

CHAPTER 4

RESULTS

Four out of the seven LSEN schools selected gave permission for the research to be conducted.

The structure of the school and work done by the occupational therapists varied greatly from school to school. Therefore a short description of each of the seven schools and the role fulfilled by the occupational therapist in each is presented in Appendix G. Schools 1, 4, 6 and 7 were used in the research.

The total number of records actually assessed by the researcher was 76. Although the planned number was 100 to 125 records this was not possible because:

- Only 4 schools were willing to participate in the research.
- The schools that did participate had fewer than 5 subgroups as the schools either did not have a Further Education and Training (FET) phase i.e. Grade 10, 11 and 12, a skills section or they did not store discharged learner's files.
- Records in the occupational therapy department were not kept for each learner in the school, but rather only for those learners receiving occupational therapy intervention at present.

Six questionnaires were completed by occupational therapists working at the schools. The two occupational therapists from school 7 completed one questionnaire together and did not complete a questionnaire individually.

4.1. STORAGE, DISTRIBUTION AND AMOUNT OF RECORDS REVIEWED

Files were kept in different locations in the various schools with no consistency in terms of where current and discharge files were stored.

Two main types of record keeping were used. In schools where there was one occupational therapist, use was made of a general school record keeping system

that was maintained by other staff members as well. Where there was more than one occupational therapist, records were kept in the occupational therapy department and contained more information regarding assessment and treatment. (Table 4.1)

Table 4.1 Storage of the files at each school

School	Number of OTs	Storage of Records	Type of Record kept by occupational therapist
School 1	3	Each occupational therapist kept their own learner files and the researcher had to contact each occupational therapist individually in order to gain access to the files. There was no system for filing discharged learner's files.	Some assessments as well as one-on-one treatment sessions were recorded.
School 4	1	The files were filed alphabetically in both the general record keeping system in the social worker's office as well as in the occupational therapist's office. The discharged learner's files were put alphabetically in boxes.	All contact with other professionals and interviews with the client were recorded as well as some assessments.
School 6	1	The files were stored in the nurse's office according to the class in which the learner was in. The discharged learner's files were put in a box in no particular order.	There was no evidence of the occupational therapist recording any information.
School 7	2	The files were filed alphabetically in the occupational therapist's office but the discharged learners' files were put in a box in no particular order.	Assessments and session evaluations of referred learners. Work assessments of learners in the vocational rehabilitation class.

All the schools had foundation phase, intermediate phase, senior phase and discharged learners' subgroups. Two schools had a Further Education and Training (FET) phase and skills phase subgroup. Only one school had a "learners' on leave" subgroup.

In table 4.2 the distribution and amount of records reviewed is shown. In schools where they did not have a subgroup it has been indicated with N/A. E.g. School 1 does not have an FET phase, skills phase or a learners on leave group. When there was a subgroup present, but the occupational therapists did not maintain any records for that subgroup it has been indicated by a "0". E.g. School 7 has an FET phase, but no occupational therapy records are maintained for any learners in this phase.

As can be seen in Table 4.2 the subgroup with the most records was the foundation phase. The subgroup with the least records was the FET phase.

Table 4.2. Distribution of records reviewed

	School 1	School 4	School 6	School 7	Totals
Foundation Phase	5	3	5	5	18
Intermediate Phase	4	4	5	0	13
Senior Phase	0	5	5	3	13
FET Phase	N/A	2	N/A	0	2
Skills Phase	N/A	5	N/A	5	10
Discharged Learners	0	5	5	5	15
Learners on Leave	N/A	5	N/A	N/A	5
Total	9	29	20	18	76

4.2. PERCENTAGE OF INFORMATION KEPT IN THE RECORDS

The researcher completed a checklist for each learner's file. If information was recorded the researcher marked "yes", if the information was not present the researcher marked "no". Figure 4.1 represents the percentage of records entered into each section of the checklist.

The records only scored high on general record keeping. With the exception of personal information, information occurred in less than 50% of the records.

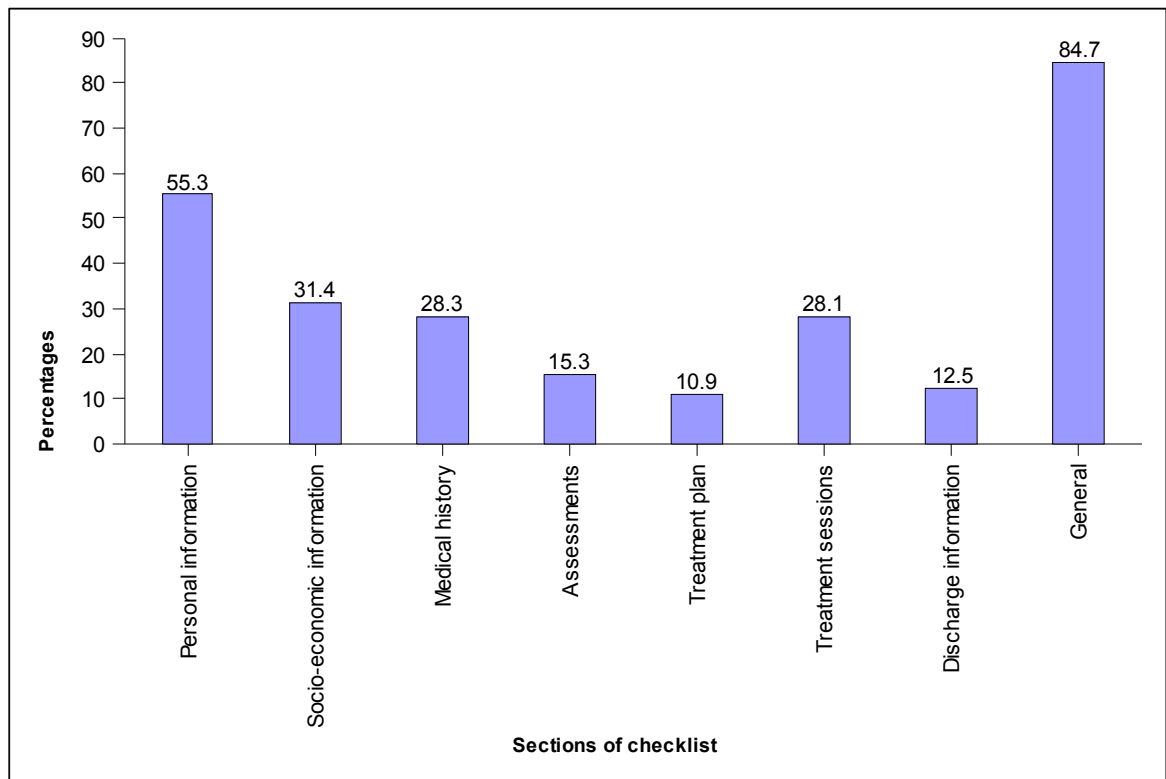


Figure 4.1. Percentage of information found in the records and entered into each section of the checklist

4.3. OCCUPATIONAL THERAPISTS VIEW OF WHAT INFORMATION IS IMPORTANT TO RECORD

After the occupational therapists had indicated on a four point scale what aspects of records were important to them percentages were calculated according to the importance of each item to be recorded. Therefore if all the occupational therapists indicated that “this information is most important to me”, then that item had a 100% level of importance. Figure 4.2 represents the percentage of the importance according to the occupational therapists of recording the items in each section of the questionnaire.

All aspects scored an importance rating of over 80% except the socio-economic status of the learner. The medical history and the discharge information were considered the most important.

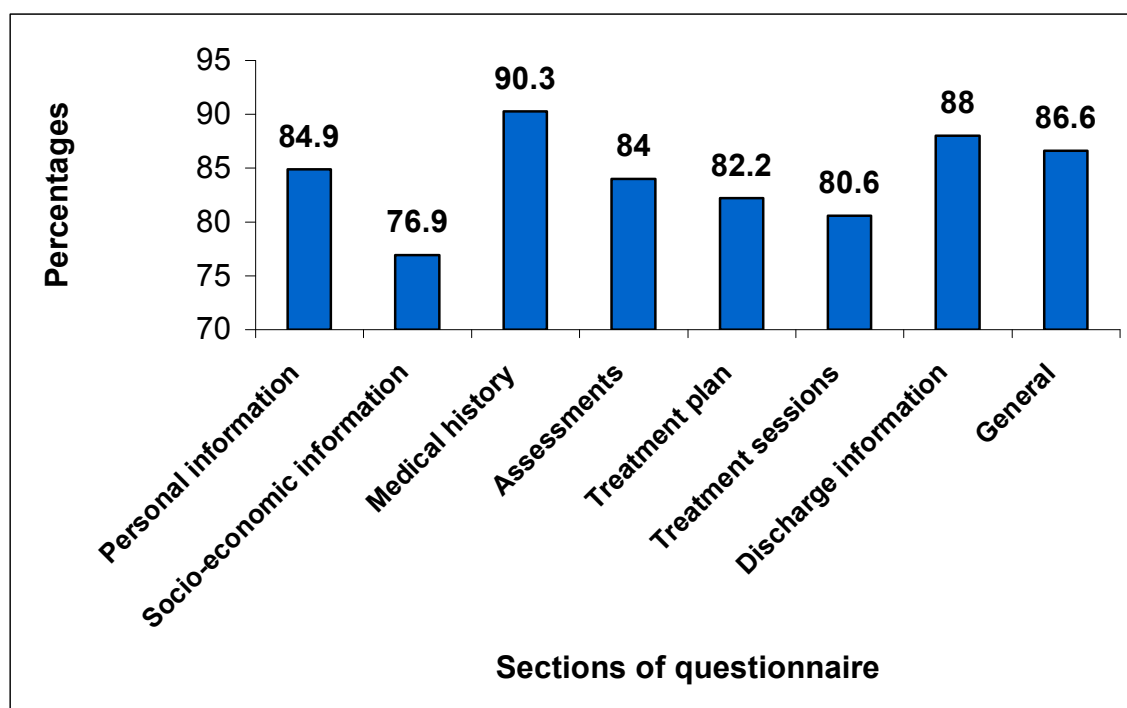


Figure 4.2. Percentages of what is important to clinical occupational

4.4. COMPARISON OF RECORDS ENTERED AND OCCUPATIONAL THERAPISTS' VIEWS OF WHAT ARE IMPORTANT

In each section the occupational therapist's view of what information is important to record is higher than the percentage of information that is recorded as assessed by the researcher.

The view of the occupational therapists regarding "general record keeping processes" was most similar to the researcher's assessment of records as the record keeping fulfilled the requirements in 84.7% of the records.

In all other sections there is a large discrepancy between what the occupational therapist's view of the importance to record data and the percentage of information that is recorded as assessed by the researcher. This can especially be seen in the sections socio-economic information, medical history, assessments, treatment plan, treatment sessions and discharge information. (Figure 4.3)

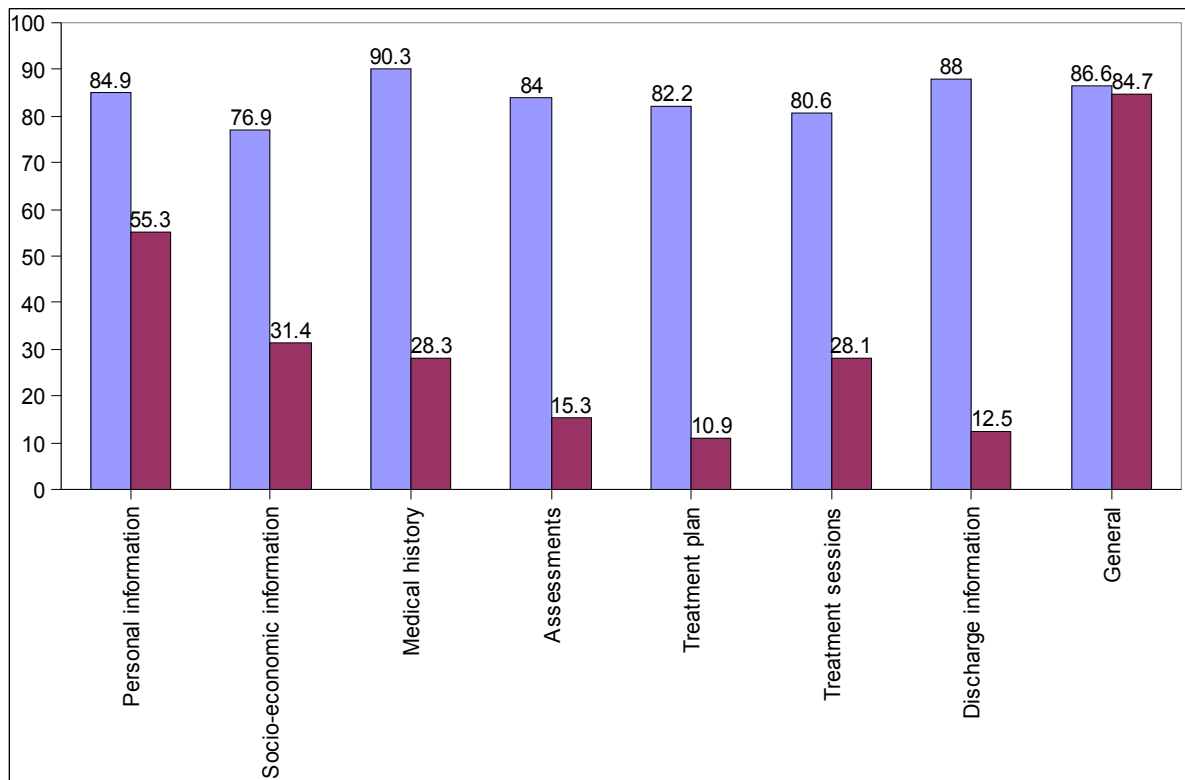


Figure 4.3. A comparison of the occupational therapists' view of which records are important and the actual records that are kept.

The greatest discrepancy occurred for the recording of treatment sessions, discharge information and assessment. The difference between what the therapists indicate is important in record keeping and what records are actually kept is highly significant at $p < 0.0001$.

There was little agreement or correlation between what occupational therapists view as important and what they actual record ($r = 0.16$)

4.5. COMPARISON OF DIFFERENT SECTIONS OF THE RECORDS

Each section of the records was considered in terms of the detail kept and the importance of this detail to the occupational therapists

4.5.1. Personal information

Personal information was recorded in 55.3% of the learner's files that were assessed by the researcher and were considered important to the occupational therapists for 84.9% of items.

Personal information records which are ranked according to the prevalence that the record was recorded (Table 4.3) included the following records:

Table 4.3. Percentage of details recorded in Personal Information

Detail Recorded	Recorded	Important to record
Name	100%	100%
Date of birth	97.4%	100%
Gender	82.9%	95.8%
Referred by whom to LSEN school	80.3%	83.3%
Address	77.6%	87.5%
Reason for referral to LSEN school	76.3%	87.5%
Emergency information / contact numbers	67.1%	95.8%
Home language	65.8%	91.5%
Name of occupational therapist	63.2%	79.2%
Religion	43.4%	66.7%
Grade / phase	42.1%	95.8%
Discipline and consequences	27.6%	79.2%
Population group	25%	54.2%
Interests	23.7%	79.2%
Academic results at the end of each grade / phase	7.9%	79.2%
Extra-mural participation	3.9%	83.3%
Total	55.3%	84.9%

Occupational therapists indicated that this information was important to them between 54.2 % and 100% of the time. The correlation $r = 0.62$ ($p = 0.02$) between what is recorded and what occupational therapists indicate is important to record in this section indicates some agreement as the records for personal details like name, age and gender being recorded 100% ,97.4% and gender 82.9% of the time in the files respectively. The records for which there was the largest discrepancy included extra-mural participation and academic results.

4.5.2. Socio-economic information

Socio-economic information was recorded in 31.4% of the files assessed by the researcher.

Table 4.4. Percentage of details recorded in Socio-economic Information

Detail Recorded	Recorded	Important to record
Information on who learner lives with	51.3%	95.8%
Relevant client history e.g. orphaned, father imprisoned etc.	40.8%	87.5%
Parent information:	37.4%	83.3%
● name	67.1%	91.7%
● contact numbers	51.3%	100%
● occupation	44.7%	62.5%
● education	15.8%	70.8%
● medical / disability history	7.9%	91.7%
Disability / child care dependency grant information / trusts / road accident fund information	27.6%	50%
Type of dwelling and ownership	23.7%	70.8%
Siblings:	19.6%	69.8%
● age	40%	66.7%
● gender	25.7%	66.7%
● education	7.1%	66.7%
● medical history	5.7%	79.2%
Total	31.4%	76.9%

The socio-economic information recorded is reflected in Table 4.4 and is ranked according to the prevalence that the record was recorded.

There were 6 cases where the learner was an only child. Therefore these files were excluded when working out the percentages for siblings.

Contact information and where the learner lived was only available in half the records reviewed.

76.9% of the items that formed part of socio-economic information were considered important for the occupational therapists. There was little agreement between what was recorded for this section and what occupational therapists viewed as important to record with a correlation of $r = 0.39$. The records that showed the most similar results were concerning disability / child care dependency grant information / trusts / road accident fund information.

4.5.3. Medical history

Medical history was recorded in 28.3% of the files assessed by the researcher.

Table 4.5. Percentage of details recorded in Medical Information

Detail Recorded	Recorded	Important to record
Diagnosis	64.6%	100%
Birth history	32.9%	91.7%
Developmental milestones	30.3%	83.3%
Onset of diagnosis	27.1%	95.8%
Illnesses	22.4%	87.5%
Present health status	21.1%	95.8%
Pregnancy history	19.7%	83.3%
Operations	18.4%	91.7%
Allergies	18.4%	83.3%
Total	28.3%	90.3%

Medical history includes the following records, which are ranked according to the prevalence (Table 4.5.) that the record was recorded: There were 28 cases where the learner did not have a medical diagnosis. Therefore these files were excluded when working out the percentages for diagnosis and onset of diagnosis.

90.3% of the items that formed part of medical history were considered important for the occupational therapists although the slightly higher correlation ($r = 0.59$) indicated that in this section what is being recorded is what occupational therapists view as important to record. The records for which there was the largest discrepancy include operations and present health status.

4.5.4. Assessments

Assessments were recorded in 15.3% of the files assessed by the researcher. Assessments include the following records, which are ranked according to the prevalence (Table 4.6) that the item was recorded:

Other assessments that were used by the occupational therapists, but were not included in the original checklist were: visual motor integration, draw a man, sensory profile, work history, emotional intelligence, body image, basic concepts, awareness and insight into disability.

The date of the assessment was the detail that was recorded most often at 34.2% of the time (Table 4.6).

84% of the items that formed part of assessments were considered important for the occupational therapists. There is no correlation between what occupational therapists view as important to record and what is actually recorded in the records when it comes to the details of assessment. ($r = 0.01$)

Table 4.6. Percentage of details recorded in Assessment Information

Detail Recorded	Recorded	Important to record
Dates of assessments	34.2%	95.8%
Recommendation regarding placement	27.6%	91.7%
Assessment methods reported in full:	25.7%	89.6%
• non-standardised tests	31.6%	83.3%
• standardised tests	19.7%	95.8%
Identify level the learner is currently at	18.4%	100%
Referral information for occupational therapy intervention	17.1%	100%
Interviews:	16.2%	91.7%
● with the learner	32.9%	95.8%
● with the parents	13.2%	91.7%
● with the referring teacher	2.6%	87.5%
Assessment of:	14.6%	79.6%
• emotional / behaviour problems	30.3%	87.5%
• perception	19.7%	87.5%
• gross motor abilities	13.2%	87.5%
• functional abilities	13.2%	91.7%
• fine motor abilities	10.5%	87.5%
• corresponding problems outlined	10.5%	75%
• cognition	9.2%	87.5%
• sensory awareness	5.3%	87.5%
• speech and language	2.6%	87.5%
● other assessments	31.6%	16.7%
Screening	14.5%	70.8%
Pre-admission assessments	5.3%	87.5%
Identifying obstacles	2.6%	83.3%
Discrepancies between a learner's performance and other's expectations	1.3%	58.3%
Teacher's expectations	0%	79.2%
Total	15.3%	84%

Aspects such as information regarding referral information and pre-admission assessments, speech and language assessments, sensory awareness, an interview with the referring teacher, identifying obstacles and the level the learner is currently at all show a difference of above 80 % between what is recorded and what is considered to be important. Thus there is little information about the learner’s performance prior to admission to the LSEN School in the records.

When the records of detailed assessments were analysed it was found that very few records of assessments were documented in any area even though all of these were considered important by the occupational therapists. (Figure 4.4)

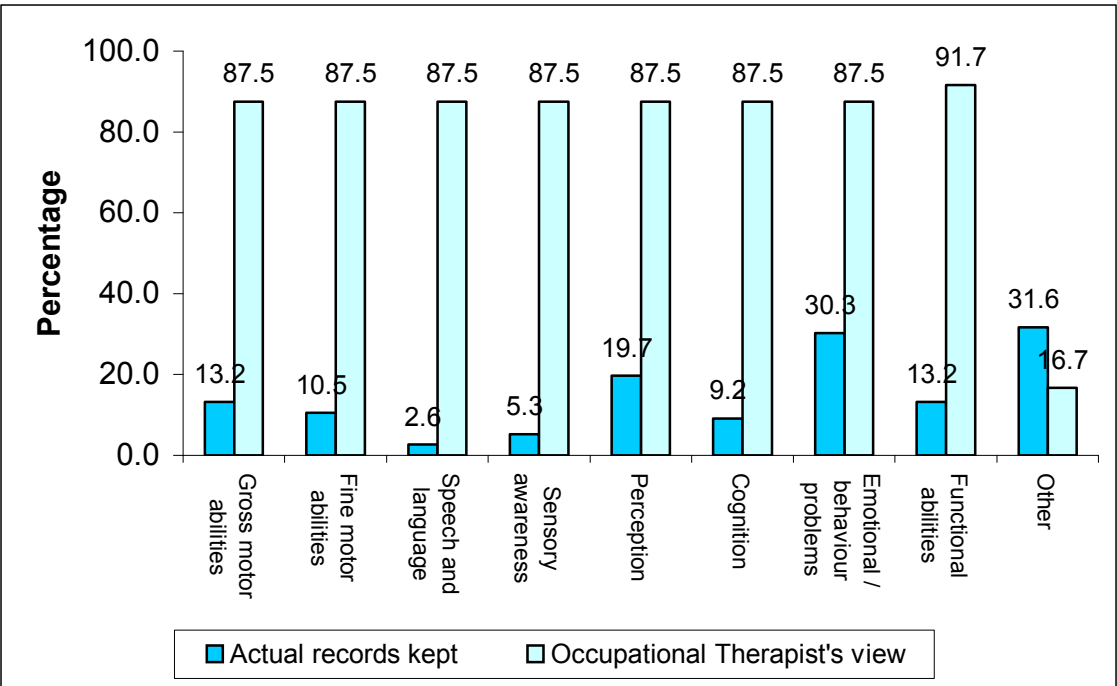


Figure 4.4. A comparison of the occupational therapists’ view of which assessments are important and the actual assessment methods that are recorded.

The type of assessment for which there were the largest discrepancies was speech and language assessments and sensory awareness assessments. The type of assessment that showed the most similar results was emotional / behavioural assessments.

4.5.5. Treatment plan

Treatment plans were recorded in 10.9% of the files assessed by the researcher.

Table 4.7. Percentage of details recorded in Treatment Information

Detail Recorded	Recorded	Important to record
Interventions clearly and logically outlined	40.8%	83.3%
Determination of the most effective types of service delivery	28.1%	81.9%
• Direct	47.4%	87.5%
• Consultation	23.7%	79.2%
• Indirect (monitoring)	13.2%	79.2%
View of client	25%	83.3%
Collaboration with other professionals	23.7%	87.5%
Problem areas identified	18.4%	95.8%
Annual reports	13.2%	79.2%
Contribution to IEDP	7.9%	70.8%
Outcomes, goals and objectives:	5.7%	81.5%
• goals	19.7%	91.7%
• objectives	13.2%	91.7%
• outcomes	2.7%	87.5%
• goals are broader than objectives	2.7%	70.8%
• client's knowledge and agreement of goal	1.3%	79.2%
• time scales and review dates	0%	83.3%
• are goals written in educational terms	0%	66.7%
Client's personal aims	5.3%	87.5%
After completion of treatment plan:	4.1%	87.5%
• outcome of treatment	7%	95.8%
• outcomes correspond with goals	7%	79.2%
• progress records	2.3%	87.5%
• reasons for goals not obtained	0%	87.5%
Strengths identified	3.9%	83.3%
Equipment used during sessions	2.6%	83.3%
Provision and adaptation of equipment	2.6%	83.3%
Home programs and user satisfaction – surveys to parents, students and staff for their opinions	0%	70.8%
Total	10.9%	82.2%

There were 33 cases where the client had not yet completed the treatment plan. Therefore these cases were excluded when working out the percentages.

Treatment plans include the items seen in table 4.7 which are ranked according to the prevalence that the record was recorded:

The occupational therapists considered 82.2% of the items that formed part of the treatment plan as important. Although the correlation between what it is important to record in treatment plans and what is actually being recorded is better than for assessment it is still low at $r = 0.32$.

The records for which there was the largest discrepancy included recording of outcomes, time scales and review dates, learner's personal aims, outcome of treatment, reasons for goals not obtained, progress records, provision and adaptation of equipment and equipment used. The records that showed the most similar results were interventions clearly and logically outlined and recording direct interventions.

4.5.6. Treatment sessions

Treatment sessions were recorded in 28.1% of the files assessed by the researcher.

Treatment sessions include the following records, which are ranked according to the prevalence that the record was recorded (Table 4.8)

The correlation between what was recorded for treatment sessions and what occupational therapists view as important to record was $r = 0.62$ with therapists identifying 80.6% of the items that formed part of the treatment sessions as important indicating a higher agreement for this aspect between the two factors.

The records for which there was the largest discrepancy included time and / or duration of session, group sessions and ongoing re-evaluations. The records that showed the most similar results were individual sessions, activities used during session, amount of sessions recorded per year and attendance.

Table 4.8. Percentage of details recorded in Treatment Sessions

Detail Recorded	Recorded	Important to record
Date of session	44.7%	95.8%
Amount of sessions recorded per year	44.7%	70.8%
Individual sessions	43.4%	91.7%
Attendance	39.5%	83.3%
Outcome of session	30.3%	87.5%
Behaviour during session	27.6%	87.5%
Activities used during session	27.6%	75%
Performance of activities	25%	79.2%
Session aims	22.4%	79.2%
Ongoing re-evaluations	21.1%	75%
Group sessions	9.2%	79.2%
Time and / or duration of session	1.3%	62.5%
Total	28.1%	80.6%

4.5.7. Discharge information

Discharge information was recorded in 12.5% of the files assessed by the researcher. Discharge information is represented in Table 4.9 and is ranked according to the prevalence that the record was recorded:

Table 4.9. Percentage of details recorded in Discharge Information

Detail Recorded	Recorded	Important to record
Discharge report	26.3%	70.8%
Discontinuing occupational therapy	15.8%	86.7%
Reason for discontinuing occupational therapy	26.3%	87.5%
Client's status at the end of occupational therapy intervention:	13.2%	86.5%
● functional status	26.3%	91.7%
● social status	26.3%	83.3%
● physical status	0%	83.3%
● psychological status	0%	87.5%
Leaving school	13.5%	82.1%
Reason for discharge	26.3%	83.3%
Client's status at discharge:	13.2%	85.4%
● functional status	26.3%	87.5%
● social status	26.3%	87.5%
● physical status	0%	79.2%
● psychological status	0%	87.5%
Follow-up information after discharge	10.5%	66.7%
Details of placement after discharge	5.3%	83.3%
Changes between initial and current status of functional ability	0%	91.7%
Deficits with regards to performance areas and components	0%	70.8%
Discharge plan	0%	79.2%
Total	12.5%	88%

As only 19 files assessed by the researcher were of learners that have been discharged, these 19 files were used to determine the percentages.

The records for which there was the largest discrepancy included functional and psychological status at end of occupational therapy intervention, psychological status at discharge and changes between initial and current status of functional ability. The record that showed the most similar results was the provision of discharge reports.

88% of the items that formed part of the discharge information were considered important for the occupational therapists. The correlation between what is recorded and what clinical therapists feel it is important to record is low ($r = 0.14$).

4.5.8. General record keeping

General observations of good record keeping processes were recorded in 83.4% of the files assessed by the researcher and were considered important to the occupational therapists for 97.4% of items.

General observations of good record keeping processes included the following observations, which are ranked according to the prevalence that they were recorded (Table 4.10)

The item “Use of slang / colloquialisms” was not included in the statistical analysis as it caused confusion for some of the occupational therapists. One of the occupational therapists indicated under “other” that “Knowledge of storage procedure” was important to consider.

The records for which there was the largest discrepancy included the ease with which items can be located within the records of each section. The records that

showed the most similar results were the use of abbreviations, ease with which to file the records and good storage facilities.

Table 4.10. Percentage of aspects reviewed in General record keeping

Detail Recorded	Recorded	Important to record
Confidential	100%	95.8%
Legible handwriting	100%	79.2%
Access	100%	89.6%
• ease with which to file patient records	100%	91.7%
• ease with which to locate patient records	100%	87.5%
Use of abbreviations (should be explained in full the first time that they are used in OT records)	88.2%	83.3%
Good storage facilities	75%	87.5%
Disposed confidentially	73.7%	91.7%
Is it easy to locate items within the records of each section	61.8%	87.5%
Would records be understood by people who are not health professionals?	61.8%	75%
Total	84.7%	86.6%

This is the only aspect where a negative correlation was found in that the records scored higher than the importance of these aspects as indicated by the therapists ($r=-0.23$).

There was also no significant difference between what was done and what was considered important for general record keeping $p = 0.33$. There was a significant difference for all other aspects ($p < 0.001$).

4.6. SUMMARY

A statically significant discrepancy was found between the records kept by occupational therapists working in LSEN schools and those records that they view

as important to keep. This was found for all aspects including personal information, socio-economic information, medical history, assessments, treatment plan and treatment sessions, and discharge information. The agreement between what was considered important and what was actually recorded varied when correlated from 0% to 62% ($r = 0.0 - 0.62$)

The only section that presented no statistically significant difference was general record keeping where the results indicate that the percentage of what is done is actually higher than the importance placed on this by occupational therapists.