ARTICLES

★ Career development of people with disabilities: Some new and not-so-new challenges
   Edna Mora Szymanski & Jeff VanCollins

★ Vocationally orientated rehabilitation service requests: The case of employed persons experiencing a spinal cord injury
   Amanda E. Young & Gregory C. Murphy

★ The determinants of work adjustment following traumatic brain injury: A focus for career counsellors
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★ Acquired brain injury and return to work in Australia and New Zealand
   James A. Athanasou

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The Australian Journal of Career Development is a professional journal focusing on current theory, practice and policy relating to the career and work education field. The Journal provides a national forum for sharing, disseminating and debating current careers research, practice and policy.

The audience for the Journal includes professionals in educational and academic settings, community and government agencies, and business and industrial settings. Therefore, topics should be presented with implications for practice. Authors of research reports and theoretical discussions should relate their conclusions to the realm of practical applications.

NOTES FOR CONTRIBUTORS

General Principles

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

• it expands the body of knowledge;
• it informs in a manner that will develop people’s professional understanding;
• it provides concrete assistance in professional practice;
• it raises philosophical questions related to the field of careers practice;
• 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 of less than 3000 words are preferred.

2 Articles

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. They should be a maximum of 4500 words.

i Review

Books, reports, packages, computer programs or any other material relevant to career practitioners are reviewed in this section. Reviews include an overview of content and critical analysis and should be a maximum of 750 words. If you know of or have material that you feel is relevant, please contact the Editor or forward it directly.

4 Careers Forum

This section of the Journal is set aside to provide a forum for sharing of relevant information and stimulating discussion and debate. We invite contributions as follows:

• comments related to material in earlier editions of the journal;
• an ‘ideas exchange’ where you can share a success story from your day-to-day work, or seek help for a problem in your day-to-day work.

People currently undertaking or having recently completed research relevant to careers practitioners are invited to submit abstracts of 300 to 500 words outlining the focus of their research, the time frame, and preliminary findings or final outcomes where appropriate.

Brief reports of relevant conferences, seminars and events, and forthcoming events will also be included. Submissions should be less than 500 words.

Manuscript Standards

All submissions are required in MS Word format. Hard copy should be typed double-spaced. Submission of articles as an e-mail attachment is also acceptable.
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The vocational implications of the suffering of a serious injury or of having to live many years with a chronic ill-health condition are matters that need to be better understood by a range of human-service professionals, including those involved in careers counselling. Advances in medical science, and improvements in the efficiency of emergency service personnel, mean that today, many people are surviving to old age even though they may have suffered a life-threatening injury or been diagnosed with a previously fatal disease. If serious ill health or injury occurs at a relatively young age, then the effectiveness of the rehabilitation services provided will have a major impact on the quality of life of those affected, as well as on the costs to be borne by the community in terms of loss of productivity and increased use of medical and related services.

The undertaking of a work role is recognised as generally correlated with improved mental and physical health. Yet, in spite of the evidence for the health benefits of employment, there is still unevenness in the extent to which health and human-service professionals are knowledgeable about, or pay attention to, the vocational implications of their clients' injuries and disabilities. National surveys conducted in both Australia and overseas have found that only a minority of people who have a disability are in the labour force. Louis Harris & Associates (1996) found that approximately only one-third of persons with disabilities in the United States are members of the workforce. Of the remainder, 79% said that they could and would like to work. In Australia, only 53% of people with a disability are members of the labour force (Australian Council of Social Services, 2000). Such findings identify an opportunity to improve the health and well-being of those with a disability through assisting them to achieve their vocational potential.

In North America, there is a specific profession (Rehabilitation Counselling) dedicated to providing the services required to 'return the person with a disability to the fullest physical, mental, social, vocational and economic usefulness of which they are capable' (see National Council on Rehabilitation, 1944). In Australia, there are a variety of health and related professionals who undertake some or all of this task. For example, doctors and physiotherapists will concentrate on 'medical and physical rehabilitation services', occupational therapists on 'independent living services' and psychologists and social workers on 'psychosocial rehabilitation services'. Regardless of the main focus of a particular professional group's services, a central question that must be asked is 'how do the services provided assist the client to better
undertake the work role?’. Further, we must ask ‘how best can we support the vocational aspirations of persons affected by ill-health or injury?’.

At the same time as we are learning about the general health benefits of the undertaking of paid work and of the many unpredicted post-injury vocational achievements of those with even the most serious of injuries, we are faced with a labour market characterised by features that make it increasingly difficult for all in our society to plan a career that involves sustained employment in predictable positions. Thus the increased importance of effective vocational counselling, guided by up-to-date knowledge about ways to maximally realise vocational potential is evident. This Special Issue of the AJCD provides an opportunity for careers professionals to better understand the vocational potential of those undergoing rehabilitation, and for health professionals to understand that ‘rehabilitation’ and ‘vocational rehabilitation’ are virtually synonymous terms.

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REFERENCES
Firstly, Jane, thank you for making the time to talk with AJCD. Jane, how did you, as a health professional, come into rehabilitation work?

In the 1960s, I was living in Central Western New South Wales. At that time, the country was in the grip of a five-year drought and the bottom had fallen out of the cattle, sheep and wool markets. I had been appointed to the Coonabarabran, Binnaway and Barradine Hospital Boards, and those people requiring secondary rehabilitation had to travel to either Tamworth, Dubbo or Sydney. Most often, the people requiring rehabilitation could not afford it and returned home with minimal support.

My first attempt at rehabilitation was discharge planning and reintegration of long-term ill and injured persons back into the family, rural community and work, working through the nearest community health centre and community group, such as the Lions Club or Rotary.

It was on these trips to the rural towns that the district nurses talked about the high rates of deafness and poor language development of young children commencing school. I had originally graduated in speech therapy and done extra training in audiology.

Through the community health centres and schools, I performed audiometric testing and developed individual and group language programs. The most satisfying work was with young Aboriginal children.

Do you have a particular philosophy or orientation that characterises your work within rehabilitation?

There is a solution to every problem facing injured workers, but the problems must be approached in a systematic, thoughtful and commonsense way.

Firstly, the problems must be identified. It is surprising how often the major problem is financial hardship. Unless addressed, the financial problems exacerbate the health problems, particularly if the worker is suffering from chronic pain and depression.

Financial problems can also prevent a satisfactory return to work, particularly if child-care and transportation are issues.

Secondly, every worker must have meaningful daily routines to ensure appropriate levels of physical and mental activities, which, in turn, encourage adequate sleeping habits.

Thirdly, if a worker cannot return to work due to age, lack of competitiveness in the labour market or due to profound injury, the worker should be keyed
into social and community activities that give meaning to the person’s existence.

Who and what has been influential in your work?
My introduction to ‘rehabilitation’ was from the late Dr Cecil Ashley, a former Medical Superintendent at Caulfield Hospital. Dr Ashley was a fervent believer in enabling his patients to achieve a goal each day no matter how small. He also taught his staff to achieve something daily for their patients. The Caulfield woodwork and carpentry classes were legendary and, in 1963, Caulfield was the first Victorian hospital to introduce sheepskin rugs on patient beds to prevent pressure areas – a real problem in those days.

In the late 1970s, I worked at the Microsurgery Unit at St Vincent’s Hospital, Fitzroy. I witnessed remarkable restorative and reconstructive surgery with limbs and partial limbs being re-implanted, huge flaps being transposed and new technologies being proved. This was also my introduction to hand injuries and repetitive strain injuries.

What can you tell our readers about injured employees’ attempts to return to work following serious injury?
There are three broad groups of seriously injured workers who require very different services to return to meaningful employment or activities. The most common group comprises the workers with a work capacity for changed employment who have around 30% whole-of-person impairment.

A second group is those workers who suffered a profound physical injury, such as quadriplegia, paraplegia, major amputation, burns etc., but did not suffer cognitive impairment.

A third group is those injured workers who suffered an acquired brain injury (ABI) and subsequent cognitive problems. Their needs are lifelong in duration and require specialised rehabilitation expertise.

With particular reference to the first group, there are mixed incentives to return to work following serious injury classification. On one hand, there is access to a common law lump sum if negligence by a third party can be proved. The uncertainty of a sustained return to permanent employment is less attractive when considered against perceived financial security of a lump sum benefit.

Once the common law action is settled, the injured worker most often has access to a sum of money that will bring security for a period of time. It is my experience that the majority of injured workers are not astute financial managers. With the pressures of mortgage and family wishes, the lump sum can evaporate and the worker is most often left without an income and is precluded from receiving social security benefits. The worker has no alternative other than to seek employment, which is, most often, intermittent and unsuitable.

Most often, it is too late to offer meaningful occupational rehabilitation three or four years down the track as the person has ‘drifted’ into long-term unemployment and presents as such. The worker may return to casual part-time and often unsuitable work, but most often is not competitive in the labour market.

The rehabilitation of major spinal and other major injury cases – in particular, acquired brain-injured workers – requires innovative and specialist new employment programs, which have not been developed by the workers’ compensation jurisdictions at this time.

How have you seen workers’ compensation rehabilitation services change over the past 15 or so years?
With the exception of services for acquired brain-injured workers, I have seen few changes since the early 1990s.

The current Australian workers’ compensation schemes continue to medicalise suffering, particularly when this suffering is misattributed to pain. This, in turn, usually leads to efforts to remediate the problem by medical means. Perhaps the major problem of workers’ compensation schemes is the medicalisation of suffering caused by one or more environmental issues, including social, family and employment issues.

Although the new Victorian WorkCover early intervention sprain and strain program introduces a bio-psychosocial approach, the actual workers’ compensation legislations reflect a biomedical approach and do not capture the important variable in pain behaviour.

In 1994, the more innovative compensation and medical schemes in Europe and North America recognised this and compensation schemes were
implemented that provided the injured worker with the resources that could help them regain access to competitive opportunity in the working world – a concept of temporary assistance. In the event of an irremediable condition, such as quadriplegia or acquired brain impairment where pathology could be demonstrated and the resulting impairment was that which would normally be expected for that type of injury, a partial economic haven was provided for the worker and family in lieu of work: an implied permanent disability with or without potential for work.

In addition, the provision of weekly benefits could not exist without the individual contribution of effort. Provision of weekly benefits was intended to assist the person and the family unit on a temporary basis, while remediation was underway. If remediation was not an option, permanent weekly benefits were available.

The Victorian WorkCare scheme commenced in September 1985. There have been endless changes to this legislation; but these changes do not reflect the international literature and increasing knowledge of the nature of injury and resulting human behaviour and needs.

**Where do you see workers’ compensation return-to-work services going?**
There needs to be a radical change within all compensation schemes to ensure that return-to-work services reflect current labour market trends and needs. There has been a strong growth in part-time employment, with a trend towards smaller proportions of individuals and households being responsible for higher proportions of work in the labour market.

Without sufficient economic growth to take up unemployed workers at reasonable wages, combined with wage deregulation creating jobs for unemployed workers, any created jobs now tend to be lower paid.

The injured worker returning to work is at a fourfold disadvantage. Not only has the worker a history of injury, the market trend is for part-time employment at lower paid rates, both financially disadvantaging. A realistic option of self-employment or setting up a family business, is most likely beyond the worker’s financial means and there are no programs within the workers’ compensation schemes to encourage this.

I do not believe the workers’ compensation schemes and government departments responsible for employment programs have developed employment programs that take the current labour market and productivity growth into account.

**What knowledge areas or skills do you think are most important for careers counsellors providing services to people living with chronic conditions or disabilities?**
Postgraduate training and mentoring to gain the necessary experience in case-managing specific injury types is essential because each case is different. One size does not fit all.

Services for ‘pain’ alone are the biggest medical and like cost of any health or workers’ compensation jurisdiction in the world. Worldwide 90% of workers do not return to work because of self-reported levels of ‘pain’. In 80% of these cases, the ‘pain’ suffered is out of proportion to that which would normally be expected for a patient with that particular type of injury alone. When a worker does not return to work within normal recovery times, it is most often due to self-reported levels of pain.

Careers counsellors must be skilled in ‘pain issues’ and be able to discuss whether the pain is undiagnosed depression or due to a lack of activity tolerance or whether there is possible underlying pathology, or a combination of these factors. There must also be recognition that abnormal psychological function, whether caused through worksite or vocational difficulties or avocational difficulties, is not ‘pain’.

Nor should occupational rehabilitation be predicated solely on continuing complaints of pain. There must be a shift to time contingent occupational rehabilitation.

I believe very strongly that all career counsellors should be familiar with the International Association for the Study of Pain (IASP) publication ‘Back Pain in the Workplace – Management of Disability in Non-specific Conditions’.

There are also information sessions on ‘pain’ provided by St Vincent’s Hospital and Caulfield Pain Management and Research Centres. Geelong Hospital Pain Management Centre and North Shore Hospital also have IASP accredited postgraduate training.

If a worker is ‘work-ready’, it is my experience, and
this is supported in the literature, that if child-care and transport issues are not addressed, there is a greater likelihood of job placement failing, particularly in the first four weeks. It is also my experience that if financial issues are not addressed, there is also a greater likelihood of a return to work failing.

Many injured workers are not competitive in the labour market. They may have minimal literacy, training and employable skills, and addressing a lack of pre-injury education and training achievement will have little success. If a rehabilitation counsellor goes back into the injured workers’ histories, most often the employers have trained the employees to fit into their jobs. The counsellor needs to build on this when finding new employment. Lateral and innovative exploration of new employment opportunities is required, but this must be supported by the workers’ compensation jurisdictions developing equally innovative new and varied employment programs. One program, such as Victoria’s WISE Program, cannot fit all.

It is dangerous for career counsellors to provide services to workers suffering from acquired brain injury, unless they have the knowledge and training to do ABI rehabilitation counselling. It is not unusual for ill-informed counsellors to talk about sheltered workshops for workers with cognitive difficulties. The acquired brain-injured (ABI) worker does not, post-injury, suddenly become intellectually disabled. ABI workers have difficulties unscrambling and linking thought processes and are constantly aware of what they used to be able to do and now cannot. Most often, acquired brain-injured workers should be keyed into meaningful community activities and provided with the mentoring and support services to sustain these.

What initiatives are required in the field of careers counselling if careers counsellors are to be more effective in providing services to those wishing to return to work or change occupation following serious injury?

Workers’ compensation and organisations who have ‘employment’ as the primary goal must ensure there are new and innovative employment programs available that reflect current marketplace and labour trends.

For instance, do any jurisdictions have as advisers to the board and executive, a university lecturer in labour market trends, productivity growth and employment? Do any jurisdictions have as an adviser a journalist who specialises in articles for employment and career sections of major tabloid newspapers?

In the late 1980s, WorkCare had a partial redemption program where a worker could redeem 30% or 50% of future weekly benefits up to a maximum of five years. In 2002, if injured workers are long-term recipients of weekly benefits, should there be an option where a worker could redeem up to 50% of their weekly benefits over five to ten years to invest in a self-employing business that was income producing? Such a program would enable the worker to continue to receive 50% of weekly benefits while the business was developing.

Self-employment, small family businesses, consultancies and contracts require capital sums. Other than lump sums obtained through impairment or common law, there are no other ways to raise the money for these types of employment opportunities.

In Victoria, approximately 50% of workers in receipt of long-term weekly benefits live in country towns or rural areas. They have few employment opportunities, yet there are many businesses in country and rural towns that require an injection of capital to expand or remain viable. All Victorian regional areas have small business advisory services that would welcome such a program, providing expert advice and active assistance. These regional business centres have an excellent reputation.

Perhaps workers’ compensation jurisdictions should mandate that injured workers must have financial counselling and produce a financial program that is income generating and to their best benefit, prior to receiving an impairment or common law payment.

When self-employment is not an option, and, in an economic climate where many small businesses are struggling, should return to work programs be developed to assist injured workers to return to the same employer?

In the USA, one of the most successful small employer programs subsidised re-training of an already-employed person to fit into a new job or changed job with the same employer. This employer on-the-job training turned an injured worker into a
productive employee and provided an opportunity in keeping with labour market trends and the motivation of the worker. If the small employer was unable to retain its worker in the new or changed job, a new employer was also subsidised to employ the former injured worker. The literature indicates that it is significantly more likely that an injured worker can move from employment to other new employment, but, if out of work, the chance of moving from unemployment to employment is much more unlikely.

The needs of the individually injured worker, of employers and of workers’ compensation schemes, call for re-appraisal of the types of programs that are required to assist workers into employment, whether self-employment, family businesses, contract or agency employment; or, for those who cannot return to work, meaningful activity.

With a range of programs that better meets the needs of widely differing groups of injured workers and employers, skilled rehabilitation counsellors would be better able to steer injured workers towards meaningful employment, and be better able to encourage employers to participate more actively in return to work – all at a cost benefit to workers’ compensation schemes.

Jane, may I thank you again on behalf of the readers of the Australian Journal of Career Development for taking time out from your busy work demands to allow this interview to take place, and I extend my appreciation for your long-standing involvement in the advancement of services for work-injured employees over many years.

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CAREER DEVELOPMENT OF PEOPLE WITH DISABILITIES: SOME NEW AND NOT-SO-NEW CHALLENGES

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Changes in the world of work present new challenges for people with disability. Using relevant literature, we review some changes in the world of work, provide an overview of an ecological model of vocational behaviour, identify possible challenges for people with disabilities, and provide suggestions for career counsellors.

Work is different today from what it was just ten years ago, and these differences affect people with disabilities. In this manuscript, we will examine some of the changes and their implications through the following topics: (a) an ecological model of vocational behaviour; (b) changes in the world of work; (c) challenges for people with disabilities; (d) implications for career counsellors.

AN ECOLOGICAL MODEL FOR VOCATIONAL BEHAVIOUR

Work, individuals, social and political contexts, and environments are all interconnected. As background for our discussion of some new and not-so-new challenges, we provide a very brief introduction to an ecological model of career development and vocational behaviour of people with disabilities (Szymanski, 2000; Szymanski, Enright, Hershenson, & Ettinger, in press). Essentially, the model, which is introduced in Figure 1, brings together the constructs and processes from a wide range of career development and vocational behaviour theories into one model, which can be used to conceptualise vocationally relevant issues and interventions (Szymanski; Szymanski et al.). The model draws from the following theories: Super’s Theory (Super, Savickas, & Super, 1996), Holland’s Typology (Holland, 1985), Trait Factor Theory (Brown, 1990), Krumboltz’ Learning Theory of...

The model is relatively self-explanatory. Readers interested in further detail as well as a discussion of the relation of the model to existing theories are referred to Szymanski et al. (in press) and Szymanski and Hershenson (1998). After a brief discussion of changes in the world of work, we will refer back to the model during our discussion of some of the new and not-so-new challenges facing people with disabilities in today’s workplace.

Changes in the World of Work
Changes in the world of work over the past ten years are mainly due to technological and economical globalisation. Globalisation has expanded the labour market (Augimeri, 2001; Graham, 2001), redefined the way the world economy functions (Greenaway & Nelson, 2000; Zakaria, 2002) and transformed the way society looks at work (Augimeri, 2001; M. Warner, 2001; Wolf, 2001; Yeung & Dicken, 2000).

Despite the fairly recent economic upsets of the East Asian crisis, the short-circuiting of the dot com boom, the synchronised global recession, (Zakaria, 2002, p. 37), the September 11th attacks and most recently, the fall of Enron, labour markets have continued to expand. Countries once closed off to the free-market system (e.g., Brazil, India and Russia) are now attempting to integrate into what is increasingly becoming the world economy (Yeung & Dicken, 2000; Zakaria, 2002).

‘A “globalized” economy could be defined as one in which neither distance nor national borders impede economic transactions’ (Wolf, 2001, p. 178). Countries once seen as overly protective of domestic markets are shifting to a greater openness to international markets (Wolf 2001; Yeung & Dicken, 2000).

Countries that recognise the economic benefits of globalisation have learned to optimise skilled and unskilled workforces (Augimeri, 2001; Champlin & Olson, 1999; Greenaway & Nelson, 2000; Yeung & Dicken, 2000; M. Warner, 2001; Wolf, 2001). The workforce has become much more mobile as national economic systems become integrated with the ebb and flow of goods and capital (financial and human) across borders (Champlin & Olson, 1999; M. Warner, 2001).

In the globalised economy, the confined office space and eight-hour work day have become concepts of the past. With current technology, multinational corporations can now develop intellectual products by electronically transmitting developing ideas from workgroups in Asia to colleagues in Africa, Europe and the United States for final output in a 24-hour time span (Lucore, 2002). The global office, in effect, has increased the use of offshore professionals, independent contractors and temporary employees (Lucore, 2002).

As a result of the much faster pace of transactions in the global economy, the labour force has become more fluid. Mergers, downsizing, re-engineering, and outsourcing are now normal modes of operation, and employment stability is relatively rare (Burke & Nelson, 1998). ‘The company’s commitment to the employee extends only to the current need for that person’s skills and performance’ (Hall & Mirvis, 1996, p. 17). In this fast-paced, low-overhead approach, workers often have more duties (Burke & Nelson), and job stress is on the increase (Quick, Quick, Nelson, & Hurrell, 1997). Theorists and practitioners alike are working to understand this new reality (see e.g., Collin & Young, 2000).

Challenges for People with Disabilities
Throughout the industrialised world, people with disabilities are at significant risk for unemployment or underemployment. In the USA and Canada, fewer than half of the working aged adults with disabilities are employed and those who are employed often have low earnings (Schriner, 2001). ‘It does not seem to overstate the case to say that people with disabilities are almost universally at the bottom rung of the socioeconomic ladder’ (Schriner, p. 645). Further, significant numbers of those individuals with a disability who are employed have experienced some form of job discrimination, even in the presence of the protective US legislation of the Americans with Disabilities Act (Kennedy & Olney, 2001). The following issues, discussed in this section, are likely to
**CONTEXT**
Contextual constructs are characteristics of the situations in which individuals live or have lived. Examples include socioeconomic status, family, education, legislation (e.g., the ADA), and important events (e.g., wars, floods).

**INDIVIDUAL**
Individual constructs are attributes directly connected to the person. Examples include gender, race, physical and mental abilities and impairments, and interests.

**ENVIRONMENT**
Environmental constructs include elements and structures in work that influence and are influenced by the behaviour of individuals. Examples include organisational culture, task requirements, reinforcement systems, characteristics of workers in the environment, and the physical structure of the environment.

**OUTCOME**
Outcome constructs describe the behaviours or states that result from the interaction of the other groups of constructs and processes. Examples include job satisfaction and satisfactoriness, job stress, occupational attainment, organisational productivity, and competitiveness.

**MEDIATING**
Mediating constructs are individual, cultural, or societal beliefs that affect the interaction of individuals with environments. Individual Examples include work personality, self-efficacy, and outcome expectations. Cultural Examples include cultural and religious beliefs, acculturation, and racial identity. Disability related cultural beliefs could be included in this category (e.g., deaf culture). Societal Examples include discrimination, prejudice, and castification.

**ALLOCATION**
Allocation is the process by which societal gatekeepers use external criteria to channel individuals into or exclude them from specific directions. Examples include job satisfaction and satisfactoriness, job stress, occupational attainment, organisational productivity, and competitiveness.

**CHANCE**
Chance is the occurrence of unforeseen events or encounters. Examples include job satisfaction and satisfactoriness, job stress, occupational attainment, organisational productivity, and competitiveness.

**DECISION MAKING**
Decision-making is the process by which individuals consider career-related alternatives and formulate decisions. Examples include job satisfaction and satisfactoriness, job stress, occupational attainment, organisational productivity, and competitiveness.

**DEVELOPMENT**
Development describes the process that produces systematic changes over time, which are interwoven with characteristics and perceptions of individuals and reciprocally influenced by the environment.

**SOCIALISATION**
Socialisation is the process by which people learn work and life roles.

**CONGRUENCE**
Congruence is the process of relative match or mismatch between individuals and their environments.

**LABOUR MARKET FORCES**
Labour market forces are the economic and business forces that affect individual and organisational opportunities. Examples include organisational culture, task requirements, reinforcement systems, characteristics of workers in the environment, and the physical structure of the environment.

further disadvantage some people with disabilities: (a) job insecurity and the changing labour market; (b) the challenge of technology; (c) special challenges for people with cognitive disabilities; (d) changing policies; and (e) stress and the work environment.

Job Insecurity and the Changing Labour Market
As noted earlier, the global economy has resulted in a more mobile and fluid labour force. Mergers and downsizing are common (Burke & Nelson, 1998); there is less employment stability; and temporary workers are often an important part of organisations’ competitive strategies (Hall & Mirvis, 1996). In countries with limited national health insurance, this situation may present particular challenges to workers with challenging health care or medication needs. Further, disability compensation policies (Schriner, 2001) may limit incentives for participation in the temporary labour force (R. Warner, 2001), which is often a stepping stone to more permanent employment. In addition, both job insecurity and job loss can be detrimental to psychological well-being (Burke & Nelson, 1998).

The Challenge of Technology
The increased technology dependence of today’s workforce can either hinder or help people with disabilities. ‘While new technology, deregulation and more flexible production techniques may prove enabling to some, to others they will almost certainly mean worsening social isolation, and new and enhanced forms of exclusion’ (Barnes, 2000, p. 446).

Two factors are of particular concern here: accessibility and affordability. While laws in some nations address technology access for people with disabilities, it is still fair to say that many people with physical or cognitive disabilities have difficulty accessing technology without assistance or specially designed accommodations. In addition, as noted above, people with disabilities are often economically disadvantaged (Schriner, 2001). Thus, it may be difficult to afford a basic computer let alone adaptive hardware or software.

Special Challenges for People with Cognitive Disabilities
People with cognitive disabilities are at particular disadvantage in this new age (Barnes, 2000). They may lack some of the knowledge or skills required to compete in the fast-paced, knowledge-dependent workplace. Or, limited expectations or preparation may place them at competitive disadvantage (Falvey, Bishop, & Gage, 1993) complicated by criterion rather than generalisation-focused instructional techniques (Hanley-Maxwell, Szymanski, Seay, & Parker, 1990). Supported employment is a viable way of supporting people with these disabilities in integrated employment (Hanley-Maxwell, Owens-Johnson, & Fabian, in press; Jenaro, Mank, Bottomley, Doose, & Tuckerman, 2002; Parmernter, 1999). However, the fluidity and rapid pace of change at work will require particular attention to work environments, natural supports, and coaching strategies. Specifically, it will be important for job supports and coaching strategies to anticipate and address rapid work pace, expanding job tasks, and frequent changes of required tasks.

Challenging Policies
Throughout the world disability policies are evolving (Schriner, 2001). Among others, two forces seem to be influencing developments. First, increased competitiveness of the global economy can pit the needs of people with disabilities against those of industry and other groups with high unemployment (see e.g., Barnes, 2000; Parmenter, 1999). Second is commodification: people with disabilities have become commodities in a disability industry (Albrecht, 1992; Szymanski & Trueba, 1994). In some cases, the independence and choice needs of people with disabilities have been pitted against the economic needs of the care-giving industry (Szymanski, Johnston-Rodriguez, Millington, Rodriguez, & Lagergren, 1995). For example, some supported employment agencies lose government subsidies when workers no longer need support. This situation may foster unnecessary dependence.

Stress and the Work Environment
Work environments continue to cause and exacerbate disability. The environment increasingly has been recognised as an important determinant of the effect of disability (Fougeyrollas & Beauregard, 2001; Hahn 1989). Consider, for example, the different impact of an injury resulting in use of a wheelchair for mobility on an ironworker and a high-level administrator who works in an accessible building. Also consider the
repetitive-use injuries that have become all too common today (e.g., carpal tunnel syndrome).

A less tangible but equally important environmental threat is job stress. 'Job stress is the mind-body arousal resulting from physical and/or psychological demands associated with the job' (Quick, Quick, Nelson, & Hurrell, 1997, p. 10). Although some stress is important for good performance, too much stress can produce physical and psychological harm (Karasek & Theorell, 1990; Quick, et al.).

The increased fluidity of the workforce (e.g., downsizing, lay-offs) has become a potent source of unhealthy stress over recent years (Gowing, Kraft, & Quick, 1998; Quick et al., 1997). This concern appears to have heightened after the recent worldwide economic downturn. For some individuals, it may be possible that increased stress in the work environment may compound disability-related stress (Szymanski, 1999).

In addition, jobs that afford workers little control over their work and relatively high production pressures are particularly problematic, because they are associated with higher rates of distress (Quick et al., 1997). Since many of these jobs are unskilled, they have long provided employment options for people with disabilities. Counsellors should, therefore, be aware of the potential stress complications with these jobs.

**SOME SUGGESTIONS FOR CAREER COUNSELLORS**

In the preceding section, we have presented a few of the possible complications of the new fluid workplace for some people with disabilities. In this section, we refer back to the ecological model of vocational behaviour to discuss considerations for career counsellors working with people with disabilities.

As indicated in the model, people, the contexts of their lives, their work environments, and a variety of internal and external forces (e.g., labour market forces, allocation, decision-making) are all integrally interconnected. Thus, career counselling interventions cannot focus solely on the individual without consideration of the interaction of the other constructs and processes of the model. To this end, we present our recommendations according to three major themes: understanding, consideration, and support.

**Understanding**

Some particular background considerations are warranted in planning career counselling for people with disabilities. We believe that it is important for career counsellors to understand the economic context of the individual, the disability and employment policy context of the country, and prevailing cultural and social views regarding the individual’s particular disability. It is also important to understand how the person was socialised and how they have experienced gatekeepers (i.e., allocation).

**Consider and Where Necessary Intervene in Environments**

Environments are critical in both causing and limiting the effect of disabilities. Two factors are particularly salient here. First, prevention is a good strategy. On the physical side, to the extent that carpal tunnel syndrome and other repetitive motion injuries are common, career counsellors can advocate for ergonomic assessment in the workplace. On the psychological side, corporations are fertile for intervention to help individuals counteract the negative effects of stress resulting from downsizing, reorganisation, or enhanced competition (Gowan et al., 1998; Quick et al., 1997).
Second, job accommodations can help people with disabilities to function better in their work environments. See Browdin, Parker, and DeLaGarza (in press). For example, ergonomically designed workplaces can enable people with repetitive use injuries to continue working without further aggravating their injury, and flexible work schedules and/or telecommuting may help workers with stamina limitations to obtain or maintain employment.

Support Individuals
This new fluid workforce presents both more challenges and more opportunities for people with disabilities. Counsellors need to help individuals to maximise their assets and plan to seize opportunities.

Hall and colleagues (Hall & Mirvis, 1996; Hall & Moss, 1998) suggest a protean career, a free agent type model in which individuals manage a portfolio of skills and experiences and use various organisational contexts to add to their portfolio. Keeping with Hall’s model, it is important to help individuals with disabilities maximise their skills and education in order to be able to access a variety of organisational contexts.

Poor preparedness and poor decision-making skills can hamper progress. To that end, career planning workshops and decision-making instruction are recommended. These interventions have been shown to be beneficial for people with disabilities (Conyers & Szymanski, 1998; Merz & Szymanski, 1997). It is also expected that people with better decision-making skills will be better able to take advantage of chance vocational opportunities.

Finally, people with disabilities should be encouraged to actively self-manage their careers (King, 2001). In addition to maintaining and continually upgrading their personal portfolio of skills and experiences, they need to plan for resilience and hardiness, which are needed attributes in today’s workforce (Burke & Nelson, 1998, Collin &Young, 2000). The career resilience portfolio (Szymanski, 1999) provides a concrete guide to help people with disabilities organise information and planning around their skills and experiences, future goals and requirements, and stress management and well-being.

**Summary**
The workplace has become faster-paced with a more fluid workforce. These changes, which appear to be related to increasing global competition, are likely to continue. They may be particularly challenging for some people with disabilities. Thus, career counsellors have the challenge of helping workers to positively navigate this changing scene.

The ecological model of vocational behaviour presents one approach to understanding the complexity of career development and vocational behaviour. Using it as a base and building on our discussion of potential challenges for people with disabilities, we recommend focus on understanding contexts and processes, considering environments, and supporting individuals. We also recommend research on the special challenges of people with disabilities in the fluid workforce.

**References**


VOCATIONALLY ORIENTATED REHABILITATION SERVICE REQUESTS: THE CASE OF EMPLOYED PERSONS EXPERIENCING A SPINAL CORD INJURY

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GREGORY C. MURPHY, La Trobe University

Traumatic spinal cord injury (SCI) has a dramatic effect on the lives of those affected. As those injured are typically relatively young adults, the interruption to careers and vocational plans is often significant. While return to work following SCI has been well investigated, little is known about the process by which people regain employment post-injury. This investigation aimed to study participants’ perceptions regarding the adequacy of the vocational rehabilitation services they received. Data was collected through personal interview with 168 persons with a SCI who were employed at the time of their injury. Participants were asked if they believed they could have been assisted by additional services provided with the aim of facilitating their return-to-work attempts. More than half of the participants believed they would have benefited from additional services. The most commonly requested additional services were: more discussion of vocational options and alternatives, and the timely follow-up of vocational issues. Analysis of subgroup differences indicated that rural-based study participants had clear and precise ideas for how vocational rehabilitation services might be improved.
INTRODUCTION
Medical technology has advanced to the stage where those with even the most serious impairments can expect to achieve average life expectancy. Consequently, a key priority is to ensure that that life is meaningful and rewarding. Using return to work as a marker of broader rehabilitation gains, this study investigates opportunities and strategies for optimising vocational rehabilitation outcome following the acquisition of a major physical impairment.

While there is a group of people who are born with physical impairments, it is often those who acquire an impairment later in life that face the greatest adjustment difficulties. For such people there is typically the need for major life changes, including at least a brief withdrawal from the workforce. Unfortunately, this period can sometimes extend indefinitely, resulting in decreased community involvement, and inferior physical and mental health, together with an increased use of medical services, elevated medication use and generalised morbidity.

Of all the acquirable impairments, few are as profoundly life-affecting as are those that can result from spinal cord injury (SCI). Typically, those with SCI require ongoing health care, welfare and other assistance (O’Connor & Cripps, 1997). In Australia the cost of SCI has been estimated to exceed $110 million annually (Walsh, 1988) and this did not include an estimate for lost wages or productivity. Clearly an avenue for reducing the cost of SCI is to assist those affected to achieve the best possible return-to-work outcome.

Employment for those with a disability is not only of benefit to a country’s economy. Productive work is one of the cornerstones of adulthood, impacting across all the core dimensions frequently associated with quality of life (Micheals, 1998). Employment status has been demonstrated to be intrinsically related to an individual’s sense of well-being (Murphy & Athanasou, 1999), self-reported health status (Kessler, Turner, & House, 1988) and health service usage (Leeflang, Klein-Hesselink, & Spruit, 1992). For those with an impairment, the argument for employment can be even stronger. In the case of people with a SCI, employment has been found to be related to higher levels of life satisfaction, as well as superior adjustment, self-sufficiency and physical health (Roessler, 2001). With the benefits associated with employment, the role of vocational rehabilitation is clearly an important one.

At the general level quite a bit is known about rates of employment following SCI (see e.g., Murphy & Athanasou, 1994, and Murphy, Brown, Athanasou, Foreman, & Young, 1997). However, very little is known regarding the process by which people with SCI end up in positions of employment or alternatives. While some work has been undertaken on barriers and facilitators of return to work amongst those living with SCI, a topic that has gone largely unexplored is the adequacy of the vocational services provided as part of patient rehabilitation.

The present study was undertaken in order to collect information about aspects of vocational rehabilitation services as they relate to persons with SCI. The first aim was to identify the extent to which persons with SCI believed that they could benefit from additional services to assist them to return to work. Then, for those who thought they could benefit from additional services, the aim was to collect individuals’ thoughts regarding the additional services they believed might have assisted them in their vocational rehabilitation. In the case of those who believed they were not in need of additional assistance, the aim was to identify the reasons behind such persons’ beliefs.

METHOD
Sample
Study participants were identified using a consecutive sampling technique based on the new admissions to the participating Australian metropolitan-based spinal injury unit between 1990 and 1996 inclusive. In order to facilitate national and international comparisons, the Center for Disease Control’s clinical definition of SCI was used. It defines SCI as the occurrence of an acute, traumatic lesion of neural elements in the spinal canal, resulting in temporary or permanent sensory deficit, motor deficit, or bladder/bowel dysfunction (Thurman, Sniezek, Johnson, Greenspan, & Smith, 1995). Using this definition, 501 (77.9%) of the 643 new admissions could be classified as traumatic. In addition, to be eligible for inclusion in the study, the patient needed to reside in Australia, be discharged with persistent
neurological damage, not deceased and without cognitive impairment.

After applying the exclusion criteria described above, 241 of the 393 eligible patients were identified as employed at the time of their injury. The demographic characteristics of those employed were as follows: mean age 34.68 (SD = 13.33) years; 88% were male; 54% resided in a non-metropolitan (rural) location. The industries in which people were most frequently employed were agriculture, forestry and fishing (21%), construction (18%), manufacturing (13%), and retail (11%).

All of the people employed at the time of injury (N = 241) were targeted for further study and 168 (69.7%) were questioned in regards to their thoughts about whether or not they could have benefited from receiving additional services to help them return to work. Consistent with the population demographic, the mean age of the participants at the time of interview was 39.78 years (SD = 13.78). Of the study participants, 149 (88.7%) were male and 19 (11.3%) were female. Further information regarding the participants’ injury types and compensation status is provided in Table 1.

<table>
<thead>
<tr>
<th>Injury Characteristics</th>
<th>Number</th>
<th>Per cent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Injury type</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Complete Tetraplegia</td>
<td>24</td>
<td>14.3</td>
</tr>
<tr>
<td>Incomplete Tetraplegia</td>
<td>61</td>
<td>36.3</td>
</tr>
<tr>
<td>Complete Paraplegia</td>
<td>38</td>
<td>22.6</td>
</tr>
<tr>
<td>Incomplete Paraplegia</td>
<td>45</td>
<td>26.8</td>
</tr>
<tr>
<td>Compensation</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Workers’</td>
<td>41</td>
<td>24.4</td>
</tr>
<tr>
<td>Transport Accident</td>
<td>65</td>
<td>38.7</td>
</tr>
<tr>
<td>Other</td>
<td>17</td>
<td>10.1</td>
</tr>
<tr>
<td>None</td>
<td>45</td>
<td>26.8</td>
</tr>
</tbody>
</table>

Details regarding the sample’s employment characteristics appear in Table 2. The most common occupational categories were tradespersons (28.0%), managers (16.1%) and production and transport workers (14.9%). Highly represented industries included agriculture, forestry and fishing (25.0%), construction (17.3%), manufacturing (11.9%) and retail (12%). At the time of interview, half of the sample was employed in paid work (i.e., worked for one hour or more for pay, profit, commission or payment in kind in a job, business, or farming enterprise). The remainder was occupied in a number of activities including undertaking unpaid work (17.9%), homemaker (8.3%), study (17.9%), focusing on physical rehabilitation (8.3%) looking for work (28.6%), unemployed but not looking for work (42.9%) and retired (9.5%). (Note: Categories are not mutually exclusive.)

While vocational issues were addressed as part of patients’ rehabilitation processes, the vocational focus was not extensive and vocational services were delivered on an ‘as needed’ basis. Depending on their wider circumstances, participants were eligible for additional vocational assistance as part of their transport accident or workers’ compensation entitlements (see Table 1 for proportions), from the Commonwealth Rehabilitation Service (available to those receiving social security benefits), or from some other private rehabilitation provider. As such, the amount of vocational rehabilitation individual participants received varied substantially.

Procedure

The question ‘Could you benefit, or have benefited, from having additional services to help you to return to work?’ was integrated into a larger semi-structured interview designed to collect information about participants’ demographic characteristics, rehabilitation experiences and return-to-work outcomes. The interviews were administered in a one-to-one format by researchers experienced in providing vocationally orientated services to the study population. Telephone interviews were investigated as an alternative to face-to-face interviewing and were chosen based on the many advantages associated with this method of data collection (see Fenig, Levav, Kohn, & Yelin, 1993).

Responses to the open-end interview questions were analysed using the principles of grounded theory (Strauss & Corbin, 1990). As recommended by Carpenter (1994), analysis began with a thorough reading of the interview transcripts in order to get a sense of the data as a whole. The responses were then
categorised into themes and tabulated. Following this, the original transcripts were again consulted to ensure that all relevant information had been included. As recommended by Bowling (1997), data was coded using categories that emerged from the data.

### Results

Of the 168 participants, 103 (61.3%) said that they thought that they could have benefited from additional services to help them return to work. When comparisons were made between those employed (50%) and those not employed (50%), it was found that more of those not in paid work said that they thought they could benefit from additional assistance (65.5% vs 57.1%), however this difference was not statistically significant (p > .05). When a comparison was made of individuals’ satisfaction with their occupational status, significantly more of those who were dissatisfied indicated that they believed that they could benefit from additional services: 73.6% vs 53.4%, χ² (1) 5.03, p < .05. Fewer of those from metropolitan areas indicated that they thought that they would benefit from additional services: 68.0% vs 52.1%, χ² (1) 4.385, p < .05.

No relationship was observed between a belief that additional services would have been helpful and if a participant: was a white vs blue collar worker; was eligible vs not eligible for compensation; had tetraplegia vs paraplegia; or was male vs female. In addition, belief was not found to be related to age at injury or age at the time of survey.

Details of the additional services participants believed they would have benefited from are provided in Table 3. The most common request was for more discussion of the individual’s options and alternatives. Of the 26 people who asked for such, six specifically indicated that they would have liked additional assistance in relation to retraining or choosing between education options. In some cases people said that they were interested in undertaking a computer course, however, in other cases, it was specifically stated that they were not interested in undertaking a computer course and wanted to explore other options.

Another common request was for more follow-up in relation to vocational issues. A number of people said that they were not ready to think about vocational issues while they were in hospital, however, after they had returned home and progressed to the stage where they felt ready to pursue employment, they felt unsure about what to do. There was no real consensus in relation to the right time for the follow-up of vocational issues: some people suggested not long after returning home, others suggested it could take three

<table>
<thead>
<tr>
<th>Pre-injury Employment Characteristics</th>
<th>Number</th>
<th>Per cent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Occupation</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Managers</td>
<td>27</td>
<td>16.1</td>
</tr>
<tr>
<td>Professionals</td>
<td>12</td>
<td>7.1</td>
</tr>
<tr>
<td>Associate Professionals</td>
<td>22</td>
<td>13.1</td>
</tr>
<tr>
<td>Tradespersons</td>
<td>47</td>
<td>28.0</td>
</tr>
<tr>
<td>Advanced Clerical &amp; Service Workers</td>
<td>8</td>
<td>4.8</td>
</tr>
<tr>
<td>Intermediate Production</td>
<td></td>
<td></td>
</tr>
<tr>
<td>&amp; Transport Workers</td>
<td>25</td>
<td>14.9</td>
</tr>
<tr>
<td>Elementary Clerical, Sales &amp; Service</td>
<td>6</td>
<td>3.6</td>
</tr>
<tr>
<td>Labourers &amp; Related</td>
<td>21</td>
<td>12.5</td>
</tr>
<tr>
<td>Industry</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Agriculture, Forestry &amp; Fishing</td>
<td>42</td>
<td>25.0</td>
</tr>
<tr>
<td>Mining</td>
<td>1</td>
<td>0.6</td>
</tr>
<tr>
<td>Manufacturing</td>
<td>20</td>
<td>11.9</td>
</tr>
<tr>
<td>Electricity, Gas &amp; Water</td>
<td>2</td>
<td>1.2</td>
</tr>
<tr>
<td>Construction</td>
<td>29</td>
<td>17.3</td>
</tr>
<tr>
<td>Wholesale</td>
<td>1</td>
<td>0.6</td>
</tr>
<tr>
<td>Retail</td>
<td>20</td>
<td>11.9</td>
</tr>
<tr>
<td>Accommodation, Cafes &amp; Restaurants</td>
<td>6</td>
<td>3.6</td>
</tr>
<tr>
<td>Transport &amp; Storage</td>
<td>15</td>
<td>8.9</td>
</tr>
<tr>
<td>Communications</td>
<td>1</td>
<td>0.6</td>
</tr>
<tr>
<td>Finance &amp; Insurance</td>
<td>4</td>
<td>2.4</td>
</tr>
<tr>
<td>Property &amp; Business</td>
<td>8</td>
<td>4.8</td>
</tr>
<tr>
<td>Government</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Administration &amp; Defence</td>
<td>2</td>
<td>1.2</td>
</tr>
<tr>
<td>Education</td>
<td>2</td>
<td>1.2</td>
</tr>
<tr>
<td>Health &amp; Community Services</td>
<td>4</td>
<td>2.4</td>
</tr>
<tr>
<td>Cultural &amp; Recreational Services</td>
<td>7</td>
<td>4.2</td>
</tr>
<tr>
<td>Personal &amp; Other Services</td>
<td>4</td>
<td>2.4</td>
</tr>
</tbody>
</table>
to four years. In four cases people indicated that they may still benefit from follow-up in the future.

Of the 14 people who made a comment suggesting that they wanted access to more informed, credible service providers, 12 were from a rural setting. In the majority of cases these people were agricultural workers who experienced some frustration with metropolitan-based service providers not understanding the rural context or the demands of the various farming environments. In many of these cases, participants felt that they would have benefited from talking with providers from a rural background and/or with experience in working through the issues surrounding a return to active farming.

Requests for assistance with problem solving were also more commonly made by people from rural areas (nine of 13). In the majority of cases, requests were framed around the desire to solve practical problems that would allow the person to return to work. People reported needing assistance with transport, attendant care, and modifications or equipment that would allow them to return to their pre-injury work setting. Especially in the case of the rural people, there was a request for rehabilitation professionals and other advisers to think ‘outside of the box’.

Another common request was for interaction with others who had experienced a SCI and returned to work. Again, this was of particular interest to the agricultural workers (ten of the 11). The thinking behind such requests was that such interaction would allow the individual to gain an understanding of what was possible, and hopefully give some ideas and inspiration for changes that the individual could apply to their situation to allow them to return to their pre-injury position.

Assistance with decision-making was something that was more commonly requested by metropolitan-based participants (six of eight). Such requests were typically framed as requests for assistance in making career choices. Assistance with choosing educational programs was mentioned by three of the participants.

Requests for employer support services included requests for assistance with working out what duties should and should not be performed, assistance in developing a return-to-work plan, information about SCI to give employers and coworkers, and incentives to offer employers so that they would consent to a work trial. The encouragement of ideas and the pursuit of goals was also something that was mentioned by a number of participants.

Somewhat surprisingly, there were only a few requests for what can be categorised as traditional vocational services. Such requests included: vocational planning, work experience, work trial, interview training, resume writing, etc. While not common, other noteworthy requests included: requests for information about starting a small business (two of three from rural areas), the introduction of more

### Table 3: Suggestions for additional services made by those who indicated that they believed that they would have benefited from additional services (N = 103).

<table>
<thead>
<tr>
<th>Suggestion</th>
<th>Frequency</th>
<th>Per cent</th>
</tr>
</thead>
<tbody>
<tr>
<td>More discussion of the options and alternatives</td>
<td>26</td>
<td>24.2</td>
</tr>
<tr>
<td>Timely follow-up</td>
<td>22</td>
<td>21.4</td>
</tr>
<tr>
<td>Access to more informed / credible providers</td>
<td>14</td>
<td>14.0</td>
</tr>
<tr>
<td>Assistance with problem solving</td>
<td>13</td>
<td>12.6</td>
</tr>
<tr>
<td>Interaction with similar others who returned to work</td>
<td>11</td>
<td>10.7</td>
</tr>
<tr>
<td>Assistance with decision making</td>
<td>8</td>
<td>7.8</td>
</tr>
<tr>
<td>Employer support services</td>
<td>8</td>
<td>7.8</td>
</tr>
<tr>
<td>Encouragement</td>
<td>7</td>
<td>7.0</td>
</tr>
<tr>
<td>Individualised vocational assistance</td>
<td>5</td>
<td>4.9</td>
</tr>
<tr>
<td>Traditional vocational services</td>
<td>4</td>
<td>3.9</td>
</tr>
<tr>
<td>Information about starting a small business</td>
<td>3</td>
<td>2.9</td>
</tr>
<tr>
<td>Access to meaningful work</td>
<td>2</td>
<td>1.9</td>
</tr>
<tr>
<td>More services locally</td>
<td>2</td>
<td>1.9</td>
</tr>
<tr>
<td>Assistance maintaining physical condition</td>
<td>1</td>
<td>1.0</td>
</tr>
<tr>
<td>Vocational assistance provided separate from medical care</td>
<td>1</td>
<td>1.0</td>
</tr>
<tr>
<td>Unsure of what would have helped</td>
<td>1</td>
<td>1.0</td>
</tr>
</tbody>
</table>

Note: Figures add to greater than 103 due to people sometimes nominating more than one service.
system-driven financial incentives to work, and better access to meaningful (as opposed to mundane) work.

Of those who indicated that they did not feel that they would benefit from additional services, 30 went on to explain why they thought this was the case. Details of the comments made are provided in Table 4. The most common reason given was that the individual believed that they had received sufficient help. In a number of the remaining cases, people indicated that additional assistance was not required as they had been able to maintain a good relationship with their pre-injury employer or were self-employed, which meant that a return to work was relatively uncomplicated for them.

Consistent with the findings in relation to those who believed that they could benefit from additional services, there was a portion of the group who felt that they were not ready to return to work. Other reasons given included: that individuals felt their return to work was their own responsibility (n = 3); that they felt it would be a waste as they did not believe that they could work (n = 3); they did not want to return to work (n = 3); and that the provision of such services was not worthwhile as there were no realistic employment opportunities in the (rural) area (n = 1).

**DISCUSSION**

Although a limitation associated with this study is the lack of standardisation in the vocational assistance offered or received, study findings do provide some insights as to what might be done to better assist those with acquired physical impairments to return to work. The finding that more than half of the participants believed that they could have benefited from additional vocational rehabilitation services indicates that there is significant potential to improve the work-related rehabilitation experiences and outcomes of people with SCI. The finding that those in work were as strong in this belief as those not, suggests that those who may, at the time of their injury, appear to be without the need of assistance might also benefit from enhanced vocational rehabilitation assistance. While the way the question was phrased made it difficult to determine what proportion of people employed thought that they would still benefit from vocational assistance, study findings do indicate that some of those in work felt that post-placement support would still benefit them.

**TABLE 4: COMMENTS MADE BY THOSE WHO INDICATED THAT THEY DID NOT BELIEVE THAT THEY WOULD BENEFIT FROM ADDITIONAL VOCATIONAL REHABILITATION SERVICES (N = 30).**

<table>
<thead>
<tr>
<th>Comment</th>
<th>Frequency</th>
<th>Per cent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Amount of assistance received was sufficient</td>
<td>14</td>
<td>46.7</td>
</tr>
<tr>
<td>Participants felt they were not ready to return to work</td>
<td>6</td>
<td>20.0</td>
</tr>
<tr>
<td>Thought that return to work is the individual’s responsibility</td>
<td>3</td>
<td>10.0</td>
</tr>
<tr>
<td>Participant felt unable to work</td>
<td>3</td>
<td>10.0</td>
</tr>
<tr>
<td>Participant did not want to return to work</td>
<td>3</td>
<td>10.0</td>
</tr>
<tr>
<td>No point as there are no jobs in his area</td>
<td>1</td>
<td>3.3</td>
</tr>
</tbody>
</table>

The finding that more of those from rural areas thought they could benefit from additional assistance is consistent with the wider rural health literature which suggests that rural persons are underserved when it comes to health and rehabilitation services (Aday, 1985; Harrison, 1997; Humphreys & Rolley, 1993). Findings also suggest that rural residents with acquired physical impairment, but particularly agricultural workers, have needs that are not being well met by metropolitan-based vocational rehabilitation services. Study results support the contention that there is a lack of understanding on the part of service providers as to the needs of their rural-based clientele. Thus, consistent with the recommendations arrived at by Boughton, Fragar, Davis and Beard (1997), it is concluded that there is a need to educate health-service providers regarding the rehabilitation requirements of their farming clientele.

In addition to the education of vocational rehabilitation providers, study findings indicate that there was a desire to talk to other farmers, see their set-up and learn more about the options open to them. This request for peer interaction is not isolated to the agricultural population. Indeed peer support is commonly requested by those involved in the agricultural industries who acquire an impairment. In response to such requests in North America, staff from Breaking New Ground (located...
in the USA) produced a publication entitled, *Barn builders: A peer support network of farmers and ranchers with disabilities and caregivers* (Breaking New Ground, 1999). The directory is freely available, accessible via the internet (see http://pasture.ecn.purdue.edu/~bng/barn/), widely distributed and well utilised throughout North America. The results from this current research indicate that such a resource could be beneficial to Australians attempting to work in an agricultural setting with a physical impairment. A resource similar to that developed by Breaking New Ground is being established for farmers in Australia. Further details regarding this resource can be obtained through contacting the Australian Centre for Agricultural Health and Safety.

While a number of the participants expressed a desire for additional follow-up, study findings do not provide much assistance in terms of identifying the best time for such contact. With such disparity in individual responses, it would appear that the best time for follow-up varies considerably and probably needs to be considered on a case-by-case basis. Further, it is likely that more than one follow-up could be required. One solution might be to negotiate a time to revisit vocational issues with the patient at the time of discharge. If the individual is still not ready at the time of follow-up, future scheduling could be made. Follow-up need not necessarily mean extensive services, rather it could simply entail a phone call conducted with the aim of maintaining contact and letting the individual know that services are available to them and how to access them when they are ready to do so.

Another important issue appears to be employer support services. In the current study there were instances where people encountered difficulties because their employers were not aware of the actual nature and extent of their limitations as well as of their capabilities. In one case the affected participant indicated that it would have helped if there were a video or educational material that he could have given his employers so that they better understood his limitations. In addition, liaison between the employer and the employee directly also appears to have good potential for facilitating vocational rehabilitation gains.

The lack of request for traditional services is difficult to interpret due to our not having a detailed record of the services used by the study participants. However, given that all those likely to be in need of traditional services would have had access to them through the various resources at their disposal, findings may be interpreted to mean that there is sufficient traditional assistance available. What appears to be lacking is more innovative vocational rehabilitation approaches. This is not to say that there is no place for traditional vocational rehabilitation services. Rather, that those with acquired disabilities have needs beyond those that can be fulfilled through traditional means.

While study findings indicated that a substantial proportion of participants believed that they would benefit from services, there were also a number of people who felt that they could not have been further assisted. While approximately half of the participants gave an explanation for why this was so (see Table 4), the remainder did not. Of those who did not, 20 (57%) were employed, suggesting that these individuals had received all the assistance they required in order to allow them to return to the labour force.

Of those who gave some explanation for why they did not think they would have benefited from additional services, close to half believed that they had received all the assistance they required. Interestingly, only a relatively small proportion of those interviewed believed that they would not benefit from additional assistance because they felt unable or did not want to return to work. While this may to some extent relate to participants’ desire to give a socially desirable response, these findings are in support of other research that has found that the majority of unemployed persons with a disability believe they could and would like to work (Louis Harris and Associates, 1996).

While this research investigated the perceptions of people with a SCI, findings are likely to be generalisable to a variety of people with other conditions. Many other illnesses and injuries can have similar consequences to those associated with a SCI (e.g., chronic pain, restricted mobility, and restricted physical abilities). As such, study findings are also likely to be applicable to a larger group of people with acquired physical impairments.

In conclusion, given that the gaining or re-gaining of employment is associated with so many positive consequences, any additional or improved vocational
services for seriously injured job seekers must be of high priority for health and welfare policy makers, as well as for professionals involved in delivering services to those discharged from hospital with a major impairment. This study’s findings indicate that a substantial proportion of people with SCI believe that they could have benefited from additional vocational rehabilitation services. In particular, those from rural areas had requests that, with relatively little effort, would likely result in more positive rehabilitation experiences and outcomes. Implementation of the suggestions presented has the potential to improve the health and quality of life of not only those with SCI, but also a variety of others who experience a change in their physical capabilities resulting in work disablement.

REFERENCES


This longitudinal study examined the determinants of work adjustment in the traumatic brain injury (TBI) population, using the frameworks provided by Hershenson (1996) and Moos (2002) as a guide for selecting variables. Based on these frameworks, the predictive utility of a range of variables (i.e., self-esteem, perceived support, situational stressors, appraisal of stress and self-efficacy and coping responses) was examined. Eighty-one individuals with TBI provided data for the study. The prediction of work adjustment was improved beyond that accounted for by initial adjustment when these previously-mentioned variables were entered into regression equations. Specifically, short-term work adjustment was associated with high levels of social support and self-efficacy as well as the effective use of problem-solving. In the long-term, however, internal resources such as self-esteem became more important to work adjustment, as did the effects of lesion location and cognitive impairment. Greater focus on these determinants of work adjustment in the career counselling process could foster the development of a preventative approach to TBI vocational rehabilitation. In particular, it may be possible to identify individuals who are likely to experience work adjustment difficulties and assist them to maintain and develop the resources that will, in turn, improve their likelihood of vocational success.
Vocational disruption is relatively common following traumatic brain injury (TBI) (Johansson & Bernspang, 2001). Indeed, for severely injured individuals, the unemployment rate has been found to be as high as 71% (Stambrook, Moore, Peters, Deviane & Hawryluk, 1990). However, of those individuals who do return to work following TBI, 84% will return to a lower level of occupation than that held prior to injury or to roles that are not commensurate with their pre-injury qualifications and experience (McMordie, Barker & Paolo, 1990). Many are no longer able to perform at their pre-injury level (Parente & Stapleton, 1996) and require considerable assistance to maintain employment (Wehman, 1990). In general, individuals with TBI are extremely unlikely to maintain stable employment over time (Sale, West, Sherron & Wehman, 1991).

Given the difficulties experienced by this population, the capacity to maintain a positive attitude to work is likely to be severely impeded. In examining work adjustment among people with disabilities, Hershenson (1981) provided a framework that may be useful for career counsellors. In this approach, work adjustment was conceptualised as the consequence of three interacting components, namely, work personality, work competencies and work goals. According to this theory, these three components develop sequentially as individuals mature, with each component being dependent on achievement of the preceding component (Hershenson, 1996). The first component, work personality, refers to an individual’s self-concept as a worker, his or her needs and values in relation to work and the personal system of work motivation (Hershenson, 1981). The second component, work competencies, includes an individual’s work-related abilities, interpersonal skills, and work behaviours. The final component of work adjustment is the work goals individuals have developed over time, which, according to Hershenson (1981), are often influenced by peers and reference groups. These three components interact with each other, and with the work environment (i.e., expectations, demands of the job, required skills and career prospects) to influence vocational outcome (Szymanski & Hershenson, 1998).

TBI represents a complete disruption of many of these components of work adjustment. For instance, the individual’s self-concept may be disrupted by his or her inability to manage pre-injury work-related tasks and responsibilities. The associated feelings of inadequacy and futility will undoubtedly have a negative impact on work motivation and values. The cognitive and physical disabilities that result from TBI are likely to prevent individuals from competently adapting to workplace changes and demands. The need for a reduced pace of work, difficulties in problem-solving and planning and impaired interpersonal interactions with work colleagues (Gronwall, Wrightson, & Waddell 1990; Groswasser, Melamed, Agranov & Keren, 1999) are all likely to impact on competence in the workplace. As a result, the individual’s work goals are likely to require considerable reassessment following TBI.

For career counsellors, attending to these components of work adjustment is crucial if a successful and sustainable return to work is to occur for people with TBI. However, the complex nature of TBI presents a major challenge for career counsellors, particularly as little is known about how best to facilitate work adjustment in this population. Accordingly, it is important to recognise and understand the factors that are most likely to impede or facilitate successful work adjustment following TBI.

In this regard, Moos (2002) recently discussed several factors that have the potential to account for work adjustment. According to Moos, the determinants of adjustment are best categorised into four major clusters, namely (1) factors in the individual’s environment, (2) his or her personal resources, (3) the transitory situational conditions that affect the individual and (4) the individual’s appraisal and coping skills. If these factors are able to determine the level of work adjustment experienced by people with TBI, then they offer a viable focus for career counsellors who are working with this population.

Within the environmental system, Moos (2001) referred to the external supports that are likely to influence the individual’s adjustment. Lazarus and Folkman (1984) also recognised that aspects of the environment are likely to represent valuable coping resources for individuals who are confronting major life events. Indeed, the importance of social support following a life crisis has been extensively corroborated (see Kessler, Price, & Wortman, 1985 for an early review of this research). Subsequent research
has found that the type of ‘support’ makes a difference. Thus unhelpful interactions or misguided attempts to be supportive can be damaging (Thoits, 1994). Some argue that perceived support, i.e., the subjective sense of being supported is more important to eventual adjustment than are such facts as the actual size of the support network (Kreutzer, Marwitz & Kepler, 1992).

Distinct from the environmental system, the personal system consists of internal attributes, such as the level of confidence or self-esteem, that assist individuals to adjust to difficult circumstances. These personal factors reflect the extent to which individuals believe themselves to be capable, successful and worthy (Kivimaki & Kalimo, 1996) and, therefore, are likely to have a profound impact on work adjustment. Individuals who have positive beliefs about themselves and their abilities have been found to demonstrate a range of successful outcomes following stressful life events (Terry, 1991). Self-esteem has emerged repeatedly as a predictor of general wellbeing (Ellsworth, 1995) and appears to be a particularly important resource for people confronting social rejection (Leary, Schreindorfer & Haupt, 1995).

In addition to environmental and personal resources, Moos (2002) acknowledged the importance of considering the context within which individuals were required to adjust. In particular, transitory conditions or events that occur simultaneously with TBI are likely to interfere with the individual’s coping capacity or deplete coping resources (Terry, 1991). Specifically, the frequency, ambiguity, duration or timing of other events in the individual’s life may account for differences in outcome (Lazarus & Folkman, 1984) and, therefore may contribute to work adjustment. For example, the break-up of a personal relationship may well influence an individual’s work adjustment post-TBI.

Finally, Moos’ (2002) framework incorporates the appraisal and coping strategies individuals employ to manage their life situation. In terms of appraisal, clinicians have noted that individuals who refer to their injury in catastrophic terms (i.e., as extremely threatening) are likely to experience poor adjustment (Klonoff & Lage, 1991). Similarly, Linn, Allen and Willer (1994) found that individuals who rated themselves as being severely disabled also reported higher levels of depression and adjustment disorder than those who rated their disability as being less severe. The relevance of self-efficacy to adjustment following TBI has also been identified through clinical observations (Kihlstrom & Tobias, 1991). Bandura (1997) defined self-efficacy as a belief in one’s capability to execute the actions required to produce a desired outcome. Such beliefs are likely to have a considerable impact on adjustment, particularly as they relate to work performance and job-seeking behaviour (Barlow, Wright & Cullen, 2002).

When faced with major life crises, Lazarus and Folkman propose that, following appraisal of one’s circumstances, individuals are likely to implement one of three types of coping, namely problem-focused, emotion-focused or perception-focused strategies (Lazarus & Folkman, 1984). Problem-focused strategies are those that aim to confront the problem directly and include such techniques as information-seeking, decision-making and solution generation (Kendall et al., 1997). In contrast, emotion-focused coping usually seeks to lessen the impact of any negative emotions (e.g., denial, escapism, wishful thinking and distraction) whereas perception-focused coping aims to reduce the intensity of the problem by minimising its importance or engaging in such techniques as joking and rationalising.

If these factors suggested by Moos (2002) do determine work adjustment as defined by Hershenson (1981), then they are likely to provide an important focus for career counsellors who wish to assist people with TBI. However, to date, the predictive utility of the factors have not been examined empirically. Thus, the purpose of the current study is to examine the extent to which the factors outlined by Moos can predict successful short and long-term work adjustment following TBI.

**METHOD**

The current study was longitudinal, with three data collection points: at discharge from hospital; two months after discharge; and eight months after discharge. Work adjustment was assessed at each point.

**Participants**

A consecutive sample of 81 individuals with TBI was selected from the rehabilitation unit of a major
metropolitan hospital. In line with the TBI population, most were male (81%) with a mean age of 30.18 years (ranging from 16 to 63, SD = 11.34). The most common cause of TBI was motor vehicle accidents (65%), with falls and assaults accounting for an additional 19% and 16% respectively. Although most of the participants had diffuse TBI, 46% had clear signs of frontal lobe involvement (e.g., CT scan, EEG and/or surgical notes). Using the Glasgow Coma Scale (GCS) score (Jennett & Teasdale, 1981) assigned on admission to the emergency unit, severe TBI was sustained by 54% of the sample (GCS < 8). Moderate (GCS 8 to 12) and mild (GCS > 12) TBI was sustained by 16% and 30% of the sample respectively. The mean GCS score was 7.98 (SD = 4.61). Cognitive impairment was assessed using the Barry Rehabilitation Inpatient Screening of Cognition procedure (BRISC; Barry, Clark, Yaguda, Higgins & Mangel, 1989) that is administered routinely prior to discharge. BRISC scores can range from 0 to 135, with higher scores indicating better cognitive functioning. For this sample, the mean BRISC score was 121.32 (SD = 13.80).

Measures
Work Adjustment was assessed using the vocational scale of the Psychosocial Adjustment to Illness Scale (PAIS) Self-report version (Derogatis, 1986). The scale consists of six items that measure attitude towards work (i.e., commitment to work, work goals, perception of one’s performance, productivity, attendance and co-operation with co-workers). Respondents were asked to indicate their level of agreement with each statement on a four-point scale and higher scores indicated a more positive work adjustment.

Self-esteem was assessed at Time 1 using Rosenberg’s (1965) Self-Esteem Inventory. Each of the 10 items required individuals to rate their agreement with a general statement concerning their beliefs about themselves using a four-point scale. Higher scores indicated greater levels of self-esteem.

Perceived support was measured using eight items designed to assess emotional and instrumental support. Eight items were selected from the Social Support Questionnaire (SSQ; Sarason, Sarason, Shearin & Pierce, 1987). Sample items include: ‘How much can you talk about your worries?’ and ‘How much can you count on these people to help you out financially if you really needed it?’). The items were repeated five times in relation to various sources of social support (i.e., mother, father, spouse/partner, extended family and friends). Participants indicated how supportive they perceived each person (or group of people) to be on each of the eight items using a five-point scale. As research has suggested that the source of support (i.e., family or friends) may be more important than the type of support (McColl, Lei & Skinner, 1995), scores were calculated for family support (i.e., spouse and parents) and social support (i.e., extended family and friends). To calculate social support, the scores from the extended family and friends scales were summed. However, as only 30% of the sample had a spouse or regular partner and parents were often deceased or unavailable, family support was represented by the mean of the scores assigned to whichever sources were available.

Stressors experienced in addition to TBI were reported by relatives as many individuals with TBI experience post-traumatic amnesia and confusion in relation to the events preceding their injury. Relatives completed a modified version of the Life Experiences Survey (LES; Sarason, Johnson & Siegel, 1978), which consists of 34 life events that are common to young people. Relatives indicated if the participant had experienced each event within the last year so that higher scores indicated a more stressful situation.

Appraisal was conceptualised as consisting of perceived stress and self-efficacy. Perceived stress was assessed using Terry’s (1991) measure of the perceived stressfulness of one’s circumstances. Participants rated how disruptive, upsetting, difficult, severe and stressful they thought the impact of TBI had been on their lives relative to other events using a series of six-point semantic differential scales (e.g., ‘very severe’ to ‘not at all severe’). Higher scores indicated less perceived stress. Terry’s (1991) measure of self-efficacy was also used to assess appraisal. This scale consists of five items concerning the degree to which participants felt that they could successfully manage any difficulties they were experiencing. Responses were given on a five-point scale, with higher scores indicating higher self-efficacy.

Coping was assessed using 16 items from the Ways of Coping questionnaire (WOC), which was
originally developed by Folkman and Lazarus (1980). The items used in the current study were drawn from three scales, namely instrumental action (problem-solving coping), minimisation (perception-focused coping) and escapism (emotion-focused coping) as these types of coping strategies have been previously identified in TBI samples (McColl et al., 1995). Participants indicated on a four-point scale how frequently they had used each strategy over the last few weeks. Higher scores indicated a more frequent use of each coping strategy.

Procedure
The first questionnaire was completed during a personal interview prior to discharge. Follow-up questionnaires were mailed to participants two months following discharge and again six months later. These time periods were chosen to ensure that personal, environmental and situational variables were assessed prior to the complicating influence of community re-entry. Appraisal and coping, however, could not be accurately assessed until participants had returned home and given thought to their circumstances. Thus, these variables were assessed within two months of discharge. The final interval was conducted six months later to provide opportunity for the individual’s circumstances to begin to stabilise. In addition to correlations, two hierarchical multiple regression analyses were performed to predict Time 2 and Time 3 work adjustment. For both analyses, the predictors were entered in steps, with Time 1 work adjustment entered first, followed by the injury variables; the personal, environmental and situational variables; and finally, the coping and adjustment variables.

Results
Table 1 shows the means and standard deviations for the independent and dependent variables. Work adjustment scores were reasonably stable across time, with a slight trend towards improvement. However, repeated-measures analyses of variance revealed that this trend was not significant, $F_{(2,26)} = 2.36, p = .08$.

Table 2 contains the bi-variate correlations among the variables. As would be expected, less cognitive impairment (i.e., higher BRISC scores) was associated with less severe injuries (i.e., higher GCS scores). There were significant positive correlations between self-esteem and both family and social support. An interesting finding was the significant negative correlation between support and severity of injury, indicating that more severe injuries (i.e., lower GCS scores) were associated with higher levels of support. This finding suggests that individuals with serious injuries may attract more intense support from extended family and friends than those with mild injuries, at least in the early phases of recovery. Positive appraisals (i.e., less stress and higher self-efficacy) and self-esteem were correlated and were associated with less use of escapism as a coping strategy. The use of both emotion-focused and problem-solving coping was associated with more severe injuries (i.e., lower GCS scores). This finding was unexpected, but may reflect the fact that individuals with more severe injuries are more likely than those with milder injuries to confront problems that necessitate the use of coping. Higher levels of social support were also associated with higher self-efficacy and greater use of problem-solving.

As shown in Table 3, the injury variables failed to predict work adjustment at Time 2 after controlling for initial adjustment. However, after entry of the personal, environmental and situational variables into the equation, there was a significant increase in $R^2$. Specifically, higher levels of social support were associated with better short-term work adjustment. When the appraisal and coping variables were included as independent variables, the prediction of subsequent work adjustment was further improved. High levels of self-efficacy and the use of problem-solving coping predicted better work adjustment.

Table 4 shows that the prediction of work adjustment at Time 3, after controlling for initial adjustment, was significantly improved when lesion location and cognitive impairment were entered into the equation. Specifically, lower levels of cognitive impairment (i.e., higher BRISC scores) predicted better work adjustment, as did lesions not incorporating the frontal lobes. Inclusion of the personal, environmental and situational variables failed to improve $R^2$, although better work adjustment was predicted by higher levels of self-esteem. Social support was no longer a significant predictor of work adjustment. Although the inclusion of the coping and appraisal variables did not increase $R^2$, the use of problem-solving was associated with
### Table 1: Means and standard deviations of study variables at particular points in time

<table>
<thead>
<tr>
<th>Variable</th>
<th>Time 1</th>
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<th>Time 2</th>
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<th>Time 3</th>
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<tr>
<td></td>
<td>M</td>
<td>SD</td>
<td>M</td>
<td>SD</td>
<td>M</td>
<td>SD</td>
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<td>2.85</td>
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<tr>
<td>Cognitive Function (BRISC Score)</td>
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<tr>
<td>Self-esteem</td>
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<td>Social Support</td>
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<td>Family Support</td>
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<td>Stressors</td>
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<td>Perceived Stress</td>
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<td>Escapism</td>
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<td>2.58</td>
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<tr>
<td>Minimisation</td>
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<td>3.14</td>
<td>0.82</td>
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* = Variable not measured at this time

### Table 2: Correlations among the independent variables

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<td>(1) Injury severity</td>
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<td>(2) Cognitive impairment</td>
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<td>-.17</td>
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<td>(3) Lesion location</td>
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<td>(4) Self-esteem</td>
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<td>.01</td>
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<td>(5) Family support</td>
<td>-.22*</td>
<td>-.05</td>
<td>-.07</td>
<td>.37**</td>
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<td>(6) Social support</td>
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<td>-.16</td>
<td>.02</td>
<td>.42**</td>
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<td>(7) Stressors</td>
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<td>(8) Stress Appraisal</td>
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<td>-.04</td>
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<td>-.38**</td>
<td>-.12</td>
<td>-.13</td>
<td>.01</td>
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<td>(9) Self-efficacy</td>
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<td>-.15</td>
<td>-.06</td>
<td>-.48**</td>
<td>-.19</td>
<td>-.32**</td>
<td>.02</td>
<td>.38**</td>
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<td>(10) Escapism</td>
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<td>.02</td>
<td>-.45**</td>
<td>-.02</td>
<td>-.10</td>
<td>-.02</td>
<td>.44**</td>
<td>.45**</td>
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<tr>
<td>(11) Minimisation</td>
<td>.18</td>
<td>.10</td>
<td>.09</td>
<td>-.03</td>
<td>-.18</td>
<td>-.16</td>
<td>-.02</td>
<td>.21</td>
<td>-.18</td>
<td>-.03</td>
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<tr>
<td>(12) Problem-solving</td>
<td>-.36**</td>
<td>-.08</td>
<td>-.14</td>
<td>.01</td>
<td>.16</td>
<td>.26*</td>
<td>.01</td>
<td>.21</td>
<td>-.04</td>
<td>.33**</td>
<td>-.11</td>
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* p < .05  ** p < .01
TABLE 3: Hierarchical Multiple Regression Analysis Predicting Work Adjustment at Time 2

<table>
<thead>
<tr>
<th>Independent Variables</th>
<th>( R^2 )</th>
<th>( \text{Adj} R^2 )</th>
<th>( R^2 ) change</th>
<th>( F )</th>
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<td>1. Time 1 Work Adjustment</td>
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<td>.36***</td>
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* \( p < .05 \)  **** \( p < .001 \)

TABLE 4: Hierarchical Multiple Regression Analysis Predicting Work Adjustment at Time 3

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<th>( R^2 )</th>
<th>( \text{Adj} R^2 )</th>
<th>( R^2 ) change</th>
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* \( p < .05 \)  **** \( p < .001 \)
DISCUSSION
The aim of this study was to examine the factors that can predict successful short and long-term work adjustment following TBI. The results of this study indicated that attitudes towards work remained relatively stable over time, with the most significant predictor of both short-term and long-term work adjustment being attitude to work at the time of discharge from hospital. This finding highlights the importance of early intervention following TBI.

Interestingly, the nature and severity of TBI, and the level of associated cognitive impairment, were not associated with either initial attitudes to work or short-term work adjustment. However, higher levels of cognitive functioning and lesions not incorporating the frontal lobes of the brain predicted better work adjustment in the long-term. This finding confirms other data showing that persistent vocational disturbances following TBI are likely to have a neurological basis (e.g., Dikmen & Machamer, 1995). For career counsellors, this finding denotes a need to understand the profound impact of frontal lobe lesions and cognitive impairment on vocational outcomes among clients with TBI. Unfortunately, little is done to assist individuals with TBI to adopt acceptable workplace strategies that can accommodate high-level cognitive and social impairments. If addressed in the short-term, it is possible that the negative long-term impact of these factors on work adjustment may be obviated.

In relation to the non-neurological predictors of work adjustment, the current study identified a number of significant predictors that are potentially useful in the career counselling process following TBI. In particular, social support (i.e., from peers and extended family) was an important determinant of positive work adjustment in the short-term. This finding is intuitively sensible in that attitude towards work is undoubtedly influenced by the supportiveness of one’s peers, many of whom are likely to be associated with the pre-injury workplace. High levels of support from these peers could facilitate the maintenance of a positive attitude towards work.

However, in the long-term, friends and peers have been found to withdraw their support or become less available to individuals with TBI. Friendships, in particular, are extremely vulnerable to disruption, presumably because friends are unable to manage the cognitive and behavioural sequelae of TBI (Finset, Dyrnes, Krogstad & Berstad, 1995). Consequently, the degree to which peers can provide support may be so negligible in the long-term that they become irrelevant to the individual’s work adjustment. Despite this possibility, it has also been suggested that there may actually be a limit to the beneficial impact of social support. Specifically, too much support could exacerbate negative adjustment, perhaps by fostering dependence on others and damaging confidence (Krause, 1995). This suggestion indicates the possibility of a non-linear relationship between social support and work adjustment that would not be detected using standard statistical analyses. Although inconclusive in relation to long-term adjustment, the current findings clearly indicate that the maintenance of social support in the early stages following TBI impacted positively on short-term work adjustment. Consequently, assisting individuals with TBI to maintain social links with their work-related peers could be a useful and innovative strategy for career counsellors.

Over time, however, it appears that social support declines in importance and internal resources, such as self-esteem, gain prominence as potential determinants of work adjustment. In this regard, some researchers have found that, rather than being a stable resource, self-esteem may fluctuate over time in response to ongoing threats and failures (Kernis et al., 1993; Kivimaki & Kalimo, 1996). Given that the experience of returning to vocational activities following TBI is fraught with failure and threat, self-esteem could be severely damaged over time. The current study has indicated that the ability to retain or acquire self-esteem despite the challenges of TBI may be a crucial buffer against negative vocational outcomes. Consequently, an important role for career counsellors in working with individuals who have TBI involves consolidation of a meaningful sense of self despite the major losses they have experienced.

In relation to the cognitive coping and appraisal variables, self-efficacy underlies many therapeutic interventions following a range of illnesses and injuries (e.g., Lorig, 1996) and, therefore, its importance to work adjustment is not surprising.
However, the failure of self-efficacy to remain significant over time was unexpected. It is possible that, as noted by clinicians, the chronic nature of TBI results in a strong cycle of frustration and depleted sense of control (Cicerone, 1991). Specifically, the pervasive nature of TBI sequelae is likely to be associated with repeated failure to bring about the desired outcomes despite considerable effort. Thus, the potency of self-efficacy as a predictor may be diminished in the long-term. Despite the likelihood of depleted self-efficacy, individuals who continued to use a problem-solving style of coping were more likely to maintain positive work adjustment over time. This finding is challenging, given the fact that TBI often impairs the ability to problem-solve effectively (Kendall et al., 1997), indicating the need for considerable support and encouragement in this area during career counselling.

The major contribution of the current study lies in its ability to inform career counsellors about potential determinants of work adjustment among individuals with TBI. In particular, the findings bring attention to the fact that counsellors must have a proper comprehension of the impact of frontal lobe injury and impaired cognitive functioning on work adjustment and must be able to identify workable strategies for their clients. Although these variables may not appear to be important in the short-term, they have a long-term impact. The study has also identified the need to focus on several psychosocial determinants of work adjustment, namely social support, self-efficacy, self-esteem and problem-solving ability. A number of researchers and clinicians in the area have documented strategies that may be useful in modifying these variables. For instance, Godfrey and Smith (1994) presented a number of strategies for increasing social support for individuals with TBI. Similarly, O’Hara and Harrell (1991) documented the process of empowerment training in TBI rehabilitation and outlined strategies for increasing self-efficacy and practical coping skills. In an effort to directly influence appraisal, a number of clinicians have described techniques that encourage individuals to positively reappraise their situation, to find meaning in their injury and to regain self-esteem (e.g., Lewis & Rosenberg, 1990; Nadell, 1991; Prigatano, 1991). There is also evidence that, with the inclusion of appropriate generalisation cues, training programmes can facilitate the successful use of problem-solving among individuals with TBI (Foxx, Martella & Marchand-Martella, 1989).

Most importantly, the current study has highlighted the need for early career counselling for individuals with TBI. Often these individuals do not come to the attention of careers counsellors, or even rehabilitation providers, until some time after their injury. By this time, work-related difficulties have become severe and long-standing (Karol, 1989) and motivation to return to work is often low. The current findings offer some potentially cost-effective foci for assisting those individuals who are most likely to experience work adjustment difficulties in the long-term.

The study also provides several avenues for further research that would clarify the findings and address limitations. For instance, other than stressors, all variables were assessed through self-report. This method of measurement may have resulted in inflated relationships between independent and dependent variables. Accordingly, the use of significant others’ reports of work adjustment, or structured observations of work-related behaviour, is necessary to validate the findings. It would also be useful for future research to examine predictors of work adjustment over a longer time period. Due to time restrictions, the current study used only an eight-month follow-up period. However, work-related outcomes following TBI are likely to be affected for many years after injury. Despite these limitations, the current study offers some potentially useful foci for career counsellors to use within the first year following TBI.

Acknowledgements
Thanks are due to the staff and patients of the Princess Alexandra Hospital, Australia, for their co-operation and participation in this study. The assistance of the Centre for National Research on Disability and Rehabilitation and the Motor Accident Insurance Commission is also acknowledged.

REFERENCES
Articles


RECONCEPTUALISING THE VOCATIONAL REHABILITATION PROCESS USING A CAREER DEVELOPMENT APPROACH

NICHOLAS BUYS, Griffith University
SHARON HENSBY, Griffith University
JOCELYN RENNIE, Griffith University

The traditional job placement approach to vocational rehabilitation service delivery is no longer sustainable in terms of delivering meaningful employment outcomes for people with disabilities. For vocational rehabilitation to be relevant in the current labour market to the needs and aspirations of this population, a conceptual shift is required in the focus of service delivery. This paper suggests that an approach focused on career development is warranted, and to this end, a model of career development for vocational rehabilitation underpinned by systems theory is presented. The application of the model is illustrated through the use of a case study and the implications of the model for rehabilitation practice are explored.

Over the past 60 years vocational rehabilitation (VR) services, with their strong focus on job placement, have been viewed as having served Australia well (Tipping, 1991). Assisting people with disabilities to obtain work is seen as a good investment by society because of savings in social security expenditure and clawbacks through income tax payments. However, despite considerable increases in VR expenditure over the last two decades, employment rates for people with severe disabilities have not significantly improved, with unemployment rates for this group remaining at over 50 per cent (Australian Bureau of Statistics, 1998). During this same period labour markets in Australia have undergone a radical shift. The classical wage-earner model that focuses on full-time permanent work in a
regulated labour market is no longer relevant in Australia (Buchanan & Watson, 2000). Labour markets are now characterised by high levels of unemployment, a high degree of casualisation of the workforce, growth of precarious work, and a massive increase in low-paid jobs in the service sector. Vulnerable workers in this labour market include many people with disabilities. These workers are ‘likely to suffer labour market churning: to move between a succession of short-term low-paying jobs, to move in and out of employment...’ (Buchanan & Watson, 2000, p. 28). In this environment the traditional job placement model of rehabilitation service delivery is not sustainable in terms of ensuring durable and satisfying employment options for many people with disabilities (Buys, Buys, Kendall & Davis, 2001). Indeed, available data indicates that job retention rates among people receiving disability employment services are poor (Anderson, Psychogios & Golley, 2000). Gilbride, Stensrud and Johnson (1994) summarise the situation regarding VR services well: ‘people may be placed, but they may not be assisted to sustainable or promotable employment’ (p. 217).

In response to these issues it is the contention of this paper that the job placement approach to VR needs to be replaced by a model that focuses on career development. It is argued that it is only through assisting people with disabilities to pursue long-term sustainable careers that the ‘labour market churning’ of this population will be reduced. In this context the purpose of this paper is to present a model of the VR process that has a career development focus.

**TRADITION MODELS OF VR**

The VR process is usually characterised as a short-term intervention strategy comprising several stages that ultimately lead to a vocational outcome. This process appears to be consistent across many industrialised nations and stages in the process are commonly described, with minor variation, as referral, initial assessment, vocational evaluation, planning, service delivery, job placement and follow-up (Brabham, Mandeville & Koch, 1998; Commonwealth Rehabilitation Service, 1994; Rubin & Roessler, 2001). However, the ultimate focus of these approaches, job placement, (Rubin & Roessler, 2001; Vandergoot, 1981) is inadequate for two reasons that relate to the nature of the intervention. Firstly, due to funding constraints, people with disabilities are often placed in easily accessible jobs where minimal training is required. These jobs are often low paid, and are usually the most precarious in terms of longevity. Such jobs form what is termed the secondary labour market (Hagner & Dileo, 1993). It is not surprising therefore that people with disabilities are disproportionately laid off from jobs (Yelin, 1991), particularly at times of economic restructuring and rapid labour market change. Secondly, even where training is provided to people with disabilities and jobs attracting reasonable salaries are found, little attention is paid to career planning. Consequently people with disabilities may move ‘laterally’ in the job market rather than obtaining promotions or advancing their careers. Furthermore, they may be laid off from their jobs with little idea about how to successfully re-enter the labour market and capitalise on career opportunities. A more sustainable approach to VR focusing on career development is clearly required.

Adoption of a career development approach radically alters the way in which we conceptualise the VR process, from assessment through to job placement for people with disabilities. If we take the view that career development is a lifelong process consisting of multiple jobs, the notion of a ‘one-off’ job placement as the criterion for success in service delivery is challenged. Instead, placement is viewed ‘as an event within a person’s overall career development’ (Vandergoot, 1981, p. 263), and the criterion for success becomes the client’s capacity to pursue a sustainable career.

Although a career development approach to VR has been advocated in the literature over the past two decades (see Navin & Myers, 1983; Rumrill & Roessler, 1999; Szymanski, Hershenson, Enright & Ettinger, 1996; Vandergoot, 1981; Vandergoot, Jacobsen & Worrall, 1979), little seems to have changed in the service delivery domain. Part of the problem for vocational rehabilitation practitioners has been that ‘traditional’ career development theories have largely ignored the impact of disability on people’s lives (Buys et al., 2001; Patton, 1997). The consequence of this has been that vocational rehabilitation practitioners have lacked a cohesive theoretical foundation for practice. However, recent ecological and system approaches to
career development (McMahon & Patton, 1995; Patton & McMahon, 1997; Savickas & Lent, 1994; Szymanski & Hershenson, 1998) offer hope in this area by offering frameworks to relate career development theories to rehabilitation practice (Buys et al., 2001).

**Theoretical Framework For a Career Development Approach To VR**

The systems theory framework when applied to career development attempts to identify and represent a range of individual, social and environmental influences on vocational decision-making and behaviour as a system of complex interrelationships (McMahon & Patton, 1995; Patton & McMahon, 1997). It acknowledges that these influences change in importance over time and that chance factors, including the onset of disability, can have significant impact on career development.

Such systems theory frameworks are useful because they can guide rehabilitation counsellors in identifying the sub-systems (e.g., attitudes, family, labour market) that affect clients and the relationships between these sub-systems. Counsellors can then assist individuals to 'understand issues and barriers to their vocational development and conjointly decide on appropriate interventions' (Buys et al., 2001, p. 41). By focusing on the range of socially constructed barriers and other environmental variables that influence the lives of people with disabilities, the systems framework moves away from explanations of career development that overly focus on the impairment associated with disability (Conte, 1983). Consequently, greater emphasis is placed on interventions addressing the barriers that people with disabilities face in wider society (e.g., employment discrimination, access problems to workplaces) rather than remedying personal deficiency.

The systems theory framework also aids rehabilitation counsellors in selecting constructs and interventions from other career development theories to inform practice by identifying salient variables that impact on an individual's career development over the lifespan. In effect, the framework provides 'a map for practitioners that alerts them to the broad range of influences and hence the theories to which they can refer' (McMahon & Patton, 1995, p. 20). The systems theory framework is used in this paper to underpin aspects of the conceptual model outlined below.

**Career Development Model For VR**

The conceptual model for the career development approach to VR is described in Figure 1. It involves four phases: (a) career exploration and decision-making, (b) career enhancement, (c) job realisation, and (d) career management. The foundations for this model have been derived, in part, from the work of Vandergoot (1981). He proposed a career development model for VR that focused on ‘identifying and enriching a person’s productivity’ (p. 277) in the labour market. The model consisted of three phases that included: (a) productivity enrichment aimed at preparing clients for careers, (b) productivity realisation directed at achieving placement that is consistent with clients’ long-term vocational goals, and (c) career enhancement aimed at preparing clients for long-term career development. The primary difficulty with Vandergoot’s model is its linear representation of events. In contrast, this paper presents a process that is repetitive and cyclical, for two reasons. Firstly, events that occur at different phases are not necessarily exclusive to those phases. Activities primarily associated with the career enhancement phase, for example, may occur at other phases in the process. During career exploration clients will acquire self-knowledge in relation to work that will be critical to the development of future career options. Similarly, the acquisition of skills necessary to find employment in the career enhancement phase will also be important to ongoing career management. The notion of repetition is represented in Figure 1 by overlap of the phases. Secondly, the career management phase is somewhat recursive as depicted in the mini-cycle in Figure 1. Within this phase it may be necessary to revisit activities characteristic of earlier phases. For example, if a career option is no longer deemed satisfactory due to a significant life transition, ill-health or injury, economic downturn, or labour market change, further work in career exploration, career enhancement and job realisation may be required.

Figure 1 also represents the notion that counsellors will initially work intensively with clients, and then over time, clients will become increasingly independent in terms of their own career.
management. This is important for two reasons. Firstly, the goal of case management within VR should be to promote the independence of clients in job seeking and career planning activities. Secondly, VR systems usually sanction only short-term intensive interventions by caseworkers, thus clients need to become self-reliant in their career management as soon as possible.

Career exploration and decision-making phase
The career exploration and decision-making phase consists of assisting people to: (a) clarify career and life aspirations and values, (b) develop a self-knowledge of their skills, abilities, aptitudes and interests, (c) understand the barriers to their participation in work and a career, (d) obtain knowledge of occupations and the labour market, and (e) make career choices based on this information.

Due to the emphasis within many rehabilitation systems on short-term interventions for immediate placement in employment, career and life aspiration issues have traditionally not been considered in VR. This model proposes that clarification of these issues is a foundation for effective career development. Exploring with clients their own meaning of work and career, and how these fit with their broader life plans assists them to work collaboratively with the rehabilitation counsellor on the clients’ goals rather than on assumptions of the centrality (or otherwise) of work and career in people’s lives. Reaching an understanding of what is important to the client, such as family, lifestyle, community and other activities, as well as those factors related to work and career (e.g., levels of income, job security required, desires for skill and personal development) is a key part of this exploration.

Formal assessment of skills, aptitudes and interests is traditionally termed vocational assessment in rehabilitation service delivery. Through the use of tools such as transferable skills analysis, aptitude and
achievement tests, and interest inventories, counsellors aim to increase clients’ self-understanding so they are better prepared to make career decisions. These assessment approaches have been well documented in the rehabilitation literature (see Bolton, 1998, 2001; Power, 2000). While the utility of these assessment techniques is accepted, there is a growing movement in the area of career counselling for more consideration to be given to qualitative assessment approaches (McMahon & Patton, 2002), and this is consistent with enabling clients to clarify their career and life aspirations. The intention of qualitative approaches is to ‘encourage individuals to tell their own career stories, and uncover their subjective careers and life themes’ (p. 59). Individuals can then use this information, with the assistance of the counsellor, to move towards a more preferred future. Constructivist assessment approaches of this nature have considerable applicability to the area of disability and career development because they are more likely than quantitative methods to elicit information relevant to career planning. For example, it is well recognised that acquired disability can ‘alter the relationship of past experiences to current occupational choices’ (Szymanski & Hershenson, 1998, p. 340). The use of ‘lifelines’ to explore life histories in terms of career aspirations, career influences and transitions (McMahon & Patton, 2002) can reveal the impact of acquired disability on clients’ careers, and also emergent life themes/patterns that reflect barriers to their career development (e.g., perceived discrimination). Similarly, the use of genograms with individuals who acquired disability early in life can reveal ‘patterns of family influence’ (McMahon & Patton, 2002, p. 63) that have a profound impact on the development of vocational behaviour (Roe & Lunneborg, 1990).

The use of qualitative assessments for self understanding provides not only richer career information for both the client and the counsellor, but can be an intervention in terms of enabling clients to build confidence and to recognise where discrimination and attitudes of others may have been internalised. For example, underestimation of ability by significant others, such as health professionals and potential employers, may lead to self-doubt and lowered confidence. Taking a qualitative approach to identifying transferable skills asks the client to engage in a process to recognise and confidently value their skills. In contrast, the use of quantitative assessment of previous achievements may result in the same list of skills, but these skills may not be confidently recognised by the client as a true reflection of their capabilities because of their lack of involvement in the assessment process. These processes of building meaning, purpose and confidence are essential to assist the client to establish a solid platform for immediate and future career exploration (McMahon, Adams & Lim, 2002).

The second part of the career exploration and decision-making phase is to engage the client in a career decision-making process using information from assessments and with reference to the labour market. In VR systems this process is traditionally called vocational counselling. Because VR systems usually mandate that interventions will be time limited, the end point of vocational counselling normally is a decision about which occupation a client will pursue. Funding patterns and constraints in these systems have meant that clients are placed in occupations that are available either in terms of their current transferable skills or following a brief period of training. Adopting a career development approach to VR changes the focus of vocational counselling to one of career exploration, the outcome of which will be decisions about jobs within the context of a career. Given that career development involves a ‘lifelong sequence of occupationally relevant choices and behaviour’ (Szymanski & Hershenson, 1998, p. 327) it is important that clients make occupational choices that fit within their overall career goal (Rumrill & Roessler, 1999).

Assisting clients to obtain relevant labour market information about occupations, requirements of occupations, areas of job growth, and current job vacancies is a key part of the vocational counselling process. However, a career development approach involves more than just accessing information, for two reasons. Firstly, clients need to understand how selected jobs relate to career objectives (Wolffe, 1997) in terms of skills and knowledge acquisition. There is little point identifying jobs that will not contribute to the achievement of a career goal. Secondly, clients need to become lifelong learners in terms of accessing up-to-date occupational information and labour market trends (Patterson, 1996). For clients to realise
career goals and develop resilience in a changing labour market it is important they understand that sourcing and evaluating occupational information is a continuous process and not a ‘one-off’ event that ceases following a job or career decision. Clients should be aware that the skills required for occupations can rapidly change. Technology, for example, has led to the demise of many occupations and the introduction of new occupations (Irwin, 1994). Clients need to be familiar with the new sets of skills these occupations require as well as possessing the job-seeking skills needed to change jobs.

Planning is an important part of the career exploration and decision-making phase. Rehabilitation counsellors use rehabilitation plans to document the steps and resources necessary to achieve a vocational goal. Within a career development approach rehabilitation plans are replaced by career plans. Career plans contain short-term and long-term career objectives, steps and timeframes and resources required (Rumrill & Koch, 1999). They can also include the skills needed to achieve career goals and the means by which these skills will be acquired. In a career plan, the acquisition of a job is likely to be a short-term objective in realising a career pathway. Career plans can be useful as tools for ‘gap analysis’ (Phillips, 1998) in that the objectives and timeframes specified in plans allow clients to determine what they have achieved at a particular time and what further action is needed to achieve their career goals.

**Career enhancement phase**

The career enhancement phase focuses on assisting clients to: (a) understand and develop their skill levels in relation to job hunting and pursuing their chosen career, and (b) enhancing their knowledge of the world of work in relation to their specific job and chosen career. Assessment and enhancement of clients’ abilities in areas such as job seeking, resume preparation, interview skills and application writing is well-established practice in vocational rehabilitation service delivery, and there are many useful rehabilitation resources in this area (e.g., see Boerner, 1994; Wolfe, 1997). However, developing a client’s knowledge of those skills necessary to pursue a career or careers over a lifetime is not traditionally part of VR practice. Pressures to secure immediate employment outcomes can lead to short-cutting the process of training clients in effective job-search skills necessary for future job transitions and career planning. A career development approach to VR focuses on building up skills in areas such as self-efficacy (Strauser, 1995) and self-marketing through the job search process, career planning (Szymanski, 1999), development of career portfolios (Koch & Merz, 2001), and career maintenance (Rumrill & Roessler, 1999). It also involves overcoming career barriers such as negative employer attitudes, lack of workplace accommodations and family issues. In short, one of the primary aims of the career enhancement phase is to ‘strengthen the person’s ability to choose, obtain and maintain good jobs in accordance with his or her long-term career goals’ (Rumrill & Roessler, 1999, p. 28).

Career enhancement also builds on the career exploration and decision-making phase in terms of knowledge of employers, the labour market and the world of work. Currently rehabilitation counsellors provide, or assist clients to obtain, occupational information necessary to find job leads. Such information may include job advertisements in newspapers and on web sites, sourcing job leads through family and friends and employer contacts. However, career enhancement also focuses on locating specific sources of information needed to pursue their chosen career such as occupational outlook web sites and trade publications, as well as through building networks. Accessing the experience and support of people established in particular fields is an effective means for clients to obtain relevant information for identifying transferable skills, making informed career decisions, revealing ‘hidden’ opportunities and gaining pertinent, up-to-date career information. This can be done through activities such as informational interviewing (Bolles, 1996), job shadowing (Wolffe, 1997) and mentoring. Given the rate of occupational change, it is essential that clients are able to access up-to-date information about trends in their chosen career, including keeping up with the skills necessary to do these jobs. Clients will need to know how to access training necessary to update these skills so they remain competitive in pursuing their career.

**Job realisation phase**

Job realisation is the phase where clients obtain and
accept a job offer. Where necessary, rehabilitation counsellors may provide other services at this stage such as worksite modification, assistive technology, job coaching, implementation of support services and other workplace interventions. In this context the job realisation phase represents a convergence between traditional service delivery models and a career development approach. Where the two differ is that a career development approach suggests that the placement must be consistent with the person’s overall career development rather than being viewed as an isolated event. The job is therefore a ‘stepping stone’ on the way to a career or careers pursued over a lifetime (Vandergoot, 1981). This requires that considerable emphasis be placed on exploring suitable careers in the career exploration and decision-making phase to ensure that clients have a clear path to follow if they decide to leave the job or are made redundant in today’s unstable labour market. In traditional vocational service delivery systems the job realisation phase also includes a post-placement follow-up period of three to six months that is concerned with maintaining clients in their current position. It involves monitoring and supporting clients, and can include services such as ongoing worksite modification, resolving workplace issues (e.g., supervision, interpersonal conflict), on-site training, encouraging appropriate workplace behaviours, education of workplace peers, development of natural supports and resolving issues with transport to and from the workplace. The job realisation phase is viewed as the logical conclusion to the rehabilitation process. However, within a career development framework the next phase is career management.

Career management phase

The career management phase is concerned with management of the career in the longer term and focuses on assisting clients to maintain and advance their careers, including the processes of changing jobs in the future and reviewing career over time. This assistance is particularly important so as to avoid ‘the revolving door of placements’ (Rumrill & Roessler, 1999, p. 30) whereby clients move from one position to another, usually in low-skilled, unstable jobs.

Career management skills include those developed with clients in earlier phases of the model such as career exploration and planning, decision-making, dealing with environmental barriers and sourcing information about labour markets. With the reduction in job security in today’s labour market, the reality for most workers is that they will need to change jobs and career direction regularly throughout their working lives. Thorough, instructive and future-focused assistance in the earlier stages of the VR process should mean that clients should be well equipped to manage future job transitions independently or with need for only minimal further assistance at this point.

Career management entails more than securing and maintaining jobs. It also embraces notions of continuous learning and management of career in the context of life in general. Clients need to learn how to learn (Szymanski, 1999), negotiate roles, resources and access requirements in relation to any promotions or changes in the workplace, problem solve in a complex labour market, avoid skill obsolescence, maintain a work–life balance and review career aspirations and opportunities. Career aspirations should not be treated as static but an evolving process over time. Fluctuation in the labour market and people’s realities of changing life experiences, needs and desires, health status and other circumstances, requires regular review of career direction and life balance. It is not expected that rehabilitation counsellors will be actively involved with clients for the duration of their
careers. This approach is intended to assist clients to become independent in the career planning process. For example, skills and techniques developed in the earlier stages, such as negotiation and self-advocacy and accessing and developing networks with others, can be applied to the career management phase. However, rehabilitation counsellors may serve as ‘consultants’ to clients on an as-needed basis over a long period of time (Szymanski, 1999). In this role they may also be useful in assisting the client to identify and access other sources of career support, such as identifying a mentor, joining a professional association and accessing useful community or professional groups.

Case study: Tony

Tony, 41 years of age, left school when he completed Grade 10 at the age of 16 years. He has had several jobs including clerk and stores manager in a local engineering supplies firm, self-employed fisherman, apprentice carpenter, and carpenter. At the age of 36 he injured his back while employed as a formwork carpenter and was unable to return to this type of work. Tony has two children and his spouse works as a shop assistant. He has taken on the role of ‘house-husband’, including after-school care of the children. The family receives a small amount in social security payments from Centrelink, and has eligibility for a health care card, which assists with medical costs. After five years out of the workforce, Centrelink referred Tony for vocational rehabilitation assistance.

Career exploration and decision-making phase

At the time of referral Tony was pessimistic about the outcome of rehabilitation because of his pain levels and uncertainty about his work future. Functional restrictions specified by his doctor included a sitting tolerance of 30 minutes, a standing tolerance of an hour, and no heavy lifting. In the initial sessions the rehabilitation counsellor explored with Tony what he had achieved in the past and also encouraged him to develop a vision of a preferred future. Initially, Tony was reluctant to engage in this activity as he felt he had little control over his future or choice of options. The counsellor drew on a solution-focused therapy approach called the ‘miracle question’ (de Shazer, 1988) to overcome this reluctance. Solution-focused therapy is a goal-directed systems-based model of therapy that focuses on building solutions through working collaboratively with the client (de Shazer, 1985). By asking questions such as: ‘Imagine that a miracle happened overnight and tomorrow morning you woke up to discover that you were no longer limited by your back injury, what would you do?’ and ‘How would life be different?’, the counsellor was able to focus Tony on positives and strengths, and work to generate possibilities and hope. The process revealed that Tony, whilst doubtful, was highly motivated to return to employment and that work played a number of important roles in his life, including being able to support his family financially and to offer opportunities for challenge, stimulation and autonomy. In addition, through the use of assessment instruments and transferable skills analysis, Tony was able to see that he possessed a wide variety of skills and interests that were relevant to careers that were within his functional restrictions.

Tony was also asked to complete a life span time line to identify the events, and possible influences around his major life decisions. This revealed a number of profound influences and consistent themes related to his career. An early role model was Tony’s grandfather, whom he greatly admired as a man of principle. As a boy he accompanied his grandfather on trips to value rural properties and he dreamed of being in the same job. However, restlessness in his teenage years and a loss of interest in education meant Tony had not pursued this dream. As he reflected on his working life, Tony relayed the growing importance of achieving a comfortable living standard and having a challenging career, while at the same time having sufficient time to spend with his family on weekends and evenings.

The time line also revealed the profound losses that Tony experienced at the time of his injury that have continued to impact on his life. He reflected that his aspirations, continuity of achievement and his valued role in his family had ceased at this time. His inability to pursue work in the building industry after his injury further compounded his feelings of loss. However, it also revealed that he had enjoyed many aspects of his new family role and had felt recognised for his achievement in his community work. He was very proud of the quality of life he had attained, and the valuable contribution he made to his family. Revelations from the time line process surprised Tony...
and he began exploring how his strengths and influences from the past could be applied to his current circumstances to assist in accommodating the limitations placed on him by his work accident. Tony recognised he could draw on these attributes during his rehabilitation program, and could also apply them in the future.

Tony identified his major barriers to returning to work as his pain levels and his need to be able to control his activity, as well as his responsibilities within the family. To help improve his physical tolerances, Tony undertook a gym program with the approval of his doctor, was provided with back-education, and given a back support to use when seated and driving his car. The combination of these activities resulted in increased stamina and reduced pain levels. During this time Tony participated in a self-paced computer skills course to increase his sense of self-efficacy and improve his basic skills in keyboard and common software packages.

With his increased confidence and insights, Tony was now ready to consider his career plans. He reviewed the information about his career dreams and needs, interests and transferable skills with his counsellor, and then identified several occupations of interest, including valuer, real estate salesperson, property manager, and computer technician. With his counsellor Tony developed an initial career plan to break down the steps he would take to research the long-term viability of selected career options and identify a suitable career. As part of the plan, Tony was coached on using informational interviews to learn about the experience and skills required for each occupation. As part of his explorations into the occupation of valuer, he spoke with a valuer, the Australian Property Institute and two employers and learned that a degree in property economics was required. Tony also analysed the employment trends and options for valuers by reviewing pertinent labour market web sites and recontacting the professional association. Simultaneously, Tony was encouraged to explore the other interest areas so that he was well placed to contrast the options in terms of meeting his career needs.

On completion of the tasks in the initial plan, Tony and the counsellor again reviewed his position. Tony had developed a revised view of himself and was beginning to realise that it was possible for him to return to employment. He stated that he now wanted to obtain a job in which he could have some control over his environment so that he could reasonably manage his back pain. He acknowledged that if he was able to work, the family would benefit from his additional income. Long-term career options were discussed and Tony confirmed his passion for valuation as his career choice. His career plan was revised to identify valuer as his career goal. Objectives of the plan included further investigations into careers in valuation, and steps to pursue a job in the short-term that would develop additional skills for his preferred career choice.

**Career enhancement phase**

During his visits to valuation firms Tony was able to identify related occupations, available in the short-term, that could contribute to his longer-term career goal. It appeared that clerical work in the finance sector would offer valuable experience related to his career goal as well as offer him an income whilst he pursued part-time tertiary studies. Transferable skills in the area of administration gained from his previous occupations combined with his newly acquired computer skills meant that he was well placed to obtain such work.

In accordance with his career plan Tony developed his self-marketing skills in preparation for job search. His research into occupations and their requisite skills provided a platform for his marketing efforts. Additionally, his new-found recognition of his achievements and transferable skills gave him considerable confidence in what he had to offer a potential employer and formed the basis for a career portfolio. To help Tony refine his job search and presentation skills, he participated in a job club group that included sessions on how to self-market, prepare an effective resume, source ‘hidden’ vacancies and effectively present in interviews. He identified several employers he considered would be suitable and sent off his resume to each.

Another objective of his career plan was to continue developing his knowledge of his chosen occupation of valuer. He began networking with professionals in the field to enlist support and guidance. As a result Tony met a valuer in the bank, who seemed to want to assist him with his efforts to return to the workforce. He found his contact with
him informative in terms of opportunities in valuation and he learned about the skills and attributes that he possessed and also needed to work as a valuer. Tony also learned about ‘trade’ publications that provided insights into developments in the field of valuation and listed conferences he could attend to build on his knowledge and contacts. All indications pointed to a healthy outlook in the demand for valuers over the next five years.

Job realisation phase
Two barriers to obtaining employment became evident during Tony’s job search efforts. These were his lack of recent work experience and employers’ concerns about the impact of his back injury on his productivity. A three-month work experience placement as a clerk was therefore negotiated for Tony at a local building society to consolidate his work skills and provide him with experience. Following a work site assessment a graduated work program was organised with regular breaks, and ergonomic furniture provided. After-school care was also arranged for his children.

While on the work experience placement, Tony continued to apply for suitable positions. One of these was a vacancy for a teller in another branch of the building society. Through colleagues he found out that the branch manager supported staff development, which would provide Tony with the support he needed to complete his degree. Tony successfully applied for the position, and was told he was selected because of his preparation, work experience and enthusiasm.

Career management phase
Prior to his commencing the position, Tony reviewed his activities to this point with his rehabilitation counsellor. He was able to clearly describe the processes he went through to identify his choice of valuer, and the activities that had lead him to successfully obtain his current job. He also recognised the support his new ‘valuer mentor’ had given him, and they continued to meet regularly. Tony planned to stay in the teller position until he completed half of his degree, and then seek a move to a position more closely linked with valuations, either within the building society or elsewhere. His career plan was revised to incorporate these new career management objectives and to build in a process of follow-up with the counsellor. They agreed to meet six-monthly, but Tony was encouraged to utilise the counsellor as a consultant more frequently if required.

At six months, Tony’s plan was proceeding well, he was enjoying his position and his studies, managing his back pain effectively and balancing his home, work and study commitments. However, at the second review Tony expressed concerns with managing stress. The load of part-time studies and full-time work, together with his family needs were becoming exhausting and he was falling behind in his studies. In addition, rumours were rife in the building society that the branch would soon lay off staff. The stress and heavy workload appeared also to be compounding Tony’s back pain. With all the difficulties, he had lost touch with his mentor and ceased attending professional association meetings. The counsellor assisted Tony to problem-solve the issues.

The ideal solution for Tony was to drop his position back to part-time to enable more time for other commitments. The counsellor coached him in putting together a proposal to put to his manager that was successful. Tony was asked to review his back care strategies taught earlier in the program and this resulted in his returning to daily back exercises and taking up swimming as a way to increase his fitness and manage stress. As Tony had been feeling frustrated with the slow progress towards his career goal, he was encouraged to resume his networking with his mentor and professional association and to be observant about any possible openings in the industry. He was also linked with student services at his university, who were able to assist with support for managing his back pain during studies and exams, as well as providing targeted career support towards his career goals such as informing him of paid cadetships in his industry.

At the third review meeting much had changed. The building society had closed the branch where Tony worked. While he was offered another position in a different branch, he elected to leave. His networking had paid off; his mentor told him about an ideal position as a clerk with a small practice of valuers. Tony researched the company and used this to effectively market himself into securing the position. He continued to undertake his exercise to
manage his back and stress, and developed an extensive network of contacts in the industry and university who encouraged his progress towards his long-term goal. Tony eventually secured a position as a valuer.

**Implications of the Model for Vocational Rehabilitation Services**

The career development model is proposed to address deficiencies of the current VR system. Whilst pressure to demonstrate accountability and outcomes with tax payer or insurance company dollars can lead to a focus on immediately available jobs, this model shifts the focus to enhancing the longer term employability of people with disabilities. It is argued that a career development approach will ultimately result in better returns for rehabilitation investments, as clients will be more independent, less likely to require substantial further assistance on a revolving-door basis and more likely to sustain employment throughout their working lives. Three key implications arise out of the proposed model concerning the (1) evaluation of VR services; (2) role of the rehabilitation counsellor; and (3) need for research regarding career management issues for people with disabilities.

Although a career development approach can be delivered through current service delivery structures, it will entail re-conceptualising criteria for deciding on case closure and evaluating effectiveness of services. Traditional notions of case closure based on quantitative criteria such as retaining a job for three months are somewhat problematic within this model. It is likely that rehabilitation counsellors will need to use different types of criteria as a basis for case closure (Rumrill & Roessler, 1999). For example, an assessment by the client and counsellor of the client’s level of independence in the career planning process may be an appropriate indicator of when a program should be closed. Evaluation measures assessing effectiveness of interventions will need to change. Maintaining criteria focused on measures such as number of clients placed in jobs will continue to drive service delivery toward short-term but potentially unstable outcomes. More effective, and indeed more accountable, measures include longitudinal tracking of clients’ employment, and assessments of how well services have assisted clients to develop career resilience. A new set of future-oriented criteria could also lead to further gains through calling attention to systemic and individual career management issues previously not considered, such as issues of discrimination experienced by people with disabilities in relation to career promotions and potential gaps in service delivery.

There are implications of this model for the role of the counsellor within the VR process. Its emphasis on a process of collaboration, involvement and encouraging skill development reframes the role of counsellors as partners and coaches as they facilitate the client to develop career goals and the skills necessary to pursue a career. Given the long-term nature of establishing careers, clients may encounter difficulties in maintaining their careers. In these situations clients may seek the services of counsellors as ‘consultants’ to help them keep their careers on track. In these instances, clients will determine when and what services they require from counsellors rather than vice versa. In response to changes in the labour market, there is also an emerging political role for counsellors (McMahon & Patton, 2000; Miller, 1999; Peavy, 2000). Rehabilitation counsellors are often in a privileged situation through having access to information about career development issues. As clients tell their stories of aspirations and frustration experienced, counsellors have access to valuable information to inform better service delivery mechanisms, and advocate and educate policy makers regarding the barriers people with disabilities face in managing a career. Through being cognisant of the social and political context in which careers are fashioned, rehabilitation counsellors are in a good position to impact the systems and institutional structures that prevent clients from realising career aspirations. Broadening the role of rehabilitation counsellors in this way has long been advocated by some in the disability rights field (see Hahn, 1991).

Finally, the model of service delivery proposed in this paper raises the need for research to better understand career management issues of people with disabilities. The career management needs of this population have been unexplored, yet such research is necessary to better inform and enhance service delivery models and strategies. Furthermore, longitudinal research that ‘tracks’ clients through career exploration, planning and management is
needed to understand their changes in terms of career development. This research will not only inform interventions in career guidance for people with disabilities but could also build a foundation for a theory of career development that adequately reflects the vocationally relevant behaviours and decisions of members of this population.

CONCLUSION
Labour markets in Australia will continue to change and vocational rehabilitation services cannot afford to ignore the impact of this on clients of their services. With the increased focus on assisting social security recipients with disabilities to participate in employment programs there is an opportunity to introduce models of service delivery that will adequately prepare them for the contemporary labour market. Models focused only on job placement will not achieve this aim. Instead an approach that embraces the notion of building those skills required for long-term career development is needed. This paper provides the foundations for such a model.

REFERENCES
Articles


Self-employment is an important employment option for people with disabilities. It provides flexibility, the ability to work non-traditional hours and to address issues associated with an illness or disability. It particularly addresses accessibility, communication, or transportation barriers for people with disabilities. It is especially useful in rural areas where there are few employers and consequently few employment opportunities. But self-employment is not for everyone, not every business idea is sensible, and not every proposed business is feasible. Rehabilitation agencies and counsellors that work with people with disabilities wishing to start a business usually are operating in unfamiliar territory. For the most part, rehabilitation counsellors are counsellors, not business developers. This article presents a process developed to assist rehabilitation agencies and counsellors to work with a client who wants to start a business. The process was developed after extensive research with rehabilitation agencies and counsellors who indicated they would be more willing to work with a client to start a business if they had guidance from their agency. The following process addresses that need by blending rehabilitation agency policies and procedures with best practice for developing a business.
SELF-EMPLOYMENT IN THE UNITED STATES

Self-employment is one of the fastest growing trends in the US economy, up 25% between 1979 and 1997 (Manser & Picot, 1999). According to the 1990 US Census, self-employed individuals constituted 7.8% of the labour force aged 16–65 and 12.2% of the labour force for people with disabilities aged 16–65 (United States Bureau of the Census, 1996). In 1999, microbusinesses (businesses employing fewer than five individuals) accounted for 60% of total firms in the United States (United States Bureau of the Census, 2000), and recent estimates suggest that in the United States four and a half million adults started a business in 1998 alone (Dennis, 1998). For many, self-employment offers a means to financial independence and job security in a climate of diminishing economic choice.

The US employment profile is changing in the wake of massive corporate lay-offs and significant downsizing in the public sector. In the first three-quarters of 2001 alone, a total of 1,171,572 people were laid off, a figure that exceeds the yearly total for 2000 (US Department of Labor, Bureau of Labor Statistics, 2001). People are redefining employment in the United States within a climate of increased competition for scarce jobs (Garten, 1999) and entrepreneurship has become an increasingly attractive employment option.

Self-employment offers a variety of economic opportunities to people in different situations. In rural areas, which suffer the highest rates of poverty in the US (Economic Research Services, US Department of Agriculture, 2001) and a significant rural/urban wage gap ($8,093 in 1994) (Kassel & Gibbs, 1997), self-employment can enable people to support themselves without relocating to urban centres. Self-employment provides flexibility to stay home or work non-traditional hours in order to care for a child or address an illness or disability (Clark & Kays, 1999). For people with disabilities, self-employment also can alleviate accessibility, communication, or transportation barriers that are associated with traditional paid employment outside the home. Finally, business ownership activity can tap into personal strengths or passions that enhance job gratification (Clark & Kays, 1995).

The economic promise of self-employment is particularly important to people with disabilities. Just 32% of people with disabilities were employed in 2001 and people with disabilities are almost three times as likely as people without a disability to live in poverty (National Organization on Disability, 2000). Additionally, self-employment provides an opportunity for people to ‘income patch’ whereby income from multiple sources (e.g., federal government-provided social security income or supplemental social security disability insurance, federal government-provided funds to military veterans, spouse) are combined to make a living wage.

OVERVIEW OF VOCATIONAL REHABILITATION

In the United States, a major provider of rehabilitation services is the Rehabilitation Services Administration (RSA). RSA was established by the US Congress, through enactment of the Rehabilitation Act 1973. This Act is reviewed and amended periodically, usually every five to seven years. It was last amended in 1998. RSA is the principal federal agency authorised to help individuals with physical or mental disabilities obtain employment and live more independently. This charge is accomplished through the administration of several formula and discretionary grant programs that provide supports for people with disabilities such as counselling, medical and psychological services, job training, and other individualised services. Each US state provides employment services to people with disabilities through a Vocational Rehabilitation (VR) agency, which is funded through RSA’s formula program. Funds are provided to each state’s VR agency through a federal/state partnership where the federal government provides about 79% of the rehabilitation funds and the states provide the remainder. An individual with a disability is eligible for VR services if he or she meets all three of the following criteria: (a) the individual has a physical or mental disability; (b) the disability prevents the individual from getting or keeping a job; and (c) the individual wants to work and needs VR services to help obtain or keep a job.

The Rehabilitation Act 1973 as amended in 1998 sets broad guidelines and regulations that are then interpreted and applied by the RSA and further interpreted by each state’s VR agency. VR counsellors...
operating in a state system have a great deal of
discretion within this broad framework. The
Rehabilitation Act Amendments of 1998 strengthened
client choice and self-determination of rehabilitation
goals and the rehabilitation process for clients of VR
programs.

SELF-EMPLOYMENT AS A CAREER
OPTION WHEN WORKING WITH A
VR AGENCY
Although prior to the Rehabilitation Act
Amendments of 1998, self-employment was a possible
employment outcome for a person receiving VR
services, until recently many VR agencies and
counsellors used it as the option of last resort. This
attitude towards self-employment was deeply
embedded in the VR system. For example, 22% of
states whose self-employment policies were reviewed
by the Research and Training Center on Rural
Rehabilitation Services (RTC:Rural) required that the
counsellor eliminate all other viable rehabilitation
options or salaried employment before considering
self-employment (Arnold & Seekins, 1994). In other
research conducted by RTC:Rural on the use of self-
employment by VR agencies, researchers found its use
was significantly influenced by counsellor attitudes
toward it and that counsellor attitudes were shaped
by office atmosphere and state policy regarding self-
employment. Counsellors also said they would be
more willing to use self-employment if they had more
direction from the state agency on how to use it
(Ravesloot & Seekins, 1996).

The Rehabilitation Act Amendments of 1998
legitimated self-employment as a vocational outcome.
After this Reauthorisation of the Act, VR agencies
were more open to working with clients to become
self-employed. This change was the result of (a) the
1998 Reauthorisation; (b) the Act’s focus on client
choice; (c) the publication of self-employment research
findings and recommendations (Arnold & Seekins,
1994; Arnold, Ravesloot, & Seekins, 1995; Ravesloot &
Seekins, 1996); (d) the publication of the results of
several ‘choice’ demonstration projects that did not
focus specifically on self-employment but where 20%
to 30% of the employment outcomes were to self-
employment (Collins, 1998; Sullivan & Cooper, 1998;
Watson & Herkimer, 1998); (e) an increasing focus by
the federal government on employment outcomes by
VR agencies (Region VI Rehabilitation Continuing
Education Center, 1999); and (f) on the success of
several rehabilitation practitioners focusing on self-
employment.

Recognising that people with disabilities will
continue their quest to be self-employed, many US
Vocational Rehabilitation agencies have reworked
their self-employment policies to facilitate the process.
But because counsellors are trained to be counsellors
and not business developers, VR agencies must
continue to facilitate and promote self-employment
within their agencies by:

- Ensuring that rehabilitation counsellors who work
  on a potential self-employment case gain
  familiarity with business plans. This is important
  because rehabilitation counsellors have spending
  authority for their agencies. They must be able to
  read and understand a submitted business plan so
  they approve and wisely spend VR funds on the
  business.
- Developing a relationship at both the state and
  local levels with agencies that provide small
  business development assistance. In the US there
  are many sources of this assistance; one such federal
  program that exists in all states involves Small
  Business Development Centers (SBDCs), which
  report to the federal Small Business
  Administration (Small Business Administration,
  2002).
- Providing counsellors with guidance in the form
  of a process to follow when working with someone
  who wants to open a business.

As a result of its self-employment research, the
RTC:Rural has addressed each of these issues by
developing a VR counsellor self-employment training
program (Arnold, Montana Women’s Capital Fund,
Seekins, Shelley, Anderson, Brown, & Hammis, 1999),
identifying the required linkages between VR
agencies and SBDCs, and describing a self-
employment process for rehabilitation counselors to
use when working on a self-employment case. The
components of this process and rationale for each step
are presented below.

A RECOMMENDED SELF-
EMPLOYMENT PROCESS FOR
REHABILITATION AGENCIES
Starting a business is hard work. For a person with a
disability working with a rehabilitation agency, it requires a deliberate, detailed process. The following process is the product of self-employment research and evolved from working with self-employment consultants, VR counsellors and administrators, and people with disabilities. It incorporates Vocational Rehabilitation practice with current state-of-the-art small business development practice.

Step 1: The individual expresses interest in self-employment.
There are people served by rehabilitation agencies who already have business ideas, know they want to be self-employed and will not hesitate to tell the counsellor this. Less assertive people may have the potential for owning a business, but will not mention self-employment as a goal unless they are specifically informed that it is an option.

Others may not know what they want to do – they may have considered self-employment, but have made no decision. In these situations, job exploration (including self-employment) is appropriate.

Because some VR agencies fear that if they tell people self-employment is a vocational option there will be more people wanting to start a business than the agency can handle, it is not mentioned either during the counselling process or in the agency’s written materials. If clients are informed, it is realistic to expect an increase in the number of people pursuing self-employment, but many will not progress beyond the first few steps of this process and some of those who do will not develop a viable plan.

Step 2: Counsellor and individual discuss advantages and disadvantages of self-employment
In this step, the counsellor and individual begin a dialogue. The individual tells the counsellor about his or her business idea(s), and the counsellor gets a feel for how realistic the individual is regarding the proposed business.

During this step the counsellor explains the steps (this process) for developing a business. During this discussion the counsellor explains that the rehabilitation agency will not commit to fund any portion of a business until a viable business plan is developed. In the US, the state/federal VR agencies can provide ‘...occupational licenses, tools, equipment, and initial stocks and supplies; technical assistance and other consultation services to conduct market analyses, develop business plans, and otherwise provide resources ... to eligible individuals who are pursuing self-employment ... as an employment outcome’ (Workforce Investment Act of 1998 Public Law 105-220—Aug. 7, 1998, Rehabilitation Act Amendments of 1998). The counsellor also discusses the agency’s business funding policy, procedures, and guidelines so the individual understands the limitations that may be placed on the type or magnitude of the business he or she wishes to open.

Although the individual can decide against self-employment at this or any step along the way, many will decide not to pursue self-employment after this initial discussion.

Step 3: Self-employment assessment
RTC: Rural recommends a self-employment assessment consisting of two phases. During Phase I, the individual completes a feasibility study to develop the business idea into an initial draft of the business plan. During this step the business idea becomes more concrete and the individual begins to identify:
• the business itself;
Many clients will be intimidated when confronted with this task of developing a more concrete business idea. Business development experts say that at this point many people decide not to pursue self-employment because they have difficulty moving beyond the conceptual to a more concrete stage. The counsellor needs to decide if an individual’s inability to complete a feasibility study is because of his or her disability or another reason. Could the person complete the study with counsellor guidance and encouragement? Is some sort of assistive technology needed?

Phase II is an assessment of the individual’s potential for self-employment. At this point the counsellor is not assessing the business idea or business plan – just the individual’s potential for self-employment. This assessment discloses the client’s strong and weak characteristics and highlights training or education to pursue. RTC: Rural recommends that US VR agencies use an assessment developed specifically for them such as the Goodman and Herzog Business Assessment Scale for this purpose (Goodman & Herzog, 1994).

Step 4: Identify sources for training, education, and for preparing for self-employment

Ideally, the assessment phase identified knowledge and skills that the client should pursue to enhance the business’s success. Services, education, or training may help the individual develop a business plan or remedy any deficiencies in skills or knowledge. Locating training resources in rural areas might be difficult – the counsellor and client may have to be creative. For example, if the client needs computer training but classes are not available locally, the counsellor should consider paying a local computer wizard to provide the training.

Other educational opportunities might include an apprenticeship or experience gained by working in the type of business the consumer wishes to open. If the consumer has no small business experience, some business experts recommend that he or she spend as much time as possible observing or working in a similar business – of course the level of involvement and length of time is up to the business owner. The business owner should be willing to discuss his or her business practices and strategies.

Step 5: The individual successfully completes services, training, or education (Steps 6 and 7 can be completed concurrently with Steps 7–9.)

If everything goes as planned, the individual will successfully complete needed services, training, or education. If the person does not do this it is important to ascertain why. The individual may have been dissatisfied with training or services – it may not have met his or her needs or it may have been too academic. Perhaps another, less academic method should be explored. After spending time in a business or an apprenticeship, the individual may have realized that he or she does not want to start that type of business or work at the level or intensity needed to make the business a success. Perhaps the client should pursue another type of business or should consider working for someone else in the type of business described as his or her employment objective.

In either case, the counsellor proceeds to step 6 to determine whether either the consumer or the VR agency is still interested.

Step 6: Determine continued interest

This is an opportunity for the agency to re-evaluate the individual’s initiative and drive, and to determine how interested he or she is in starting the proposed business. It also is an opportunity for the consumer to re-evaluate his or her desire to become self-employed.

Step 7: Individual and counsellor work with consultants to develop plan, marketing, and funding strategies

If there is continued interest to start the business by the client and the agency, the next step is to take the business plan from a draft to a comprehensive document. A good comprehensive business plan will be the new business’s road map, can be used to obtain necessary funding, and is necessary for judging the potential for success.

Most people have no experience with developing business plans, so we recommend that a consultant help. In the US such a consultant might be found at a Small Business Development Center. Each state houses an SBDC program, which provides management assistance to current and prospective small business owners. SBDCs are administered by
the US Small Business Administration, which was created by the US Congress.

**Step 8: Counsellor and individual evaluate all business plan drafts**
The counsellor and client evaluate all drafts of the business plan to ensure they are complete and thorough.

**Step 9: The business plan is complete**
A completed plan is necessary for step 10.

**Step 10: Re-evaluate the individual and the proposed business**
At this critical point in the process the agency evaluates both the consumer and his or her proposed business to determine if the agency will provide support. RTC: Rural recommends administering the Business Assessment Scale (Goodman & Herzog, 1994) a second time to evaluate the individual and the business idea along with previous assessment(s), the completed business plan, the business consultant’s input, and the counsellor’s experience with the client.

**Step 11: Determine parameters of agency contribution**
Up to this point, the agency has not committed to funding the business. In this step, the agency establishes its funding level and describes how funds are to be used (e.g., to purchase equipment, inventory, or marketing services).

The agency establishes funding parameters at this time so its contribution can be considered when the client applies for a loan or searches for other sources of business funding. Often a consumer can use the agency’s contribution to leverage money from other sources.

A basic tenet of business development is that the potential business owner must contribute financially to the business. A personal investment is considered critical for instilling a sense of ownership and reducing the likelihood that the business owner will walk away if the business falters. Business developers feel an individual is serious about the business if he or she is willing to invest something valuable besides time. RTC: Rural recommends that the agency requires an appropriate contribution from the client.

How much should the client contribute from his or her own funds? Recommended amounts range from 10% to 30% of the start-up funds. Some micro-loan organisations even accept such things as a car or wedding ring as collateral from low-income business owners who have no money of their own to contribute. There are some who think along different lines: they believe that because people with disabilities are at an inherent disadvantage, the agency should provide total business funding whatever the cost. RTC: Rural understands though that agency counsellors need to refer to their states’ policies for guidance at this step.

Many agencies have established a minimum funding level (e.g., often between $2,500 to $5,000) where the counsellor can decide to fund the entire business without a business plan or without agency approvals. Usually this occurs without the client fully addressing all aspects of the business. While this is expedient for many agencies, it also presents a dilemma because some states that follow such a procedure have observed that the bulk of the business start-ups do so using this minimum amount of money. This occurs so both the counsellor and the client can open the business without going through what may be considered lengthy and unnecessary planning. The result is that the agency simply may have purchased tools or a computer without assisting the client to become fully prepared for operating the business. For example, important components of operating a business may not have been addressed such as identifying the business’ market, advertising and promoting the business, understanding and preparing for cash flow, or how to price the product.

In the US current federal regulations do not allow the rehabilitation agency to place dollar limits on the services it provides including the amount an agency contributes towards a business. This is somewhat problematic for VR agencies and counsellors for two main reasons. First, interpretation of the Act and regulations usually falls to the individual counsellor resulting in inconsistent interpretation over the services the individual should receive in terms of funding a self-employment outcome. Second, agencies fear that a business owner will demand the agency fund a $100,000 or $200,000 business (which has happened in a few cases). To address this, a few agencies will fund a business according to a sliding scale. For example, the agency might contribute the full amount up to $5,000 and a certain percentage of
business start-up after that $5,000. This requires that the business owner secure other funds for a business needing more than $5,000 to start or must consider alternatives such as starting small and growing the business.

Step 12: The plan is submitted to potential funders for start-up funds
Potential sources of start-up funds include family, friends, banks, micro-loan programs, and US social service programs such as the federal Social Security Administration’s Plans for Achieving Self-Support, which allows a person with a disability to achieve a work goal by setting aside income and/or resources for a specific period of time. Some state agencies require that the business be turned down by other funding sources such as a bank before the agency will contribute its own funds. It is understandable that outside resources must be explored first before the agency commits to funding a business. However, the approach is problematic. Rehabilitation agencies must understand why a loan was turned down. Does the lender fund business start-ups and/or make small loans? Does the client have collateral? Does the client have a poor credit history? Can the client repay the loan? Was the likelihood of the business succeeding in the proposed location so questionable that the lending institution did not want to set the applicant up for failure? Did the applicant meet the lender’s guidelines? Was there bias against a person because of his or her disability? These are all possible reasons for denying a loan. The counsellor must explore them prior to making a final decision.

There may be cases where available funds do not match start-up projections. When this happens, the business plan must be revised and pared down if possible. Perhaps the business owner can open on a smaller scale and grow the business. However, no matter how hard the agency, the counsellor, and the client try, businesses fail to open for many reasons—including inadequate funding.

Step 13: Finalise agency funding and open the business
Now that the agency knows all the funding sources and amounts, the counsellor can reevaluate previously-established parameters, finalise agency contribution and specify how start-up funds will be used.

Step 14: Assist the business owner with developing a support system
Although self-employment experts agree that follow-up support is important to business success, rehabilitation agencies generally do not offer long-term, ongoing supports. An agency might provide support in a crisis, but not the day-to-day networking and consulting that business owners need. The RTC: Rural recommends that before a business opens, the rehabilitation agency secures the services of a consultant, possibly through a contract, to review the business’s monthly or bi-monthly financial statements, discuss the business with its owner, and report back to the agency. Further, the rehabilitation counsellor should assist the business owner with developing a support system such as finding a mentor or networking with other business owners.

Step 15: Close the case
Generally, the rehabilitation agency and the business owner mutually agree to close the case without having pre-defined or -delineated circumstances. This can cause problems for the agency when a client returns several times for more agency support for the business. Because they already have an investment in the business and have not developed closure criteria, agencies often get caught in an endless loop of supporting the business ‘just one more time.’ In response, some agencies have developed case closure indicators. These include meeting the requirements of a core plus one additional indicator. Indicators may vary. For one agency the individual must: be in business for 90 days (which is the indicator of a successful employment placement (Workforce Investment Act of 1998)), not have received additional agency support, and have reinvested in the business to support ongoing expenses. Additional indicators include: terminating federal government-provided social security income or supplemental social security disability insurance, reducing payments from other public programs such as welfare, significantly increasing gross business income, or increasing equity in the business such as equipment or savings.

Step 16: Evaluation by the business owner and the rehabilitation agency
Evaluation by both parties provides valuable information on the agency’s services and their impact.
on the individual and the community. RTC: Rural recommends that the business owner evaluate the agency annually, for up to three years. This provides the agency with information on the effectiveness and usefulness of its services — information it can use to improve self-employment procedures. RTC: Rural also recommends that the agency evaluates the business annually for an unspecified period. Such evaluations would provide the agency with data on the effectiveness of its services. Evaluations also might focus on assessing how agency-funded self-employment start-ups affect the community and could document the longevity and cycle of self-employment.

CONCLUSION

Although developed for and based on US Vocational Rehabilitation agency and counsellor experience, this recommended process addresses the basics that any rehabilitation counsellor can use to work with a client to start a business. This process provides counsellors, who are not business developers, with direction for working with consumers to develop the most successful businesses possible. It is flexible and can be modified to reflect an agency’s values. The steps also provide a systematic approach for counsellors to: explain their agency’s role, the client’s role, and the role of others (e.g., business development consultant) in the self-employment process; clearly communicate to the client the self-employment process that will be followed including how agency decisions will be made for pursuing self-employment; and communicate whether and how the agency will help with training, developing a business plan, and funding the business.

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Region VI Rehabilitation Continuing Education Center (1999). People with disabilities developing self-employment and small business opportunities. 14th Institute on Rehabilitation Issues. Hot Springs: AR.


The widespread nature of mild-to-severe head injuries in our society poses a substantial vocational issue with theoretical and practical implications for the study of career development in this specialised group. The incidence of acquired brain injury (also known as traumatic brain injury) is around 100 per 100,000 to 200 per 100,000 population in industrialised countries (Williamson, Scott & Adams, 1996) and the prevalence is greatest for 15–24-year-old males. Australian estimates of the incidence of brain injuries ranged from 100 to 377 per 100,000 per year (Fortune & Wen, 1999, p. xiii).

Acquired brain injuries have heterogeneous consequences. These may be evident in the lowered speed of intellectual processing, problems of concentration, memory difficulties or reduction in learning performance. Social consequences of head injury include alterations in personality functioning and behavioural disturbances including anger problems, inappropriate behaviours or lack of inhibition. Other neurological sequelae including motor problems (e.g., hemiplegia, ataxia, hemiparesis), epilepsy, aphasia, fatigue or sensory deficits (e.g., impaired hearing, impaired vision, hemianopia) are also common. Such consequences may have devastating effects on social relationship and personal lives. The diverse range of outcomes of brain injury may be subtle in nature and not evident on first inspection, but they have an impact on learning and work performance.

The purpose of this paper is to review the return-to-work rates following acquired brain injury in Australia and New Zealand (ANZ). The reported return-to-work rates for the nine ANZ studies varied from 29% to 64% with a median of 46% and for 23 international studies the return-to-work rates varied from 19% to 88% (median also 46%). When the results of all ANZ studies were combined to form a total of 1010 subjects then the overall return-to-work rate was 44%. A number of methodological concerns were raised and it was estimated that only about 7–10% of persons with an acquired brain injury are likely to return to the same job.
As far back as 1949, it was observed that many persons with head injuries were able to return to ‘lighter work’ positions (McMordie, Barker & Paolo, 1949). Despite the fact that even the most severely injured can sometimes achieve a return to work, the neuropsychological sequelae act as an impediment for employment. Loss of work is reported as one of the most obvious problem areas for individuals with brain injuries (see Willer, Allen, Liss & Zicht, 1991) and the return to work provides a meaningful and significant outcome of successful rehabilitation from injury. Reported return to work rates vary substantially and Dikmen, Temkin, Machamer, Holubkov, Fraser & Winn (1994, p. 177) commented that they ranged from 0% to 100%. When Kreutzer, Wehman, Morton and Stonnington (1988) documented the value of supported employment, they also commented on the reported return-to-work rates and made some observations that are still relevant today:

Although there are relatively few comprehensive studies of post-head injury vocational status, examination of data from the studies described herein yield a number of conclusions. First, the severity and type of injury are determinants of post-injury employment potential. Persons with more severe injuries are less likely to return to work. Second, it is reasonable to conclude that less than 50% of persons with moderate to severe injuries, as determined by the depth and duration of coma, are likely to return to employment. The likelihood of returning to work at pre-injury levels is even smaller, and there are long delays for those who return to work. Finally high rates of unemployment persist despite the interventions of numerous rehabilitation professionals. (p. 206)

Advances in medicine have now brought about increased survival rates for persons with acquired brain injury and resulted in near-normal longevity. Career development following survival is a key personal issue that involves, inter alia, the resumption of vocational identity and potential adjustment to work. Furthermore, employment provides quite a stringent criterion of the extent of recovery due to the wide-ranging requirements of work situations. These involve adaptation to changing circumstances, ongoing adjustments and continual cognitive, emotional, social and personal demands.

The specific purpose of this report is to examine the return-to-work rates of persons with a head injury that were cited in previous Australian and New Zealand studies. The aim is to determine the overall range within which one might reasonably expect employment outcomes from a group of persons following an acquired brain injury. This report combines the findings from previous studies to provide an overall perspective of the extent of return-to-work and the likely influences on these outcomes. I have also compared return-to-work rates in Australia with those cited in similar articles from 1987 (Volume 1) of the journal Brain Injury, which is the major source of studies on employment following acquired brain injury. This report is part of a long-term program of research that seeks to document the return-to-work rates of persons with different disabilities (see Athanasou, 1993; Athanasou, 1999; Murphy & Athanasou, 1994).

RETURN TO WORK

Return to work is used as a meaningful and practical indicator of recovery from injury but it is not considered an unequivocal measure. Return to work suffers from a number of limitations. Firstly, it represents only a snapshot in time. Secondly, it is affected by many uncontrolled factors such as the amount or type of rehabilitation and placement support received, the prior work history of the person, premorbid psychosocial variables, personal resources, the length of time since injury, the number of people lost to follow-up and the nature of the samples (see Kendall & Terry, 1996; Lishman, 1973).

By way of introduction, the following sections outline two factors (the extent of cognitive impairment and the time since injury) that have been related to return-to-work rates, before considering the overall rate of employment following head injury. Where available, the return-to-work rates have been investigated in terms of these factors.

Cognitive impairment

An obvious candidate for predicting the level of return to work that one might consider is the extent of cognitive impairment. Lower post-head injury employment has been associated with longer periods of post-traumatic amnesia, patient self-reports of
difficulties and neurological status at the time of injury as assessed by the Glasgow Coma Scale. (The Glasgow Coma Scale is an assessment for the depth and duration of impaired consciousness and coma and is based upon motor responsiveness, verbal performance and eye-opening responses. Ratings on this scale range from 3 – no response to any stimulation – to 15 – normal responding across the three domains). For instance, Stambrook et al. (1990, p. 186) studied 131 males who were employed full-time prior to their injury and found that those classified with a severe head injury (Glasgow Coma Scale <8) had a rate of return to full-time or part-time work of 42%; 62.9% with a moderate head injury (Glasgow Comas Scale 8–13) returned to work; and 65.3% with a mild head injury (Glasgow Coma Scale >13) returned to full-time or part-time work.

**Time since injury**

Recovery from acquired brain injury continues over a period of time with some estimates being around two years for there to be a plateau in the consequences. There have been variations in the findings across studies, but, as expected, the findings from a recent report were that a return to productivity was higher at 12 months than at six months after injury for 72 patients who were employees or housewives prior to head injury (De Sousa & Koizumi, 1999).

A key issue is when the return-to-work rates are maximised. The return to work in 364 patients peaked at 70.7% at 24 months (17.2% at 1 month; 49.6% at 6 months; 65.7% at 12 months and 70.7% at 24 months – Dikmen et al., 1994). Longer-term studies found that the return-to-work tended to increase with the passage of time, from 16.0% at 26–36 months, 29.4% at 37–48 months, through 15.1% at 49–60 months and 26.7% for periods longer than 60 months (see Brooks, McKinlay, Symington and Beattie, 1987).

**FINDINGS**

The reported return-to-work rates for the nine ANZ studies varied from 29% to 64% (all percentages rounded) with a median of 46% and for the 23 international studies the return-to-work rates varied from 19% to 88% (median also 46% – see Figures 1(a) and (b)). When the results of all ANZ studies were combined to form a total of 1010 subjects then the overall return-to-work rate was 44% (compared with 45% for the 2182 subjects in the international studies).

**PROCEDURE**

A search of the literature using Medline and Psychlit databases was undertaken using the keywords of ‘head injury’ and ‘return-to-work’ and further articles were identified from references to other studies. Only studies that cited a return-to-work rate were considered and these are listed in Table 1. There were ten studies from Australia and New Zealand (ANZ), nil from Asia, six from Europe, two from the Middle East and 14 from North America The size of the samples varied considerably and for ANZ reports ranged from 24 to 208 participants (median = 70.5) and from 19 to 333 (median = 77) for the international studies from Brain Injury. The reports were coded in terms of (a) the year of publication; (b) the location of the studies; (c) the sample size; (d) the minimum period of follow-up; and (e) the severity of the acquired brain injury as indicated by the Glasgow Coma Scale. Where a number of return-to-work rates were cited, the rates for employment at 24 months were selected and where possible students and those engaged in home duties were excluded. For the most part the return-to-work rates include part-time as well as full-time work and where feasible sheltered or supported work was excluded.

![Figure 1A. Return-to-work rates from studies of acquired brain injury in Australia and New Zealand](image-url)
TABLE 1: RETURN-TO-WORK RATES FOLLOWING ACQUIRED BRAIN INJURY

<table>
<thead>
<tr>
<th>Investigator</th>
<th>Year</th>
<th>Location</th>
<th>N</th>
<th>Minimum follow-up (months)</th>
<th>% returned to work</th>
</tr>
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<td></td>
<td></td>
<td></td>
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<td>24</td>
<td>75</td>
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<td>Doig et al.</td>
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<td>Fearnside et al.</td>
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<td>24</td>
<td>38</td>
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<td><strong>International studies</strong></td>
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<td>Ip et al.</td>
<td>1995</td>
<td>Nth America</td>
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<td>Johnston &amp; Lewis</td>
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<td>1989</td>
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</table>
FIGURE 1B. RETURN-TO-WORK RATES FROM INTERNATIONAL STUDIES OF ACQUIRED BRAIN INJURY

The severity of injury was directly related to return-to-work. Four Australian and New Zealand studies of persons with severe brain injuries reported a median rate of 68%, increasing to 79% for those with a moderate or mild injury. By comparison, six international studies reported 57% return-to-work for severe brain injuries, 56% for moderate and 67% for mild injuries.

Across all studies there was hardly any correlation (–0.10) between the sample size of the studies and the reported return-to-work rates and a low correlation (0.21) between the year of publication and the return-to-work rates. The latter indicates a slight trend for more recent studies to report higher return-to-work rates. While there might be a perception that return-to-work rates might be lower across longer time periods, it was noted that the correlation between length of follow-up and return-to-work across 26 studies was only –0.15.

DISCUSSION

The results from these ANZ studies are certainly consistent with international trends. They show that persons with acquired brain injury had a median return-to-work rate of around 44% when all the studies were combined and this compared favourably with the 45% reported for comparable international studies in the journal Brain Injury. There were few differences between ANZ and the international studies, despite the fact that they covered such different services, labour markets and regions. Possibly the return-to-work rates of severely injured persons are higher in Australia and New Zealand.

Around the world there were very low effects arising from or related to the size of the study, the year in which the research was conducted, or the length of time of follow-up.

One concern with research in this area is that it may reflect a publication bias. That is, studies which found low return-to-work rates might not be submitted for publication or may not be published. In addition, the published rate is unusually consistent with the published rates for other disability groups. For example, Murphy and Athanasou (1994) reported a review of 17 studies concerned with the vocational potential of persons with severe spinal cord injuries (paraplegia and quadriplegia) and noted that 1441 or 40.3% of all the 3568 subjects returned to work post-injury. Quite recently, Whyte and Carroll (2002) indicated that 43.5% of amputees remained in employment. One worries whether there may be some methodological artefact that is operating in these studies of return-to-work for persons with serious injuries.

Some limitations of this report relate firstly to the small sample sizes involved in the studies analysed. The studies have also varied in the severity of the injury that was studied as well as the nature of the samples involved. These factors limit any inference to individual cases. For example, Ponsford et al. (1995) studied only mild to severe injuries; Crowe (1993) was restricted to a study of severe injuries and Fearnside et al. (1993) also studied those with GCS<8; while Athanasou (1993) focused only on compensable cases of head injury; and Tate et al. (1989) used participants from good recovery through to severe disability.

Furthermore, the nature of the samples in these studies were quite heterogeneous and defy comparison. Some studies combined children, students, those engaged in home duties and employees. The study by Godfrey et al. (1993) included those who were studying as well as those who were working while Ponsford et al. (1995) utilised employed males.

A second general issue is that the criterion of return to work was not defined uniformly. Some studies compounded part-time, full-time or sheltered work and classified this as a return to work. Hillier et al. (1997) and Ponsford et al. (1995) combined full-time and part-time work. Other studies did not indicate the level of employment or the nature of the return-
to-work. For example, Fleming et al. (1999) showed that 23 out of their 170 participants had returned to work but were no longer working, 59 out of 170 returned to the same job and 20 to a different job while 68 out of 170 had not returned to work. The overall return-to-work rate masks a range of qualitative indicators of vocational adjustment.

It is also possible that the results are influenced by the method of follow-up, response rates or attrition from the study populations. Most studies of return to work focused on respondents to surveys or telephone follow-up and it is well known that there are significant difficulties in locating participants (e.g., Tate et al. (1989) located 87 out of their original sample of 100; Fearnside et al. (1993) lost 37 patients to follow-up and only 181 out of 315 were able to be studied over two years). Moreover, the length of follow-up varied considerably across as well as within studies. For example, Tate et al. (1989) had an average of six years follow-up with a range from 3.4 to 9.7 years; Felmingham (2001) used a follow-up period of six months and 24 months; Fleming et al. (1999) also varied their follow-up from 13 to 97 months. In addition, the findings may represent an overestimate firstly because they are limited to those who survived ABI and those not in a persistent vegetative state or otherwise seriously injured or referred to a brain injury service. The influence of survival rates is illustrated in the study by Fearnside et al. (1993), who reported that of 315 persons with ABI, 97 died and 37 were lost to follow-up, leaving a sample of 238 males out of the original 315.

If the reader bears with me for a moment and assumes that 30% of persons with ABI died or failed to emerge from post-traumatic amnesia (based on Fearnside et al., 1993; see also Felmingham et al. 2001, p. 436); that around 10% of participants were lost to follow-up and possibly not working (based on Tate et al., 1989; Fearnside et al., 1993; Felmingham et al. 2001); and that of those 60% remaining to be studied some 44% (based on the findings of this study) returned to work, then the actual return-to-work rate following ABI is some 26% (or as high as 31% if it is assumed that some of the 10% lost to follow-up were working). Furthermore, if one then assumes (based on Fleming et al., 1999) that of those 30% (or even 44%) who return to work 23% of them will return to the same job, 20% will return to a different job and 58% will return to work but not continue (note that the percentages are rounded and may not total 100) then of the 100% of persons with ABI only some 7–10% will return to the same job. It is recognised that this analysis makes many assumptions but by any standards the vocational consequences of ABI are disastrous.

Despite the clear career development implications of return-to-work, nearly all the studies have been from a medical perspective. This is understandable but there may be some scope for input from career development professionals. The context of this report also poses some questions for the relevance of those theories of career development (see for example, Szymanski, Hershenson, Enright & Ettinger, 1996) that assume normal progression or make no allowance for dislocations, such as those occurring after injury.

Fortunately, there is evidence that employment rates can be influenced by comprehensive vocational rehabilitation (see Kreutzer et al., 1988). Nevertheless, the conclusions of Vogenthaler, Smith and Goldfader (1989) seem as relevant today as they did some 13 years ago:

A body of literature exists that describes return-to-work after head injury but the data is enormously inconsistent. Interpretation of the data has been difficult in some cases due to a lack of description of the study sample, length of time elapsed before follow-up and other methodological problems. Beyond these issues the criterion of return-to-work has been called into question as a valid index of head injury outcome (p. 356)

The available evidence supports the capacity of persons with an acquired brain injury to return to work. Any residual vocational potential is far less than the pre-injury potential of the person and in the majority of cases (54%) a return to work has not been achieved in Australia and New Zealand. Even this figure is likely to require revision given the limitations of our previous research.

Acknowledgments
Preparation of this paper was undertaken while a visiting fellow at the Breakthru Employment Solutions office in Liverpool. I am grateful to Peter Kennett and the staff of his office for their support and cooperation.
References


*References marked with an asterisk are listed in Table 1.*
The re-emergence of the importance of personality factors for career development arose as a consequence of 'resolution' of long-running disputes within the personality field especially the person-situation debate (Pryor, 1993). More recently the emphasis on broader conceptions of relevant variables relating to career development (Szymanski & Hershenson, 1997) have further served to highlight the relevance of issues of personality for career development. In particular, those with disabilities typically face major issues of adjustment to loss of physical and/or cognitive functioning, reaction to pain, social withdrawal, restricted or no employment prospects, financial stress and uncertainty about the future (Bolton, 1997).

Two measures of adjustment developed in Australia were compared in this study using both rehabilitation clients and technical and further education (TAFE) students. The Congruence Personality Scale – Form 2 (CPS-2) is the behavioural equivalent of the Congruence Personality Scale – Form 1 (CPS-1), research on which has been previously published in this journal (Pryor & Taylor, 1994; Pryor, 1995; Taylor & Pryor, 1995). Whereas the CPS-1 uses personal adjectives as its items, the CPS-2 uses behavioural statements for which people are asked to indicate how frequently such a statement applies to them. Full details of the psychometric properties of the Congruence Personality Scale – Form 2 can be found in Pryor & Taylor (2000). Both the CPS-1 and the CPS-2 assess the so-called Big Five (personality traits) sometimes designated the five factor model (Digman, 1990; Pryor, 1993). Pryor & Taylor, however, altered the traditional names for the purposes of better communication with clients:

Extraversion changed to Social orientation
Openness to experience changed to Cognitive orientation
Agreeableness changed to Interpersonal orientation
Conscientiousness changed to Task orientation
Neuroticism changed to Emotional orientation

The two-week test-retest reliabilities for the CPS-2 scales ranged from .78 to .90.

The Depression Anxiety and Stress Scales (DASS) is a set of three self-report scales designed to measure the negative emotional states of depression, anxiety and stress (Lovibond & Lovibond, 1995). Depression assesses such symptoms as dysphoria, hopelessness, self-depreciation, and inertia (e.g. ‘I could not seem to experience any positive feelings at all’). Anxiety refers to autonomic arousal and the subjective experience of anxiety (e.g. ‘I felt scared without any good reason’). The Stress scale is sensitive to chronic non-specific arousal (e.g. ‘I found myself getting upset by quite trivial things during the past week’). The internal reliability values of the scales are 0.91 (Depression), 0.84 (Anxiety) and 0.90 (Stress).

The DASS is a measure of state. It asks the respondent to rate the degree to which each symptom applied to them during the past week. The CPS-2, on the other hand, is more a measure of personality traits. It asks the test taker to rate statements according to how often that statement applies to them. However, it would be expected that if a person scored highly on Emotional Orientation they would more likely display elevated states of depression, anxiety and stress during a particular period in their life. Therefore it would be predicted that scores on the DASS would correlate positively with scores on Emotional Orientation. It would also be predicted that these correlations would tend more to be moderately positive rather than highly positive. A measure of state (e.g., DASS) would be expected to be more sensitive to the current situational stressors affecting an individual than a measure of trait. Thus, for example, those who gained a low score on Emotional Orientation, may score highly on the DASS if they were in a highly stressful situation at the time of assessment.

Since under the Five Factor Model each trait is conceptualised as orthogonal it would be predicted that the four orientation scales assessed by the CPS-2 other than the Emotional Orientation scale would not be systematically related to the scales of the DASS. It was further predicted that scores on the DASS and Emotional Orientation scales would be higher for rehabilitation clients than for TAFE students.

Sample

The CPS-2 and a measure of adjustment (DASS) were given to a sample of adults and the results correlated. The sample comprised 39 clients of a rehabilitation agency and 11 TAFE access students. Demographic data were available for only 40 of the 50 in the sample. Age ranged from 19 to 63, with a mean of 39 years. All TAFE access students were female. Of the rehabilitation clients, 60% were male.

RESULTS

The average score for each of the three scales of the DASS fell in the 87th to 95th percentile range. The mean score for Depression was 15.5, Anxiety was 11.0 and Stress was 19.1. These scores are elevated and suggest that, on average, people in the sample were moderately depressed, anxious and stressed. The average scores on each of the CPS-2 scales were for Social 63.8, Cognitive 65.8, Interpersonal 72.8, Task 75.8 and Emotional 56.9. On each of the scales of the CPS-2, these mean scores fell in the average range.

As can be seen in Table 1, the three measures of depression, anxiety and stress are moderately positively correlated with Emotional Orientation but with not other CPS-2 scales.

The means and standard deviations of the scores on the DASS and CPS-2 were compared between the rehabilitation clients and TAFE Access students using the Mann-Whitney U test. As expected the rehabilitation clients were statistically significantly more depressed, anxious and stressed than the TAFE students and only on Emotional Orientation is there a significant difference between the two groups on the CPS-2 (See Table 2).
CONCLUSIONS

It was hypothesised that the three measures of depression, anxiety and stress would be moderately positively correlated with the Emotional Orientation scale of the CPS-2. This result was obtained. In line with the Five Factor Model conceptualisation the scales of the DASS did not correlate significantly with any of the other CPS-2 scales. Therefore it can be concluded that people who score highly on Emotional Orientation tend to be more depressed, anxious and stressed at a particular time than those who gain a low score on the scale. This result strongly supports the validity of the Emotional Orientation measure.

An interesting finding from this research was that although the scales of the DASS and the Emotional Orientation scale were correlated, they differed in their average scores when normed. All the DASS mean scores were above average while the mean score for the Emotional Orientation was in the average range. It may be that the DASS overestimates people’s level of emotional disturbance or the CPS-2 underestimates the level of people’s reaction to stress and psychological strain. Alternatively these data could be explained as individuals’ state at a particular time being different from their perception of themselves over a wide range of situations and times. This latter explanation may be preferable since many rehabilitation clients self-report unease in the assessment situation. If this latter interpretation is correct it would provide further evidence for the validity of conceptualising the scales of the DASS as assessing state variables and the Emotional Orientation scale as an indicator of a general personality trait.

Further support for the validity of the Emotional Orientation scale of the CPS-2 and the three scales of the DASS was evident in the comparison of the two subsamples in this study. As predicted, the scales of the DASS and the Emotional Orientation of the CPS-2 significantly differentiated rehabilitation clients from TAFE students. Rehabilitation clients had significantly higher scores than the TAFE students on the four adjustment scales used in this research but had no significant score differences on the four other personality dimensions assessed.

In addition, these data illustrate the potential of personality measures’ contribution to a more complete understanding of the impact of disability on clients. One of the tragedies that I frequently see in my own medico-legal work is that individuals’ physical limitations are assessed extremely thoroughly while the impact on the person qua person is frequently ignored unless the person has some form of brain damage. Some recent changes in various states’ legislation relating to public liability and workers compensation also appear to be returning to the 1980s when the impact of disability was almost exclusively conceived in physical terms. The results of this study indicate that such a narrow conception of the impact of disability is too circumscribed to do justice to the problems of those with injuries. Further, it may be inequitable in terms of the personal and financial cost that those with disabilities will be constrained to cope with in the future.

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INTERNATIONAL CAREER DEVELOPMENT TRENDS

SANDRA KERKA, ERIC Clearinghouse on Adult, Career, and Vocational Education,

Career development has taken on global significance as individuals prepare for work that increasingly crosses borders. Internationally, individuals and the career practitioners helping them are grappling with such issues as development of cultural competencies for cross-cultural work (Arthur 2000). The issues vary in different sociopolitical contexts (Santos et al. 2001). As Eastern Europe and China, for example, move to more Western-style economies, new ways of school-to-work transition are being sought (European Training Foundation 2000; Hu 1997; Mansuy et al. 2001). Cross-cultural applicability of career development theories, models, and instruments is a focus of research (Lee 2001; Leong and Serafica 2001; Lerman 2001; ‘Special Issue’ 1998; Tracey et al. 1997). Women’s successful career development also varies across nations (Charles et al. 2001; Linehan and Walsh 2001; Mavin 2000; Zabludovsky 2001), although the impact of family on women’s careers remains a universal theme.

International collaborations have resulted in a career development facilitators’ curriculum (Carlson et al. 2000), transnational career theory (Sampson et al. 2000), and a web site for the professional development of career development specialists (Turcotte and Hiebert 1999). Across nations, common concerns include the ethical, equity, and quality issues of career development on the internet; the need for current, accessible labour market information; and stronger links between education and employment and between the career development field and policymakers (Hiebert and Bezanson 2000; Lerman 2001).

NOTES AND RESOURCES

Carlson, B. L., Goguen, R. A., Jarvis, P. S., & Lester, J. N. (2000). The North American career development partnership: Experiment in international collaboration. Journal of Employment Counseling, 37 (2) 76–87. Describes how career development programs became the focus of an international partnership between the United States and Canada. Traces the history of each country’s efforts, beginning in the 1970s, which led to this significant international collaboration.

Charles, M. et al. (2001). The context of women’s market careers: A cross-national study. Work and Occupations, 28,(3) 371–396. Labour force participation of Swiss women was more strongly influenced by family configuration. The association between
educational credentials and occupational sex typing was more persistent in Switzerland. Results show how cultural, institutional, and governmental factors constrain women’s career choices.


Lee, K. H. (2001). A cross-cultural study of the career maturity of Korean and United States high school students. Journal of Career Development, 28 (1) 43–57. Constructs of career maturity were similar across both cultures. Level of maturity was culture related: US students had greater confidence; Koreans were more prepared.


Linehan, M., & Walsh, J. S. (2001). Key issues in the senior female international career move: A qualitative study in a European context. *British Journal of Management, 12,* (1) 85–95. International career moves of female expatriate managers had largely been developed along a linear male model of career progression, which, taken together with gender disparity both in organisations and family responsibilities, frequently prevented women from reaching senior managerial positions.

Mansuy, M. et al. (2001). The transition from education to working life: Key data on vocational training in the European Union. Thessaloniki, Greece: European Centre for the Development of Vocational Training (ED 456 225). http://www2.trainingvillage.gr/download Describes aspects of the school-to-work transition throughout the EU, including the school-to-work transition in Central and East European countries, the integration of young people into working life, and European Community policies.

Mavin, S. (2000). Approaches to careers in management: Why UK organisations should consider gender. *Career Development International, 5*(1) 13–20. Women’s career development proceeds differently from that of men and few career models incorporate women’s varying life experiences. As long as women step off the career track to meet family responsibilities, they will be at a competitive disadvantage in career advancement.


been considered and implemented in those countries.


Zabludovsky, G. (2001). Women managers and diversity programs in Mexico. *Journal of Management Development, 20*(4), 354–370. Until recently, very few Mexican private companies had specific policies to support and advance women executives. A few companies are beginning to recognise their responsibility and develop diversity programs focused on increasing the numbers of women in management.

**Websites**

International Association for Educational and Vocational Guidance: http://www.iaevg.org/

International Association of Career Management Professionals: http://www.iacmp.org/

International Career Development Conference: http://www.careerccc.com/

International Career Development Library: http://icdl.uncg.edu/

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The purpose of the OECD Career Guidance Policy Review is partly benchmarking, i.e., enabling countries to see how well they are doing in relation to other comparable countries, and partly sharing good practice: enabling countries to learn from practices elsewhere. Fourteen countries are taking part in the review. Eleven are from Europe (Austria, Czech Republic, Denmark, Finland, Germany, Ireland, Luxembourg, Netherlands, Norway, Spain, UK); the others are Australia, Canada and Korea. Half of these countries have been visited (July 2002).

In addition to visits, national questionnaire responses, Country Notes and the coming Comparative Report, eight papers have been commissioned, in collaboration with the European Commission. Four have already been completed: on quality issues; on the skills, training and qualifications of guidance workers; on integrating services at local level; and on the role of Information and Communication Technologies (ICT) in integrated guidance systems. The other four cover: the role of the market in guidance delivery; evaluating outcomes; improving career information; and whether information is a sufficient basis for effective career decision-making. These documents are being made available, on the OECD review web site: www.oecd.org/els/education/reviews.

We are also working on a rationale statement, which will outline the role of career guidance in relation to lifelong learning and to active labour-market and welfare-to-work strategies. We hope to link this to some current OECD work on human capital development. This recognises that in OECD countries about 40% of individual variation in earnings can be explained through conventional measures like years of education, literacy and work experience, combined with the background factors of gender, language background and parents' education. It suggests that at least some of the remaining 60% might be accounted for by motivation and other personal characteristics, including the notion of human ‘meta-capital’, i.e., people’s ability to manage the development and utilisation of their own human capital. These are important arguments, which potentially place career guidance centre-stage.

**Emerging issues**

A number of tentative issues can already be identified:

1. Career education and guidance in schools risk being subsumed and marginalised within broader educational/social concepts.
2. With policies favouring devolution of management responsibilities to individual schools, there is an issue about how some form of student guidance entitlement can be assured within such policies.
3. Weaknesses in guidance services within the more academic parts both of the school system and of the higher education system.
4. Career guidance for adults is still limited and fragmented: guidance systems are still very front-loaded.
5. A need to integrate public employment services more closely into lifelong learning strategies in general.
6. A need for stronger professional structures in the career guidance field.
7. A need for stronger mechanisms to provide coordination and leadership in articulating strategies for lifelong access to guidance in most countries.

The OECD review is linked to a number of other current international initiatives. The European Commission is currently setting up a European Guidance Forum (see article above, p. 2) to provide an opportunity for the key policymakers in each member-state (plus the aspirant member-states) to share their experience and to consider what initiatives might be appropriate at European level. As part of the preparations for this forum, the Commission has asked the European Centre for the Development of Vocational Training (CEDEFOP) to use our OECD questionnaire in order to collect relevant data on countries that are not taking part in our review. It also seems likely that the World Bank will shortly initiate a parallel review in a number of middle-income
countries. In addition, following two very successful international symposia on career development and public policy held in Canada in 1999 and 2001, there are tentative plans to set up a new International Centre for Career Development and Public Policy. These are indeed exciting times for career guidance and career development.

(Reader comments are invited on the OECD Review of Career Guidance Policies Australian Country Note – Editor).

Tony Watts
OECD

AUSTRALIAN APPRENTICE AND TRAINEE STATISTICS 2002, SEPTEMBER QUARTER

This report from the National Centre for Vocational Education Research provides statistical information on apprentices and trainees (persons who undertook vocational training through contract of training arrangements) for the September quarter 2002 (1 July to 30 September 2002). At the end of the quarter:

- There were 367,800 apprentices and trainees in-training, an increase of 13% from 30 September 2001.
- The number of apprentices and trainees in-training in the Trades and related workers occupational group was 3% higher than the number reported at September 2001.
- In the Clerical, sales and service workers (elementary, intermediate and advanced) occupation groups the number of apprentices and trainees in-training was 17% higher than in the previous year.
- Part-time (including school-based) apprentices and trainees accounted for 24% of the total in-training, up 3 percentage points from 20% at 30 September 2001.
- There were 129,300 female apprentices and trainees in-training, accounting for 35% of all apprentices and trainees, a slight increase from the previous year.
- There were 248,200 commencements in the 12 months ending 30 September 2002, up 11% from the previous year.
- There were 109,300 completions in the 12 months to September 2002, up 23% from the previous year.


THE 2003 GUIDE TO CAMPUS RECRUITING

The Guide to Campus Recruiting is one of the Graduate Careers Council of Australia’s most popular and useful publications. Released in December each year, the Guide contains entries from 44 Australian and New Zealand universities and features comprehensive coverage of the Australasian higher education sector.

The Guide provides comprehensive contact details for the careers services in universities across the country, a facility useful not only to students and careers services personnel, but also to graduate employers. In addition to this practical staffing information, the Guide also features:

- detailed listings of the most important events in the graduate recruitment calendar, such as careers fairs dates and preferred times for employer visits;
- estimates of numbers of graduating students by discipline; and
- services related to recruitment activities such as mailouts, noticeboards and application collection.

The book also combines all the contact information for careers services staff in every university into a Contact Directory, located at the rear of the publication – this is listed alphabetically both by state and by university for quick reference. The new 2003 Guide to Campus Recruiting will be available in December 2002 and you can pre-order your copy now by completing the order form at: www.gradlink.edu.au/gradlink/employer/2003orderform.pdf

Source: Graduate Careers Council of Australia Ltd: www.gradlink.edu.au
Nobel Prize
The Royal Swedish Academy of Sciences has decided that the Bank of Sweden Prize in Economic Sciences in Memory of Alfred Nobel, 2002, will be shared between Daniel Kahneman of Princeton University, USA and Vernon L. Smith George of Mason University, USA. Kahneman received his award ‘for having integrated insights from psychological research into economic science, especially concerning human judgment and decision-making under uncertainty’.

Psychological and experimental economics
Traditionally, much of economic research has relied on the assumption of a ‘homo œconomicus’ motivated by self-interest and capable of rational decision-making. Economics has also been widely considered a non-experimental science, relying on observation of real-world economies rather than controlled laboratory experiments. Nowadays, however, a growing body of research is devoted to modifying and testing basic economic assumptions; moreover, economic research relies increasingly on data collected in the lab rather than in the field. This research has its roots in two distinct, but currently converging, areas: the analysis of human judgment and decision-making by cognitive psychologists, and the empirical testing of predictions from economic theory by experimental economists. This year’s laureates are the pioneers in these two research areas.

Daniel Kahneman has integrated insights from psychology into economics, thereby laying the foundation for a new field of research. Kahneman’s main findings concern decision-making under uncertainty, where he has demonstrated how human decisions may systematically depart from those predicted by standard economic theory. Together with Amos Tversky (deceased in 1996), he has formulated prospect theory as an alternative, that better accounts for observed behaviour. Kahneman has also discovered how human judgment may take heuristic shortcuts that systematically depart from basic principles of probability. His work has inspired a new generation of researchers in economics and finance to enrich economic theory using insights from cognitive psychology into intrinsic human motivation.

(Source: Royal Swedish Academy of Sciences).

Grawemeyer Committee Award
Working as a team for nearly three decades, Kahneman and Tversky revolutionised the scientific approach to decision-making, ultimately affecting all social sciences and many related disciplines. Kahneman and Tversky demonstrated in experiments that normative mathematical models of probability and choice don’t account for most intuitive human judgments and decisions. Instead, a series of psychological principles, often leading to simplification of a problem, guide human behaviour in the face of uncertainty. By identifying biases that guide human judgment, Kahneman and Tversky have impacted fields such as economics and medicine. As a result of their work, Kahneman and Tversky are among the most frequently cited authors in behavioural science. ‘It is difficult to identify a more influential idea than that of Kahneman and Tversky in the human sciences,’ the Grawemeyer committee noted.

Employers of Choice Expo in Melbourne
The Employers of Choice Expo is designed for companies committed to fostering a positive working environment. The expo is open to people of all ages. It includes a range of industries including banking, automotive, hospitality, information technology, education, consulting, retail, recruitment and travel.

The event will showcase a range of leading Australian companies such as Commonwealth Bank, Accenture, Coles, Village Roadshow, Autoliv, Meinhardt, TXU, ESSO, Safeway, TMP Worldwide, Sara Lee and IKEA. Education providers, career specialists, government departments and non-profit organisations will also be on display.

Education Day, which is part of the Employers of Choice Expo, aims to provide information so people can make informed decisions about future careers and subject choices.

The Employers of Choice Expo is now in its fourth year in Melbourne, and Sydney has been added to the
calendar. In 2003, the expo will be held in Sydney, Melbourne, Brisbane and Adelaide. For further information please contact: Kate Leaman on 03 9526 8526 or 0413 306 862.

**NEW VENTURE**
A new venture between C-F-S Career Management and the career web site, www.jobsDB.com.au, now provides job seekers with a one-stop-shop comprehensive job service. This association offers candidates the chance to compete in the worldwide jobs market, combined with the benefits of one-on-one career mentoring. The service is designed to utilise the international database of jobs in the interactive recruitment network of jobsDB.com.au and the personalised careers advice of C-F-S. For more information contact C-F-S at info@cfscm.com, or www.cfscareermanagement.com.

**LEADERSHIP FOR BUSINESS**
A recent study by the Australian Institute of Management (AIM) confirmed business awareness of the need for cultivating leaders, where it showed that coaching was part of a formal training program in 71 per cent of companies surveyed. The survey, which cross-sectioned chief executives, managing directors, board members and human resources staff of 400 AIM member organisations, revealed a recognition for leadership coaching at all levels, with middle managers just as likely as more senior managers to receive coaching. The AIM statistics indicate that Australasian corporations are moving in the direction of seeking executive coaching. Helen Hooper, co-director of Creative Coaching Solutions emphasised the importance of investing resources in accelerating the development of future leaders. “It’s a key strategy in attracting and retaining talented individuals – it results in growing your own leaders, who develop their own ability to acquire responsibility, assume risk and learn from their achievements,” she said. Further enquiries: Monica Rosenfeld Email: monica@wordstorm.com.au

**NEWS FROM THE CAREER ASSOCIATIONS**

**CAREERS EDUCATION ASSOCIATION OF VICTORIA (CEAV)**
Recent CEAV collaborative projects include:
- Workcover – Set of OHS Lessons
- Heinemann web site development for science (completed) and geography (current) information.
- DEET LOTE project for teachers – John Roodenburg devising resources.
- DETYA Canberra – initial customisation of the Canadian ‘The Real Game’ careers and social studies education kit, completed in May.
- ‘A Reason to Learn: Vocational Learning in Australia’ second national VETNETwork conference, in conjunction with VETNETwork.
- GST Start Up training for VET cluster coordinators, session running in June, in conjunction with VETNETwork. Source: CEA: www.netspace.net.au/~ceav/

**FORTHCOMING CONFERENCES**

**SYDNEY, 9–11 APRIL 2003**
Australian Vocational Education and Training Research Association.
Email: avetra@welldone.com.au

**ADELAIDE, 14–16 APRIL 2003**
Australian Association of Career Counsellors, 12th national conference: Switched on careers.
Email: aaccnational@ozemail.com.au or see: http://www.aacc.org.au/conferences/2003.html

**SYDNEY, 18–21 MAY 2003**
Australian Human Resources Institute, 2003 national conference, Email: convention@ari.com.au or see: http://www.ahri.com.au

**DENVER, COLORADO, JUNE 26–28, 2003**
National Career Development Association, see: www.ncda.org
BERN, SWITZERLAND, SEPTEMBER 3–6, 2003
Quality development in vocational counselling and training, International Association for Educational and Vocational Guidance, see: www.aiosp-berne.ch

BALLARAT, 7–9 DECEMBER 2003
Career Education Association of Victoria, see: www.netspace.net.au/~ceav/

FROM THE JOURNALS

INTERNATIONAL JOURNAL FOR EDUCATIONAL AND VOCATIONAL GUIDANCE, VOLUME 2, NUMBER 3, 2002
The Role of information and communication technologies in integrated career information and guidance systems: A policy perspective. A.G. Watts
Quality and ethics in internet-based guidance. James P. Sampson
Delivery of career development information in the context of information computer technology. Reginald Savard, Marrelle Gingras, Michel Turcotte
Validity of e-advice: The evaluation of an internet-based system for career planning. Branimir Sverko, Natasa Aćik, Toni Babarović, Ana Brcina, Iva Sverko

Introduction: Innovating career development using advances in life course and life-span theory. Fred W. Vondracek, Paul J. Hartung
Reinvigorating the study of careers. Mark L. Savickas
Integrating person- and function-centered approaches in career development theory and research. Fred W. Vondracek, Erik Porfeli
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A metaperspective for counseling practice: A response to the challenge of contextualism. Mary Sue Richardson
Development through work and play. Paul J. Hartung

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Suicide reduction and prevention: strategies and interventions. Stephen Palmer
Cognitive style and suicidal behaviour: implications for therapeutic intervention, research lacunae and priorities. Noel Sheehy, Rory C. O’Connor
Understanding suicidal ideation and assessing for risk. Peter Ruddell, Berni Curwen
A psychodynamic approach to suicide: A critical and selective review. John Lees, Quentin Simpson
A solution-focused approach to working with clients who are suicidal. John Sharry, Melissa Darmody, Brendan Madden
Support groups: a psychological or social device for suicide bereavement? Minna Pietilä
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