Chapter 8 Discussion and Conclusions

As with Chapters 5-7, this Chapter is primarily structured around the three research questions:

What relationship exists between education and training of managers and organisational performance in disability-based organisations?

What relationship exists between education and training of managers, and planning processes and systems in disability-based organisations?

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

This Chapter firstly draws together and reviews the overall results of the data relating to Chapters 5-7, incorporating conclusions for each research question. These conclusions are then explained within the context of this and prior research examined in Chapter 3, prior to drawing conclusions about the research problem.

The Chapter then discusses the implications for theory, and for policy and practice, prior to discussing the limitations of the research, and the implications for further research. In so doing, the Chapter also demonstrates that the research makes a distinct contribution to the body of knowledge as outlined in Chapter 1 under the heading ‘Significance of the research’.

The Chapter then concludes.
1 INTRODUCTION

As described in Chapter 1, this Thesis deals with issues that fundamentally concern the constructs of education and training of managers, organisational performance, strategic planning, and their interrelationships. These issues are:

- the changing nature of the disability sector in Australia that 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.

This research was limited to the three constructs mentioned above, but did not ignore the possibility that other organisational and environmental variables may have had effects on organisational performance and strategic planning.

The study's major objective was 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.

The research hypothesis was that 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. It was hypothesised that this enhanced performance is mediated by the existence and intensity of strategic planning processes and systems.

It should be noted that, in this study, the various measures of organisational performance/effectiveness were self-assessed by respondent managers. Further, the performance measures used may not directly relate to the actual outcomes of services (e.g. integration or employment in the community for people with disabilities).

Caution should also be used in interpreting the results of the study as, although there are important implications of the study, in some areas, the data does not provide conclusive results. For example, there is no relationship established between education and training levels of top management teams in disability-based organisations and strategic planning. This caution reflects the complexity of the issue and the difficulty in such research.
The remainder of section one will briefly review and then summarise the overall results of the data relating to Chapters 5-7 as they relate to the three research questions.
1.1 Review of Chapter 5 results

Chapter 5 examined the results of the data as they related to the first research question:

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

Education and training levels of top management teams were measured in two ways – firstly the highest level of education and training, and secondly the average level of education and training. A distinction was also made between management-specific qualifications, and overall qualifications. Organisational performance was self-assessed by respondent managers, and correlated with respondent staff and independent experts’ opinions.

The overall results of the data analysis as they relate to the first research question are shown in Figure 39 (reproduced from Chapter 5) below.

Figure 39 includes only statistically significant correlations between the various categories of education and training and the five measures of organisational performance. As organisational size has a statistically significant correlation with a number of measures, it is also included.

There are statistically significant correlations between the highest education and training levels of top management teams in disability-based agencies and their respective organisations’ performance on two out of the four measures of organisational performance used in this research. These two statistically significant correlations (with organisational effectiveness and job satisfaction) are supported by the average education and training levels of top management teams, which also demonstrates a statistically significant correlation with objective fulfilment.

Management-specific education and training (using either the highest or average measure) is also positively and significantly correlated with job satisfaction, and with central life interests.

In Tasmania, there are statistically significant correlations between education and training levels (both highest and average) and organisational effectiveness, and objective fulfilment, but not between management-specific education and training and any measure of organisational performance. Caution should be used in interpreting the Tasmanian results, as the small sample size may have affected the results.

On the other hand, Victorian levels of education and training (both highest and average) are positively and significantly correlated with organisational effectiveness and objective fulfilment. In Victoria, management-specific education and training levels are also positively correlated with job satisfaction.
The correlations between the education and training levels of top management teams and organisational performance are supported by the various regression analyses presented in Chapter 5.

**Figure 39** Relationship (Spearman’s rho correlation) between education and training levels of top management teams and organisational performance

<table>
<thead>
<tr>
<th></th>
<th>ET(high)</th>
<th>ET(Av.)</th>
<th>MET(high)</th>
<th>MET(Av.)</th>
<th>Size</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mott (1972)</td>
<td>0.315**</td>
<td>0.411**</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ramanujam &amp; Venkatraman (1987b)</td>
<td>0.243**</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Miskel (1982)</td>
<td>0.252*</td>
<td>0.218**</td>
<td>0.316**</td>
<td>0.324**</td>
<td>0.264**</td>
</tr>
<tr>
<td>Hoy &amp; Miskel (1987)</td>
<td></td>
<td></td>
<td>0.197*</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Location</td>
<td>-0.357**</td>
<td>-0.208*</td>
<td>-0.186*</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

* Correlation is significant at the .05 level (2-tailed)
** Correlation is significant at the .01 level (2-tailed)

Key: ET (Education and training)
MET (Management-specific education and training)
High (Highest)
Av (Average)
Size (Organisational size)

1.2 Review of Chapter 6 results

Chapter 6 examined the results of the data as they related to the second research question:

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

The strategic planning construct was measured using Ramanujam & Venkatraman’s (1987b) system capability approach to assessing organisational performance, which incorporated five dimensions of strategic planning systems – internal orientation, external orientation, functional
coverage, use of planning techniques, and involvement of key personnel. Each
dimension was self assessed and measured using a 5-point Likert scale from
'No emphasis' to 'A great emphasis'.

The overall results of the data analysis as they relate to the second research
question are shown in Figure 66 (reproduced from Chapter 6) below.

Figure 66 includes only statistically significant correlations between the
various categories of education and training and the five dimensions of
strategic planning. As organisational size has a statistically significant
correlation with a number of measures, it is also included.

*Correlation is significant at the .05 level (2-tailed)*

As can be seen in Figure 66, there are no statistically significant correlations
for the sample set as a whole between the education and training levels of top
management teams in disability based agencies and their respective
organisations on any of the five dimensions of strategic planning used in this
research. The only statistically significant correlations are between
organisational size and the external orientation and use of key personnel
dimensions (at the .05 level of significance).

The correlations between organisational size and strategic planning are
supported by the various regression analyses presented in Chapter 6.
1.3 Review of Chapter 7 results
Chapter 7 examined the results of the data as they related to the third research question:

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

The overall results of the data analysis as they relate to the third research question are shown in Figure 87 (reproduced from Chapter 7) below.

**Figure 87 Relationship (Spearman’s rho correlation) between strategic planning and organisational performance**

As can be seen, there are statistically significant correlations between strategic planning and the component dimensions in disability based agencies and their respective organisations on two out of the five measures of organisational performance used in this research.

On each of these two measures, objective fulfilment and central life interests, there is an extremely high level of explanatory power.

Victorian agencies show a greater correlation than the aggregate between strategic planning overall and the central life interests measure of organisational performance (significant at the .01 level of significance), and
also between the use of planning techniques dimension and central life interests (significant at .05). On the other hand, Tasmanian agencies demonstrate little association at all between the two constructs and their various dimensions and measures. Caution should be used in interpreting the Tasmanian results, as the small sample size may have affected the results.

The correlations between the dimensions of strategic planning and organisational performance are supported by the various regression analyses presented in Chapter 7.

1.4 Summary of Chapters 5-7 results

When the results of the data analysis are aggregated and superimposed on Figure 7 (Specific constructs of the Thesis – see Chapter 1), the position is as shown in Figure 88.

*Correlation is significant at the .05 level (2-tailed)
**Correlation is significant at the .01 level (2-tailed)

Key: ET (Education and training)
MET (Management-specific education and training)
H (Highest)
A (Average)
Size (Organisational size)
PL (Strategic Planning)
EXT (External orientation)
FUNC (Functional integration)
KEY (Use of key personnel)
As can be seen from Figure 88, there are significant relationships between organisational performance and the other two constructs in this research – education and training and strategic planning. The direction of causation will be discussed later in this Chapter, however at this point it is necessary to state that it appears that education and training can have an impact on organisational performance, and that strategic planning can also have an impact on organisational performance. There are no significant relationships between the education and training and strategic planning constructs.

It appears that education and training impacts on organisational performance as measured in this research somewhat differently than through strategic planning however. Using both the highest and average levels of qualifications, education and training positively impacts on Mott’s (1972) overall organisational effectiveness measure of organisational performance, Ramanujam & Venkatraman’s (1987b) objective fulfilment measure of organisational performance, Miskel’s (1982) job satisfaction measure of organisational performance, and Hoy & Miskel’s (1987) central life interests measure of organisational performance.

On the other hand, strategic planning also positively impacts on Ramanujam & Venkatraman’s (1987b) objective fulfilment measure of organisational performance, but the only other measure of organisational performance with which strategic planning is positively correlated is Hoy & Miskel’s (1987) central life interests measure of organisational performance.

The common organisational performance measure positively correlated to both education and training and strategic planning therefore is objective fulfilment. Education and training qualifications of top management teams, and the overall level of strategic planning as well as three of the five dimensions of strategic planning (external orientation, functional integration, and use of key personnel) all impact on this measure of organisational performance.

It can also be seen from Figure 88 that organisational size is an important variable in the relationships between the constructs. The size of an organisation has a significant impact on a number of the measures used in this research, including two dimensions of strategic planning (external orientation and use of key personnel), and one measure of organisational performance (job satisfaction).

In other words, as organisational size increases, so does the propensity of organisations to involve key personnel in strategic planning, and to develop an external strategic orientation. Also, managers in larger organisations seem more satisfied with their jobs.

From the above review, summary, and Figure 88, the major findings emerging from this study are summarised below. These will be discussed in more detail in subsequent sections of this Chapter.
In relation to research question 1:

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

the specific results of this study suggest that -

(i) Education and training levels of top management teams in disability-based organisations do have an effect on organisational performance, as measured by (self assessed) overall organisational effectiveness, objective fulfilment, job satisfaction, and central life interests, with higher qualifications associated with higher performance.

Findings (ii) to (iv) are related to, but do not directly answer research question 1. The results of the study suggest that -

(ii) Organisational size of disability-based organisations has a relationship with the educational levels of top management teams, with the level of qualifications in smaller organisations being lower, and with organisational performance, with job satisfaction in smaller organisations being lower;

(iii) Organisational location of disability-based organisations has a relationship with the educational levels of top management teams with the level of qualifications in non-Melbourne Metropolitan areas being lower than those in the Melbourne Metropolitan area, and the qualifications of top management teams in Tasmanian organisations being lower than those in Victoria. Organisational location also has a relationship with organisational performance with organisational effectiveness, objective fulfilment, and central life interests rated higher in Tasmanian as compared to Victorian organisations, and job satisfaction rated higher in Victorian as compared to Tasmanian organisations (Caution should be used in interpreting the Tasmanian results, as the small sample size may have affected the results); and

(iv) Age and experience of individual managers in disability-based organisations have a relationship with the educational levels of those individuals, with overall educational levels of managers in the 40 to 49 year age group being higher than those in the 20 to 29 year age group; the overall level of qualifications of managers with less than 5 years experience as a manager being lower than those with between 11 and 15 years of managerial experience; the level of management-specific qualifications of managers with between 11 and 15 years of experience in the disability sector being higher than those with greater than 15 years of experience; the level of management-specific educational levels of managers with less than 5 years of managerial experience
being less than those with greater than 15 years experience as a manager; and the level of management-specific educational levels of managers with between 5 to 10 years experience as a manager being less those with greater than 15 years experience as a manager.

In relation to research question 2:

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

the specific results of this study suggest that -

(i) There is no relationship established between education and training levels of top management teams in disability-based organisations and strategic planning.

Finding (ii) is related to, but does not directly answer research question 2. The results of the study suggest that -

(ii) There is a relationship between organisational size and strategic planning intensity in disability-based organisations, with smaller organisations being self assessed as having a lower intensity on the external orientation and use of key personnel dimensions of strategic planning.

In relation to research question 3:

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

the specific results of this study suggest that:

(i) Strategic planning intensity does have an effect on organisational performance in disability-based organisations, as measured by (self assessed) objective fulfilment and central life interests, with higher intensity levels of strategic planning and the component dimensions associated with higher performance.

Finding (ii) is related to, but does not directly answer research question 3. The results of the study suggest that -
(ii) There is a relationship between organisational location and strategic planning systems in disability-based organisations with systems in Victorian organisations being more intense as compared to Tasmanian organisations (Caution should be used in interpreting the Tasmanian results, as the small sample size may have affected the results).

Overall, it can be suggested that management-specific education and training performed less well than overall education and training as a predictor of both organisational performance and strategic planning i.e. overall education and training is more effective than management-specific education and training in predicting both organisational performance and strategic planning. In this regard, the comments of critics of Australian management education (e.g. Billett & Cooper, 1997; Delahaye, 1990; Mission, 1998; Mukhi, 1982; Smith, 1989) who assert that it is ineffectual and does little to contribute to individual and organisational effectiveness are pertinent.

The relatively poor performance of management-specific education and training as a predictor of both organisational performance and strategic planning may be because existing management-specific training programs are not sufficiently tailored to the disability sector, or perhaps because there is a lack of in-house mechanisms to facilitate a positive transfer of learning.

Further, it can be suggested that there is a relationship between organisational size and location, individually and combined, and education and training levels, organisational performance and strategic planning. Findings also suggest that and profitability is not a reliable and valid measure of organisational performance in the disability sector. This is due to the prevailing non-profit approach by organisations in the sector.

Finally, it is apparent from the approach used in this Thesis that the use of organisational performance and strategic planning measures from various disciplines has validity and reliability when applied in disability sector research e.g. Mott (1972), Ramanujam et al. (1986a), Miskel (1982), and Hoy & Miskel (1987).

The next section will discuss and explain these findings by research question within the context of this and prior research examined in Chapter 3.
2 CONCLUSIONS TO RESEARCH QUESTIONS

This section will discuss and explain the findings of this study for each research question in turn within the context of this and prior research examined in Chapter 3. For ease of reference, the findings from the previous section will be repeated and used as the framework for discussion.

2.1 What relationship exists between education and training of managers and organisational performance in disability-based organisations?

There are four key findings of this research which have been identified in relation to this first research question, which will be discussed in turn.

2.1.1 Education and training and organisational performance

Education and training levels of top management teams in disability-based organisations do have an effect on organisational performance, as measured by (self assessed) overall organisational effectiveness, objective fulfilment, job satisfaction, and central life interests, with higher qualifications associated with higher performance.

As stated previously in Chapter 3, a search of the literature failed to find any empirical studies which specifically linked the education and training demographic, either generic or industry specific, to organisational performance of disability-based organisations. Therefore, the results of this research as they apply to the link between education and training and organisational performance in disability-based organisations cannot be directly compared to existing empirical research.

As stated in the introduction to this Thesis however, it is suggested 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. In a general sense, this first finding (see Figure 88) tends to support this view, and that of other researchers discussed in section 1.3 of Chapter 3 (Child, 1972; Day & Lord, 1988; Gupta & Govindarajan, 1984; Hambrick & Mason, 1984; Meyer & Goes, 1988; Miller & Toulouse, 1986b; Miller et al., 1982; Sturdivant et al., 1985).

This first finding also tends to support Vroom & Tushman (1986), who showed that the profiles of top management teams of high performing firms were significantly different from those of top management teams in firms that had poor performance, as well as supporting Norburn & Birley (1988), who found that ‘top management teams which demonstrate a preponderance of output functional experience, multiple company employment and wider educational training will outperform those which do not . . . ’ (p. 236).
In a more general sense still, the above finding is consistent with O'Rourke's (1999), Beazley's (1992) and the Karpin Report's (1995) views on the importance and influence of education and training on managers.

Further, the above finding is also consistent with the literature discussed in Chapter 3 (section 1.1.3) that found a general relationship between education and training and organisational success (Bartel, 1994; Baldwin & Ford, 1988; Cappelli, 1993; Cooper, Gimenogascon & Woo, 1994; Curry, Caplan & Knuppel, 1994; Holzer, Block, Cheatham & Knott, 1993; Ichniowski, Shaw & Premuschi, 1995; Kilpatrick & Crowley, 1999; MacDuffie & Kochan, 1995; Osterman, 1995; Roat, 1988; Williams, 1999; Williams, in McMahon, 1989; World Bank, 1995).

Also, the finding accords with the literature on models of 'soft' HRM as discussed in section 1.2 of Chapter 3, models which have a common thread of training and education (Keep, 1989; Storey, 1992). Although these models differ in their emphases on particular aspects of the human resource 'wheel' (e.g. Kochan & Osterman, 1994; Lawler, 1986; Pfeffer, 1994), all focus on employee participation, high selection standards, extensive investments in training and development, opportunities for high levels of earnings, free flow of information, mutual trust and cooperation.

Other researchers discussed in Chapter 3 found a specific relationship between education and training and flexibility (Berg, 1994; Coopers & Lybrand, 1996); productivity (Bartel, 1994; Coopers & Lybrand, 1996); and quality of output (Coopers & Lybrand, 1996). OECD studies also found evidence of a macro-economic relationship between education and productivity (OECD, 1994, 1997b). Productivity, flexibility, and quality of output are all aspects of organisational effectiveness inherent in Mott's (1972) overall measure of organisational effectiveness, which as can be seen from Figures 23 and 24 in Chapter 5 are positively and significantly correlated with education and training in this research.

In addition, the above finding is, to some extent, consistent with the views of Billett & Cooper, (1997), Delahaye (1990), Mukhi (1982), Mission (1998), and Smith (1989) who opined that Australian management education is ineffectual and does little to contribute to individual and organisational effectiveness. In this research, management-specific education and training was positively correlated with job satisfaction and central life interests. However there was no statistically significant correlation with overall organisational effectiveness or objective fulfilment, as can be seen from Figure 88 in this Chapter and Figure 39 in Chapter 5. If central life interests and job satisfaction can be regarded as measures of 'individual effectiveness', and organisational effectiveness and objective fulfilment measures of 'organisational effectiveness', then these critics of Australian management education may at least be partly correct. As discussed in the previous section, overall it can be suggested that management-specific education and training performed less well than overall education and training as a predictor of both organisational performance and strategic planning.
Inherent in the above finding also is a recognition that management-specific education and training positively correlates with job satisfaction and central life interests, while overall education and training positively correlates with job satisfaction, but also overall organisational effectiveness and objective fulfilment (see Figure 88). To this extent, this finding may not support that of the Bureau of Industry Economics Small Business Research Unit (1991), which found that management education had a greater overall beneficial effect on business survival and business performance than either technical or professional education. However, due to the service-based nature of disability-based organisations, job satisfaction and central life interests may be more critical measures of organisational effectiveness than either the Mott (1972) or Ramanujam & Venkatraman (1987b) measures.

Indeed, the above finding may generally add to the inconclusive evidence relating to the link between management-specific education and training and small business performance (see Chapter 3, section 1.1.3.1), as described by Westhead & Storey (1996), and contained in Table 10 (Chapter 3). Westhead & Storey were unable to consistently document methodologically well-conducted research evidence that showed that provision of management training for SMEs clearly leads to improved performance on the part of the recipient firm.

In a similar vein, Watkins (1983) and Curran & Stanworth (1989) outlined several management-training initiatives in the United Kingdom which were designed to improve organisational performance based on the premise that management training enhances organisational profitability, but were unable to find a link between the two. As will be discussed later, this current research did not find profitability a valid measure of performance in the disability sector.

The above finding as it relates to the studies in Table 10 (Chapter 3) represents qualified support for the reasons given above. Further, none of the studies in Table 10 (SME Management-specific training and business performance research) used the business performance measures utilised in this research, even though this current research might be said to represent a more comprehensive and more sophisticated analytical attempt at measuring SME business performance as recommended in Chapter 3 by Storey & Westhead (1994). The above finding does however represent progress in that the 1996 conclusion of Westhead & Storey that the absence of a clear link between management-specific training and business performance might be either because of a lack of impact, or because of the difficulties of attributing cause and effect, has been partly overcome (see section 1.1.3.1 in Chapter 3).

Particularly with disability-based organisations, the service aspect (Murnane, 1994) discussed in Chapter 2 may also have a bearing on this finding as mentioned above. Further, as discussed in Chapter 3 (section 1.4), knowledge, experience, practices, and the understanding to apply them in everyday work will determine enterprise success (Davis & Botkin, 1994). This is particularly the case in service-related jobs like many in disability-
based organisations where information is the key resource (Quinn, 1992). If better educated managers and supervisors of disability-based organisations have higher levels of job satisfaction and feel that their job is more central to their life, then it can reasonably be assumed that the outcomes for the people with disabilities who work with those managers and supervisors will be enhanced. Based on this reasoning, enterprise success (or organisational effectiveness) may in fact incorporate individual as well as organisational effectiveness measures.

The above finding that higher educational levels positively correlate with higher levels of organisational performance accords with human capital theory. From Chapter 3 (section 1.2), and from an organisational perspective, human capital theory posits that, in a perfectly operating labour market, organisational productivity increases as individuals become more highly trained and educated, and therefore productive. The above finding would also tend to support the HR theorists who place emphasis on HRM practices, including training, as a key driver of firm performance (Arthur, 1994; Cutcher-Gershenfeld, 1991; Huselid, 1995; Huselid & Becker, 1996, MacDuffie, 1995), and the neo-human capital theorists or 'new growth theory' (Marginson, 1993), which emphasises the importance of organisational contextual factors, and introduces education explicitly or implicitly as the source of human capital accumulation.

Indeed, if the notion of a learning organisation is accepted, and the view of Hayes & Allinson (1998) that the quality of individual and collective learning is a key determinant of organisational success (from section 2.3 of Chapter 5, education and training explains 22.2 per cent of variance in organisational effectiveness), and further, that perhaps the quality of individual and collective learning is even a prerequisite for business excellence (Eskildsen, Dahlgaard & Norgaard, 1999; Evans & Lindsay, 1999), then the above finding provides some support.

As well, the above finding also tends to confirm the Lank & Lank (1995) advocation for the 'continuously learning organisation', and the assertion (discussed in Chapter 3, section 1.4) that the greatest business value in an organisation now lies not in physical assets, but in the various elements of intellectual capital that have been developed (Antal et al., 1994; Bontis, 1996; Brooking, 1996; Cascio, 1998; Darling, 1996; Drucker, 1993; Edvinsson & Sullivan, 1996; Handy, 1989; Oslan & Yaprap, 1995; Quinn, 1992; Reich, 1991; Saint-Onge, 1996; Senge, 1990; Stewart, 1991, 1994; Sveiby, 1997; Toffler, 1990). As will be discussed later however, this research did not uncover the means by which the learning was inculcated into organisations.

It might also appear from the above finding that, as Drucker put it in 1993 (section 1.4 in Chapter 3):
Knowledge is the only meaningful resource today. The traditional factors of production - land, labour and capital - have not disappeared, but they have become secondary. They can be obtained, and obtained easily, providing there is knowledge.

(p.38)

Based on this research including the regression data, it might not be the case that knowledge is the only meaningful resource, but it would appear that as incorporated in education and training, it is a meaningful resource.

The above finding of this research (that education and training levels of top management teams in disability-based organisations do have an effect on organisational performance) may also support Cheng & Ho's (1998) finding that regards training as an expensive investment especially when the returns are low. As stated previously in this discussion, education and training explains 22.2 per cent of the variation in organisational effectiveness. Although statistically significant, this figure approximates that of other researchers discussed in section 1.5 of Chapter 3 and infers that there is still 77.8 per cent of unexplained variation. In America, Georgenson (1982) found that only 10 per cent of training expenditures could lead to positive transfer of training while Curry et al. (1994) estimated that only 10 to 13 per cent of learned skills are transferred to the work environment.

In relation to causation and as discussed in Chapter 3 and Chapter 1, researchers have found significant relationships between education and productivity (Bartel, 1994; Bishop, 1991, 1994a; Doucouliagos & Hopkins, 1993; Guzzo, Jette & Katzell, 1985; Karpin Report, 1995; OECD, 1994, 1997b; Schultz, 1960, World Bank, 1995). Recent OECD studies have also found that better educated individuals have higher participation rates, lower unemployment, and higher earnings (OECD, 1995, 1997a), and Coopers & Lybrand (1996) found that staff training brings returns in the areas of (amongst others) worker productivity, workforce flexibility, and quality of output. Also, the ability to think systematically and creatively is a function of educational level, and a prerequisite to adapting to new technological innovation (Bartel & Lichtenberg, 1987; Schultz, 1975; Wozniak, 1984, 1987). Further, Pfeffer (1983) argued that demography is an important causal variable that affects a number of intervening variables and processes, and, through them, a number of organisational outcomes.

The results of all these studies, when combined with the results of this current study including the data and methodology of the regression analyses, tend to suggest that education and training can and does have an effect on performance.

The next finding attempts to isolate the effect of size on the relationship between education and training levels of top management teams and organisational performance.
2.1.2 Education and training, organisational performance and organisational size

Organisational size of disability-based organisations has a relationship with the educational levels of top management teams with the level of qualifications in small organisations being lower, and with organisational performance with job satisfaction in small organisations being lower.

Simply put, both the educational levels of top management teams and job satisfaction increase as the size of disability organisations (measured by employee numbers) increases. Size therefore mediates the effect of education and training levels on organisational performance.

In relation to size and educational levels, and as can be seen from Appendix 4, organisational size is positively and significantly correlated to the highest level of overall education and training (at the .05 level of significance); to the highest level of management-specific education and training (at the .01 level of significance); and to the average level of management-specific education and training (at the .01 level of significance).

This first aspect of this finding parallels Storey & Westhead’s (1994) study which showed that organisational size was positively related to the level of formal management training, and also with that of The Resolutions Group (1996) which found a similar pattern with both overall and management-specific educational levels (see section 1.1.3.1 in Chapter 3). This aspect reflects perhaps the inability of smaller organisations to attract (and/or retain) better-educated managers, and may be linked to organisational location in that smaller agencies are more likely to be located outside Metropolitan areas and the concomitant plethora of readily available and relevant educational courses (see section 2.1.3 in this Chapter).

Although the second aspect of the finding relating to job satisfaction and organisational size cannot be compared with any existing empirical research, it is perhaps a surprising finding of the research in view of the collegial, collaborative, and consultative nature of the sector (DISTSS, 1999). The strength of the correlation (at the .01 level of significance) suggests that this would be an interesting aspect to follow up with further, perhaps qualitative, studies. From the regression analyses in section 2.3 of Chapter 5, it can be seen that although size is a significant predictor of job satisfaction on its own, there are also significant correlations between education and training and size, which when considered together reduce the significance of size as a predictor.

Inherent in the above finding is the notion that larger organisations (with a longer career development chain and perhaps a greater level of organisational resources) are more likely to employ better qualified, and more satisfied, managers. Although the direction of causation is likely to be from organisational size to educational qualifications and job satisfaction, more research would be required to determine whether this were the case or not. For example, it could be the case that larger organisations might place a
stronger emphasis on management education and training and development for their managers than smaller organisations, perhaps resulting in enhanced job satisfaction. The finding of this research (see section 2.2.2 in this Chapter) that larger organisations have more intense strategic planning systems that subsequently have an effect on organisational performance, specifically objective fulfilment, is relevant in this regard. Because one of the component measures of objective fulfilment is improved management development, the suggestion made above that larger organisations might place a stronger emphasis on management education and training and development for their staff than smaller organisations, might therefore have some merit.

The next finding attempts to isolate the effect of location on the relationship between education and training levels of top management teams and organisational performance.

2.1.3 Education and training, organisational performance and organisational location

Organisational location of disability-based organisations has a relationship with the educational levels of top management teams with the level of qualifications in non-Melbourne Metropolitan areas being lower than those in the Melbourne Metropolitan area, and the qualifications of top management teams in Tasmanian organisations being lower than those in Victoria. Organisational location also has a relationship with organisational performance with organisational effectiveness, objective fulfilment, and central life interests rated higher in Tasmanian as compared to Victorian organisations, and job satisfaction rated higher in Victorian as compared to Tasmanian organisations.

Tables 41 and 42 in Chapter 5 showed that there were significant differences between the educational qualifications of top management teams in the Melbourne Metropolitan Area and those in all other areas apart from those in Victorian Provincial cities. Further, Appendix 4 shows that significant negative correlations exist between location and the highest level of overall education and training (at the .01 level of significance); between location and the average level of overall education and training (at the .05 level of significance); and between location and the highest level of management-specific education and training (at the .01 level of significance).

In other words, the more remote from the Melbourne Metropolitan area, the lower the level of overall educational qualifications. This finding incorporates State by State differences, as indicated in Appendices 5 and 6. Appendix 5 indicates that, for Tasmania there are no significant correlations between location and educational levels, whereas in Victoria only the management-
specific correlation drops out. Caution should be used in interpreting the Tasmanian results, as the small sample size may have affected the results.

Overall, this finding supports that of Kilpatrick & Bell (1998) who found that adults in rural areas are less likely to have completed secondary school, have post-school qualifications, and participate in post-school education and training. For the disability sector, this may be a reflection of the availability of relevant courses in such areas, or perhaps the attraction to metropolitan areas of the better-qualified managers as a result of the possibly higher salaries offered by larger organisations in such areas.

This reasoning may also apply to the State aspect of the finding that top management teams in Tasmanian organisations have lower educational qualifications than those in Victorian organisations. Although this result may have been affected by the small Tasmanian sample size, it may also have been affected by the lower educational participation rates in rural and remote areas of Australia such as Tasmania (Australian Bureau of Statistics (1997b).

The above finding indicating a relationship between organisational location (by State) and the various measures of organisational performance as contained in section 1.2 of Chapter 5 is not statistically significant, as reflected by the tests for correlations and the regression analyses. This finding does however tend to confuse the finding of section 2.1.2 of this Chapter that the bigger the organisation the higher job satisfaction and central life interests. In view of Tasmania having fewer larger respondent organisations, it is difficult to reconcile the two results, which again may have been affected by the small Tasmanian sample size but may also have been affected by other State-related characteristics.

Inherent in the above finding regarding organisational location and educational levels is the notion that the larger agencies (which are located in larger towns and cities – principally Melbourne) demonstrate higher levels of education and training held by their managers (see section 2.2 of this Chapter). Also from the previous finding, (see section 2.2 of this Chapter), such organisations tend to have a higher (self-assessed) level of job satisfaction. As these larger organisations are principally located in Victoria, it is therefore not surprising that job satisfaction rated higher in Victorian compared to Tasmanian organisations as found stated in finding 2.1.3. Again, caution should be used in interpreting the Tasmanian results, as the small sample size may have affected the results.

Although the direction of causation is likely to be from location to education and training and performance, further (preferably qualitative) research would be required to determine whether this were the case or not. For example, and as discussed above, disability-based organisations that are more remote (or rural) may suffer from the regional characteristics derived from the Australian Bureau of Statistics (1997b) data, or the availability of relevant courses in such areas, or perhaps the attraction to metropolitan areas of the better-
qualified managers. The subsequent confusing effects on the various aspects of organisational performance also requires further research, as stated above.

2.1.4 Education and training, age and experience

Age and experience of individual managers in disability-based organisations have a relationship with the educational levels of those individuals, with overall educational levels of managers in the 40 to 49 year age group being higher than those in the 20 to 29 year age group; the overall level of qualifications of managers with less than 5 years experience as a manager being lower than those with between 11 and 15 years of managerial experience; the level of management-specific qualifications of managers with between 11 and 15 years of experience in the disability sector being higher than those with greater than 15 years of experience; the level of management-specific educational levels of managers with less than 5 years of managerial experience being less than those with greater than 15 years experience as a manager; and the level of management-specific educational levels of managers with between 5 to 10 years experience as a manager being less those with greater than 15 years experience as a manager.

The above results relating to educational levels as contained in sections 1.1.1 and 1.1.2 of Chapter 5 were not tested in the regression analyses, however they were found to be statistically significant. They also serve to provide general indicators of some aspects of the demographics of managers in the disability sector in Victoria and Tasmania. Caution should be used in interpreting the Tasmanian results, as the small sample size may have affected the results.

Although tests for correlations between age and experience were not conducted in this research as the primary focus was on the relationships between the three constructs of education and training, strategic planning and performance from an organisational perspective, for overall educational qualifications the qualifications of managers in the 40 to 49 year age group are higher than those in the 20 to 29 year age group (Table 27). This may indicate a general propensity of such managers to undertake higher study after some time in the workforce or perhaps the qualifications were gained some time ago. Only managers aged 40 or more possess management-specific educational qualifications, but this same group is also the only group to possess up to year 10 educational qualifications.

Further, a significantly higher proportion of managers with between 11 and 15 years of managerial experience have overall graduate certificate/diploma and postgraduate qualifications than managers with less than 5 years managerial experience (50 per cent more - Table 29). To some extent, this finding is consistent with that in the previous paragraph, as it might be expected that older managers have had more of an opportunity to pursue tertiary studies beyond undergraduate degree level. From Table 27, it is apparent that a
higher proportion of younger managers compared to all categories of older managers are better qualified at undergraduate degree level. This might indicate that many older managers and those with more managerial experience may not have undertaken undergraduate degree level study at all, but proceeded direct to graduate certificate/diploma and postgraduate degree level study, perhaps gaining admittance through recognition of prior learning entry procedures.

In terms of management-specific qualifications of managers, experience in the disability sector is a significant factor, as managers with between 11 and 15 years of experience in the sector have higher educational qualifications than those with greater than 15 years of experience (see Table 36). As it might be generally expected that managers with more years of experience in the sector may also be older and have more years of managerial experience, and therefore have higher overall (see previous paragraph) and management-specific qualifications, the finding in this paragraph tends to be counter-intuitive and difficult to explain.

This difficulty is accentuated by the finding that the level of management-specific educational levels of managers with less than 5 years of managerial experience are less than those with greater than 15 years experience as a manager, as well as the finding that the level of management-specific educational levels of managers with between 5 to 10 years experience as a manager are less those with greater than 15 years experience as a manager (Table 37). It seems clear from the two findings in this paragraph (and generally from the other findings in this section - 2.1.4) that 'more is better' in terms of age, managerial experience, and industry specific experience.

Although the direction of causation would appear to be from age and experience to education and training, further (qualitative) research would be necessary however to determine the empirical nature of the relationships between these various aspects.

2.2 What relationship exists between education and training of managers, and strategic planning processes and systems in disability-based organisations?

There are two key findings of this research which have been identified in relation to this research question. They will be discussed in turn.

2.2.1 Education and training and strategic planning

There is no relationship established between education and training levels of top management teams in disability-based organisations and strategic planning

As stated previously, a search of the literature failed to find any empirical studies which linked the education and training demographic, either generic or industry specific, to strategic planning of disability-based organisations.
Therefore, the results of this current research as they apply to the link between education and training and strategic planning in disability-based organisations cannot be directly compared to existing empirical research.

However, as discussed in section 2 of Chapter 3, a review of the social work literature found that there has been some analysis of factors affecting the adoption of planning activities, and although previous research had not shown a consistent relationship between individual demographics and level of planning activity, some influence had been found in terms of seniority of workers (Cohen, 1989). A 1997 study by Boehm & Litwin did find that professional education was a meaningful variable although general educational levels were found to be less predictive of planning activity (Cohen, 1989; Rabinovitz, Hall & Goodale, 1977).

The Boehm & Litwin (1997) study found that, from a range of personal background variables, only professional education of workers in community social work was found to be a significant predictor of the frequency of rational and organisational planning activities. The study was based on the assumption that the direction of the relationship was from individual characteristics to planning activities. However no significant correlation was found between educational level in general and planning activities (Section 2 of Chapter 3). This current study also did not find any such significant predictors.

Further, this study was not able to replicate the findings of those researchers discussed in section 2 of Chapter 3. In that section, planning formality (or intensity) was described as involving the ability to be thorough and comprehensive in information gathering, to integrate decisions across organisational units, and to deal with the ambiguity of political pressures and alliances (Bantel, 1993). It was posited that more highly educated managers will exhibit several qualities that will be an asset in this process: the ability to discriminate among a variety of stimuli, higher capacity for information processing (Schroder, Driver & Streufert, 1967); higher boundary spanning; higher tolerance for ambiguity; and higher integrative complexity (Dollinger, 1984). For example, Ugboro (1991) found the existence of significant positive correlation between top management's involvement in an organisation's strategic planning system and the impact of that involvement on the effectiveness of the strategic planning system. 'Effectiveness' in this sense could mean the degree to which organisations attain their objectives (objective fulfilment) as will be discussed in section 2.3.1 of this Chapter.

This issue of the positive effects of managerial, environmental and organisational factors on the intensity of the strategic planning effort in organisations (discussed in section 3.3 of Chapter 3) has been suggested by several studies (Cragg & King, 1988; Gable & Topol, 1987; Kallman & Shapiro, 1978; Orpen, 1985; Robinson, Logan & Salem, 1986; Robinson & Pearce, 1983; Robinson et al., 1984; Shrader, Mulford & Blackburn, 1989; Unni, 1981; Watts & Ormby, 1990).
Although Tables 98 and 99 do generally appear to show that higher education levels tend to accompany higher (or more intense) levels of strategic planning, Figures 46 to 65 indicate that there are no statistically significant relationships between the education and training levels of top management teams in disability-based organisations and either strategic planning or any of its dimensions. This may be because all the respondent organisations (strategically) plan well (Figure 40 indicates the mean was 3.7 out of 5 or 74 per cent), irrespective of whether top management teams are well educated or not. There may not be sufficient discriminating power in the data given this generally high level of strategic planning intensity.

In so far as education and training levels do not appear to be related to that of strategic planning as measured in this research, this major finding of the research question is therefore not consistent with upper echelon theory (Hambrick & Mason, 1984), which posits that top team demography influences organisational performance entirely through processes and systems, and that it has no direct effect on performance (see section 2, Chapter 3).

Further, following on from the major finding in the previous section that education and training levels of top management teams in disability-based organisations do have an effect on organisational performance, the above finding does not accord with the second stream of upper echelon theory literature concerning the positive relationships between managerial characteristics and organisational performance (Child, 1974; Halebian & Finkelstein, 1993; Norburn & Birley, 1988; Smith et al., 1994; Virnay & Tushman, 1986). According to this second stream of theory, the characteristics of top management do not have an independent effect on organisational performance. Rather, it is the institutionalisation of these characteristics into the planning processes of the organisation that has the impact on performance, all other things being equal. As discussed in section 2.1 of this Chapter, the (education and training) characteristics of top management do have an independent effect on organisational performance. Also as will be discussed in section 2.3 of this Chapter, strategic planning does have an impact on organisational performance.

However, the more general underlying philosophy of the second stream of upper echelon theory literature would seem to be substantiated by this research. This philosophy states that the three constructs of planning/strategy, top management characteristics and organisational performance are all necessary in understanding the process by which top management influences organisational outcomes.

Further research would therefore seem to be necessary to determine the mechanics of the interaction process between education and training and strategic planning in disability organisations. Such a need has been discussed previously (see section 2, Chapter 3) in the review of literature which found that there has been little empirical work on the link between top management and the process of making strategic decisions (Bantel, 1993; Huff & Reiger, 1987; Lewin & Stephens, 1994, Rajagopalan et al., 1993; Smith et al., 1994).
although Papadakis, Lioukas & Chambers (1998) found no evidence of a relationship between the top management team’s level of education and the making of strategic decisions.

This aspect of the mechanics of the interaction process between education and training and strategic planning incorporates the notion of transfer of learning discussed in section 1.5 of Chapter 3. The transfer of the education and training and learning of the top management team can only be effected through the organisation to the service rendering employees. In this Thesis, it was hypothesised that one of the ways this is done is by the existence of strategic planning systems and processes. ‘Organisational learning’ (see section 1.4 of Chapter 3) is what organisations must do to capture the benefits of past experience, and to change to meet future conditions. The CEO and top management are merely the initiators and drivers of the process.

It would appear from this research that there are other ways apart from those measured in this study (primarily strategic planning) by which the benefits of education and training are positively transferred into the workplace. According to Joyce & Showers (1983), it is this ‘high road’ or ‘vertical’ transfer of learning which incorporates ‘executive control’ (or general transferable skills rather than specific task skills) that is required by employers, accompanied by the use of judgement. That is to say, teachers (or managers) are required to use their judgement and discretion more often than when using standard operating procedures, which therefore involves decisions about when and where to use the new skills. For example, well credentialled managers of small disability agencies may decide that it is not appropriate to use formal strategic planning techniques (see next section - 2.2.2 of this Chapter).

‘Executive control’ in this sense might not be applicable to strategic planning because the nature of the education and training qualification might not have included the topic as an area of study. This proposition is strengthened by the generally low level of management-specific education and training qualifications of respondents in this study (Table 31).

2.2.2 Strategic planning and organisational size

Organisational size has a relationship with strategic planning intensity in disability-based organisations, with smaller organisations being self assessed as having a lower intensity on the external orientation and use of key personnel dimensions of strategic planning.

As can be seen in Appendix 11 and the discussion on multiple regression (see section 2 in Chapter 6), organisational size does have a relationship with certain aspects of strategic planning. The smaller the organisation (and less well educated in terms of the top management team), the less emphasis on analysing government and political issues, competitive trends, supplier trends, external client and customer preferences, and technological trends, and on
performing market research. There is also less emphasis on strategic planning by the CEO, by line managers, by Board members, and on involving all staff.

This finding is perhaps surprising given the collegial, collaborative and consultative nature of the disability sector (DISTSS, 1999), and the predominance of small to medium sized organisations in the study. Perhaps the finding indicates that larger organisations plan more on these two dimensions so as to manage their external environment more strategically and with larger numbers of staff. In addition, it might also reflect the transfer of training principle discussed in the previous section that small disability agencies may decide that it is not appropriate to use formal strategic planning techniques. This finding may also reflect the lack of perceived need for strategic planning systems in smaller organisations that may result from the lower educational levels of managers in those organisations.

Alternatively, this finding could be explained in terms of Stone's (1989) study. As discussed in section 3.3.2 of Chapter 3, Stone found organisational size (and corporate base) to be a significant predictor of the adoption of formal planning by not-for-profits. The smaller the organisation, and the smaller the corporate base of the geographical region, the less the likelihood of the adoption of formal planning.

The above finding could also support in some respects the Robinson, Pearce, Vozikis & Mescon (1984) assertion that small firms are not suited to formal strategic planning, as it is essentially a conceptual activity suited solely to larger firms. More (qualitative) research is required to ascertain whether any or all of these explanations could in part explain this current finding.

This finding could also help to explain the not-for-profit characteristic of decentralisation being complicated. As described in Chapter 2 (section 1), the difficulty of setting objectives for an intangible, hard to measure service mission complicates the delegation of decision-making authority. Important matters are therefore often centralised, and low-level managers are forced to wait until top management makes a decision. The (counter-intuitive to the industry culture) finding that strategic planning intensity decreases with organisational size may reinforce this characteristic, perhaps in part because of the heavy dependence on sponsors for revenue support. This dependence means that top management of a not-for-profit organisation must always be alert to the sponsor's view of organisational activity. This necessary caution leads to 'defensive centralisation' in which top management retains all decision-making authority so that low-level managers cannot take any actions to which the sponsors may object as discussed in Chapter 2. This centralisation may be easier to achieve in smaller rather than large organisations.

This dependence accentuates the importance of linking pins for external-internal integration also discussed in Chapter 2. Because of the heavy dependence on outside sponsors, a special need arises for people in 'buffer' roles to relate to both inside and outside groups. This role is especially
necessary when the sponsors are diverse and the service is intangible with a broad mission, and multiple shifting objectives. The smaller the organisation, the more critical the dependence, and depending on the personnel involved, the greater the likelihood of centralisation. Given the lower levels of education in such organisations however, it may be the case that the enhanced need for an external orientation (because of this critical dependence) may not be perceived as being important.

On the other hand, this finding is consistent with the general not-for-profit literature (discussed in Chapter 2). For example, King (1998) found that only 31 per cent of not-for-profits had a strategic plan and of these, most had larger budgets, with a greater availability of resources and staff time to devote to planning (Young & Sleeper, 1988), and possibly more managerially sophisticated executive directors (Wolch, 1990).

This finding is also consistent with Bantel (1994) who examined the effect of top management team demography on the strategic planning dimension of planning openness in a sample of retail banks. After controlling for firm size and performance volatility, Bantel found that low tenure mean, low education mean, and functional heterogeneity had an influence on planning openness.

In any event, this aspect of the research should not be open to the same criticism as that of the early small business research discussed in section 3.3.1 of Chapter 3 - that researchers have not controlled for, amongst other things, firm size (Grinyer, Al-Bazzaz & Yasia-Ardekani, 1986; Shrader, Mulford & Blackburn, 1989).

It seems clear from this study that larger organisations demonstrate a higher intensity (effectiveness) of planning across the external and key personnel dimensions of strategic planning. These same organisations also tend to have more highly educated managers, confirming the above aspects of the literature review. Although the direction of causation is likely to be from education and training to strategic planning, this research was unable to identify a relationship at all between the two constructs.

Finally, as discussed in section 1 of Chapter 2, there are many characteristics of not-for-profit organisations that affect the strategic planning process. In relation to this research question, the characteristic that goal conflicts may interfere with rational planning seems to be relevant. Because the not-for-profit organisation typically lacks a clear-cut performance criterion (such as profits as revealed in this study), divergent goals and objectives are likely. For smaller organisations which may have less goal conflict, less well educated top management teams, and less intense strategic planning processes (as regards the external and key personnel dimensions), this may not be so much of a problem (which may explain their highest rating on the objective fulfilment measure of organisational performance – see next section). For larger organisations, the reverse may be the case.
2.3 What relationship exists between strategic planning and organisational performance in disability-based organisations?

There are two key findings of this research which have been identified in relation to this research question, which will be discussed in turn.

2.3.1 Strategic planning and organisational performance

Strategic planning intensity does have an effect on organisational performance in disability-based organisations, as measured by (self assessed) objective fulfilment and central life interests, with higher intensity levels of strategic planning and the component dimensions associated with higher performance.

As discussed in section 3.3 of Chapter 3, this current study built on the third wave of empirical research that attempted to employ richer conceptualisations of planning. This third wave commenced with Wood & La Forge (1979, 1981), Frederickson & Mitchell (1984), and Frederickson (1984), and was continued throughout the 1980s by Bracker & Pearson (1986), Robinson & Pearce (1988), Bracker et al. (1988), and Odom & Boxx (1988) who all reported a positive relationship between strategic planning and organisational performance.

From Appendix 18, the strategic planning construct in this research was found to be a significant predictor of organisational performance in a number of respects. Firstly, strategic planning and the external orientation dimension were positively and significantly correlated with the objective fulfilment and central life interests measures of organisational performance. Secondly, the functional integration and use of key personnel dimensions were found to be highly positively correlated with the objective fulfilment measure of organisational performance. As a consequence, it would appear that strategic planning does have an effect on organisational performance (both self assessed) in this research, as does education and training.

Therefore, as discussed in section 3.3 of Chapter 3, the prescriptive management literature which strongly advocates strategic planning as a key to superior performance (Glaister & Falshaw, 1999), and the 49 (61 per cent) of the 80 studies which identified a favourable link between strategic planning and performance (Table 12,) would appear to be strengthened by this finding. It should be reiterated however that the favourable link in the literature is a tentative conclusion, as it is based on mixed evidence and is subject to a caveat (Armstrong, 1982; Greenley, 1986, 1993, 1994; Kudla, 1980; Pearce, Freeman & Robinson, 1987; Rhyne, 1986; Shrader, Taylor & Dalton, 1984).

The finding that strategic planning itself and the functional integration dimension of strategic planning, as self assessed, have an effect on organisational performance, specifically objective fulfilment, perhaps suggests that those organisations that plan more strategically using an open systems
approach (as discussed in Chapter 1 – see Figure 5), are more likely to perform well. Because one of the component measures of objective fulfilment is improved management development, this finding may also suggest that organisations that have a more intense level of strategic planning are more likely to demonstrate an improvement in management development.

In relation to the significant correlation found between key personnel (CEO, line managers, Board members and all staff) involvement and objective fulfilment (both self assessed), it can be suggested that a human services sector orientation (collaborative, collegial, and consultative) matched by organisational arrangements is most likely to achieve organisational goals. As discussed in section 3.1 of Chapter 3, much of the early research (Andrews, 1971; Ansoff, 1965; Brodwin & Bourgeois, 1984; Chandler, 1972; Cotton, 1970; Hall, 1977; Schendel & Hofer, 1979; Shagory, 1975; Summer, 1961; Wildavsky, 1973) seemed to imply a “top management only” perspective when discussing the make-up and contributions of people responsible for planning within a firm. Morgan (1997) opined that it is this top management approach which encourages single-loop learning but discourages the double-loop thinking so critical for the evolvement and emergence of intelligence.

Other researchers (Bower, 1970; Burgelman, 1983, 1985, 1988, 1991; Cascio, 1993; Frederickson, 1984; Ghoshal & Bartlett, 1994; Hambrick, 1981; Hiltrop, 1996; Hutt et al., 1988; Kanter, 1993; Mintzberg & Waters, 1985; Mowday, 1978; Schilit, 1987ab; Schilit & Locke, 1982; Taylor, 1997ab; Thakur, 1998; Woolridge & Floyd, 1990) referred to the phenomenon of (and the desirability for) strategy being initiated outside top management. Such an approach in relation to middle managers found that strategic involvement of middle managers in the formation of strategy was associated with improved organisational performance (Woolridge & Floyd, 1990), a similar result to this study.

Further, the finding that a more intense external orientation is significantly correlated with objective fulfilment (both self assessed) might suggest that organisations which are more able to monitor the external environment (as discussed in section 2 of Chapter 1) incorporating sponsoring and funding bodies are more likely to achieve organisational goals.

Inherent in the above finding also is the notion that the intensity with which organisations undertake the strategic planning process in general, and the external orientation in particular, is positively and significantly correlated with the central life interests measure of organisational performance. This notion may indicate that those organisations that plan more strategically (these are more likely to be larger organisations with a longer career development chain), with a particular emphasis on monitoring the external environment, are more likely to employ managers whose life interests relate primarily to their work. Although the literature review indicates that direction of causation is from strategic planning to organisational performance (central life interests), further (preferably qualitative) research would be required to determine whether this were the case or not in this research. For example, organisations
that are more intense strategic planners may also demonstrate other favourable characteristics (such as a longer career development chain) that may attract more work or task oriented personnel than would normally be the case. The finding of this research that those organisations that plan more strategically are more likely to be larger organisations would tend to support such a view.

Such a view could use McLagan's (1989), and Beer, Spector, Lawrence, Quinn & Walton's (1984) hypothesis which views career development as being integral to the success of the individual and the organisation, a notion which dramatically expands the limited premise of human capital theory discussed in Chapter 3.

In relation to causation, Hopkins & Hopkins (1997) found a reciprocal relationship between strategic planning intensity and performance. That is, strategic planning intensity causes better performance, and, in turn, better performance causes greater strategic planning intensity. More research would be required to ascertain whether such a causal relationship existed in disability organisations in this study.

As described and discussed in section 3.3.1 of Chapter 3, the small business literature on the relationship between planning and performance falls into two main themes. The first relates planning to improved profitability (Aram & Cowen, 1990; Hopkins & Hopkins, 1997; Hussey, 1982), and the second recognises that good planning is a key to success (Argenti, 1980; Bracker & Pearson, 1986; Branch, 1991; Brokaw, 1992; Hillidge, 1990; Knight, 1993; Schwenk and Shrader, 1993). In view of the failure of profitability to be a reliable and valid measure of organisational performance in this study, the findings of this study can only be empirically compared to the literature on the second theme. This comparison is however favourable as in this study, good or at least more intense planning seems to be related to organisational success. Of course, it should be recognised that a good plan can be poorly implemented, and vice versa, both of which have deleterious outcomes.

In addition, the overall results of this study and the findings in this section in particular do not suffer from the criticisms of earlier small firm studies that failed to control for firm size, industry environment, and entrepreneurial/managerial characteristics (Grinyer, Al-Bazzaz & Yasia-Ardekani, 1986; Shrader, Mulford & Blackburn, 1989) as discussed in section 3.3.1 of Chapter 3.

Further and still in relation to small business research, the above finding is in agreement with that of Robinson & Littlejohn (1981) who, during the 1980s asserted that virtually all of the studies to that point had found the use of planning to be much higher in successful than unsuccessful firms. Also, in 1984, Robinson, Pearce, Vozikis & Mescon found that a rather consistent, positive relationship existed between the extent of planning activities and the performance of small business.
The results of this study also accord with Orpen’s (1985) finding which strongly suggests that small firms that perform well conduct the long-range planning process differently than small firms that perform poorly. This difference is essentially due to the comprehensiveness (quality) of the process. Orpen (1985) found that for mixed small businesses, those undertaking more comprehensive long-range planning experienced improved performance relative to those that undertook less comprehensive planning. And in 1986, Robinson, Logan & Salem found significantly higher levels of perceived performance for those firms engaging in strategic planning, a similar finding to this current study.

Further, the strategic planning-performance relationship was also seen as important to rural health care organisations (Smith, Piland & Funk, 1992), who found that significantly higher average profits, operating margins, and planning system effectiveness (objective fulfilment in this study) were reported by hospitals with highly developed strategic planning systems (see section 3.3.2 of Chapter 3).

On the other hand, the above finding refutes the 1983 and 1984 studies of Robinson & Pearce who found no significant performance differences between formal and non-formal small business planners, and that of Gable & Topol (1987) who found that, for small-scale Australian retailers, a positive relationship was not supported.

And in relation to the social work literature as discussed in section 3.3.2 of Chapter 3, strategic planning has been found to be useful in improving human services (Lauffer, 1984); improving the ability to predict (Henderson & Thomas, 1980); and improving the ability of organisations to cope with problems and focus on initiatives (Bryson, 1988; Kaufman & Jacobs, 1987; Rothman & Zald, 1985). In this research, flexibility and adaptability were part of Mott’s (1972) measure of organisational effectiveness that was not significantly correlated in any way with strategic planning.

Finally, as discussed in section 3.3.2 of Chapter 3, the high level of intensity with which not-for-profit organisations in the disability sector in this study apparently conduct their strategic planning processes (mean of 3.7 out of 5 or 74 per cent) may tend to confirm the view that, since 1989, many not-for-profit firms have adopted strategic planning and control systems as a form of operational discipline (Davies, 1994; Parker, 1998; Richardson & Hawkins, 1995). This level of adoption is the case despite in many cases not having the managerial skills, capacity and credibility to do so (Dees, 1998), as found in this study in relation to management-specific skills of top management teams in small organisations. A longitudinal and/or qualitative study would be required to confirm the rate of adoption in the disability sector.
2.3.2 Strategic planning and organisational location

Organisational location has a relationship with strategic planning systems in disability-based organisations with systems in Victorian organisations being more intense as compared to Tasmanian organisations.

The above result relating to strategic planning as contained in section 1.1 of Chapter 6 is not reflected in statistically significant differences or correlations. However, it does serve to provide general indicators of the levels of strategic planning in the disability sector in Victoria and Tasmania.

Strategic planning systems (as self assessed) are more intense in Victorian as compared to Tasmanian organisations. On all dimensions of strategic planning apart from functional integration, respondent Victorian managers self assessed their organisations as performing at a higher or more intense level.

This result may have been affected by the small Tasmanian sample size but may also have been affected by the size of respondent organisations in Tasmania, or other regional characteristics. Again, further research is required to gain more insight into the nature of the finding and possible explanations.

Inherent in the above finding is the notion that the intensity with which organisations undertake the strategic planning process in general may be linked not only to organisational location, but also to the size of organisations in those locations. As found in section 2.3.2 of this Chapter, strategic planning intensity is related to organisational size. Although organisational location and organisational size are not significantly related in a statistical sense in this research, it may be the case that, as discussed in section 2.3.1 of this Chapter and above, the small Tasmanian sample size and size of respondent Tasmanian organisations may have affected the results. Therefore, caution should be used in interpreting the results of the study that relate to Tasmania.

The next section discusses the conclusions to the research problem.
3 CONCLUSIONS TO RESEARCH PROBLEM

This section is based on section 2 of this Chapter, and explores the implications of this research for further understanding of the research problem. In essence, sections 3 and 4 of this Chapter are the 'conclusion' to the whole PhD (Phillips & Pugh, 1987).

As previously stated, the research problem essentially concerns the growing complexity and importance of the management role in the disability sector, and the need for and sector initiatives towards providing managerial education and training in the expectation of improving organisational performance. There is also a lack of empirical research in the sector relating to the three constructs of education and training, strategic planning and organisational performance.

This section goes beyond the quantitative analysis of Chapters 5-7, and incorporates more qualitative findings about the research problem developed during the research. The conclusions in this section are based on the findings of this research and differ from the next two sections that discuss the implications rather than conclusions.

In view of the exploratory nature of this research, the findings of this research concerning the research problem may all be described as significant. To facilitate a deeper understanding of these findings and the conclusions derived from them as they relate to the research problem, further research will be required as discussed in section 7 of this Chapter. This further research may identify other organisational and environmental variables that affect organisational performance and strategic planning apart from the education and training levels of manager and supervisors.

As they relate to the research problem, the overall findings of this research do tend to suggest that top management team education and training levels and organisational strategic planning do have a beneficial effect on organisational performance, but also tend to suggest that there is no relationship between the education demographic of managers and the existence and/or sophistication of strategic planning processes and systems as measured in this research. Organisational size and location also seem to be related to educational levels, organisational performance, and strategic planning, with larger and more metropolitan agencies having higher levels of education and performance, and more intense strategic planning systems.

Further, the overall findings of this research tend to suggest that disability sector initiatives in providing a training and education infrastructure in Victoria are justified in that the education and training levels of top management teams in Victoria are higher than those in Tasmania, and should perhaps be replicated elsewhere. One of the reasons underpinning the State by State differences relating to the educational levels of managers in this research may in fact be that managers and organisations in Tasmania may have been disadvantaged by not having access to such an infrastructure,
resulting in lower levels of education and training as compared to managers in disability-based organisations in Victoria.

On the other hand, these differences may be related to the generally smaller size of disability-based organisations in Tasmania. These differences may also be related to the finding that education and training levels of top management teams in disability-based organisations vary and decline as agencies become more distant from metropolitan areas.

The overall findings of this research also tend to suggest that generally, disability-based organisations in Tasmania are self-assessed by their managers as performing better than those in Victoria, with the exception of the job satisfaction measure of organisational performance. Although the small Tasmanian sample size may have affected this result, idiosyncratic regional characteristics may well explain the phenomenon.

As far as organisational performance is concerned, the integrated multidimensional framework of organisational performance developed by Hoy & Miskel (1996) based on the work of Parsons (1960) and others mentioned in Chapter 1 (p.11), has been shown to be a valid and reliable measurement model of organisational performance in disability sector (charitable) not-for-profit organisations. Similarly, the measurement of disability-based organisations in terms of the intensity of their strategic planning systems and processes across a number of dimensions has been shown to be a valid and reliable measurement model of organisational performance.

The overall findings of this research tend to suggest that cross disciplinary research measures of strategic planning and organisational performance provide a more meaningful measure of both constructs than one measure on its own. For example, if profitability had been chosen as the only measure of organisational performance for this research, then the ultimate dependent variable (Cameron & Whetten, 1983b; Pfeffer, 1977) would have not been valid or reliable in this instance. Similarly, the multidimensional nature of the measure of strategic planning (and organisational performance) has provided a number of insights into various dimensions of strategic planning.

This multidimensional approach has assisted the researcher’s efforts to find a solution(s) to the research problem, and that of the Department of Health, Housing, Local Government and Community Services (1993). As discussed in Chapter 2, the Department’s approach is encapsulated in Midgley’s (1996) view that ‘No single evaluation method, or method of directing organisational change, can cope with every issue faced when evaluating, or intervening in, service systems for people with disabilities’ (p.68).

In this research however, profitability did not prove to be a valid measure of organisational performance, despite the desirability of disability-based organisations making a profit, as ‘... profits can be used to increase the scope and quality of services.’ (Goldsworthy, 1999b). As discussed in section 1.1.3 of Chapter 3, not-for-profit simply means that the excess of revenues over
expenses go back into the organisation and are not distributed outside the organisation (Sandler & Hudson, 1998). Goldsworthy goes on to note that:

'None of the various State Associations Incorporation Acts, the Commonwealth Corporation Law or Special Acts of Parliament, which provide the legal frameworks for community businesses, prevent these organisations from making a profit.' (p.1)

The findings of this research as they relate to profitability and the research problem do not therefore help to fill in the knowledge gap on the relationship between education and organisational bottom-line profit. The consensus amongst researchers that there are too many compounding and contradictory variables to sensibly suggest that returns can be quantified in this way (Billett & Cooper, 1997), is applicable in this current research and has adversely affected finding a meaningful conclusion to the research problem in this regard.

In this respect, the profitability findings of this research do not help to understand and assess the performance of charitable not-for-profit organisations (Fottler, 1981; Hatten, 1982; Herman & Renz, 1998; Kanter & Summers, 1987; Newman & Wallender, 1978, Nutt, 1984), although in other respects the findings are helpful in so understanding and assessing.

Finally, the findings of this research tend to suggest that respondents' subjective judgements provide a fairly valid measure of organisational performance. The major safeguard in this research was an outside evaluation of the performance of the organisations under study. As discussed in section 7.4 of Chapter 4, these evaluations were based on personal (confidential) interviews with various staff of the Commonwealth Department of Health and Family Services. In this way, it was possible to ascertain 'ratings' of the various Commonwealth funded agencies involved in the study. The 'ratings' were not comparisons of performance between agencies, but rather comparisons of agency performance against the applicable Disability Service Standard levels.

The next section discusses the full picture of the research's findings within the body of knowledge. In brief, this and the next section summarise the complete answer to the research problem.
4 IMPLICATIONS FOR THEORY

This section aims to provide the full picture of the research’s findings within the body of knowledge. This section seeks to demonstrate that, not only has the research made a significant contribution to knowledge in its immediate discipline as outlined in sections 2 and 3 of this Chapter, but that the research also has implications for the wider body of knowledge, including the parent disciplines.

This section also revisits Figure 7, originally developed in Chapter 1 (p.16) and discusses the modifications that need to be made based on the research findings.

Wortman (1988, pp.431-432) first identified the conceptual issues of evaluation and efficiency/effectiveness as being important in not-for-profits, leading to research questions of:

- What are the characteristics of successful versus unsuccessful not-for-profits?
- Do not-for-profit organisations that utilise strategic management perform more efficiently and effectively than those that do not?
- Do the characteristics of certain types of not-for-profit organisations tend to lead those organisations to the use of strategic management? If so, what are these characteristics?
- What measures of efficiency and effectiveness can be developed for determining the performance of not-for-profit organisations in the long term? (Also identified by Stone, Bigelow & Crittenden, 1999)
- What impact does the chief executive/board/committees have on the strategic management of the organisation?

This current research attempted to at least, answer all but the last of these questions as they relate to the disability sector, thereby responding to Wortman’s (1988) and more recently Stone, Bigelow & Crittenden’s (1999) call for descriptive, exploratory studies to attempt to define variables that require statistical testing.

Further, as stated in section 3.4 (Chapter 3), contingency theorists claim that all attempts to link strategic planning with performance will increase understanding of the effects of strategic planning on organisational performance under different situations, and will foster a consistent conceptualisation of strategic planning characteristics and their relationships to varying firm and environmental characteristics (Egelhoff, 1985). It is suggested that this Thesis will serve to increase that understanding and add to the knowledge base from the perspective of the disability sector.

This research also makes a contribution to the knowledge base of the theory concerning the relationship between education and training and organisational

Further, and based on the findings of this research, it can be suggested that this study adds to that body of theory positively correlating education and training and strategic planning with organisational performance. And more specifically, this research is particularly relevant to the small and fragmented research on not-for-profit organisations (Applied Research and Development Institute, 1997; Jenster & Overstreet, 1990; Kohl, 1984; Stone, Bigelow & Crittenden, 1999; Wortman, 1979, 1988) and ‘nonbusiness’ organisations (Stone & Crittenden, 1993). As previously stated, this research is also the first of its kind in the disability sector.

The research in this study was based on the research hypothesis that 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 existence of strategic planning processes and systems. This hypothesis is represented in Figure 7 (below).

Although positively correlating education and training and strategic planning with organisational performance, there is no evidence in this study that would support the notion of enhanced organisational performance being mediated by the existence of strategic planning processes and systems. To this extent and with hindsight, Figure 7 should be modified so as to delete any suggestion of a link between the education and training construct and the strategic planning construct.

As a result of this research, the nature of the relationships between the education and training and the strategic planning constructs and the organisational performance construct as shown in Figure 7 also need to be reexamined. As already discussed in relation to causation, it appears that
education and training levels of top management teams can have an impact on organisational performance, and that strategic planning can also have an impact on organisational performance. However, although the direction of causation appears to be from education and training and strategic planning constructs towards organisational performance, it might be the case that those organisations that are better performers attract better-qualified managers in the first instance. In this case, the arrow linking the two constructs in Figure 7 should perhaps be indicating both directions.

Similarly, although the direction of causation appears to be from the strategic planning constructs towards organisational performance, it might be the case that those organisations that are better performers are more able and/or more willing to undertake more intense strategic planning. This might be the case with large organisations for example. It might also be the case that strategic planning intensity causes better performance, and, in turn, better performance causes greater strategic planning intensity, a view espoused by Hopkins & Hopkins (1997). In this case, the arrow linking the two constructs in Figure 7 should also perhaps be indicating both directions.

Taking these possibilities into account, Figure 7 can be modified as shown below (Figure 89).

*Figure 89* (Modified) Specific constructs of the Thesis

![Diagram](attachment:image.png)

This is not to say that disability organisations are not open systems interacting with their environment as discussed in section 3.3 of Chapter 1 (and shown diagrammatically in Figure 4). Rather, it can be suggested that, based on this current research, the direction of the relationships is as shown in Figure 5 i.e. from input factors to outcomes, and from process factors to outcomes, rather than as shown in Figure 6 where the possibility of there being another interaction, that of input and process, which also has an effect on outcomes, is shown. Again, this is not to say that such an interaction is not present, only that it was not identified in this research.

These initiatives generally acknowledge that performance of organisations is being assessed across a wide range of measures - not just financial and/or environmental, but including internal and external aspects of quality and customer satisfaction, even extending to their suppliers. In this current research for example, the adaptability-flexibility component (the predominant measure identified by Steers, 1975) of Mott’s (1972) index of organisational effectiveness was found to be a valid and reliable measure of organisational performance.

The multidimensional nature of the strategic planning (Dyson & Foster, 1982; Greenley, 1986; Kargar, 1996; King, 1983; Kukalis, 1991; Lorange, 1979, 1980; Phillips, 1998; Ramanujam & Venkatraman, 1987b; Rhyne, 1987; Veliyath & Shortell, 1993) aspect of this research provides for a more detailed analysis than the early theory of strategic planning which merely distinguished between firms that planned and those that didn’t. As discussed in Chapter 2, this failure to distinguish between performance-related characteristics of the planning process associated with performance from organisation to organisation has been seen to be responsible for some of the inconsistencies in the research (Armstrong, 1982). This more detailed analysis becomes more important when analysed in conjunction with other constructs such as organisational performance as in this research. This research also in part answers Boyd’s (1991) call for more rigorous measures for formal planning, controls for industry effects, and separate analyses for the various dimensions of organisational performance. All these aspects were incorporated into the current research as discussed in section 3.3 of Chapter 3.

As discussed in Chapter 2, the Hoy & Miskel (1996) integrated goal-system resource model (see Table 7) was chosen for this current research as it provides a more comprehensive theoretical guide than other currently utilised models of organisational effectiveness, accounting for both process and outcome, and both means and ends (Uline, Miller & Tschannen-Moran, 1998). In so far as the theoretical implications of this research are concerned, the Hoy & Miskel (1996) model has facilitated a detailed analysis of a number of dimensions of organisational performance, and in conjunction with the
measurement tools chosen from the literature has been shown to be a useful model for analysis of this kind.

This current research also helps to remedy the deficiency (identified in Chapter 3) of research into training at the level of the enterprise (Billett, 1995; Smith, 1998). Further, this research might assist in providing valid and reliable tools for measuring the impact of training on productivity, identified by Mission (1998) as a possible reason for the lack of organisational research.

This research also adopted the same approach as that of the majority of studies of top teams which focussed on examining the relationships between team demography and organisational outcomes (Bantel & Jackson, 1989; Finkelstein & Hambrick, 1990; Globerman, 1974; Michel & Hambrick, 1992; Pettigrew, 1992). In those studies (discussed in Chapter 3), demographics were the most often used variable as a surrogate for processes which link input and outcome variables (Lawrence, 1991; Pfeffer, 1983), the same approach used in this research. The strategic leadership literature suggests that, since the cognitive bases which influence information gathering and evaluation activities are a product of backgrounds, experiences and training, demographic characteristics can be used to assess this construct (Wiersema & Bantel, 1992).

Researchers investigating the relationship between managerial characteristics and organisational outcomes (Chaganti & Sambharya, 1987; Thomas, Litschert & Ramaswamy, 1991; Wiersema & Bantel, 1992) have demonstrated the usefulness of the approach. Such characteristics are readily observable, unobtrusive and convenient to measure; they possess the advantages of objectivity, parsimony, comprehensibility, logical coherence, predictive power and testability (Wiersema & Bantel, 1992); and are therefore particularly attractive for theory building (Hambrick & Mason, 1984). The scientific method adopted in this research (see section 1 of Chapter 4) is based on these characteristics.

Also in Chapter 3, it was stated that Pfeffer (1983) provided the basic rationale for expecting direct relationships between top management team demography and organisational performance. Pfeffer argued that demography is an important causal variable that affects a number of intervening variables and processes, and, through them, a number of organisational outcomes (1983). He also argued that researchers would find direct effects for demography on performance because it would be impossible to measure all the potential intervening process variables.

Based on the findings of this current research, Pfeffer's argument would appear to be sustained. This research did find direct links between management team demography and organisational performance, but did not find a link between top management team demography and the process variable of strategic planning. Other intervening process variables need to be identified and measured as advocated by Lawrence (1991).
These intervening process variables might also assist in identifying the interaction of tacit and explicit knowledge across levels of knowledge-creating entities (individual, group, organisational, and inter-organisational), which converts, articulates, and amplifies individual knowledge into and throughout the organisation (Nonaka & Takeuchi, 1995) as discussed in Chapter 3. This interaction essentially represents the notion of the learning organisation. Although in this Thesis the existence of strategic planning systems and processes was taken to represent disability-based organisations' attempts to convert, articulate, and amplify individual knowledge into and throughout their organisations (and hence represent 'learning organisations'), the 'triggers' or intervening process variables in this study remain unknown, and of great interest.

In any event, the perspective of this Thesis that corporate resources and personnel can provide a competitive advantage (Barney & Wright, 1998; Jauch et al., 1980) as a result of the distinctive competency of management (see section 3.2 in Chapter 3) would appear to be supported.

Finally, this study continues the trend established since the early small firm studies (Thune & House, 1970; Herold, 1972; Robinson, 1979; Robinson, 1982), for researchers to take a more contingent view toward the planning-performance relationship and by controlling for firm size, industry environment, entrepreneurial/managerial characteristics, environmental uncertainty, etc. (Grinyer, Al-Bazzaz & Yasia-Ardekani, 1986; Shrader, Mulford & Blackburn, 1989). As discussed in Chapter 3 (section 3.3.1), this current research has taken a multidimensional approach in a number of respects, as well as specifically controlling for organisational size, location, and managerial characteristics.

The next section discusses the implications of the finding of this study for policy and practice.
5 IMPLICATIONS FOR POLICY AND PRACTICE

This section discusses the practical implications of the research for managers, organisations, and policy makers concerned with the disability sector.

As previously stated (pp.4 & 17), this research is the first of its kind in the disability sector, and is significant because:

- 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 external research on multidimensional organisational performance measures has taken place in the disability sector; and
- no research on levels of managerial training and education and its effects on performance and/or strategic planning systems has taken place in the disability sector.

Its findings should therefore be of great interest to managers, organisations, and policy makers in the sector, as well as small business and not-for-profit practitioners generally, and to researchers both within and without the sector as described in the previous section. In a very general sense, this research may provide some support and justification for the Department of Workplace Relations and Small Business' (1997) finding that, since 1979 a number of training and education providers have addressed the challenge of satisfying the real needs of owner/managers for entrepreneurial and managerial skills training, and are making a substantial contribution to improving the quality of managerial performance in Australia (see Chapter 3, section 1.1.1.1). Managerial skills training in this sense refers to training managers generally as distinct from training which is only relevant to managers i.e. management-specific training.

As described in Chapter 1, the disability sector is evolving with its environment, and with an emphasis on balancing the tension between business services and people services (Murnane, 1994), which together have made the tasks of managers, organisations, and policy makers more complex. This complexity appears to have been a factor in the establishment of the Non-Government Disability Training Unit (NDTU) with a focus of improved services for people with a disability. The establishment of the NDTU has however been justified (Day, Myrianthis, & Owen, 1997), as 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 an expectation that performance of the sector can be improved (e.g. Kinlaw & Christensen, 1986).

Although not longitudinal in nature, this current research would suggest that these sector initiatives and expectations are soundly based and capable of being empirically validated. Further, this research may go some way towards
developing some performance and outcome measures to overcome the criticisms of the sector made by Baume & Kaye (1995), as stated in Chapter 1 (p.6), and may also serve in some small way to further the growing interest in the topic of organisational effectiveness of Community Social Welfare Organisations (CSWOS) since the 1980s (D'Aunno, Hooijberg & Munson, 1991; Ezell, Menefee & Patti, 1989; Kettner, Moroney & Martin, 1990; Malka, 1989; Patti, Poertner & Rapp, 1987; Rapp & Poertner, 1992; Tsui, 1990).

In relation to education and training, the generally lower levels of qualifications in smaller and more regional organisations may raise issues for practitioners and policy-makers concerning access to and availability of suitable training, as well as organisational arrangements in such organisations to facilitate participation. Such arrangements may include in-house mechanisms to facilitate a positive transfer of learning, as well as providing sufficient funding to encourage participation.

The generally lower levels of qualifications in smaller and more regional organisations may also raise questions concerning the possible inability of smaller organisations to attract better-educated managers in the first place. This scenario may be related to the unavailability of relevant courses in such areas, or the attraction of the better qualified managers to more urban or metropolitan areas, perhaps in part because of the better career prospects or higher salaries in the larger organisations, as well as the higher levels of specialisation possible therein. In this regard, the Karpin Report (1995) identified the targeting of skills and education relevant to the particular sector as a critical component for effective intervention (see Chapter 2, p.36). Administrators should note that such interventions should be enterprise or business driven and linked directly with critical enterprise and business outcomes (Karpin Report, 1995).

From section 2 in Chapter 5, education and training explains between 14.9 and 22.2 per cent of the variation in organisational effectiveness, depending on whether highest or average levels of education are used, and on whether stepwise or multiple hierarchical regression techniques are used. In view of Gregoire, Propp & Poertner's (1998) finding that an agency's commitment to training emanates from upper management (see section 1.5 in Chapter 3), the positive relationship in this research between education and training and organisational performance should reinforce such a commitment.

An interesting aspect of education and training for administrators arising from this research is that of strategic planning being positively correlated with objective fulfilment. One of the components of objective fulfilment is enhancing management development. For managers and organisations, this finding highlights the importance of organisational strategic planning as a means of developing the managerial knowledge, skills and abilities of managerial staff.
Further, as previously described in Chapter 3 (section 1.2), ‘hard’ models of HRM incorporate human resource policies into the strategic planning of the organisation so as to develop competencies which might enhance organisational performance (Dyer & Kochan, 1995). This link was developed by Fombrun, Devanna & Tichy (1984) as part of their original four phase strategic HRM model which equates strategic HRM practices with development of management, in particular the skills and knowledge to carry out management functions, and the consequent impact on performance. The evidence that is beginning to accumulate that employers who use HR management practices will see enhanced organisational performance (Hiltrop, 1996), evidence which is supported by this research, should encourage practitioners and policy makers to persist in their management development efforts. In some small way, this might contribute to reversing the undesirable situation that exists where Australian enterprises do not regard management development as a strategic issue (Barraclough & Co., in the Karpin Report, 1995), nor do enterprises widely accept the notion of continuous management learning (Karpin Report, 1995).

Given the low proportion of managers with any management qualification (40 per cent), and the high proportion of managers with less than five years experience as a manager in the disability sector (51 per cent), perhaps there is also a need for management training incorporating an orientation to the disability sector, induction, and basic management training.

In relation to performance, as previously stated (see Chapter 1, p.10), staff satisfaction and life interests are of particular interest in this sector. This research not only provides data which allows administrators to benchmark their own organisations, but goes further and suggests that these two variables are positively related to the educational qualifications of managers within those organisations. Further, as discussed in Chapter 2, in their 1998 study (which included developmental disability service organisations), Herman & Renz, found that, amongst other things, practitioners identified measuring satisfaction, and having a plan as criteria they used to evaluate their own and other not-for-profit organisations. These factors were also identified as being important by focus groups in this study, and as a result of this current study, it is suggested that these measures can be used validly and reliably by practitioners and policy makers in their evaluation processes.

Apparently, profitability is not related to organisational performance in the disability sector due to the prevailing non-profit approach by organisations in the sector. Notwithstanding the prevailing legislation regarding the accumulation of ‘surpluses’ by disability based agencies, the management approach to managing organisational resources taken by many agencies as reported by managers in this research (see section 1.2.5 of Chapter 5), does not represent sound management. Merely because an organisation is ‘non-profit’ does not obviate the need to keep costs down, seek alternative funding sources, and generally manage resources efficiently and effectively so as to achieve the best possible outcomes for clients and consumers. For policy
makers and administrators, the challenge is to reward innovation and good management rather than penalise it.

As regards strategic planning, administrators and policy makers should be aware that apart from education and training there are other factors, internal and external including organisational size and location, which might have an impact on strategic planning in disability-based organisations. These factors should not be considered in isolation of each other. For example, two of the findings of this research suggest that smaller organisations have less formally qualified top management teams, and less intense levels of strategic planning. Perhaps these two findings are related, perhaps they are not. Other planning measures may have to be utilised to better capture the strategic planning construct.

Concerning organisational size, this research found that smaller organisations were self assessed as having a lower emphasis on the external orientation and use of key personnel dimensions. This may indicate that larger organisations plan more on these two dimensions so as to manage their external environment more strategically and with larger numbers of staff. This should not obviate the need however for smaller organisations to also involve their key people in planning strategically and comprehensively monitoring their external environment, particularly as organisational performance may be affected.

When integrated with the finding of strategic planning being positively correlated with objective fulfilment, the finding of this research that the functional integration dimension of strategic planning is also positively correlated with objective fulfilment may also indicate to administrators that strategic planning efforts using an open systems approach should be intensified wherever possible to facilitate the attainment of organisational goals.

Another interesting aspect for administrators is that of the use of key personnel dimension of strategic planning and its positive correlation with objective fulfilment. The collaborative, collegial, and consultative orientation of the human services sector (DISTSS, 1999) would suggest that people are more rather than less involved in the operations of their organisations. Perhaps it is surprising therefore that there is a statistically significant difference between organisations on the basis of their involvement of key personnel in strategic planning and subsequent organisational performance. On the other hand, perhaps there is a wide range of collaboration, collegiality, and consultation in the sector, and differentiation is not so difficult to attain. In any event, the suggested implication of the finding for practitioners is that organisations that involve their key personnel more are more successful in attaining their goals.

Nevertheless, it seems clear that in this instance, there is at least qualified support for disability sector agencies adopting management structures and practices from the corporate sector (Bryson, 1995; Delbecq & Gill, 1988;

The changing nature of the disability sector has been mentioned previously, incorporating the impetus of many agencies to become more financially diverse and not totally reliant on government funding. The desirability of, and success of agencies in working towards and achieving this goal may in part be supported and explained by the finding of this research that those organisations which have a more intensive external orientation are more likely to achieve organisational goals. The implications are particularly relevant for smaller agencies.

Another finding which may be of interest to administrators is linked to the previous aspect. This current research suggests that strategic planning and the external orientation dimension are positively correlated with central life interests. This may be because the impetus for organisational financial diversity and the strategic planning mechanisms for achieving it may provide such stimulation to the managerial staff that there is a statistically significant difference in the degree to which such staff view their job as being central to their life. Another explanation is that such staff are attracted to such organisations (which are likely to be larger) in the first place. Again, the implications for agencies are profound.

This research also provides data facilitating individual and organisational benchmarking of managerial educational qualifications, organisational strategic planning, and organisational performance across a number of measures and dimensions. These measures and dimensions are from a number of disciplines and should encourage practitioners to similarly explore and research outside their immediate discipline area in seeking answers and models to strategic and operational dilemmas. This research might also provide a stimulus to organisations to begin to identify detailed information (e.g. cost-benefit analysis) about returns on investment in training, a problem identified by Billett & Cooper (1997).

Finally, 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, perhaps to the extent of mandating minimum qualification levels for managerial and supervisory positions. In view of the many environmental changes outlined during Chapter 1, 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. Such justification is particularly relevant for increased efforts in smaller organisations where organisational performance and strategic planning intensity are lower, and arguably, organisational survival is more tenuous.

The next section discusses the limitations of the study.
6 LIMITATIONS

Previous studies that used the constructs of organisational performance and strategic planning were affected by a number of major methodological difficulties and criticisms as described in previous Chapters. These aspects are:


2. Difficulties in determining how to understand and assess the performance of small and medium enterprises (Keats & Bracker, 1988), because it is not known if traditional neo-classical economic measures are appropriate for assessing the performance or success of small owner operated firms (Newby, Watson & Woodliff, 1998) as discussed starting page 43;

3. Difficulties in developing a theoretically, methodologically and philosophically sound multidimensional measure of organisational performance (Venkatraman & Ramanujam, 1986) as discussed starting page 43;


5. A need to reverse the bias towards large firm samples in strategic planning – organisational performance studies (Robinson & Pearce, 1983), and ignoring findings which identify firm size as an important contingency factor (Hofer, 1975; Kudla, 1980; Lindsay & Rue, 1980; Robinson & Pearce, 1983; Wood & LaForge, 1979) as discussed starting page 118;

6. A need to consider the intensity with which firms undertake the strategic planning process (Hopkins & Hopkins, 1997) as discussed starting page 118;

7. A need to eliminate or reduce sampling bias (Bracker & Pearson, 1986; Robinson & Pearce, 1984) as discussed starting page 118;

8. A failure to control for industry effects (Hitt, Ireland & Stadler, 1982) as discussed starting page 118;

9. Not considering the length of time firms have been involved in formal strategic planning (Fulmer & Rue, 1974; Hofer & Schendel, 1978) as discussed starting page 118; and

10. A failure to control for the interactive effects of organisational environments and strategy (Kudla, 1980) as discussed starting page 119.

This study attempted to overcome all of the above aspects apart from 9 and 10 by controlling for firm size, controlling extraneous influences by limiting the population to a single industry, employing multiple performance measures, and using a clearly definable multidimensional measure of planning formality and intensity.
Further, by using the qualitative and quantitative approaches outlined in Chapter 4, this study made a scientific attempt to advance the understanding of organisational performance. The methodology of this study made an attempt to develop a theoretically, methodologically and philosophically sound multidimensional measure of organisational performance, and strategic planning, suitable for a range of different sized organisations in the not-for-profit sector.

As far as the outcomes of this particular research is concerned, to some extent the small number of respondents in Tasmania reduced the statistical power of the conclusions, in that a Tasmanian effect, or difference between States, needed to be larger than a corresponding Victorian effect in order to appear as statistically significant.

To some extent also the low overall percentage of respondent organisations and managers reduced the statistical power of the conclusions. There was also no data gathered on the distinction with which respondent managers attained their particular educational qualifications.

Particularly with larger organisations, it was also difficult to separate top team managers from other managers. However, as most of the respondents were from small and medium sized organisations with mostly one level of management (but a maximum of two) (DISTSS, 1999), the validity of the overall results particularly as they apply to small and medium sized organisations should not be seriously challenged. As previously described in Chapter 2 (Section 2), over two thirds of organisations in the disability sector were estimated to comprise no more than 30 employees and at most two levels of management but mostly one (DISTSS, 1999). ‘Top management teams’ in most agencies will therefore be small and will involve all managers, particularly in view of the collaborative, collegial, consultative nature of the human services industry in general and the disability sector in particular (DISTSS, 1999). It is therefore likely that there would be responses from whole management teams in a majority of cases, especially those from small and medium sized agencies (73 per cent of respondent organisations – see Table 21). It may be the case therefore that the results of the research will be more likely to be valid for small and medium sized organisations.

This aspect of organisational size was not the only contingency factor that may have affected the validity of the overall results. As described in Chapter 4 (Sections 5 and 7), data was gathered from the total population of Tasmanian and Victorian disability sector organisations. The population of 588 represented the complete industry in those two States. Unfortunately, a complete list of all agencies concerned was not possible as, although the peak bodies were happy to endorse the research by way of cover letter, as well as posting out the documentation to all their members, they (understandably) wished to guarantee confidentiality of their client base.

Consequently, it was not possible to discriminate among the respondent organisations according to organisational type. Such a breakdown as to the
types of disability-based organisations included in the study (see Section 1 of Chapter 2) would have assisted in estimating the effects of sampling bias amongst the different categories of service, particularly as there may have been differences in the quality of management among the different categories of service.

In relation to the number of respondent organisations with management-specific qualifications (83 organisations), although the whole sample (137 organisations – see Chapter 4) was sufficient to provide statistically valid and reliable results, the results of analyses where the whole sample was disaggregated should be treated with caution. For example section 1.1.4 of Chapter 5.

Further, because this research was limited to the disability sector in two States, Victoria and Tasmania, the results may not be generalisable to other States in Australia, or to other industry sectors, or countries. It is likely however, that, if the disability sector and geographical demographics of other States in Australia are similar to those in Victoria and Tasmania, the results may indeed be generalisable. This assumption may be questionable however, because even if it is the case that the disability sector and geographical demographics of other States in Australia are likely to be similar to those in Victoria and Tasmania, the different findings in a few variables (or relationships) between States in this study may be repeated in those other States.

One variable that is unlikely to differ significantly in disability-based agencies from State to State is that of profitability. The difficulties experienced in this current research in using profitability as a valid and reliable measure of assessing the organisational performance of charitable not-for-profit organisations tends to support the difficulties found by previous researchers as mentioned in point 1 (above) in this section.

In relation to the use of self-reported data in this study, this method represented an opportunity for the consideration of intervening variables, but incorporated the problem of historical bias due to dependence on the memories of respondents.

Caution should also be used in interpreting the results of the study as, although there are important implications of the study, in some areas, the data does not provide conclusive results. For example, there is no relationship established between education and training levels of top management teams in disability-based organisations and strategic planning. This caution reflects the complexity of the issue and the difficulty in such research.

Further, the performance measures used may not directly relate to the actual outcomes of services (e.g. integration or employment in the community for people with disabilities).
The final limitation relates to the generic nature of the planning-performance research. As previously stated and in common with other observational studies where a true manipulation is not possible, in seeking to define the relationship between planning and performance, it is difficult to establish what performance would have been achieved by a planning organisation if planning had not been undertaken.

The next section discusses the implications of this study for further research.
7 IMPLICATIONS FOR FURTHER RESEARCH

Although the results of this (exploratory) study have significant implications for theory, policy and practice in the disability sector, it should be reiterated that it is the first and only such study in the sector involving the three constructs of education and training, strategic planning, and organisational performance.

Consequently, there are several key areas where further such research in the disability sector could be undertaken, prior to possibly examining the three research questions in other regions of Australia, other countries, or other industry settings. Because this research was limited to the disability sector in two States, Victoria and Tasmania, the results may not be generalisable to other States in Australia, or to other industry sectors, or countries. However, at the very least, additional such research in other States of Australia would serve to further add to the knowledge base concerning the management and leadership skills needed by voluntary organisations to successfully serve people with disabilities.

Such research should consider removing some or all of the limitations mentioned in the previous section.

For example, future research that seeks to explore the relationship between top management teams and other dependent variables, should seek to separate top team managers from other managers. As previously described in this Chapter (section 6), it was difficult to separate top team managers from other managers. Although the validity of the overall results of this research should not be seriously challenged in view of the organisational and industry characteristics previously mentioned, it may be the case that the results of the research will be more likely to be valid for small and medium sized organisations. Future studies should attempt to meaningfully distinguish between top team managers and other managers.

Further, and although the research population of 588 represented the complete industry in Tasmania and Victoria, it was not possible to compile a complete list of all agencies concerned (see section 6 of this Chapter). Consequently, it was not possible to discriminate among the respondent organisations according to organisational type. Future research should seek greater access to organisational data in order to, amongst other things, facilitate the estimation of the effects of sampling bias amongst the different categories of service, particularly as there may have been differences in the quality of management among the different categories of service.

Such access may assist in improving the respondent response rates (see section 5 of Chapter 4) with consequent advantageous ramifications for the validity of the data, particularly in relation to the number of respondent organisations with management-specific qualifications for example.
Future research may also consider it appropriate to use alternative financial measures of profitability as valid and reliable measures of assessing the organisational performance of charitable not-for-profit organisations, given the difficulties experienced in this regard in this research.

In relation to the use of self-reported data in this study and the inherent problem of historical bias due to dependence on the memories of respondents, it may be possible, to some extent, for future research to overcome the problem by undertaking more qualitative research. This particular feature of future research is discussed in more detail later in this section.

As far as the performance measures used in this research are concerned, and although such measures were developed by sector managers (see section 7 of Chapter 4), it is possible that the measures used may not directly relate to the actual outcomes of services (e.g. integration or employment in the community for people with disabilities). Future research should address this aspect of organisational performance with a view to amending such measures, and in the process perhaps developing more objective performance measures which may not be affected as much by the problem of historical bias mentioned in the previous paragraph.

The key specific areas in the disability sector where further research might meaningfully be undertaken would include:

(i) further exploration of the nature of education and training and whether there are other interpretations of education and training which may have an impact on organisational performance in the sector e.g. on-the-job education and training, staff development, and prior experience;
(ii) further exploration of organisational performance (and the learning organisation) so as to determine whether other measures of organisational performance might be applicable to the sector;
(iii) further exploration of what other factors, internal and external including organisational size, might have an impact on strategic planning in disability-based organisations;
(iv) further exploration as to the nature of other transfer of training variables and processes (apart from strategic planning) by which education and training affects organisational performance;
(v) further exploration as to whether strategic planning affects organisational performance directly, or do other strategic activities intervene; and
(vi) further exploration of the processes by which a human services sector orientation and organisational arrangements are most likely to achieve organisational goals.

As described in Chapter 4, qualitative research would be appropriate to conduct much of this exploratory research. For example, in this current study, a further stage (Stage 4 – see below) was part of the original research
plan. However, due to the complex nature of the quantitative aspects of the research, the qualitative research in Stage 4 was not included as part of this Thesis, but may possibly be undertaken in the future.

Using the qualitative approach of Stage 4 (see Table 102 below) and from the quantitative data originating from this current study, case studies could be utilised to better understand the relationships, including managers' reflections on how they saw the impacts of their training and education, how they applied it, and how successful it had been for them and their organisation.

Table 102  Possible further research (Stage 4)

<table>
<thead>
<tr>
<th>Study focus</th>
<th>Procedure</th>
<th>Data source</th>
<th>Data gathering methods</th>
</tr>
</thead>
<tbody>
<tr>
<td>Stage 4 Research Questions 1, 2, and 3</td>
<td>Procedure 6</td>
<td>Selected organisations and managers</td>
<td>Case study incorporating - Interview - Document analysis</td>
</tr>
<tr>
<td>Major focus: Are there relationships between management education and training, strategic planning, and organisational performance measures within disability sector organisations?</td>
<td></td>
<td>n = 3 (3 organisations - 2 Victorian &amp; 1 Tasmanian. Four managers from each)</td>
<td></td>
</tr>
</tbody>
</table>

Nonaka & Takeuchi (1995) refer to this as tacit (subjective) knowledge. The advantages and disadvantages of case study research have been debated in the literature, and will not be reiterated here. Suffice to say that the argument, in so far as the management literature is concerned, is one of trading off 'currency' for 'data integrity' (Bonoma, 1985), and 'representativeness' for 'understanding'.

This approach could be used to discover for example, the reason(s) why the qualifications of older managers are higher than younger managers which may indicate a general propensity of such managers to undertake higher study. Further, the finding that managers with more experience in the sector have lower qualifications could also be explored, which could reflect the past
availability of education and training or an outdated recognition that experience is more desirable than qualifications.

Also, the qualitative approach could explore the finding that managers with between 11 and 15 years of managerial experience in the disability sector have higher qualifications. This finding could perhaps suggest that managers in this category have recognised that managerial experience in the sector alone is not sufficient for efficient and effective personal performance.

Further qualitative research could also explore the many differences between managers and organisations in Victoria and Tasmania. For example, organisational effectiveness, objective fulfilment, and central life interests were self assessed as higher by Tasmanian as compared to Victorian managers, whereas job satisfaction was rated higher by Victorian as compared to Tasmanian managers, albeit with the statistical limitations caveat relating to the small Tasmanian sample size.

This final qualitative procedure would be designed to uncover the experience of management education and training being transferred to the workplace.

The research questions in the final qualitative portion of this study could be varied slightly from that in this current research so that the objective inquiry would become subjective for the managers themselves. For example:

- To what extent do I think the education and training I have undertaken has contributed to the nature of strategic planning processes and systems, and organisational performance of my agency?

It is only from managers' reflections on this question that the researcher can qualitatively answer the original research question(s). The researcher must understand from managers how they see the value of management education and training, how they have applied it, and how successful it has been for them.

As an example of the data gathering methods, it is possible that three follow-up case studies could be conducted, two in Victoria and one in Tasmania. Procedure 6 could involve 12 managers, four from each of three disability sector agencies. One agency from central Victoria, one from northern Victoria, and one from Tasmania could be selected on the basis of the abnormality of the questionnaire data from managers within those agencies.

The data may be abnormal in the sense that the relationships found between all three variables in this research were not found in these particular agencies, even though a strong correlation was evident between two of the three variables. It would be expected that these cases would be 'information-rich' for the purposes of the follow-up study, and would identify several particular regional characteristics that may exist. The case studies could incorporate semistructured interviews and document analysis.
8 CONCLUSION

In conclusion, this study examined the relationships between education and training of top management teams, strategic planning and organisational performance in the disability sector from the perspective of three research questions:

1. What relationship exists between education and training of managers and organisational performance in disability-based organisations?

2. What relationship exists between education and training of managers, and planning processes and systems in disability-based organisations?

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

The results of research question 1 presented in this Thesis strongly suggest that formally accredited training contributes to organisational performance, a conclusion which provides support for organisational and industry initiatives already undertaken and planned.

The results of research question 2 are adverse in that education and training levels of managers in disability-based organisations do not appear to impact on the existence or intensity of strategic planning systems. Nevertheless, the positive relationship between strategic planning and organisational performance does provide an impetus for industry and organisational initiatives designed to uncover the mechanisms that facilitate organisational strategic planning, particularly in smaller organisations.

The results of research question 3 presented in this Thesis also strongly suggest that strategic planning contributes to organisational performance, a conclusion which although intuitively appealing has not been universally demonstrated. In this research however, the benefits of strategic planning provide some support for organisations facilitating the development and inculcation of a strategic planning culture which it is suggested has an important outcome in relation to management development.

Finally, all disability sector organisations and staff should be aware of the benefits of education and training and strategic planning in assisting their organisation to adapt to their environment, and in so doing work towards balancing the tensions between the business and the people. In this way, survival and growth of disability based organisations will be facilitated, and outcomes for people with disabilities will be enhanced thereby achieving a more efficient and effective use of society's resources.