work need not rely on taking assignments in other countries. However, employment in the global economy will require understanding and appreciation of a wide variety of cultures and the ability to work cooperatively and collaboratively in teams and across cultures (Nordgren, 2002).

**CONCLUSION**

Workers in our globally integrated society need to anticipate, recognise and adapt to the changing requirements of the new economy and workplace by ‘developing new sets of skills and acquiring new foundations of knowledge’ (Adler, 1998, p. v). Taking responsibility for one’s personal career management appears to be the prevalent strategy for increasing one’s marketability in today’s workplace. Human resource managers can help current employees in this

endeavour by incorporating in their clients an awareness of the changing reality of careers, emerging organisational structures and environmental situations (Kelly et al., 2003). ‘As the Committee on Economic Development has noted, in the global competitive labour market, “the most sought after workers will be those with the most education and occupational proficiency”.’ (Adler, 1998, p. v)

**REFERENCES**


Careers Forum


This project has been funded at least in part with federal funds from the US Department of Education under Contract No. ED-99-CO-0013. The content of this publication does not necessarily reflect the views or policies of the US Department of Education nor does mention of trade names, commercial products, or organisations imply endorsement by the US Government.

EXAMINING POST-SCHOOL PLANS AND ASPIRATIONS

A study completed by the Australian Council for Educational Research (ACER) for the Smith Family has found that family wealth has a weak affect on students’ post-school plans. Gender, ability and vocational orientation are the most important factors influencing post-school plans.

The study, *Post-school plans: Aspirations, expectations and implementation* forms part of the Smith Family’s research program into understanding how children and young people from low income families overcome financial disadvantage in making a successful transition from school into the world of work.

The report describes the post-school plans of a group of young Australians in the late 1990s; the factors associated with the development of these plans; and associations between the types of post-school plans and a student’s predisposition towards lifelong learning. The study used data collected by ACER for the Longitudinal Surveys of Australian Youth (LSAY) and the OECD’s Programme for International Student Assessment (PISA) projects.

Students participating in the LSAY study were surveyed in Year 9 and asked what their plans were for their first year after leaving school. Most young people (around 60 per cent) planned further study. A fifth of students did not know what they would do in the first year after leaving school, while 40 per cent of students did not know what their parents had planned for them after leaving school.

Family wealth or socio-economic status was found to have a weak effect on post-school plans. However, young people from low-income families find it harder to realise post-school plans for university study. A little over 60 per cent of students from the lowest socio-economic backgrounds who planned to go to university had achieved their goal. This compares with 80 per cent of students from the highest socio-economic backgrounds. Financial disadvantage was not seen as a barrier to post-school study when students opt to study at TAFE or pursue other vocational options.

Girls were more likely than boys to plan post-school study—either full-time or part-time—and nearly twice as many boys (40 per cent) as girls (20 per cent) had no plans for any study.

A student’s vocational orientation also had an effect on their post-school plans. For example, a high proportion of students who enjoyed working with their hands had no plans for post-school study. In contrast, nearly all students who had a preference for abstract thinking, particularly of a scientific nature, intended to study full-time.

Family wealth also does not appear to be associated with having an orientation towards lifelong learning. No association could be found between the wealth of the family and levels of effort and perseverance by students.
students at school. There was some suggestion that where material resources are needed to support an orientation to lifelong learning, family wealth has some impact, but it is otherwise not an important factor.

The results from this study indicate that young Australians have a good understanding of their own interests and abilities, and make their post-school plans accordingly. Policies designed to enhance student outcomes, by encouraging the development of a positive lifelong learning orientation and encouraging students and their families to formulate post-school plans, may need to consider the gender, interests and abilities of young people. This may mean acknowledging that, typically, girls have different interests from boys, and that most young people have a good idea of their abilities and what they expect that they can reasonably achieve.

In response to these findings, the Smith Family has called for the establishment of a national mentoring strategy to ensure students from low income families have the skills, role models and personal support they need to go on to TAFE or university. It also called for more effective career counselling in schools to ensure that students are well informed when it comes to making decisions about their post-school options.

Further findings and information can be found in the report, Post-school plans: Aspirations, expectations and implementation, by ACER researchers Adrian Beavis, Martin Murphy, Jennifer Bryce and Matthew Corrigan. The report is available through The Smith Family’s website: www.smithfamily.com.au

$4.5 MILLION TO STRENGTHEN CAREERS ADVICE

A $4.5 million funding boost from the Australian Government to assist in building professional standards and career opportunities for careers professionals was announced at the AACC conference on the Gold Coast, in April. The funding is to be used for:
  • developing an accreditation scheme for careers practitioners;
  • a three-part professional development package for careers practitioners;
  • a new scholarship scheme to reward Australia’s most outstanding careers teachers;
  • a ‘tear out pack’ for parents advising their children on career options for inclusion in the 2005 Job Guide delivered to every Year 10 student throughout Australia;
  • initiatives to strengthen the 216 local community partnerships assisting schools, TAFEs, universities and local industries to advise students on career choices;
  • careers forums for school principals and careers advisers to be held in conjunction with major careers expos across Australia; and
  • infrastructure for a new national careers telephone helpline service.

Careers counsellors and teachers in schools across Australia will be among those to benefit from the increased support, which will help them to deliver tailored, high-quality careers advice to prepare students for life and work. Professional careers advice helps young people develop strong career management skills, make smart choices and achieve their aspirations.

To encourage best practice approaches to careers guidance, the Australian Government will recognise and reward outstanding careers teachers in all states and territories by providing scholarships—assisting them to undertake postgraduate careers education courses or short-term industry placements.

Of this money, $95,000 has been ear-marked for the Career Industry Council of Australia (CICA)—the peak body for Australian careers associations—to help it run a forum to involve members in the wide range of careers initiatives available, to develop professional standards for careers practitioners and to design an accreditation process.

Source: Dept of Education, Science & Training
Contact Virginia Cook on: 0412 971 323
DEVELOPMENT AND IMPLEMENTATION OF PROFESSIONAL STANDARDS AND NATIONAL ACCREDITATION FOR CAREER PRACTITIONERS

The Career Industry Council of Australia (CICA) is the national peak body for Australian career practitioner organisations. CICA currently has 11 member organisations. The Department of Education, Science and Training (DEST) will work in close collaboration with CICA on two projects: the development and implementation of professional standards and national accreditation for career practitioners; and a national forum on Australian Government career initiatives.

CICA will be funded through a grant for $95,000 to support the development of professional standards and, following this, to design an accreditation process for existing and future careers practitioners across the industry. Work will commence shortly, with the aim of a national accreditation design by June 2005.

Source: Dept of Education, Science & Training

AWARD WINNING CAREERS INITIATIVE

The University of Technology, Sydney Careers Service has won the National Association of Graduate Careers Advisory Services (NAGCAS) Best Practice Award for their *Net that Career* website. The website, which the service developed in collaboration with staff in the faculties, offers online general and faculty-specific careers information and resources via the careers service and faculty websites. www.ssu.uts.edu.au/careers/

FORTHCOMING CONFERENCES

**SYDNEY, NOVEMBER 2004**
**CAREERS ADVISERS ASSOCIATION OF NEW SOUTH WALES ANNUAL CONFERENCE**
25–27 November, 2004
Menzies Hotel, Sydney
http://www.caa.nsw.edu.au/

**PERTH, NOVEMBER 2004**
**NATIONAL ASSOCIATION OF GRADUATE CAREERS ADVISORY SERVICES CONFERENCE—CONNECTIONS: BEING HEARD, HEARING THE MESSAGE, MOVING FORWARD.**
28 November–1 December
Jointly hosted by the three Western Australian Universities from the WA division of NAGCAS—Curtin University, Edith Cowan University and Murdoch University.
http://www.gradlink.edu.au

**MELBOURNE, NOVEMBER 2004**
**AUSTRALIAN ASSOCIATION FOR RESEARCH IN EDUCATION**

**ANNUAL INTERNATIONAL EDUCATIONAL RESEARCH CONFERENCE—DOING THE PUBLIC GOOD: POSITIONING EDUCATION RESEARCH**
28 November–2 December

**CANBERRA, MARCH 2005**
**AUSTRALIAN ASSOCIATION OF CAREER COUNSELLORS INC 14TH NATIONAL CONFERENCE—TURNING POINTS: ENGAGE, ENERGISE, EMPOWER**
Pre-conference professional development—29 March
Conference—30 March–1 April
Rydges Lakeside Hotel, Canberra
http://www.aacc.org.au/

**SYDNEY, NOVEMBER 2005**
**AUSTRALIAN ASSOCIATION FOR RESEARCH IN EDUCATION ANNUAL CONFERENCE**
27 November–1 December
University of Western Sydney
FROM THE JOURNALS

INTERNATIONAL JOURNAL FOR EDUCATIONAL AND VOCATIONAL GUIDANCE, 4(1), 2004
Improving the problem-solving and decision-making skills of a high indecision group of young adolescents: A test of the ‘difficult: no problem!’ training
Laura Nota & Salvatore Soresi

Tradition versus technology: Careers fairs in the 21st century
Christiane Brennan, Margaret Daly, Eileen Fitzpatrick & Edward Sweeney

Internet-based guidance in quasi-markets for education in Sweden
Agneta Ranerup

Some cornerstones in the development of a contextual action theory of career and counselling
Ladislav Valach & Richard A. Young

JOURNAL OF VOCATIONAL BEHAVIOR, 65(1), 2004
The protean career: A quarter-century journey
Douglas T. Hall

Employability: A psycho-social construct, its dimensions, and applications
Mel Fugate, Angelo J. Kinicki & Blake E. Ashforth

Adjusting to job demands: The role of work self-determination and job control in predicting burnout
Claude Fernet, Frédéric Guay & Caroline Senécal

Emotional intelligence: A meta-analytic investigation of predictive validity and nomological net
David L. Van Rooy & Chockalingam Viswesvaran

Images of career: Nine key metaphors
Kerr Inkson

Career self-management: Its nature, causes and consequences
Zella King

Role models in career development: New directions for theory and research
Donald E. Gibson

Side-bet theory and the three-component model of organizational commitment
Deborah M. Powell & John P. Meyer

BRITISH JOURNAL OF GUIDANCE AND COUNSELLING, 32(2), 2004
Work stress and coping: theory, research and practice
Philip Dewe

Work stress and coping: drawing together research and practice
Philip Dewe & Linda Trenberth

Work-related stress, the blind men and the elephant
Andrew R. Arthur

The impact of workaholism on personal relationships
Lynley H. W. McMillan, Michael P. O’Driscoll & Elizabeth C. Brady

The relative importance of psychological acceptance and emotional intelligence to workplace well-being
Emma J. Donaldso-Feilder & Frank W. Bond

‘People-work’: emotion management, stress and coping
Sandi Mann

How do work stress and coping work? Toward a fundamental theoretical reappraisal
Rob B. Briner, Claire Harris & Kevin Daniels

Assessing risk: Confrontation or avoidance—what is taught on counsellor training courses
Andrew Reeves, Sue Wheeler & Ric Bowl

JOURNAL OF CAREER DEVELOPMENT, 30(4), 2004
Straight talking: The nature of effective career discussion at work
Jennifer M. Kidd, Wendy Hirsh & Charles Jackson

The influence of occupational self-efficacy on the relationship of leadership behavior and preparedness for occupational change
Birgit Schyns

Examining the process and outcome of career counseling for different types of career counseling clients
Aaron B. Rochlen, Lynne Milburn & Clara E. Hill

Internal and external barriers, cognitive style, and the career development variables of focus and indecision
Peter A. Creed, Wendy Patton & Dee Bartrum
Careers Forum

**JOURNAL OF CAREER ASSESSMENT, 12(3), 2004**

Five-factor model of personality and career exploration
M. B. Reed, M. A. Bruch & R. F. Haase

Effect of locus of control, work knowledge, and mentoring on career decision-making difficulties: Testing the role of race and academic institution
S. H. Lease

Confirmatory factor analysis of the Career Factors Inventory on a community college sample
M. A. Simon & E. Tovar

A function-centered model of interest assessment for business careers
T. Butler & J. Waldroop

Kuder Career Search: Test-retest reliability and consequential validity
K. Ihle-Helledy, D. G. Zyroowski & N. A. Fouada

Structure of vocational interests for Korean college students
J. Tak

Dysfunctional thinking and difficulties in career decision making
T. Kleiman, I. Gati, G. Peterson, J. Sampson, R. Reardon & J. Lenz

Predictors of job search intensity among college graduates
A. Tziner, E. Vered & L. Ophir

**CAREER DEVELOPMENT QUARTERLY, 52(3), 2004**

Career counseling with clients who have a severe mental illness
Robyn A. Caporoso & Mark S. Kiselica

Career planning validity of self-estimates and test estimates of work-relevant abilities
Dale J. Prediger

Conceptions of work among adolescents and young adults with mental retardation
Rachel Gali Cinamon & Limor Gifsh

Counseling for continued career development after retirement:
An application of the Theory of Work Adjustment
Melanie C. Harper & Marie F. Shoffner

Integrating barriers to caucasian lesbians’ career development and Super’s life-span, life-space approach
Chloe J. C. House

Relation of type and amount of training to career counseling self-efficacy in Italy
Salvatore Soresi, Laura Nota & Robert W. Lent

Survivors of downsizing: Helpful and hindering experiences
Norman E. Amundson, William A. Borgen, Sharylly Jordan & Anne C. Erlebach

The relationship between race and students’ identified career role models and perceived role model influence
Danesh Karunanayake & Margaret M. Nauta

**JOURNAL OF EMPLOYMENT COUNSELING, 41(1), 2004**

Do specific Holland types prefer specific types of counseling approaches? An exploratory study
Mark J. Miller, Thomas P. Springer & Ernest Cowger Jr.

High anxiety: Counseling the job-insecure client
Audrey L. Canaff & Wanda Wright

Predicting burnout and job satisfaction in workplace counselors: The influence of role stressors, job challenge, and organizational knowledge
Andrea Kirk-Brown & Debra Wallace

The impact of outplacement programs on reemployment criteria: A longitudinal study of displaced managers and executives
James D. Westaby

Using the Myers-Briggs type indicator® in career counseling
R. Bryan Kennedy & D. Ashley Kennedy

**REVIEWERS FOR 2004**

Jim Bright
Peter Creed
Suzette Dyer
Norm Gysbers
Anna Lichtenberg

Peter McIlveen
Malcolm McKenzie
Wendy Patton
Robert Pryor
Mark Savickas
The National Forum for Career Practitioners was held on August 25–26, 2004, as part of the National Standards and Accreditation of Career Practitioners Project that the Australian Government Department of Education, Science and Training has commissioned through the Career Industry Council of Australia (CICA).

Background of the project
The standards and accreditation project evolved in an environment of growing national and international interest in career guidance. The project has benefits for individuals (private good), and for society and government (public good) (Watts, 1999). More now than ever, career guidance is perceived as an essential component of government policy—specifically in relation to lifelong learning, the labour market and social equity (Watts & Sultana, 2003). Policy is becoming more proactive, ensuring that career services will be available to all throughout their life. The shift in thinking about career guidance is linked to the emergence of the knowledge economy, in which individuals are expected to be lifelong learners who proactively shape their careers as they move in and out of work and learning during their lives. Thus, it is anticipated that individuals may access career services several times in their life.

Corresponding with policy, economic and world-of-work changes, career practitioners now provide services to a clientele who reflect greater cultural diversity and have a lifespan focus (Grubb, 2002). Concurrently, as the value of career guidance is being recognised, career practitioners are being urged to address quality standards issues. Practitioners need to ‘master the competencies required to work in new cultural settings and socio-educational contexts associated with promoting educational, cultural and social change’ (IAEVG, 2004).

National Standards and Accreditation of Career Practitioners Project
It is in this context that the National Standards and Accreditation of Career Practitioners Project has been established. To date, in Australia—as in other countries—entry into work as a career practitioner has not been regulated and has largely been determined by employers. While career specific training and qualifications are available in Australia, they have not been a prerequisite for employment in career service work. There have been previous significant attempts to establish standards in Australia, which produced documents that still have relevance (Australian Education Council, 1992; NBEET, 1992). However, the frameworks proposed in these documents were not implemented.

An important difference between the Australian career industry in the early 1990s and today is the formation of the CICA, which represents 11 career practitioner associations. CICA provides a vehicle for communication between practitioners and policy makers—hence their collaboration in this project.

The National Standards and Accreditation of Career Practitioners Project represents a milestone in Australian career practice. The project is being conducted in three phases: (1) A scoping paper was commissioned to inform the forum; (2) the National Forum for Career Practitioners was held; and (3) a consultation with stakeholders on quality standards will be conducted.

National Forum for Career Practitioners
On behalf of DEST and CICA, Col McCowan convened and facilitated the two-day National Forum for Career Practitioners, and approximately 90 invited representatives from career practitioner associations and stakeholder groups attended.

Lead presenters included Professor Tony Watts (well known for his role in the OECD review into career guidance, and also a commentator on the forum) and Dr Mary McMahon (author of the draft scoping paper—Shaping a career development culture:...
Quality standards, quality practice, quality outcomes, and also forum co-facilitator). The Federal Minister for Education, Science and Training, the Honourable Brendan Nelson MP opened the forum.

During the forum, participants discussed a range of issues related to the development and implementation of quality standards, and extensive data was collected. Once analysed, the data will inform the final version of the scoping paper and the consultation process to be conducted by Miles Morgan Australia.

The commitment, energy and enthusiasm of the forum participants clearly demonstrated that this is a project whose time has come. Information on the forum, and copies of the draft scoping paper and the conference presentations are available on the CICA website (http://www.cica.org.au) and the Miles Morgan website (http://www.milesmorgan.com.au). Further information on the project will be published on these websites as it becomes available.

REFERENCES


Advertising in the AJCD
Specifications & Rates

Advertsing Rates

<table>
<thead>
<tr>
<th></th>
<th>Casual</th>
<th>2X</th>
<th>3X</th>
</tr>
</thead>
<tbody>
<tr>
<td>Inside front cover</td>
<td>990</td>
<td>940.5</td>
<td>891</td>
</tr>
<tr>
<td>Inside back cover</td>
<td>990</td>
<td>940.5</td>
<td>891</td>
</tr>
<tr>
<td>Full page</td>
<td>770</td>
<td>731.5</td>
<td>693</td>
</tr>
<tr>
<td>Half page</td>
<td>594</td>
<td>564.3</td>
<td>534.6</td>
</tr>
<tr>
<td>Inserts</td>
<td>550</td>
<td>550</td>
<td>550</td>
</tr>
</tbody>
</table>

All prices are inclusive of GST.

Required Format
Same size bromides/artwork JPEG file, minimum 300 dpi.
No bleeds.

Booking Deadlines

<table>
<thead>
<tr>
<th></th>
<th>Autumn Issue</th>
<th>Winter Issue</th>
<th>Spring Issue</th>
</tr>
</thead>
<tbody>
<tr>
<td>14 Feb 2005</td>
<td>13 May 2005</td>
<td>12 Aug 2005</td>
<td></td>
</tr>
</tbody>
</table>

Material Deadline

<table>
<thead>
<tr>
<th></th>
<th>Autumn Issue</th>
<th>Winter Issue</th>
<th>Spring Issue</th>
</tr>
</thead>
<tbody>
<tr>
<td>16 Feb 2005</td>
<td>16 May 2005</td>
<td>15 Aug 2005</td>
<td></td>
</tr>
</tbody>
</table>

AJCD is published by:
Australian Council for Educational Research
Private Bag 55, Camberwell, Victoria, 3124

For advertising enquiries and bookings contact:
Vicki Bourozikas
National Media Sales
Tel (03) 9835 7467 Fax (03) 9835 7425
Email bourozikas@acer.edu.au
## 2005 SUBSCRIPTION ORDER FORM

<table>
<thead>
<tr>
<th>Journal</th>
<th>Subscriber</th>
<th>Price</th>
<th>Qty</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Australian Journal of Career Development</td>
<td>Australian subscribers</td>
<td>$87.00 (incl GST)</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Overseas subscribers (air mail)</td>
<td>$112.00</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Prices inclusive of GST and freight. Information is correct at the time of printing but is subject to alteration without notice – August 2004

Name
Street Address
Postal Address
School/Institution
Your Order Number
Telephone
Email

Enclosed cheque for $__________ or charge to:

- Account No.
- Bankcard
- Mastercard
- American Express
- Visa
- Diners Club

Name (please print)
Signature
Card Expiry Date

Australian Council for Educational Research

Australian Journal of Career Development Volume 13, Number 3, Spring 2004
ARTICLES

★ Children’s career development: A metatheoretical perspective
Mark Watson and Mary McMahon

★ Creating career stories through reflection: An application of the systems theory framework of career development
Mary McMahon, Wendy Patton and Mark Watson

★ ‘I had seen order and chaos, but had thought they were different.’
The challenges of the chaos theory for career development
Robert Pryor and Jim Bright

★ International talent flow and careers: An Australasian perspective
Kerr Inkson and Stuart C. Carr

★ Career in a globalised economy: Researching the implications in a one-industry town
Suzette Dyer and Fiona Hurd

★ How employees remain happy: Explaining a paradox
Dorothy M. Hutton, Barbara Atkinson, Priya Judd, Julie Darling, Linh Tran and Robert A. Cummins

★ A judgement-based framework for analysing adult job choices
James A. Athanasou

★ Facilitating post-modern career counselling in the Limpopo province of South Africa: A rocky ride to hope
Jacobus G. Maree and Jacob M. Molepo

★ Coaching for career development and leadership development:
An intelligent career approach
Polly Parker and Michael B. Arthur

★ Job seeking and job acquisition in early adolescence
Peter Creed, Frances O’Callaghan and Fiona Doherty