5 PRESENTATION AND DISCUSSION OF RESULTS

In this chapter the results and findings of the study are presented in the following format:

- **The Pre-intervention Phase:** Firstly, the application of the data collection tools, namely the pre-intervention questionnaire and the first online focus group, is discussed. The data is then presented and discussed in a consolidated form as obtained from both these tools. The data relates to: the nature of services provided; the strategies employed to deliver services; participants' perceptions related to the strategies employed; a description of the management of services, and participants' approaches to change. Lastly, the results of the short questionnaires indicating the participants' evaluation of the first online focus group, are discussed.
- **The Intervention Phase:** Findings from this phase are discussed as it relates to the application of the data collection tool, i.e. the second to fifth online focus groups, followed by a discussion of the data obtained. Data from this phase aimed to describe managers' approaches to change. Lastly, the results obtained from the short questionnaires indicating the participants' evaluation of the second to fifth focus groups, are discussed.
- **Evaluation Phase:** The application of the post-intervention questionnaire and the follow-up interviews are discussed, followed by the consolidated results and findings obtained from both these tools. The data relates to comparisons with participants' perceptions of aspects of service delivery both before and after the Intervention Phase; their approach to change in this phase, as well as their perceptions of recent changes in practice. The section also includes participants' perceptions regarding principles of best practice in early intervention service delivery and concludes with findings related to participants' evaluation of the project.

5.1 PHASE 1: PRE-INTERVENTION PHASE

Managers of 14 occupational therapy early intervention services in South Australia participated in the study. The Pre-intervention Phase consisted of the administration of the pre-intervention questionnaire and the use of an online focus group in order to establish current trends in service delivery.

5.1.1 Application of the Research Tools

5.1.1.1 The Pre-intervention Questionnaire

Having sent the questionnaire to the 14 participants, a 100% response rate was achieved. The data obtained is divided into the following four categories: the nature of the services provided by the participating organisations; a description of the strategies employed to deliver services; participants' perceptions related to the strategies employed; and a description of the management of the participating services.

5.1.1.2 The First Online Focus Group

The first online focus group was structured to provide feedback to participants on the information obtained from the questionnaire and provided a forum for discussion of these results. Data obtained from the focus group provided further information about the current status of service delivery. In addition, data analysis procedures were employed to obtain information regarding managers' approaches to change.

Two online focus group discussions occurred simultaneously: that of the country group and that of the metropolitan group. The metropolitan group consisted of seven participants and the country group had six. The country group was more active and provided a total of 70 entries on the website. The metropolitan group provided 29 entries. Participation occurred predominantly during standard office hours. Participants had a week to participate in the discussion (refer Chapter 4 for details regarding the procedures of the online focus groups). Table 9 in Chapter 4 provides a detailed layout of the content and structure of the

first focus group discussion. The topics included: Limited Resources; Understaffing; Long Waiting Lists; and Insufficient Collaboration with the School System.

5.1.2 Presentation of Consolidated Results and Findings

5.1.2.1 The Nature of the Services Provided

The questionnaire included questions to obtain descriptive and contextual data related to the types of services delivered. Table 16 illustrates the services provided (see Appendix C for the questionnaire, which includes the definitions of the terminology used). This data provides an overview of the main focus of services – it illustrates that the participating services provide a wide variety of services. Due to the small number of participants in the study, both the percentages and the actual number of respondents are provided.

Table 16 Services provided by Respondents

Services Provided	Number of Respondents	Percentage
Habilitation	14	100
Remediation	11	79
Rehabilitation	10	71
Prevention	10	71
Social Integration	10	71
Health promotion	9	64
N=14		

Table 16 illustrates that the majority of services view the focus of their services as being on intensive training or re-training of skills, i.e. habilitation and remediation. Usually applied one-to-one, or in small groups, due to their individualised and intensive nature, these frameworks are commonly being used amongst occupational therapists (Hagedorn, 1997). This result correlates well with the main client group identified (i.e. clients with development delays and scholastic difficulties - refer Table 17), being one of the main service options for this client group.

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Prevention and social integration were indicated by 10 of the 14 services and were indicated in Chapter 2 as two of the international trends in early intervention service delivery. This result indicates that a large proportion of the services perceive themselves to be playing a role in the delivery of services related to the principles of prevention: client education, early detection and intervention, as well as the social integration of clients into their natural settings.

Health promotion featured last as a type of service delivered, but still featured strongly in relation to the number of participants (9 of the 14 services). Of interest is that although traditional service types still featured the strongest, a large proportion of the services viewed themselves as delivering services that correlated with international trends, i.e. health promotion, social integration and prevention.

5.1.2.1.1 Client Types

The second question that provides data on the nature of services provided, relates to client-orientated types of services. It was recommended in Chapter 2 (Figure 1: Factors Influencing the Service Delivery Process) that this aspect of service delivery be included in an internal assessment when considering the appropriateness of service delivery models. Table 17 illustrates the main areas of practice related to client groups (refer Appendix C for the questionnaire, which includes the definitions of terminology used). Since it was established that there is an overlap between categories, participants were asked, in the instruction section of the questionnaire, to identify the categories that best describe their services. The terminology was chosen due to its wide application in the classification of client groups in occupational therapy practice.

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Table 17 Main Areas of Practice: Client Type

Main Area of Practice	Number of Services (More than One Choice per Participant)	Percentage
Development delays and scholastic difficulties	14	100
Cognitive / intellectual impairment	8	57
Neurological impairment	7	50
Physical impairment	7	50
Psychiatric impairment	1	7
Medical / surgical	1	7
Medico-legal	1	7
N=14		

Participants had more than one choice in answering this question. Responses ranged from: 14 indicating services to children with development delays and scholastic difficulties; 8 indicating cognitive / intellectual impairment; and 7 indicating physical and neurological impairments. Services to children with psychiatric impairment, medical / surgical conditions and medico-legal cases were less prevalent, with 1 response each. The low prevalence of services to children with psychiatric impairments is of interest and may be due to the fact that these services are included in other services. For example, services to clients with Attention Deficit Disorder may fall under other broader and overlapping categories such as "neurological impairment" or "developmental delays and scholastic difficulties". It may also indicate that occupational therapy services to this client group are not adequate and the result may warrant further investigation. The result may also indicate a correlation with the findings of the National Survey of Mental Health and Wellbeing (Woolbridge, 2000), discussed in Chapter 2, Mental Health Services, regarding the limited number of young people with mental health disorders who receive professional help. Further correlations with other service delivery aspects will be made in later sections of this chapter.

5.1.2.1.2 Geographical Area covered by Service

Participants represented services in the Adelaide metropolitan area, as well as urban, rural and remote areas in South Australia. Participants had more than one choice in this area. Data indicated that the majority of the services cover both urban and rural areas (9 of the 14 respectively), which include services to towns in regional areas. Metropolitan areas were covered by the second largest proportion of services (7 of the 14 participants), which include services in city areas. Remote areas are covered by the third largest number of services (5 of the 14 participants) and include areas of low density, which are geographically isolated. Most services cover areas of more than 100 kilometres (8 of the 14 participants) with two each covering 15–30 kilometres, 30–50 kilometres, and 50–100 kilometres respectively. This result is discussed in more detail later in this chapter.

5.1.2.2 The Strategies employed to deliver Services

Figure 1 in Chapter 2 provided the background for incorporating questions related to the service delivery system that need to be taken into account when considering appropriate service delivery models. Questions were included to provide data on aspects of services that relate to: the strategies employed by services, including the occupational therapy approaches and models used; the service delivery models employed; staffing and staffing strategies; the use of waiting lists; and the main venues of service delivery. These aspects formed the basis of understanding the internal factors influencing service delivery, including problematic issues.

5.1.2.2.1 Occupational Therapy Approaches and Models used

Table 18 depicts the occupational therapy approaches and models used (refer Appendix C for the questionnaire, which includes the definitions of terminology used).

The occupational therapy approaches / models most commonly used by the services were (in order of prevalence): sensory integration, the neuro-development approach, the

family-centred approach, and group work. Table 19 presents extracts from Cross Tabulations between client type (clients with development delays and scholastic difficulties) and occupational therapy approaches / models used. The models with the highest associations are presented. Participants had more than one choice in both these categories.

Table 18 Occupational Therapy Approaches and Models used in Practice

Approach / Model used	Number of Services (More than one Choice per Participant)	Percentage
Sensory integration	12	100
Neuro-development approach	11	79
Family-centred approach	11	79
Group work	10	71
Biomechanical approach	8	57
Behaviour modification	8	57
Rehabilitative approach	8	57
Client-centred approach	8	57
Cognitive-perceptual approach	7	50
Community-based approach	6	42
Canadian occupational performance model	5	35
Cognitive disability model	4	28
Activity therapy	3	21
Assistive technology	2	14
N=14		

Table 19 suggests that all the approaches mentioned previously are often used in service delivery to children with development delays and scholastic difficulties, since they are the main client group (refer to the result in Table 17). The literature supports the use of these models with this client group (Stephens & Tauber, 1996; Clark, Maillloux & Parham, 1989). Noteworthy is the intensive and specialised nature of the application of sensory integration and neuro-development intervention (Clark, Maillloux & Parham, 1989). Further discussion relating to these results follows later in this chapter.

Table 19 Cross Tabulation: Clients with Development Delays and Scholastic Difficulties by Occupational Therapy Approaches / Models used

	Sensory Integration	Neuro-development	Family-centred	Groups
Clients with development delays and scholastic difficulties	86%	79%	79%	71%
N=14				

The community-based approach was used by fewer than half of the respondents (refer Table 18). Services that used the Canadian Occupational Performance Model, the cognitive disability model, activity therapy, and assistive technology, were in the minority. Noteworthy is the use of the family-centred, group work and client-centred approaches by more than half of the respondents. These three approaches correspond with some of the current international trends in early intervention service delivery, as discussed in Chapter 2, while the limited use of the community-based model did not correspond with the international trend in the use of this model.

5.1.2.2.2 Service Delivery Models employed

Table 20 indicates the results of this section (refer Appendix C for the definitions of the terminology used). Respondents had a choice of more than one response. As discussed previously, it was established that there is an overlap between categories, and participants were asked to indicate the categories that describe their services best. In addition, when considering these results, it should be taken into account that qualitative data indicates that participants interpret certain terminology associated with service delivery models differently. Even within the given boundaries and guidelines provided in the definitions of these terms, perceptions vary regarding the application of these service delivery models. The team approaches, and the consultation and case management models in particular have been found to differ as regards to the interpretation of services. The difficulties in distinguishing between team approaches have been documented in the literature, for example Bird (1990) illustrates the team approaches on a continuum rather than as discrete and separate entities. In addition,

negative connotations seem to exist regarding the use of certain terminology. For example, while many services described the use of informal case management and consultation models during the focus group discussions and interviews, services do not indicate that they are using it, or that they are considering using it, due to negative perceptions which seem to exist amongst clinicians regarding these models.

Table 20 Service Delivery Models currently employed by Services

Service Delivery Model	Number of Services (More than One Choice per Participant)	Percentage
Consultation	14	100
Groups	13	93
Monitoring	12	86
Direct, one-to-one	12	86
Inter-disciplinary	11	79
Multi-disciplinary	6	43
Trans-disciplinary	6	43
Case management	4	29
N=14		

Participants indicated that the most prevalent model used was consultation, which was used by all services. Next, groups were used most commonly, followed by the monitoring and direct, one-to-one service delivery models, and fourthly, the inter-disciplinary model. These models are supported by the literature as being appropriate for paediatric service delivery (Case-Smith, Allen & Pratt, 1996; Dunn, 1988). Fewer than half of the respondents indicated that their services used the multi-disciplinary, trans-disciplinary and lastly, the case management models. Noteworthy is that the traditional models of direct, one-to-one and group work feature strongly, with lesser emphasis on the team-based models as well as the case management model.

The use of the direct, one-to-one model and the group models correspond with the only other documented Australian paediatric service delivery survey in occupational therapy.

In the study of Rodger, Springfield & Maas, documented in two publications (Rodger, Springfield & Maas, 1993; Springfield, Rodger & Maas, 1993), respondents indicate the use of these models as being used most frequently amongst other models. Participants wished to maintain these intervention models. These results suggest that therapists value the principles of individualisation and intensity of intervention, which these models offer. As mentioned in Chapter 2, the National Research Council and Institute of Medicine (2000) supports the use of individualised, well-designed and -implemented programs. These results correspond with the intensive nature of services suggested in the use of the habilitation, remediation, sensory integration, and neuro-development frameworks. The average number of models indicated by the participating services was six, with a range from eight models used by one service to three models used by two services. This may indicate the complex nature of service delivery within these services.

Table 21 illustrates extracts from Cross Tabulations between service delivery models employed and occupational therapy approaches / models utilised. The service delivery models with the highest association with occupational therapy approaches / models are presented. Participants had more than one choice in both these categories. The table illustrates the use of the consultation model with sensory integration and family-centred models. These results indicate the inclusion of families in the consultation process and that therapists find the application of sensory integration principles to be appropriate within a consultation model. It further illustrates the use of the monitoring models and the direct, one-to-one model with the neuro-developmental and sensory integration approaches. This illustrates the specialised nature of these approaches and that monitoring of these applications is required, as described by Clark, Mailllous and Parham (1989) and Dunn (1988).

Table 21 Cross Tabulations: Service Delivery Models employed by Occupational Therapy Models / Approaches used

	Sensory Integration	Neuro-development	Family Centred
Consultation model	86%	79%	79%
Monitoring model	92%	92%	75%
Direct, one-to-one model	92%	92%	75%
N=14			

5.1.2.2.3 Staffing

In further informing the description of the internal factors related to the service system that influence service delivery, questions were included with regard to the number of occupational therapists employed; the number of Full-time Equivalents per service; the client-therapist ratios, and the staffing strategies employed. Table 22 depicts the Full-time Equivalents and the number of occupational therapists employed.

Table 22 Full-Time Equivalents of Occupational Therapists and Number of Occupational Therapists employed

Respondent	1	2	3	4	5	6	7	8	9	10	11	12	13	14
Number of occupational therapists employed	1	30	2	3	4	2	1	1	1	1	3	8	1	1
Full- time equivalents (1= Full Time)	1	9.8	1.8	1.9	4	1.7	0.5	0.4	1	0.5	2.5	5.7	1.8	0.7
N=14														

The average number of occupational therapists employed by the services was 4, ranging from 30 therapists employed by 1 service to 6 services having 1 therapist each.

Occupational therapy assistants were utilised by 12 of the 14 services. Noteworthy is the fact

that half of the respondents are sole therapists who are responsible for service delivery in paediatrics.

The total number of Full-time Equivalents indicates that 6 of the 14 services have a therapist or therapists working full time or less. In the comments section of this question, 7 of the 14 services mentioned that understaffing was a consequence of their limited resources. Four services indicated a lack of time and 2 indicated heavy workloads as problematic issues. This result suggests that problematic issues impact on service delivery, especially when considering the result related to client–therapist ratios. The majority of services (12 out of the 14, which is 86%) have a client–therapist ratio of more than 25 clients per therapist. One service indicated a ratio of 12 to 25 clients per therapist, and another a ratio of fewer than 12 clients per therapist. This indicates that, for a large proportion of these services, therapists have caseloads of more than 25 clients per therapist. When determining caseload sizes, many variables need to be considered (Johnson, 1996), one of which is the service delivery model employed. Due to the many models that services are using in combination, no direct interpretation can be made regarding this result. The high number of respondents indicating the highest ratio is however, noteworthy, especially when considering the number of services without full-time therapists. No concrete measurements in the literature have been found against which these results may be compared.

Table 23 presents extracts from Cross Tabulations between client–therapist ratio (particularly more than 25 per therapist) and service delivery models used. The service delivery models with the highest association with the ratio are presented. Participants had more than one choice when selecting service delivery models. The table indicates an association between a client–therapist ratio of more than 25 clients per therapist and the group and consultation models, suggesting that this ratio is frequently encountered in these models.

Table 23 Cross Tabulation: Client –Therapist Ratio of more than 25 per Therapist by Group and Consultation Models

	Group Model	Consultation Model
Client–therapist ratio of more than 25 clients per therapist.	94%	86%
N=14		

In order to obtain a description of the current staffing strategies that services have implemented and are using, and in light of problematic issues related to staffing shortages, participants were asked whether they were currently using certain staffing strategies. Participants were also asked whether they would consider using such strategies in the future (refer Appendix C for definitions of the terminology used). Table 24 illustrates the responses to this question.

Table 24 Number of Participants indicating the current Use of Staffing Strategies and Consideration of the Use of Staffing Strategies in the Future

Staffing Strategy	Current Use: Yes	Current Use: No	Current Use: Unsure	Total	Would conside using: Yes	Would consider using: No	Would consider using: Unsure	Total
Personnel substitution	7 (50%)	6 (43%)	1 (7%)	14 (100%)	8 (58%)	3 (21%)	3 (21%)	14 (100%)
Therapy assistants	5 (36%)	9 (64%)	0 (0%)	14 (100%)	13 (93%)	0 (0%)	1 (7%)	14 (100%)
Multi-skilling of support staff	5 (36%)	9 (64%)	0 (0%)	14 (100%)	11 (79%)	3 (21%)	0 (0%)	14 (100%)
Multi-skilling of therapists	12 (86%)	2 (14%)	0 (0%)	14 (100%)	14 (100%)	0 (0%)	0 (0%)	14 (100%)

The majority of respondents indicated that they were currently using multi-skilling of therapists. When this response is compared with the number of participants who utilise the inter-disciplinary team approach (i.e. 11 of the 14 participants), it may indicate confusion in the application of the terminology of the team approaches. Multi-skilling is more applicable to the trans-disciplinary approach (Springfield, Rodger & Maas, 1993), which did not feature

strongly (6 of the 14 participants indicated the use of the trans-disciplinary approach – refer Table 20).

Half of the respondents indicated that they were using personnel substitution and five that they were using multi-skilling of support staff. All participants indicated that they would consider multi-skilling of their therapists in the future, which may indicate an increased use of the trans-disciplinary model in the future. Most respondents indicated that they would consider the use of personnel substitution, therapy assistants and multi-skilling of support staff. This result indicates openness to the application of these strategies.

5.1.2.2.4 Waiting Lists, Waiting Time and Services to Clients on Waiting Lists

A further category of questions related to waiting lists was included in order to obtain a better picture of the factors impacting on service delivery. Ten of the 14 respondents indicated that they had waiting lists, while 8 of the 10 were not providing services to clients on the waiting list. The average waiting time for an assessment is 93 days (with the longest waiting time being 200 days, and the shortest being 7 days), while the average waiting time for intervention is 110 days. Eight out of the 10 respondents indicated that they felt that services to clients on waiting lists were inadequate. Rodger, Springfield and Maas (1993) found the average waiting time for intervention to be 4 weeks, while this study has found an average waiting time of 110 days (22 working weeks), which is significantly higher than that in the Rodger, Springfield and Maas survey. These results suggest problematic issues related to service delivery with regard to waiting lists for services.

5.1.2.2.5 Main Venues of Service Delivery

Respondents were asked to indicate the percentage of services delivered at various venues. Fourteen participants completed this question, and indicated that most of their services were delivered at organisations' home bases (an average of 49%), followed by 25% that were delivered at educational facilities. Fourteen percent of the services were delivered in clients' homes, 8 % at organisations' satellite facilities, and 4% at community facilities.

Considering the question relating to the geographical area covered, in which 8 of the 14 respondents (57%) indicated an area in excess of 100 kilometres, it indicates that, on average, 49% of services provided by the organisations are structured to have clients travel to the home base of the organisation, rather than delivering services at settings closer to the client. It also indicates that most intervention (49% plus 8%, totalling 57%) occurs in clinical settings, i.e. at home bases and satellite facilities, rather than in the natural environment of the client. Intervention in natural environments was identified as an international trend in Chapter 2 and its use is advocated by various authors, such as Peck (1993), Wolery and Fleming (1993), Dunn (2000) and Gallagher (2000). This result correlates with the result in which fewer than half of the respondents (6 of the 14) indicated the use of the community-based approach. In addition, services indicated qualitatively during the questionnaire a desire to strengthen collaboration with the school system. Four of the respondents felt that collaboration with the school system was insufficient.

5.1.2.3 Perceptions regarding Service Delivery Aspects

In addition, participants were asked to indicate their perceptions regarding: the effectiveness of current service delivery models and resources; the need for change in the service delivery models employed; and the perceived difficulty in facilitating change.

5.1.2.3.1 Perceptions regarding Resources available for Service Delivery

The majority of respondents (86%, or 12 of the 14 participants) indicated that they perceived their resources to be inadequate, with 14% (2 of the 14 participants) indicating that they were adequate. Participants' comments included reference to limited financial and human resources, resulting in staff shortages, and limited new developments and resources for school visits. This result corresponds with the results of the study by Rodger, Springfield and Maas (1993), conducted in Queensland, Australia. It seems that limited resources for service delivery is an ongoing problem, also occurring in other states. This result suggests a problematic issue that impacts on service delivery.

5.1.2.3.2 Perceptions regarding the effective Use of Venues

Half of the 14 respondents indicated that they felt that their venues were effective and adequate, while the other half did not consider their venues to be effective. This result warrants further investigation, especially in view of the previous result, which is related to the limited use of the community-based approach, and the fact that most services are delivered in clinical settings. The result does indicate a half-half split in perceptions regarding this aspect of service delivery.

5.1.2.3.3 Perceptions regarding the effectiveness and adequacy of the Models

The majority of respondents (50%, or 7 of the 14 participants) indicated that they felt that the current service delivery models were effective and adequate, while 14 % (2 participants) were unsure. 36% (5 participants) felt that the service delivery models were inadequate and ineffective. This combined percentage (those unsure and those feeling that the service delivery models were inadequate), totalling half of the respondents, is noteworthy and suggests that further exploration of this issue is warranted. Of the 36% who felt that the service delivery models were inadequate, 4 of the 5 indicated a preference to use the inter-disciplinary and trans-disciplinary models more frequently.

5.1.2.3.4 Perceptions regarding the Need for Change in Service Delivery Models employed, and the perceived Difficulty in facilitating Change

Half of the respondents (7 of the 14 participants) indicated that they perceived a need for change, with 7% (1 participant) being unsure and 43% (6 participants) indicating that they did not perceive a need for change (the total number of respondents being 14). As mentioned before, half of the respondents indicated that they perceived current service delivery models to be effective and adequate, with 14% being unsure.

These seemingly contradictory results need to be interpreted with some caution since these perceptions were measured with close-ended questions and leave some room for differences of interpretation. In addition to this, the terms “effectiveness”, “adequacy” and

"change" are difficult to define and capture in a questionnaire. For example, some respondents may have interpreted the term as referring to major changes, while others may perceive it as referring to minor modifications to current ways of service delivery. These contradictory results may also indicate that participants have not fully explored these issues yet and may therefore respond to the two questions in a contradictory manner.

Of the 50% who indicated a need for change, 57% (4 of the 7 participants) foresaw difficulties in facilitating change. The area of difficulty that was most prevalent was in mobilising resources for action, followed by the ability of their upper management to see the need for change, and the ability of personnel to see the need for change. One service indicated that it foresaw difficulties in developing an action plan to meet its needs.

5.1.2.4 *Description of Occupational Therapy Management and Management Style*

Aspects related to the management of a service were discussed and are illustrated in Figure 1 (Chapter 2) and in Chapter 3, as being essential service elements that require consideration when services are considering changes to their service delivery models. Questions were included to elicit data pertaining to managers' time division; perceptions regarding management style; management training; perceptions regarding comfort in dealing with management tasks; and current management practices used. Responses to this section of the questionnaire varied, and not all 14 participants completed all the questions in this section. This is due to the varying structures of the services that were discussed in Chapter 3, Sampling Method. Although these therapists had senior and coordinating positions, some of the therapists who were not formally appointed as managers, did not feel comfortable to complete the management section.

5.1.2.4.1 Perceptions regarding Management Styles

Management styles that impact on effective change management in organisations were identified from the literature. Perceptions of respondents regarding their current

management styles were obtained by indicating, on a scale, their identification with each management style. Table 25 depicts their identification with each style. Eleven managers completed this section.

Table 25 Managers' Identification with Management Styles

Management Style	1: Strong Identification	2: Moderate Identification	3: Do not identify with Style
Predicting problems and developing strategies to prevent the problems from occurring	2 (18%)	9 (82%)	0 (0%)
Tendency to mostly react on and address problems that have occurred	1 (10%)	5 (45%)	5 (45%)
Tendency of manager to make most decisions at the management level; close supervision of personnel	0 (0%)	3 (27%)	8 (73%)
Tendency to involve personnel in decision-making processes, provides more freedom to personnel	9 (82%)	2 (18%)	0 (0%)
Focus on external changes and trends that influence services of the department, has a network of external contacts	4 (36%)	7 (64%)	0 (0%)
Focus on internal trends and changes in the department	4 (36%)	7 (64%)	0 (0%)
N=11			

Table 25 illustrates that the strongest identification was with the tendency to involve personnel in the decision-making process and provide freedom to personnel, i.e. a participative management style. Managers had a moderate identification with predicting problems, with focusing on external changes, and with focusing on internal trends. The strongest style with which they did not identify, was the tendency of the manager to make most decisions at the management level, i.e. a more authoritarian style. This result illustrates that managers identify strongly with the participatory management approach, which is very relevant when facilitating effective change (Marzalek-Gaucher & Coffey, 1991; Cope, 1981).

5.1.2.4.2 Management Training and Perceptions regarding Comfort with Management Tasks

The majority of managers (8 of the 13) did not have any training in management to assist them with their managerial duties, with 5 indicating that they did have training. Nine of the 14 indicated that they saw a need for further training in management, with 1 indicating no need for this, and 4 being unsure. Marzalek-Gaucher and Coffey (1991) indicate that commitment to training is one of the characteristics of change leaders. These results indicate an important need for management training within the occupational therapy profession, and a weakness in the readiness of managers to manage processes of change in their organisations. The results indicate that managers have an insight into their need for training.

Management tasks that relate to change management were identified from the literature and managers were asked how comfortable they felt with the different tasks. They were asked to indicate their level of comfort on a four-point scale. Table 26 indicates their comfort levels in relation to the different management tasks. Twelve participants completed this question.

Managers felt most comfortable with being innovative and facilitating change. This result indicates a sound base for facilitating change. They felt least comfortable with financial planning, indicating an area in which managers may require support. Other areas related to the implementation of change. Areas with which managers felt somewhat comfortable, are conflict management, negotiation, and the delegation of work. Strategic management and involvement in higher management ranged from "not comfortable" to "comfortable". These results suggest that while managers are comfortable with initiating processes of change by being innovative, they feel less comfortable regarding other aspects of implementing changes in the areas mentioned.

Table 26 Comfort Levels of Managers in relation to Management Tasks

Management Task	1: Not comfortable	2: Somewhat comfortable	3: Comfortable	4: Unsure
Conflict management	1 (8%)	8 (67%)	2 (17%)	1 (8%)
Negotiation	1 (8%)	8 (67%)	2 (17%)	1 (8%)
Financial Planning	5 (41%)	5 (42%)	2 (18%)	0 (0%)
Strategic Management	2 (17%)	4 (34%)	5 (41%)	1 (8%)
Facilitating Change	1 (8%)	4 (34%)	7 (58%)	0 (0%)
Delegating work	0 (0%)	7 (58%)	5 (42%)	0 (0%)
Being innovative	1 (8%)	1 (8%)	10 (84%)	0 (0%)
Involvement in higher management	2 (17%)	5 (42%)	5 (42%)	0 (0%)
N=12				

5.1.2.4.3 Current Management Practices used

Most departments (11 of the 14) functioned within a framework of a business or strategic plan and 8 employed strategic analysis, for example a SWOT analysis. Eleven operated according to a mission and goal. It was not clearly stated whether a distinction was made between the goals of the organisation and those of the department. In addition, 11 of the 14 regularly assessed the effectiveness of their service delivery, and all of them indicated that they included the input of clients in their service assessments. Eight of the 11 respondents included the input of referring agencies and 5 included the input of staff in the service assessments. Again, it was not clear whether occupational therapy services were included under each organisation's assessment procedures, or whether the services had their own

assessment procedures. According to Marzalek-Gaucher and Coffey (1991), and Vestal (1995), these are important organisational factors that impact on the effectiveness of change. These results suggest that the services have some service assessment, planning and goal-setting processes in place, which may serve to facilitate the process of change.

Managers were asked how much time they spent on certain management tasks and, in a separate question, how important each of the management tasks on which they spent their time, was. The data in Table 27 indicates the responses to the question relating to the actual time spent on management tasks and the respondents' perceptions of the importance of these tasks (ranging from 1 – "Not Important" to 7 – "Important"). The total rating for the perceived importance of the task was calculated as the total of the "Important" category (4 to 6 on the scale). The total rating for "Not Important" was obtained by totalling the "Not Important" category (1 to 3 on the scale).

Perceptions were divided regarding the importance of controlling. Results indicate that with some tasks, managers' time allocation corresponded well with their ratings according to the importance of the tasks. Managers devoted most of their time to planning and also rated it as the most important task. They devoted second most time on organisation and also perceived it to be the second most important, together with external relations, although they spent only 11% of their time on external relations. Monitoring the environment was perceived as being important (fourth in the order of importance), with 2% of time actually being spent on it.

Table 27 Actual Time spent on Management Tasks compared with perceived Importance of Tasks

Management Task	Actual Time spent (Percentage)	Rating according to Actual Time spent	Total for "Important"	Total for "Not important"	Rating according to Importance
Planning	32	1	12	0	1
Organisation	27	2	11	1	2
Leading	8	5	8	4	4
Controlling	6	6	5	7	5
Human resource management	14	3	9	2	3
External relations	11	4	11	1	2
Monitoring the environment	2	7	8	4	4
	Total = 100%				
N=12					

These results indicate that even though services indicated that they utilised strategic plans (as discussed previously in this section), managers did not spend a significant amount of time on monitoring the environment or building external relationships. Although managers indicated that they perceived these tasks to be important, they spent most of their time on clinical work, planning and organisation. Tasks related to keeping track of external changes are important in the process of change (Marzalek-Gaucher & Coffey, 1991; Bailey et al., 1991) and indicate that managers do not spend adequate time on these tasks.

5.1.2.5 Services' Approaches to Change

Table 28 illustrates the data obtained from the analysis of data provided by the first online focus group. It indicates the pre-set indicators, with the number of focus group statements that are identified for each indicator. Evidencing statements for each indicator are provided in Appendix L.

Table 28 Indicators and Number of corresponding Focus Group Statements with Evidence of each Indicator

Indicators	Total Number of Statements of both Country and Metropolitan Groups	Rank in Order of Prevalence (1 – most, to 6 -- least)
Critical reflection regarding current models.	45	1
Identification of the need for change in current service delivery models.	32	2
Identification of problems related to current service delivery models.	30	3
Openness to new ideas / alternative strategies and models.	30	3
Insight into the need for strategic planning, including the need to analyse external and internal environments of services.	27	4
Active participation in discussion.	27	4
Understanding the nature of the problem: insight into the deficiencies of current models of practice.	17	5
Motivation to learn, interest in information and attention given.	14	6

The table illustrates that participants were exploring the problematic issues during the focus group discussions – a high level of critical reflection and identification with problems was displayed, with both being important elements of the process of change (Marzalek-Gaucher & Coffey, 1991; Bailey et al., 1991). Participants illustrated openness to new ideas, an insight into the need for strategic planning, and most significantly, they identified with the need for change in current service delivery models.

Together with the results of the pre-intervention questionnaire, this phase may be described as a pre-change phase or the "unfreezing" phase, as identified by Lewin (1958 in Berger et al., 1980). Participants identified problematic issues regarding service delivery when prompted to do so in the pre-intervention questionnaire, and they explored these issues further in the first online focus group discussion. However, when asked directly in the questionnaire, respondents did not indicate that service delivery models were inadequate. Furthermore, the inconsistent result obtained in the questionnaire that half of the services indicated that they perceived a need for change in service delivery models, was strengthened by the finding regarding the need for change that was evident in the focus group discussions.

"Understanding the nature of the problem" featured second lowest in rating for the focus group, which may explain these inconsistent results and indicate that participants required further exploration and discussion of the issues.

5.1.3 Summary of Consolidated Results and Findings obtained in Phase 1

5.1.3.1 Service Delivery Characteristics

Table 29 provides an overview of the problematic service delivery issues identified during the Pre-intervention Phase, including the nature of the services and the strategies that services are using to cope with some of these issues. Items in the table are not presented in any particular order.

Table 29 Problematic Service Delivery Issues identified and Strategies employed

Nature of Services ↓	Problematic Service Delivery Issues identified ↓	Service Delivery Strategies employed ↓
Focus on intensive training and re-training of skills (refer discussion on Table 16). Intensive and specialised nature of services (refer discussion on Table 18). Service venues: Mostly home-based and satellite facilities (refer this chapter, Main Venues of Service Delivery)	Inadequate staffing levels (refer discussion on Table 22). Inadequate resources Long waiting lists and inadequate services to clients on waiting lists (refer this chapter, Waiting Lists). Services mostly provided in clinical settings (refer this chapter, Main Venues of Service Delivery). Vast geographical distances covered by services (refer this chapter, Geographical Area Covered by Service).	Use of consultation model (refer Table 20). Use of monitoring model (refer Table 20). Use of direct one-to-one and group models (refer Table 20). Multi-skilling of therapists (refer Table 24). Personnel substitution (refer Table 20).

The table illustrates the focus of services on intensive training and re-training of skills (i.e. the habilitation and remediation models) and the intensive and specialised nature of services (i.e. the sensory integration and neuro-development approaches), making services labour intensive and expensive. When considering the labour intensity of these services further, staffing levels are identified as being inadequate. In addition, resources have been found to be inadequate. Services that have long waiting lists and services to clients on waiting

lists are felt to be inadequate. It is evident that a conflict exists between the intensive and expensive nature of services, and the problematic issues of inadequate staffing and resources. At a Pre-intervention Phase, services are coping with some of these issues by using the consultation, monitoring, direct one-to-one, and group models. Johnson (1996) supports the use of consultation, monitoring and group models as time management strategies. In contrast to the issues identified, the one-to-one model is still used by many services and correlates with the intensive nature of the services. In addition, services utilise multi-skilling of therapists and personnel substitution, as recommended by Salvatori (1997).

The questionnaire also indicated that services are mostly provided in clinical settings – at home bases and satellite facilities of organisations, even though international trends are towards intervention in natural settings and despite vast geographical distances covered by services. When considering these issues, half of the respondents indicated a need for change in current service delivery models on the questionnaire and statements were prevalent regarding the need for change during the focus group discussions.

5.1.3.2 Services' Approaches to Change

Table 30 illustrates the characteristics of services in their general approach to change, as indicated during the Pre-intervention Phase. The table illustrates that, at the Pre-intervention Phase, services have characteristics that provide a sound base for facilitating change. Also indicated are some areas that may inhibit the processes of change. These areas are worth considering as recommendations for practice, which will be discussed in Chapter 6.

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Table 30 Characteristics of Services that relate to Approaches to Change

Characteristics that facilitate the Process of Change ↓	Characteristics that facilitate the Process of Change moderately ↓	Characteristics that do not facilitate the Process of Change ↓
Services utilise strategic / business plans and managers view strategic planning as important (refer this chapter: Current Management Practice used).	Managers' moderate identification with the management style of predicting problems (refer Table 25).	Limited time spent on external relations (refer Table 27).
Services have missions and goals (refer this chapter: Current Management Practice used).	Managers' moderate identification with the management task of focusing on external and internal trends (refer Table 25).	Limited time spent on monitoring the environment (refer Table 27).
Services engage in regular assessment of their services (refer this chapter: Current Management Practice used).	Managers' moderate identification with focusing on external changes (refer Table 25).	Managers' comfort level with regard to financial planning (refer Table 26).
Managers' participatory management style (refer Table 25).	Managers' comfort level with regard to the management task of negotiation (refer Table 26).	Managers' limited management training undertaken (refer this chapter: Management Training).
Managers' comfort level with regard to being innovative (refer Table 26).	Managers' comfort level with regard to delegating work (refer Table 26).	Difficulty in implementing change due to limited resources to facilitate change (refer this chapter: Perceptions regarding need for change and perceived difficulty in facilitating change).
Managers' comfort level with regard to facilitating change (refer Table 26).	Managers' comfort level with regard to conflict management (refer Table 26).	Difficulty in implementing change due to limitations in ability for upper management to see need for change (refer this chapter: Perceptions regarding need for change and perceived difficulty in facilitating change).
Managers displaying openness to new ideas (refer Table 28).		
Managers engaging in critical reflection (refer Table 28).		
Managers identifying problems related to service delivery (refer Table 28).	Managers' comfort level with regard to involvement in higher management (refer Table 26).	
Managers identifying the need for change in current service delivery models (refer Table 28).		

5.1.4 Evaluation of First Focus Group: Short Questionnaire

A short questionnaire was administered after the first online focus group discussion and served as an evaluation in terms of the clarity and appropriateness of information presented in the focus group discussion. Seven short questionnaires were returned after the focus group discussion, after participants were reminded to return them. The low response rate could be contributed to the limited time available to managers, and may indicate that they did not perceive participation in this part of the project as significant related to the other parts.

Participants were asked to rate each item regarding the quality of the information provided and the use of the communication medium. Participants were also asked how applicable the information was to their current settings. Figure 3 indicates the responses with regard to the items on a scale of one to five. "Use of Online Medium" was rated from 1, indicating "Very negative", to 5, indicating "Very positive". "Selection of Information" was rated from "Not appropriate at all" to "Very appropriate". "Layout of website" was rated from "Not clear at all" to "Very clear". "Clarity of Information" was rated from "Not clear at all" to "Very clear", and "Found to be worthwhile" was rated from "Not worthwhile at all" to "Very worthwhile" (refer Appendix I for the short questionnaire used and Appendix M for the raw data for this questionnaire).

In general, the ratings indicate that the majority of participants perceived the presentation of information to be appropriate and clear, the group to be worthwhile, and the experience of the online discussion to be positive. Results were mixed with regard to the application of information to their work settings. Three respondents indicated that it could be applied, two were unsure, another two indicated that it could not be applied, and one respondent indicated that she was looking forward to more discussion on this. A comment was made regarding the different contexts of services and that it was difficult to apply the information to all the different contexts. No further comments were included to indicate which aspects of the discussion were felt to be inapplicable.