> Today's developed society . . . depends for leadership on
> the managers . . .. It depends on their knowledge, on their
> vision, and on their responsibility.   In this society,
> management - its tasks, its responsibilities, its practices -
> is central: as a need, as an essential contribution, and as
> a subject of study and knowledge.

Peter F. Drucker (1993)

1   OBJECTIVE

This Thesis sets out to explore the effects of education and training levels of managers in disability-based agencies on the performance of those agencies, including the mediating effect of strategic planning processes and systems.

2   BACKGROUND AND RATIONALE

In Australia, as in many other countries, the contribution of education and training, and managers and leaders to the wellbeing of organisations, industry, and ultimately the nation has been recognised by community, researchers, educationalists, industry and government alike. For example, the most recent appointment to the Board of the Australian National Training Authority, Vincent O'Rourke (CEO of Queensland Rail), believes that he '...could not think of anyone who does not agree that training... [is] important to Australia's success as a nation.' (O'Rourke, 1999).

Both major sides of the Federal Government share a bipartisan approach. In 1992 the then Minister for Employment, Education and Training, The Hon Kim Beazley stated:

> The ability of Australian managers to deal with an increasingly
> complex domestic and international business environment is
> crucial to the development of Australia as a productive nation . .
> ..   Our   ability   to   increase   Australia's   international
> competitiveness, our flexibility in responding to changes in
> production systems, our ability to underpin and attract business
> investment and our ultimate success in the service industries
> are dependent to a very great extent on the quality of our
> management and leadership skills.

(Media Release, 28/5/92)

And in 1999, the current Minister for Education, Training and Youth Affairs, Dr. David Kemp stated that '... all governments are working together to provide a quality training systems to underpin our future success as a nation in the global economy.' (Media Release, 18/6/99).

Major reviews[1] of the state of Australian management support O'Rourke's and the Ministers' assertions. Furthermore, in all these studies the prerequisite for managers to be better trained and educated so that performance might be enhanced figured prominently. For example, the Karpin Report (1995) concluded that further education and training of management was required if the nation's current strategic and other deficiencies were to be remedied. In 1995, more than half of Australia's frontline managers, comprised of team leaders and supervisors, and estimated to number 450,000 had no formal qualifications or training relevant to their responsibilities (Australian Training, 1998).

At a national policy level, this relationship between education and training of managers and national competitiveness is intuitively appealing. However '... if the nation's current strategic and other deficiencies ... [are] to be remedied.' (Beazley, 1992), it is at an individual and organisational level that managers must firstly perform. Unfortunately, Australian enterprises do not regard management development as a strategic issue (Barraclough & Co., in the Karpin Report, 1995), nor is continuous management learning widely accepted by enterprises (Karpin Report, 1995), including those in the disability sector.

Particularly in a changing environment, these attitudes reportedly held by Australian enterprises are surprising. Indeed, the 1980s and 1990s have been characterised by Limerick (1992) as the era of discontinuity in which evolutionary, incremental change is replaced by revolutionary change. In Australia, the Minister's (Beazley, 1992) view of '... an increasingly complex domestic and international business environment...' has, since the mid 1980s, incorporated industry deregulation, severe recession, massive unemployment, rising and falling interest rates, lowering of trade barriers and the resulting internationalisation of markets (Brewer, 1995). Managers in such an environment are expected to be proficient in managing their organisations as they adapt to change, and as a corollary or indeed prerequisite, in adapting their own knowledge, skills and attitudes. They should in effect adopt a personal continuous improvement orientation (e.g. Benjamin & Al-Alaiwat, 1998).

At an international level, at least in the developed world, there also seems to be an intuitive consensus that education and training in general is a major contributor to enhanced performance. This applies at individual (e.g. Guzzo et al., 1985), organisational (Cappelli, 1993; Holzer et al., 1993; Ichniowski

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[1] The major reviews were the Industry Task Force on Leadership and Management Skills (the Karpin Report, 1995), which investigated the current status of Australian managerial preparation as did its predecessor, the Midgley Inquiry (1990), and prior to that, the Ralph Report (1982).

et al., 1995; MacDuffie & Kochan, 1995; Osterman, 1995), and national (e.g. Clare & Johnson, 1993; the Martin Report, 1964; Norris, 1993) levels.

For example, Bartel (1994) found that employee training programs were responsible for increased worker productivity in manufacturing businesses based in the United States. At an organisational level, the World Bank (1995) found that small businesses with better educated managers were more likely to grow and/or survive, which were similar findings to an Australian study (Williams, in McMahon, 1989, p.62).

The same sort of sentiments were provided by Porter (1990, p.628), who said:

> Education and training constitute perhaps the single greatest long term leverage point available to all levels of government in upgrading industry.

This contention underlies the notion that higher levels of education and improved training provision are major factors in explaining differences between countries in terms of productivity, competitiveness and income (e.g. Australian Council of Trade Unions/Trade Development Council, 1987; Australian National Training Authority, 1997; Cappelli, 1994; Commission on the Skills of the American Workforce, 1990; Felstead & Green, 1994a; Hicks, 1987; Hyman, 1992; Lynch, 1992a; Mason, van Ark & Wagner, 1994; U.S. Congress, 1990).

This link between training and education, and higher levels of productivity, competitiveness and income has not been universally accepted or demonstrated however, and has been challenged by a number of empirical studies (e.g. Maglen, 1990; Maglen, McKenzie, Burke, & McGaw, 1994; Strober, 1990). In regard to managers and their education, there are dissenters in Australia who argue that, although the precise value added by management education is difficult to ascertain, Australian management education is ineffectual and does little to contribute to individual and organisational effectiveness (e.g. Billett & Cooper, 1997; Delahaye, 1990; Mission, 1998; Mukhi, 1982; Smith, 1989).

Underpinning the research to date in this area is the omnipotent view of management which states that managers are directly responsible for an organisation's success or failure (Robbins et al., 1997). Indeed, it has been shown many times that the behaviours, characteristics, knowledge and skills of the most senior day-to-day administrative persons seem to be of critical importance in determining the overall performance and competitive advantage of an organisation (e.g. Kotter, 1988; Pedler et al., 1989).

It has also been shown many times that organisational and external environmental factors are also critically important in affecting organisational performance (e.g. Puffer & Weintrop, 1991). In fact, how well managers stay

abreast of and deal with such developments is a measure of their effectiveness (Bateman & Zeithaml, 1993).

Further, drawing on studies in strategic leadership research, Thomas & Simerly (1994) developed and tested hypotheses about linkages between top management attributes and different levels of organisational performance. Their results add further credence to the argument that organisations are a reflection of their top managers. Indeed, the top team concept as a means of delivering organisational flexibility, continuous improvement and sustainable competitiveness has been embraced by proponents of the excellence school (e.g. Moss-Kanter, 1983), the high performance movement (e.g. Buchanan & McCalman, 1989), and the resource based view of the firm (e.g. Barney, 1991).

Ultimately, according to De Geus (1988), the only competitive advantage the organisation of the future will have will be its managers' ability to learn faster than their competitors, a task made more challenging by a changing environment. Indeed, the quality of individual and collective learning has been held to be a key determinant of organisational success (e.g. Hayes & Allinson, 1998), giving rise to the notion of the 'learning organisation'. And it is through (positive or beneficial) transfer of this education and training (or learning), that the (strategic planning and performance) benefits accrue to the organisation.

However, no empirical research on the link between education and training of managers and performance at an organisational level has been conducted to date in the research setting for this Thesis, the disability sector, although the sector itself has been subject to a number of major reviews in recent times (Australian Law Reform Commission, 1995)[2]. A similar gap in educational research was identified by Coleman (1990).

The disability sector provides a vital human service and in Australia, as in many other countries, caring and providing for the needs of people with a disability is a national tradition. As recognition of this tradition, there are a number of pertinent longstanding international agreements and treaties to which Australia is a signatory (Australian Law Reform Commission, 1995) which protect and uphold the basic human rights of all Australians, but particularly provide for the rights of people with a disability[3].

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[2] Baume & Kay, 1995; Evaluation of the Disability Reform Package, Main Report, 1995; Human Rights and Equal Opportunity Commission, 1993; KPMG Peat Marwick, 1993; Report of the Handicapped Programs Review, New Directions, 1985; Privacy Commissioner and the Victorian Office of the Public Advocate, 1993; Report of the Senate Standing Committee on Community Affairs, 1992; Ronalds, 1990.

[3] e.g. International Labour Organisation Convention No. 111, Discrimination (Employment and Occupation) Convention, 1958; International Labour Organisation Convention No. 159, Vocational Rehabilitation and Employment (Disabled Persons) Convention, 1983; The United Nations Declaration on the Rights of Mentally Retarded Persons, 1971; The United Nations Declaration on the Rights of Disabled Persons, 1975; The United Nations Standard Rules on the Equalisation of Opportunities for Persons with Disabilities, 1993.

This tradition of caring and providing for people with a disability continues to evolve in Australia, particularly in terms of the nature of operations, community perceptions and environmentally imposed constraints on management (see Figures 1 and 2).
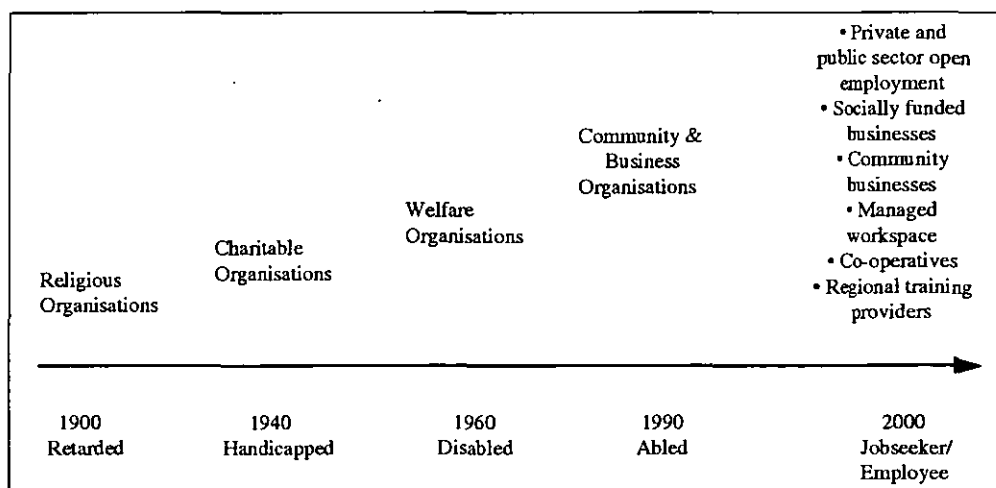
Evolving from church groups running shelters for 'retarded' people (with welfare connotations), to providing business services to 'jobseekers' (with commercial connotations), is, in both theory and practice a difficult concept for managers to effectively and efficiently operationalise (Goldsworthy, 1999a). In essence, there is a requirement to balance the tension between the need for business services to pursue profitable business activities, while at the same time providing support services (e.g. vocational training and education, and life skills) to consumers (Murnane, 1994; Schalock, 1999).

It is this need to balance business services with support services which necessarily gives rise to new perspectives for managers and management as to how they see their clients, customers and operations (see Figure 2).

Not that this 'need to balance the tension' is one that has developed only recently. In 1977, the Editorial of 'Rehabilitation in Australia' Journal, posited that:

> At this time, when the current status of workshops and concern about the future are so much in mind and where more effective management and changes of policy are considered desirable, recognition of the elements which contribute to the economic viability of sheltered employment services must be made without losing sight of the principal objective of helping handicapped people. (p.2)

Figure 1   *Disability Sector Organisational Timeline (Adapted from Australian Strategic Services, 1997)*

				• Private and public sector open employment • Socially funded businesses • Community businesses • Managed workspace • Co-operatives • Regional training providers
			Community & Business Organisations	
		Welfare Organisations		
	Charitable Organisations			
Religious Organisations				
1900 Retarded	1940 Handicapped	1960 Disabled	1990 Abled	2000 Jobseeker/ Employee

In conjunction with this 'balancing act', and further to the changing environment and general expectations of managers mentioned previously on

page 2 (e.g. Benjamin & Al-Alaiwat, 1998), the continuing evolution of the disability sector shown in Figures 1 and 2 has however meant that the policy and management function in the sector has become a much more complex and multidimensional one. Unfortunately there is evidence .to show that this growing complexity has not been well managed. For example, the Baume & Kaye (1995, p.1) report stated that:

> To move from good intentions to good outcomes for people with a disability will require a paradigm shift by all groups. There is no coherent overall policy for disability services with a significant disability, outcome commitments are lacking, performance measures relating to outcomes are meagre or non-existent, and an urgent need exists now to identify and to articulate desirable outcomes for all people with a disability. (p.1)

It is clear that policy makers and sector managers are now required to utilise more fully the range of conceptual, human and technical skills (Daft, 1997) inherent in the management role to balance the sector tensions (A.C.E., 1999; Murnane, 1994; Parmenter, 2000; Rehabilitation in Australia, 1977; Unterman & Davis, 1982; Webber & Peters, 1983; Wortman, 1983), and to successfully integrate the six key principles of organisational operations in the sector: social justice, equity, efficiency, effectiveness, sustainability, and viability (Australian Strategic Services, 1999).

This requirement was succinctly stated by Owens (1977) who said that 'Successful management ... requires all the skills usually associated with the running of a small manufacturing business, plus a little extra.' (p.21). Owens was referring to sheltered workshops, one of a number of disability-based services around the country funded by the Commonwealth Government. The 'little extra' referred to by Owens relates to the support services to people with disabilities (consumers or clients) – incorporating the principles of social justice and equity. However, it should be reiterated that the emphasis by Owens was firstly on the business skills aspects, and secondly on the support aspects.

Again, this view represents somewhat of a transition from that of the early 1900s which was characterised by disability-based services operating with a purely *client* or consumer focus (*internal*), to a perspective where recognition is given to other (*external*) stakeholders (see the transition in perspectives from (1) to (3) in Figure 2). In the case of sheltered workshops referred to in the previous paragraph for example, the role of *external customers* of the business becomes critical for organisational success, and in (2) and (3), disabled employees (shown as *'Client'* in (1)) are subsumed into the 'The People' circle with other, able-bodied employees, each with their own individual needs.

Figure 2 is based on the three operational aspects of any organisation – the service strategy (*what* are we going to provide to our clients/customers), the

systems (*how* are we going to provide the services), and the people (*what* people do we need, *how* are we going to get them and train them and keep them).

Also shown in Figure 2 are the external forces (competitive, technological, economic, social, and political) which particularly impact on the business service aspect of disability based organisations. The internal forces (assessment, training, outcomes, and accountability) shown in Figure 2 primarily impact on the support services aspect of disability based organisations.
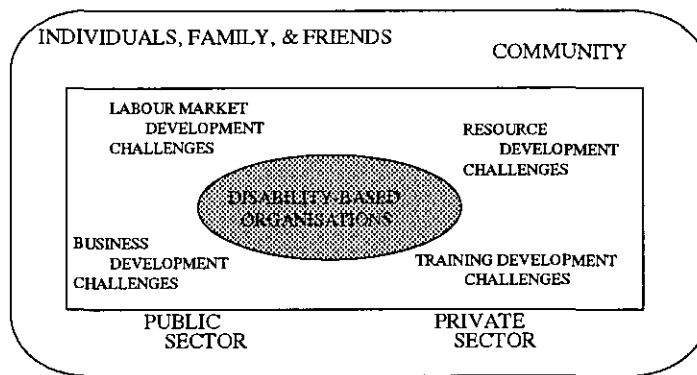
To 'balance the tension' between the two sets of forces, managers and management of disability organisations are increasingly required to widen their focus (represented by the three stages or transitions) from being solely on 'clients/consumers' (the bold middle oval circle in (1)), to incorporate business services and other (external) stakeholders.

Figure 2   *Transitions in Perspective – 1900 to 2000*
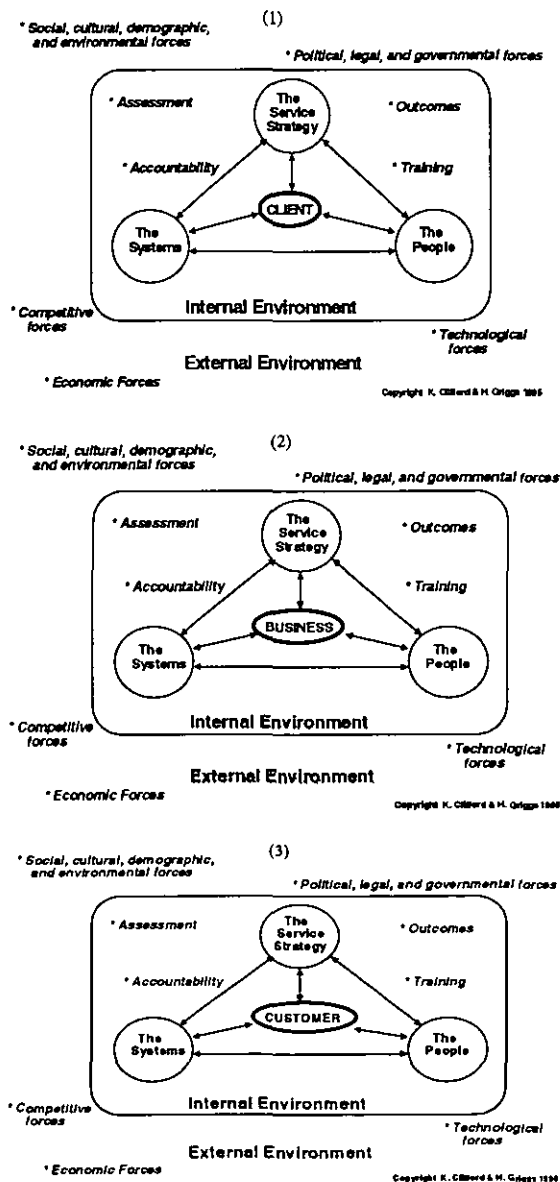
Peak Bodies in the disability sector (e.g. ACROD) have recognised the above transition and the significant challenges which now face disability-based organisations (see Figure 3).

Figure   3   *Challenges for the disability sector (Griggs, 1999)*


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INDIVIDUALS, FAMILY, & FRIENDS          COMMUNITY

    LABOUR MARKET
        DEVELOPMENT                    RESOURCE
        CHALLENGES                        DEVELOPMENT
                                          CHALLENGES
                    DISABILITY-BASED
                    ORGANISATIONS
    BUSINESS
        DEVELOPMENT                    TRAINING DEVELOPMENT
    CHALLENGES                            CHALLENGES
            PUBLIC                    PRIVATE
            SECTOR                    SECTOR
```

Along with the most recent sector environmental changes in Victoria and Tasmania (see Table 1 in respect of these States – the two principal States where research was conducted), the transition and concomitant

Table 1   *Environmental changes in the disability sector*

Aside from the generic Australian experience since the mid 1980s of industry deregulation, severe recession, massive unemployment, rising and falling interest rates, lowering of trade barriers and the resulting internationalisation of markets (Brewer, 1995), a number of key changes have particularly affected the disability sector and the role of managers within that sector. These key changes in Victoria and Tasmania, the two states involved in this study, were:

- Changes in policy directions of State Governments including:
  - purchaser-provider relationship with funded agencies
  - compulsory competitive tendering (CCT)
  - new service delivery models
  - an emphasis on client-driven service systems
  - a demand for specific output measures
- Moving towards unit-based funding
- Continued process of deinstitutionalisation
- Reprofiling and restructuring of the sector
- An emphasis on productivity
- Shifts in the industrial relations framework
- The changing role of committees of management
- Growing sophistication of service users and other key stakeholders
- Growing importance placed on quality measures
- Growing importance of change management skills
  (Adapted from Courtney, 1994; Non-Government Disability Training Unit, 1995)

challenges were two key factors behind the establishment in Victoria in 1994 of a Brokerage Model for the provision of support and development of training policy at the agency level (Day, Myrianthis, & Owen, 1997).

The establishment of the Non-Government Disability Training Unit (NDTU) with a focus of having immediate impacts in terms of training delivery, and in the longer term outcomes of improved services for people with a disability, was a recognition that, although the external environment had changed radically over the past decade or so (Limerick, 1992), the sector and individual agencies lacked a systematic and comprehensive approach to training (McLeod, 1998).

The Brokerage Model has achieved its initial objectives (Day, Myrianthis, & Owen, 1997). There is now a '...heightened perception of the need for training by the sector...' with training being planned and implemented in a systematic way (McLeod, 1998, p.3). This has led to a significant increase in the amount of training that has been provided, particularly to leaders and management, in the expectation that performance of the sector can be improved (e.g. Kinlaw & Christensen, 1986).

This 'heightened perception' shown by the disability sector of the importance and focus of training and education is akin to that experienced by W. Edwards Deming, who, midway through the first of a series of lectures on 19 June 1950 in Japan, realised that enthusiasm for his (improvement) techniques would burn out unless he could somehow reach the people in charge - the management team, the people who have the power to act and formally authorise change (Walton, 1989). To be most effective in an organisational setting, this education and training of individual managers should of course be incorporated and inculcated into their organisations so that progress towards 'learning organisations' results and management functions and organisational performance are enhanced (Senge, 1990).

Deming's "enlightenment" in 1950 is more widespread today, however no empirical research has yet been conducted on disability sector or organisational performance outcomes related to the training and education construct other than the pervasiveness of the training function (e.g. Ford & Ford, 1998).

Training and education levels of disability sector managers is therefore a key construct in this Thesis. As a corollary, the outcomes of that training and education on the organisation is also of interest. The construct of organisational performance is therefore also a key construct in this Thesis.

It is apparent that there has been a growing concern within the business and academic research community to discover better ways of assessing organisational performance (e.g. Chow, Ganulin, Haddad & Williamson, 1998). The much-celebrated 'philosophical' works of Peters & Waterman (1982), Clifford & Cavanagh (1985), Goldsmith & Clutterbuck (1984), Peters (1987) and Waterman (1987) have often been methodologically criticised

(Aupperle, Acar & Booth, 1986; Carroll, 1983; Hitt & Ireland, 1987; Jacobson, 1990; Johnson, Natarajan & Rapaport, 1985; Taylor & Paul, 1986; Tuleja, 1985).

By contrast, there are the strictly pragmatic 'quick fix' approaches (e.g. Kaplan & Norton, 1992; Parker & Benson, 1988) which purport to solve the problem of determining organisational performance but which have not been validated by any empirical process. While the former aims to force managers to focus on the handful of measures that are most critical by complementing financial measures with a small set of operational measures such as customer satisfaction, internal processes and the organisation's innovation and improvement activities, the latter concentrates on performance measurement of Information Technology and is based on extending financial measures by six other variables.

Measuring performance is problematic, and in the disability sector is a much more complicated issue than might appear at first sight due to the 'balancing act' previously mentioned of the business and support services for what are in the main not-for-profit, service-based, small to medium sized organisations. This may be one of the reasons behind Baume & Kaye's (1995) conclusion that '... the dearth of data related to program planning or performance of DSP-funded services was astonishing.' (p.2). Not that this finding is limited to the disability sector. Measuring the performance of (charitable) not-for-profit organisations generally has not received much attention in the literature (e.g. Kohl, 1984; Wortman, 1988), and continues to be problematical (Herman, 1990; Herman & Renz, 1998).

Not only are there conventional financial and other performance measures relating to small business present, but of necessity there are other more intangible performance measures including those relating to employing staff with a disability. Staff satisfaction and life interests are of particular interest in this sector. The matter of organisational culture is also important because any business, but particularly a small business, requires an appropriate organisational culture to survive (e.g. Reynolds et al., 1992).

It can be seen that any valid model of organisational performance must be multidimensional in nature, particularly with regard to the above factors, in addition to measures of system capability, system characteristics, degree of planning, financial performance, and goal attainment (e.g. Brown & Laverick, 1994; Hoy & Miskel, 1987, 1996; McKiernan & Morris, 1994).

Classifying such organisations in terms of systems may assist developing a set of multidimensional measures of organisational performance for agencies in the disability sector. For example Parsons (1960) proposed a typology of organisations based on the social functions that they perform for society. From his general theory of social systems, Parsons identified four types of organisations on the basis of four functional imperatives that face all social systems. These four kinds of formal organisations or functional imperatives are adaption, goal attainment, integration, and latency. Adaptation is

concerned with the organisation's need to control its environment. Goal attainment is concerned with the gratification of system goals. Integration is regarded as the extent to which the organisation displays social solidarity, while latency is to do with commitment to the organisation's mission and culture.

According to Parsons, all organisations (including schools – the context used by Parsons which in part characterises the training and educational aspects of many agencies in the disability sector), must meet all four of these functional imperatives if they are to survive and develop. Consequently, indicators from the four functional imperatives incorporating various stakeholder perspectives and various time frames can be developed to provide a comprehensive, multidimensional framework to assess organisational performance. Such a framework (e.g. Hoy & Miskel, 1996, which will be used for this research) can then be utilised to empirically examine the effects of training and education levels of managers on organisational performance in disability agencies.

For the purposes of this Thesis, organisational performance will be viewed as the organisation's ability to attain its goals by acquiring and using resources in an efficient and effective manner. The concept will be measured by using an integrated model of organisational effectiveness and performance, based on the goal and system resource perspectives as developed by Hoy & Miskel (1996) from the work of Campbell (1977), Etzioni (1964), Parsons (1960), Steers (1975), and Yuchtman & Seashore (1967a).

The theoretical links between performance, and training and education have evolved, from human capital theory (e.g. Schultz, 1959), to efficiency wage theory and internal labour markets (e.g. McNabb & Whitfield, 1994), to neo-human capital theory (e.g. Marginson, 1993), emphasising the importance of organisational contextual factors.

A key aspect of organisational performance inherent in Parson's (1960) typology and an important organisational contextual factor is that of goal attainment. Inherent in the notion of goal attainment is that of goal setting or planning. It might be expected that there is a relationship between the demographics of managers and the existence and/or sophistication of strategic planning processes and systems. Further, it might be expected that there is a relationship between the existence and/or sophistication of strategic planning processes and systems and performance. Neither of these questions have been examined in the disability sector, however the links between strategic planning and strategic planning systems and performance have received much attention, predominantly in the management literature.

In direct contrast with the multidimensional nature of organisational performance previously mentioned, financial performance measures were the most often and in many instances the only variables used by researchers in assessing the latter relationship as far back as the mid 1960s e.g. Ansoff et al., 1970; Eastlack & McDonald, 1970; Fulmer & Rue, 1974; Herold, 1972;

Kargar, 1996; Kudla, 1980; Malik & Karger, 1975; Pearce et al., 1987; Robinson, 1982; Robinson & Pearce, 1984; Schwenk & Shrader, 1993; Thune & House, 1970.

Most of these studies employed a similar research approach. Organisations were dichotomised into those where goal setting or planning appeared to be present, and those where planning appeared to be absent, and then the financial performance of these two groups was compared over some specified period of time. This approach has not been universally accepted. For example, Hall (1977) posited that it is the way in which managers manage their organisations which will have a bigger impact on planning effectiveness than will the sophistication of the planning effort.

Although at the time of writing this Thesis, the latest published meta-analytic reviews found that strategic planning positively influences firm performance, and that methods factors were primarily responsible for the inconsistencies reported in the literature (Miller & Cardinal, 1994), few of these studies concerned small to medium sized organisations. Further, none used a multidimensional measurement of performance such as that described on the previous page (p.11) incorporating Parsons' (1960) four functional imperatives - adaption, goal attainment, integration, and latency. Indeed, Baume & Kay (1995) found that 'The goal of the DSP is muddled. Unless the DSP goal is clear, it is not possible to evaluate the DSP's effectiveness. Setting the goal (or a hierarchy of goals) is the prerequisite to the development of strategies to meet the goals.' (p.2).

Finally, few concerned not-for-profit organisations and none examined disability sector organisations. Generally, little attention or research has been paid to disability issues in the management literature, or industrial/organisational psychology (Stone & Colella, 1996; Stone, Stone & Dipboye, 1992), or even to training itself at the enterprise level (Billet, 1995).

In summary then, this introduction suggests that managers generally are important in influencing organisational outcomes, and that the degree of influence is itself determined, amongst other things, by the demographics of managers, particularly their level of training and education. Assessing organisational outcomes is in itself problematic, however, for this Thesis, given the nature of disability agencies, the Parsons (1960) typology provides a relevant, robust model of organisational performance, which includes all four functional imperatives but particularly that of adaptation and goal attainment.

In the disability sector, the environmental and other demands have made the task of management more complex, prompting the development and implementation of a formal training infrastructure with a role of providing a systematic and comprehensive approach to training. No empirical studies have been conducted in the sector to evaluate the effects of managerial demographics, including training and education, on either organisational performance or strategic planning, or strategic planning on organisational performance. What literature there is tends to suggest training and education

and goal setting are both positively related to performance, and that top team demography is the variable most often used as a surrogate for processes which link input and outcome variables e.g. Lawrence (1991).

3   RESEARCH PROBLEM

This Thesis deals with the above issues that fundamentally concern the constructs of education and training of managers, organisational performance, and strategic planning.

These issues are:

* the changing nature of the disability sector in Australia requires more of managers and their agencies;
* no research on strategic planning has taken place in the disability sector in Australia or in disability sectors elsewhere;
* no empirical research on multidimensional organisational performance measures has taken place in the disability sector; and
* no research on managerial training and education levels and their effects on performance and/or strategic planning systems has taken place in the disability sector.

The significance of these issues to the disability sector is high, as are the outcomes of this research.

By limiting this research to the three constructs mentioned above is not to say that organisational and environmental variables do not also affect organisational performance and strategic planning, but that this Thesis will not attempt to examine all the possible variables, only those relating to managerial education and training, strategic planning, and organisational performance.

The research setting is the disability sector and the organisations studied are all Victorian and Tasmanian agencies within the sector.

In summary, this study's major objective is to explore the effects of the education and training levels of managers in disability-based agencies on the performance of those agencies, including the mediating effect of strategic planning processes and systems.

3.1   The research hypothesis is:
Disability-based organisations whose top management teams have greater levels of education and training perform better than disability-based organisations with top management teams with lesser levels. This enhanced performance is mediated by the intensity of strategic planning processes and systems.

3.2   The research questions are:

What relationship exists between education and training levels of top management teams and organisational performance in disability-based organisations?

What relationship exists between education and training levels of top management teams, and strategic planning processes and systems in disability-based organisations?

What relationship exists between strategic planning and organisational performance in disability-based organisations?

3.3   The operational hypothesis is:

There is a significant relationship between the education and training levels of top management teams and organisational performance in disability-based organisations where organisational performance is measured by a range of reliable and valid variables. This relationship is mediated by the existence of organisational strategic planning system characteristics as measured by multisite, multimethod, multistakeholder data collected from disability-based organisations.

The above relationships are developed conceptually and outlined below in Figures 4 to 7. The Figures are developed from the general to the specific. Figure 4 depicts a generic open systems view of organisations – inputs, transformation and outcomes.

Figure 4   *Open systems view of organisations*
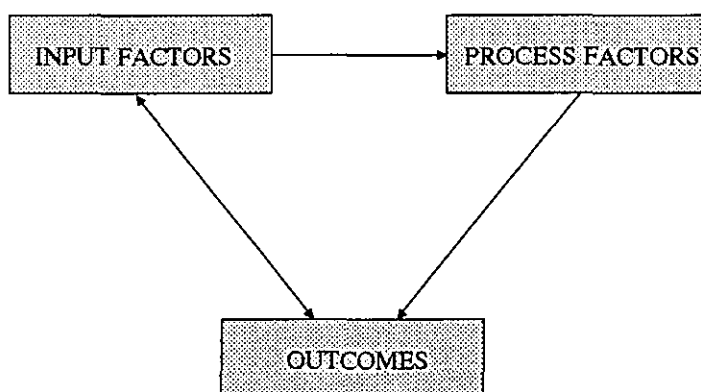
The systems view is a broad one, viewing the organisation as being an open system interacting with its environment. The generic components of each aspect of the model are seen by the researcher as being those shown below (see Table 2). Included in the input factors are managers, while strategic

planning dimensions are shown under structural systems. Organisational performance is shown as a multidimensional factor under outcomes.

Table 2   *Input factors, process factors, and outcomes*

INPUT FACTORS	PROCESS FACTORS	OUTCOMES
External environment	Political systems	
	Cultural systems	
Internal (organisational) environment:	Structural systems: Strategic planning- . External emphasis	Organisational performance:
. Size of organisation	. Internal emphasis	. Adaptation
. Age of organisation	. Use of planning	. Goal attainment
. Location of organisation	techniques	. Integration
. Mission & Committee of Management policies	. Functional coverage and integration	. Latency
. Equipment, materials and methods	. Use of key personnel	
. Human & capital resources -		
Management (demographics)- Age		Strategic Planning:
Sex		
Country of origin	Individual systems	. Effectiveness
Managerial experience		. Formality
Industry experience		
Functional background		
Training and education		

From Figure 4, it can be seen that there are at least two ways in which (organisational) outcomes can be directly affected by the other (mutually exclusive and independent) components of the open systems model. These are firstly by input factors and secondly by process factors (see Figure 5).

*Figure 5*   *Hypothesised direction of relationships (a)*
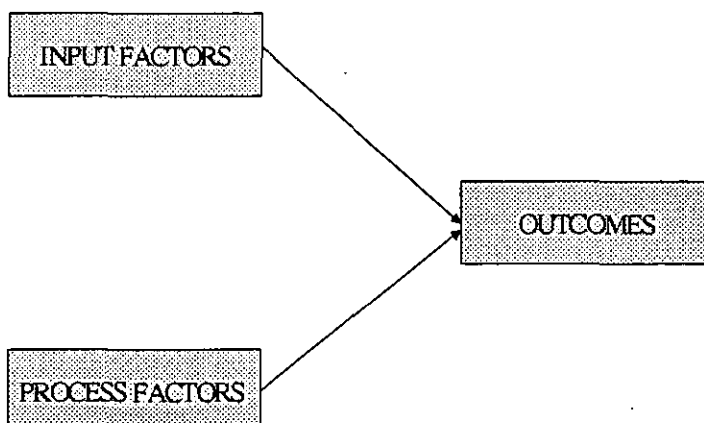
According to the view as shown in Figure 5, input and process factors (independent variables) independently affect organisational outcomes (dependent variable). On the other hand, the possibility of there being another interaction, that of input *and* process, which also has an effect on outcomes, cannot be discounted. This possibility is shown below as Figure 6.

Figure 6   *Hypothesised direction of relationships (b)*

According to the Figure 6 view, input and process factors (independent variables) interact to affect organisational outcomes. When Figures 5 and 6 are combined and related to this Thesis, the research hypothesis and research questions become clear, as shown in Figure 7.

Figure 7   *Specific constructs of the Thesis*
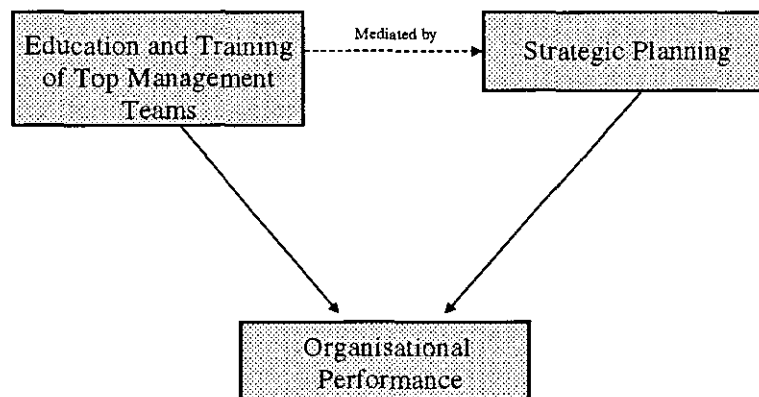
4   SIGNIFICANCE OF THE RESEARCH

This study aims to explore the effects of the education and training levels of top management teams in disability-based agencies on the organisational performance of those agencies as measured by the four functional imperatives (adaptation, goal attainment, integration and latency). It is hypothesised that disability-based agencies whose top management teams have greater levels of education and training perform better than disability-based agencies with top management teams with lesser levels. This enhanced performance may be mediated by the existence of strategic planning processes and systems.

As stated previously, this research is of significance because:

- the changing nature of the disability sector in Australia requires more of managers and their agencies;
- no empirical research on strategic planning has taken place in the disability sector in Australia or in disability sectors elsewhere;
- no external research on multidimensional organisational performance measures has taken place in the disability sector; and
- no research on managerial training and education levels and their effects on performance and/or strategic planning systems has taken place in the disability sector.

This research could provide some justification and impetus for managers, agencies, and peak bodies to (further) engage in the systematic development and implementation of management training and development programs. Further, in view of the many environmental changes outlined during this Chapter, such justification may provide the various stakeholders, particularly funding bodies and people with a disability, with a means of helping to ensure that the best possible efficiency and effectiveness outcomes are achieved.

5   STRUCTURE OF THE THESIS

The structure of the remainder of the Thesis is as follows. The next Chapter, Chapter 2, consists of key concepts and definitions. Chapter 3 consists of a literature review of relevant works from a variety of disciplines including management, education, marketing, and sociology from the perspective of the relationships between the three constructs of the Thesis (education and training, strategic planning, and organisational performance). Chapter 4 describes the methodology used to address the research questions, and Chapters 5, 6, 7 present the results of the research conducted. The final Chapter, Chapter 8, is a discussion of the results in the light of the literature reviewed in Chapter 3. Also included in Chapter 8 are conclusions and implications from the Thesis, limitations and recommendations for further research