CHAPTER CONTENTS

6

Assessment

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INTRODUCTION

Assessment is an integral part of the occupational therapy process. An initial assessment is used to evaluate the client's strengths, identify problem areas, determine whether or not occupational therapy intervention is appropriate and establish a database prior to beginning programme planning. Ongoing assessments show any changes that have taken place during treatment and demonstrate when goals have been reached. Later assessments provide a picture of residual problems, which can be measured against the client's life demands in order to make recommendations about discharge and to plan follow-up.

Assessment is measurement of the quality or degree of the various factors in a situation or condition. In clinical practice it is used to measure the assets and deficits of the client that relate to his referral for therapy. The process of assessment is invoked when a client is referred to the occupational therapist because some change is judged to be necessary in the person's situation.

Assessment is not something that is done to the client. It involves the client's active cooperation, both in providing information and in helping to interpret it.

This chapter will discuss the part that assessment plays in the occupational therapy process, what is assessed, methods of assessment and how to determine the validity of results.

THE ASSESSMENT PROCESS

The process of assessment, as shown in Figure 6.1, relates to the occupational therapy process as a whole.

Assessment techniques are designed to work within particular theoretical perspectives or frames of reference. When assessing clients we do not take account of every factor in their situation, rather, we select certain factors as being important, depending on our philosophical and theoretical bias.

INITIAL ASSESSMENT

Initial assessment can be described as the art of defining the problem to be tackled or identifying the goal to be achieved. When a referral is received, the first step in the occupational therapy process is to collect and organise information about the client from a variety of sources in order to plan treatment effectively.

The initial assessment has four main functions:

1. It gives the therapist an opportunity to judge whether or not the client will benefit from

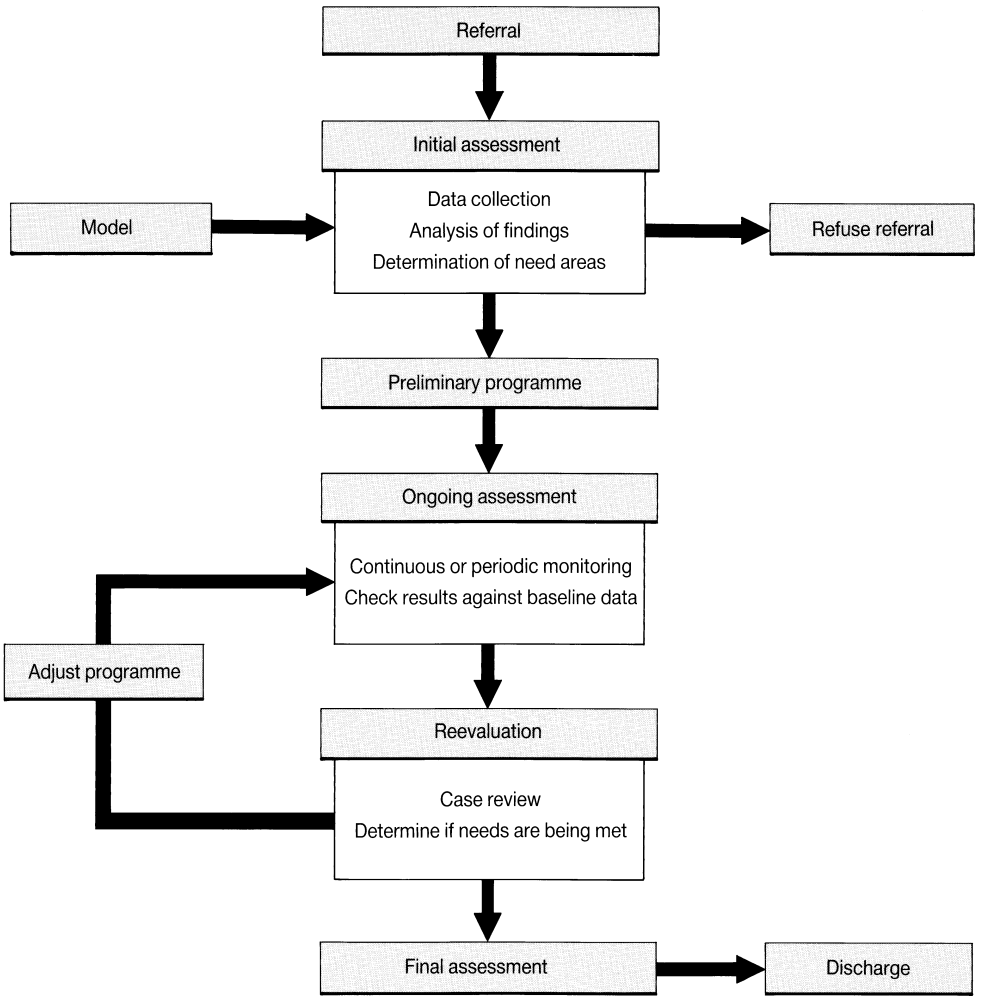

Figure 6.1 The assessment process.

occupational therapy intervention (screening).
2. It provides an opportunity to begin to establish rapport and elicit the client's interest and cooperation.
3. It gives a picture of the client's overall functional ability.
4. It produces a database.

Methods of data collection will be discussed in more detail in the section on methods of assessment.

Recording the results of investigations not only provides a baseline from which to measure change, but is also the starting point for interpretation. Methods of recording data are discussed in Chapter 8. The process of organising information, which should be carried out as far as possible with the active cooperation of the client, is used to:

- produce a list of problems and strengths
- identify goals of treatment
- suggest strategies and methods of intervention.

This process is part of treatment planning and is described in more detail in Chapter 7.

Screening referrals

The outcome of an initial assessment may be a decision *not* to provide an occupational therapy programme. The main reasons why this decision might be taken are as follows:

- The client's problem does not come within the domain of concern of the occupational therapist.
- The client could not benefit from occupational therapy intervention at this particular time (for example, a person with alcoholism needs to acknowledge that he has a drink problem before he can benefit from intervention).
- The resources of the department cannot meet the client's needs at this particular time.

Occupational therapy intervention only contributes directly to the treatment process when the programme is based on an assessment procedure that clearly indicates the need for such intervention (Gillette 1968).

Establishing rapport

Establishing a rapport with the client in this initial meeting is important to the client–therapist relationship. It can take a great deal of courage for someone to admit he needs help and the experience of attending a hospital or clinic can be very traumatic, particularly if it is a first admission. Older clients may be distressed by having to share their difficulties with a young person and may resent being asked to carry out activities if they cannot see their point. The therapist needs to appreciate these feelings and not feel personally threatened if a client is uncooperative at first.

The essential ingredients in establishing rapport with a client are as follows:

- *Respect* for the person, whatever the problems are. The client is a person first, and a client only temporarily.
- *Empathy*. It is not possible to like everyone we come into contact with, but the therapist should be able to empathise with most of the problems encountered. If there is a real personality clash that cannot be overcome with help from the supervisor, then it may be advisable to pass the client to another therapist.
- *Honesty* on the subject of what occupational therapy is about and what it can offer. It may be tempting to promise great results or to try to sound mysterious and potent, but, in the long run, full cooperation can only be engaged if the client understands the therapeutic process and feels in control.

Analysing function

Function has been defined as 'a person's ability to perform those tasks necessary in their daily life' (Punwar 1994). Occupational therapists consider the activities that the person wants to do, the activities that are necessary and those that are expected of him. The part of the assessment process which looks at how the individual

functions in the normal range of daily life activities is called functional assessment or functional analysis.

Functional analysis is a wide-spectrum assessment that allows the therapist to identify the client's strengths, problems, sociocultural environment and personal view of life before beginning more focused assessments of particular aspects of function. Mattingly & Fleming (1994) described functional analysis as an important part of the occupational therapist's whole-person approach:

> The functional assessment, which is the occupational therapy equivalent of the doctor's diagnosis, generally requires that the therapist go beyond gathering information and assessing the patient's physiological condition. It requires that the therapist pay some attention to the patient's unique life history and to how the patient sees and understands her or his condition.

Function means different things to different people at different times and must be measured in relation to the client's age, cultural background and expected environment (Mosey 1986).

Functional analysis is a process that takes place in three stages:

1. data collection
2. data analysis
3. identification of areas of dysfunction.

Methods of functional analysis will be described in the next section.

Producing a database

Basic information, such as the client's name, age, sex, marital status, can usually be found in the case notes. Much additional information will emerge during the treatment process, the initial assessment being only a starting point from which the general direction of treatment is determined.

The database is used to:

- determine the need for occupational therapy intervention
- identify the client's needs and assets
- provide a baseline against which to measure the outcome of treatment
- identify which areas need further investigation
- produce a set of treatment objectives
- suggest methods of intervention.

When all the preliminary investigations have been completed, the database can be analysed to produce a list of problems and assets, which is the basis for programme planning.

The therapist and client together produce a set of treatment goals and consider how they may be achieved. A programme is then planned and implemented immediately.

It may be necessary to start with a temporary programme while further data are collected, but this programme should be designed to help elicit the information required (as in the case described in Box 6.1).

ONGOING ASSESSMENT

Ongoing assessment is a part of the treatment process and is used to measure the client's progress, or lack of progress, so that the effectiveness of the treatment programme can be judged. This is sometimes called 'formative assessment' (Opacich 1991). Formative assessment is used to build a dynamic picture of the client's progress and to shape the course of intervention and further assessment in a continuous process.

Assessing and reevaluating progress

During the treatment programme, the therapist has many opportunities to observe the client's level of competence in the skills that the programme is designed to develop. Minor adjustments can be made at any time on the basis of observation and discussion with the client. For example, the therapist observes that a client's concentration span has increased: the client now has no difficulty in staying for a half-hour painting session. The therapist points this out to the client and suggests the length of the session be increased to three-quarters of an hour. The client agrees to try, the relevant people are informed of the change and the new length of session is implemented.

Box 6.1 Case example 1

Jim Manson, a young man with a severe learning disability, was referred for occupational therapy to find out whether any activities that would interest him could be found. The nursing staff felt that he had the potential to do more than wander around the home unit all day, but they did not have time to work with him individually.

It was agreed that for his preliminary programme one therapist would see Jim individually twice a week and try various activities with him, using the therapist's judgement and skill to choose activities and to motivate Jim to stay in the sessions.

After a few weeks, Jim's progress was reviewed. He had spent most of the time in his sessions either walking about, trying to leave or finger-flapping. His therapist noticed two barriers to involvement in activity:

- Jim found it hard to tolerate one-to-one attention.
- He could not concentrate on any one activity for more than a few minutes.

It was felt that Jim would do better in a parallel group where he would not receive the therapist's concentrated attention and where he could take time off from his own task to look at what other people were doing.

Jim continued to see his therapist once a week but they stayed in the occupational therapy workshop where many other people were also working and he was included in a small supportive psychotherapy group for people with severe communication and emotional disorders.

After a few weeks, the staff involved noted that Jim seemed much more relaxed and made no efforts to leave either of these sessions. He was spending almost equal proportions of time involved in the activity, looking at other people and indulging in ritualistic behaviour, a great improvement on his performance in individual sessions.

The new programme was continued with 6-monthly reviews. The preliminary programme, while not successful in involving the client in therapy, gave staff the information they needed to design a more appropriate programme.

More radical programme changes are usually discussed by all the people directly involved in the client's programme, if not by the whole team. A case review may be called by the therapist because she feels the client is ready for it, or the review may be routine. All clients should be reviewed regularly. In an acute setting this may take place weekly but, in a long-stay setting, 6-monthly reviews may be adequate.

The case review

In most departments a regular time each week is set aside for reviews so that all staff can attend, although an emergency review may be called at any time. All staff members are invited to the review. It is important that as many people as possible attend because:

- the observations of everyone who sees the client are important
- a broad discussion may shed new light on the client's needs
- it may be necessary to ask new staff to become involved
- the review can serve as a teaching session.

Invitations may be sent to staff of other disciplines, such as nurses or social workers. The client should also be given the opportunity to attend for at least part of the review in order to give his views in person and to hear what other people think about his progress.

The case review provides an opportunity for 'summative assessment' (Opacich 1991). This is assessment that occurs at predetermined intervals and focuses on the client's progress against treatment goals or expected outcomes. The summative assessment leads to decisions being made about changes in the client's programme.

One person is responsible for preparing and presenting the review, usually the client's key worker. The key worker's task is to collect all relevant information about the client from everyone involved and to organise it into a clear and comprehensible format. It is helpful to have a standard review format so that everyone knows how the material will be presented (Fig. 6.2). This also ensures that no points are missed. The format of the review will be determined by the frame of reference or model that the team uses.

The review will cover the client's: background, reason for referral, occupational therapy programme to date, level of involvement in treatment, progress and current areas of deficit. By analysing this information, the team can

Programme

How often the client attends

What sessions or groups the client attends

Whether or not the client's attendance is regular

Whether or not the client seems satisfied with the programme

Review

Brief recap of original goals and status at last review

Client's level of function in areas that were identified as problematic

Goals reached and progress towards other goals

Any other changes and particular areas of interest, progress or deterioration

Needs

An updated list of needs and goals that the client and therapist have agreed

Priorities for action

Suggested intervention for each goal

Suggestions about who might be involved in helping to meet each goal

Recommendations

A summary of recommendations and who is responsible for ensuring that they are carried out

Figure 6.2 A case review format.

determine what changes, if any, need to be made in the client's programme to meet those needs.

An example of a case review is given in Box 6.2. This example shows how aspects of a programme that are still effective are continued at the same level – for example continuing to attend the women's activity group and relaxation group – while other aspects are upgraded to take account of improvements – for example looking for community-based activities.

TERMINATION OF TREATMENT

The process of treatment, assessment, evaluation and replanning can take place as many times as is necessary for the client to reach his optimum level of functioning. Short-term goals are continually being met and updated and it may be necessary to change long-term goals in the light of new information acquired during therapy or if the client's progress does not match expectations.

At some stage it will become apparent that either the goals have been met, or there are

Box 6.2 Case example 2

A 6-monthly review meeting was called to discuss Mrs Joan Wallace, a 46-year-old woman with severe, long-term depression attending a mental health day centre. Joan had been attending the centre on at least two days a week for over 2 years, with short periods of hospitalisation. Some of the other people attending the centre were nervous of her because she made jokes at their expense and some of her remarks were experienced as hurtful. The overall aims of her programme were to improve her mood and ability to cope with depression, to improve her social skills and to encourage her to expand the number and range of activities in her life.

At the previous review, several recommendations had been made:

- Joan should be invited to attend a women's activity group and a relaxation class in addition to the drop-in service and social afternoon she had been using.
- She would continue to see her key worker regularly and be able to contact him when she was feeling upset.
- If Joan's comments had upset other service users, her key worker would talk to her about it and listen to her side of the story.
- She should be encouraged to participate in any outings to use community resources.

The present review showed that Joan's attendance at the centre was more regular on the days when she had a structured or focused activity than on the social days. She had had a short period of hospitalisation but returned to the groups immediately upon discharge. She had been out with the women's group on two occasions out of a possible four, including the Christmas lunch. She had made a close female friend at the centre and was getting on better with other service users in general. She was asking to talk to her key worker less often but used his regular visits to discuss matters of concern and to get feedback on her performance.

New recommendations were made to build on the changes that had occurred:

- Joan should continue to attend the structured groups but reduce her attendance at drop-in and social sessions.
- She should be encouraged to look for activities in the community where she could use some of the skills she was learning in the women's group. Her friend might go with her or a volunteer might be found to support her at first.
- Her key worker would continue to give feedback on how other people responded positively to her more gentle humour.

reasons why no further progress can be made at this time. The decision to terminate treatment is ideally taken by therapist and client together, but it may be a one-sided decision in some cases. For example, the therapist may feel that the client could benefit from further practice in the relatively protected environment of the department, but the client feels ready to take on his social responsibilities again and leaves.

Final assessment and outcome measurement

Planned discharge is the ideal, but many factors may intervene to cause treatment to be terminated before the client has attained maximum benefit. The occupational therapist does not make the final decision on how long a client remains in therapy, whether in the health or social services or in private practice.

If the discharge is planned, there will be time to do a final assessment with the client and write a discharge report. This can serve several purposes:

- It provides an opportunity to measure outcomes against the original goals of the programme. These will have been modified during the intervention, but the final assessment allows both therapist and client to see how much progress has been made overall.
- It allows the client to see what changes he has made so that he can leave feeling positive about himself.
- It gives the occupational therapist an opportunity to evaluate the effectiveness of the treatment programme.
- A record of treatment and outcomes goes into the case notes in the form of the discharge summary.
- Any gap between the client's existing level of skills and the skills he needs to carry out his expected roles and occupations is highlighted so that recommendations can be made for further treatment, or advice given on where to find help.

WHAT IS ASSESSED?

Occupational therapists claim to take a holistic view of people, but this does not mean that we assess every aspect of a person's functioning. The holistic approach allows the occupational therapist to make a general assessment of the client's range of activities and occupations so that areas of need can be identified before a more focused, in-depth assessment is carried out. In some cases, the client will have a clear idea of what kind of help is needed and does not want a broad assessment, indeed, it may be perceived as irrelevant or even intrusive.

It is not possible or necessary to learn everything there is to know about a client, therefore data are collected and organised in the context of the frame of reference being used.

The occupational therapy assessment covers both the client and the client's environment.

THE CLIENT

Aspects of the client which are assessed include:

- abilities, strengths, interests
- areas of dysfunction
- balance of activities in daily life
- roles or occupations and any major changes that have taken place recently
- potential for change
- motivation.

Abilities, strengths and interests

Abilities, strengths and interests influence the range of occupations a person adopts and the way in which these occupations are performed. Ability is the measure of the level of competence with which a skill is performed. Strengths are the skills, personal attributes and support systems that enable the client to function effectively. Interest is the expectation of pleasure in an activity which is aroused by a combination of experience and some degree of novelty – experience tells us that we have enjoyed something similar in the past and novelty arouses in us the urge to try a new experience.

In order to function effectively in a desired range of roles and occupations a person must have a variety of skills and be able to perform them competently.

When assessing clients, it should be taken into account that competence is not an absolute concept; norms for competence vary with age and are to some extent socially defined (Mocellin 1988). Each person develops a repertoire of skills that are refined from the unskilled actions of the baby and young child. New skills are learned throughout the life cycle but they are not selected randomly. Skills are developed specifically to support the life roles that the individual undertakes and to carry out the occupations associated with those roles.

For simplicity, function can be divided into skill areas that are interdependent and interrelated but that can be assessed separately in the early stages of intervention. One example is the three types of skill suggested by Reed & Sanderson (1992), as follows:

- sensorimotor
- cognitive
- psychosocial.

These types of skill can be separated for the purpose of assessment but act together in the performance of activities.

Areas of dysfunction

Function and dysfunction are not opposites but exist on a continuum; there is no clear line with function on one side and dysfunction on the other. Spencer (1988) pointed out that:

> Temporary or permanent disability takes on a unique meaning for each individual. Age, developmental stage, previous ability, achievements, life-style, family status, self-concept, interests, and general responsibilities affect attitudes such as understanding, acceptance, motivation and emotional response . . . An accurate analysis of the biopsychosocial context by the therapist is essential to determine the functional implications of the patient's condition.

Satisfaction with function is also very individual, and the therapist may have to accept that a client is happy with his own level of functioning in a particular occupation even though the therapist knows the client has the potential to perform to a higher standard.

During assessment it is important to take a temporal perspective, considering the client's past level of functioning and expected future occupations as well as present capabilities, in order to find out whether he has lost skills or never developed competence in certain areas.

The ways in which function and dysfunction are conceptualised are determined by the frame of reference the occupational therapist is using. For example, using the adaptive skills model mentioned above, dysfunction is seen in terms of lack of mastery of the adaptive skills appropriate to the individual's age and stage of development. Within a behavioural frame of reference, dysfunction is seen in terms of the acquisition of undesirable behaviours and the failure to learn desirable ones. Within a cognitive behavioural frame of reference, dysfunction is seen in terms of faulty information processing, irrational thinking and distorted perceptions.

Balance of activities in daily life

Each individual maintains a changing pattern of self-care, work and leisure activities throughout life. A disruption of that balance can be an indicator of dysfunction, as shown in the example in Box 6.3.

Hagedorn (1995) cautioned against trying to apply rigid criteria of balance to all clients. The most important measure of a successful balance of activities may be the client's own perception, or he may lack insight into what appears to others to be a problem. Functional analysis, as described in the next section, can help to identify the client's level of satisfaction with his daily life activities.

Roles and occupations

Roles are patterns of activity associated with social position. They are defined by society and assigned to individuals on the basis of such attributes as age, sex, relationships, possessions, education, job, income and appearance. Each role

Box 6.3 Case example 3

Colin, a man in his late 20s, was referred to the occupational therapist with a diagnosis of depression. He had been unemployed for over 2 years and had a very limited range of activities and interests. Previously he had held down a civil service office job for several years, enjoyed reading and cinema and had relationships with women, none of which had lasted very long.

When the occupational therapist asked Colin about which of the activities previously enjoyed he would like to try again in the future he was unenthusiastic but could not say why he had lost interest. A female patient became interested in him and they went out together a few times. The woman then told the therapist she was anxious about some of the odd things Colin had been saying. Colin became more withdrawn in groups and missed sessions occasionally. The therapist began to suspect that Colin's depression was secondary to a more serious, progressive disorder. She discussed his case with the psychiatrist and he agreed that Colin was probably in the early stages of schizophrenia. Colin's medication was changed and he was not expected to join in any groups which would put emotional pressure on him.

Colin, an intelligent young man, asked the therapist if he had been diagnosed as having schizophrenia. He could see that the difficulties he was having fitted the diagnosis and became very anxious and upset. The therapist was able to offer him emotional support while he came to terms with the implications of his changed diagnosis.

carries expectations of performance, which the individual who accepts the role attempts to carry out. A properly integrated role, supported by the skills and habits necessary for its performance, satisfies both society's expectations and the individual's needs. However, when a person is assigned a role that he is unable or unwilling to accept, then dissonance occurs between society's expectations and the person's performance. This can lead to social rejection and stigma.

A role contributes to the individual's sense of social and personal identity and influences the way in which occupations are performed.

In order to support occupations and roles, skills are organised into the routines that are habitually used to carry out the individual's daily tasks – for example brushing one's teeth involves a sequence of actions that becomes habitual so that one does not have to think carefully about every stage of the operation. Habits mean that the individual can perform everyday tasks without having to remember consciously how to go about them. These routines are developed to suit the individual's needs at any one period of life. New habits are learned and old ones discarded as circumstances change.

The therapist assesses how clients organise their time, that is, whether they have useful habits or have to expend a lot of time and energy in working out ways of performing. Habits may also have become too rigid to allow for necessary changes so that the client's behaviour no longer meets the needs of his situation. It is useful to take an occupational history to assess whether the individual's habits have been disrupted or whether he has never developed good habits. If possible, the therapist will want to identify the point at which habits broke down.

Occupations and roles exist in a balance that normally changes throughout the life cycle. A healthy balance is one that allows most of the individual's needs to be satisfied without causing him to be rejected by society. The balance can be disrupted by illness, disability or bereavement.

The therapist wants to know:

- if the client's needs are being met
- if the client is able to carry out the roles and occupations expected of him, or that he expects of himself
- about any reduction in the expected number of roles and occupations
- about any imbalance between self-care, work and leisure
- the client's occupational role history.

Potential for change

Occupational therapists take an essentially optimistic view of human beings, believing that everyone has the potential to change and to influence the direction of that change by what they do. Seedhouse (1986) argued that health is closely related to human potential:

> Except in extreme instances of illness or external control, people possess an indefinite number of potentials depending upon what they do and what happens to them . . . This is true even of terminal

patients in hospital, even until the time they finally lapse into unconsciousness . . . people can change themselves and their environments for the better.

The extent of change will be limited by personal factors, such as personal goals, degree of disability and investment in maintaining existing coping methods. For example, Allen & Allen (1987) developed a theory of cognitive disability which describes six levels that relate to the functions the patient is able to perform, the types of assistance required to compensate for dysfunction and the social dysfunction occurring in home and work environments. Change will also be influenced by external factors such as the goals of the family or carers, social support networks and social expectations. All these factors must be taken into account when setting goals.

Motivation and volition

The occupational therapist has traditionally taken an interest in motivation for the purpose of treatment, to assist in engaging clients in therapeutic activity. This aspect of motivation is discussed in more depth in Chapter 7 (p. 129). However, an understanding of the theory of intrinsic motivation can also facilitate assessment of dysfunction.

People have an innate urge to use their capacity to explore and interact successfully with the environment (Reilly 1962). The satisfaction in such action comes from the activity itself, not only from the external rewards that the action may bring. This urge is stimulated by novelty in the environment and is strong enough to sustain action even when the immediate consequences are not pleasant. Intrinsic motivation is discussed in more detail in Chapter 7.

If a client appears not to be motivated to participate in treatment, the therapist will look for factors that may be hindering or blocking the client's intrinsic motivation, such as:

- the level of stimulation and novelty in the environment
- unsatisfied needs that may be distracting the client's attention
- opportunities to act on the environment
- sense of competence or efficacy
- goals the client considers worth working for
- activities the client values
- activities the client finds enjoyable or interesting.

People have a basic urge to act, to test their own potential and to have an impact on their surroundings, but the direction of that action is influenced by life experiences. Volition is the skill which enables a person to choose what activities he does (Creek 1998). It is both the ability to choose and an awareness that the action is voluntary. Various factors determine the extent to which an individual is able to exercise volition.

One important factor in how a person chooses to act is his self-image (Kielhofner & Burke 1980). This is conceptualised in different ways depending on the frame of reference being used, but all theorists agree that this factor influences how the individual performs.

Another factor is the degree of confidence a person has in his own ability. Fidler & Fidler (1978) stated that each person learns his own capacities by 'doing'. Successful doing leads to a sense of satisfaction and a sense of competence. Persistent failure, due to lack of skill or lack of opportunity to do, leads to a sense of incompetence and lack of control.

The model of human occupation (Kielhofner & Burke 1980) also conceptualises self-image as arising from interactions of the human system with the environment during development. The balance of success to failure depends on how much the individual feels that events are within his control and how much they are outside it. This model suggests that three factors determine the actions a person takes:

- values
- goals
- interest.

Values. Values not only influence the actions of the individual, but also influence how an individual interprets and reacts to other people's actions. It may therefore be important for the therapist to understand the values underlying the client's behaviour but this is not easy,

particularly if the therapist and client are from different cultural backgrounds.

Goals. Goals are linked to values in that they are based on what the individual thinks is worth doing. In order to elicit the client's full cooperation the therapist must be able to elicit his personal goals through the assessment procedure. The client will not strive to achieve the therapist's goals unless they coincide with his own.

Interest. When we say a client is not interested in an activity we mean:

- the client has tried something similar before and not enjoyed it
- the client has tried something similar before and knows he cannot do it
- the client has tried this activity before and there is no challenge in it
- the client has never tried this type of activity before and has no confidence in his ability to succeed at a new task.

The reason for not being interested has implications for suggesting alternative activities, therefore it is important to assess a client's interests before planning intervention.

THE ENVIRONMENT

People are never independent of their environment but learn how to adapt to it, or adapt it to themselves, to satisfy their needs. Through acting on the environment and receiving feedback about the effect of their actions they learn how best to achieve their own aims. Skilled performance of actions is only developed through exploring the environment and acting on it. Failure to adapt to the environment leads to dysfunction.

Assessing opportunities for exploration and practice

Skills are learned through exploration of the environment and of one's own potential. Competence is developed through practising skills in a variety of situations. Some skills are learned by carrying them out in reality, such as learning to climb trees; competence in this skill can only be acquired by doing it. Other skills are learned by role-playing, for example social roles are rehearsed through childhood play.

Lack of opportunity to practise skills and roles in childhood and adolescence prevents the individual from developing a realistic image of his capacities and from knowing what his interests and values really are.

Reasons for being unable to engage in exploration of the environment and to practise skills for coping with it include:

- physical disability
- impoverished environment
- lack of satisfaction of basic needs, for example emotional insecurity
- overcontrolling or overprotective parental figures
- interruptions to normal development, such as injury or illness.

It should be remembered that the treatment situation itself may block engagement in occupation for several of the above reasons.

Once the problem has been identified, the therapist and client can plan intervention that will include new opportunities for exploration and skill generation with a high chance of success.

Assessing adaptation to the environment

Individuals have the ability to influence their own health through what they do. A healthy environment allows individuals to act in a way that will enable them to meet their needs. Sometimes people find themselves in an environment that they cannot adjust to in a healthy way or that does not give them opportunities to make changes. Various constraints may exist, including:

- social expectations, such as the role expectations for young mothers
- physical factors, such as poor housing
- economic constraints, such as poverty or having to stay in an unsatisfactory job.

A person may become ill because of environmental factors and then discover that the illness allows him to meet his needs, either by removing him from a difficult environment or by changing

the attitudes and behaviour of people around him. The costs of being ill are outweighed by the benefits, which then act to maintain the illness behaviour.

METHODS OF ASSESSMENT

Occupational therapists use a wide range of assessment tools, from interviews to assessment batteries. Some depend on the experience and skill of the tester, such as observation of performance in activities, while others are standardised and can, in theory, be applied objectively by anyone who has been trained in their use.

Several factors influence the methods of assessment chosen for a particular client:

- the frame of reference or model being used by the therapist
- the information required
- the client's level of ability
- the nature of the client's difficulties
- the stage of assessment.

The first four assessment techniques described below (review of records, interview, observation and home visits) are used by other professionals as well as by occupational therapists. Techniques more specific to occupational therapy are those that focus on function and involve activity or occupation; functional analysis, checklists, performance scales, questionnaires and projective techniques are also described below.

REVIEW OF RECORDS

The therapist sometimes does not have easy access to case notes and other records, for example if she works in the community. In this case, a well-designed referral form is essential to elicit the desired information before the client is seen.

It is sometimes suggested that therapists should not read clients' records before seeing them as this may influence their perceptions. However, it is very frustrating for clients to have to give the same information to many people – if therapists are aware of the danger of bias, they can consciously try to avoid it.

Looking through medical and nursing records can be time-consuming, especially if the client has a long medical history, but familiarity with the way case notes are organised (and with the handwriting of medical officers!) makes the search easier. Hemphill (1982) suggested that the therapist looks at:

- social history
- admission summary
- nurses' notes
- the psychologist's report
- the physician's reports
- any other pertinent reports.

Hemphill (1982) recommended a checklist to use when reading case notes so that no relevant information is missed.

Information gained from the client's records can be used to plan the initial interview.

THE INTERVIEW

In most treatment settings occupational therapists are in constant, informal communication with their clients. However, a formal interview can often be a useful additional method of communication and assessment.

Interviews can be structured or unstructured. No interview is truly unstructured if it is to be of use but there is a difference between knowing what you want to elicit and having a list of set questions to ask. The structured interview tends to be more popular with less experienced therapists (Kielhofner 1988).

Unstructured interviews

Before the interview, the therapist collects together any information about the client and decides what she wants to find out. Time need not be wasted during an interview in going over what the therapist already knows. The client is informed in advance about the time, place and purpose of the interview. The therapist may expect the client to turn up on time or may collect him, depending on the client's needs.

The interview is carried out in an informal atmosphere without distractions or interruptions.

Attention is paid to details such as height and positioning of chairs, in order to gain maximum rapport. Comfortable but straight-backed chairs, placed at an angle of 90 degrees to each other, are probably ideal since both parties can then see each other without effort. Interruptions can usually be avoided if other staff are informed that the interview is taking place, where it is and how long it will take. It has been known for an entire ward staff to turn out to search for a missing client, only to find him being interviewed by a student who forgot to tell anyone that she was with him.

At the beginning of the interview the therapist calls the client by name and makes sure that the client remembers the therapist's name and the purpose of the interview. The therapist may take a more or less directing role in the interview, depending on the client's mental state and the purpose of the interview, but a warm and accepting manner is usually most successful. The therapist is an active listener, paying respectful attention to what the client says and attempting to reach a good understanding of the client's intended meaning.

The length of the interview may be set in advance, especially if there are many constraints on time, or it may be determined by the course of events. A confused person may not be able to tolerate a long interview whereas a client in acute distress may benefit from the therapist's undivided attention until he feels calmer.

Upon termination of the interview, a brief summary by the therapist of its main points can help the client to continue thinking about it afterwards. The therapist then checks that the client knows where he is going and walks with him if it is appropriate. Notes are usually written up after the interview.

Structured interviews

The structured interview format may be designed for use in a particular treatment setting if the therapist finds it useful to collect the same information about each client. Alternatively, it may be designed as part of a particular model, for example an occupational history is often taken to collect information about a client's performance in past and present occupational roles for use within the model of human occupation.

The structured interview consists of a series of questions designed to elicit the desired information. Such a series of questions could also be administered as a questionnaire if the therapist is confident that the client understands it fully but an interview is more personal and allows rapport to be developed (Florey & Michelman 1982). It is often acceptable to take brief notes during a structured interview.

An interview may also be semi-structured, that is, the therapist has a number of questions to ask but allows for digressions if they seem useful. Florey & Michelman (1982) suggested that, while the questionnaire or structured interview are effective for gathering a history of discrete events such as childhood illnesses, the semi-structured interview is useful for taking a history of more abstract events.

Many of the histories and checklists used by occupational therapists could be administered as interviews, self-assessment instruments or computer programs, depending on the needs and abilities of the client.

Content of the interview

During the interview the therapist can observe the client's:

- verbal and non-verbal communication skills
- sensory deficits (if any)
- quality of self-care
- mannerisms (if any)
- posture
- facial expression.

By asking questions, the therapist can find out the client's:

- level of cognitive functioning
- attitudes to the current situation, in general
- feelings about being involved in therapy
- mood
- expectations from therapy.

Questions can be directed towards exploring a particular aspect of the client (e.g. relationships with other people).

The interview is also an opportunity for giving the client information and feedback. At the initial interview, rules and expectations within the occupational therapy department can be explained, including how violations of the rules are dealt with. A discussion of the general function of the department and its potential value helps the client to make more informed decisions about becoming involved in treatment. Clients frequently complain that they do not see how occupational therapy can help them and a clear explanation can enhance the value of therapy.

During later interviews the client can be given feedback on his performance and on any changes that have been observed. The client may also give feedback on how he feels about the programme. Modifications to the programme are discussed so that the client continues to be actively involved in his own treatment.

OBSERVATION

Observation involves noting and recording the type, frequency and duration of activities by the client and interpreting what is observed according to the model being used.

Mosey (1973) described three steps in using observation as a method of assessment.

1. *Observation*. Noting what the client does without ascribing meaning to it.
2. *Interpretation*. Using observed data to reach conclusions about the reasons for the client's actions.
3. *Validation*. Seeking to confirm the accuracy of interpretations by sharing them with the client or others who know the client well.

There are three main types of observation:

- general observation of the client during activities
- observation of specified performances
- observation of performance of set tasks.

General observation

The range of activities provided by occupational therapy gives opportunities for observing clients under different circumstances so that a picture of their capabilities and deficits can be built up. However, clients' performance in the occupational therapy department is often very different from when they are in the ward, so staff also benefit from spending time out of the department to observe clients. In a small community, where clients are frequently encountered outside the treatment setting, the therapist also has opportunities to observe their social functioning in their normal environment.

Using a checklist to record what is observed can help to ensure accuracy and reduce subjectivity. Checklists make it possible to look at complicated areas of skills without becoming confused, although a description may also be needed to give additional information.

Much can be learned from the physical appearance of the client (physique, posture, facial expression, mannerisms, gait, grooming and dress). Some diseases, such as severe depression, produce a characteristic stooped posture and flat expression. However, the use of certain drugs may mask symptoms of the underlying disorder with an array of side-effects, for example obesity or rigidity may be due to phenothiazine medication.

Form and content of speech provide clues to the client's inner life, including mood, insight, cognitive functioning and thought disorder. A good rapport with the client is helpful in that clients will be more willing to share their thoughts in the context of a warm and trusting relationship.

The client's performance patterns can be observed in different situations to assess energy level, diurnal variations in energy, interaction with others, willingness to cooperate, initiative and skills. The client may respond in totally different ways to peers, junior staff, students and senior staff so that everyone in the treatment setting will have something to contribute to a total assessment.

Observation of specified performances

General observation tends to be descriptive and inevitably misses much of what happens. The occupational therapist is usually a participant observer, making it even more difficult to observe

a client's performance. A more precise method of observation is to specify what is to be observed and ignore all other activity. This method is commonly used by psychologists but can be useful for occupational therapists, particularly within a behavioural model. The process consists of:

- deciding what to observe
- selecting an observation technique
- making the observation
- recording the observation
- analysing the recorded performance.

The therapist may wish to observe the number of times a particular activity is carried out (frequency) or the length of time the activity lasts (duration). The observation technique chosen will depend on what is to be observed but the three main methods are (Felce & McBrien 1987, Hogg & Raynes 1987):

- event counting
- time sampling
- duration recording.

Event counting and time sampling are used to count the frequency of activities that are brief, discrete and easily identified, such as head-banging. Duration recording is used for activities that last for longer periods.

Event counting

The therapist specifies the action she wishes to observe, for example the client making eye contact with the therapist. The therapist then counts the total number of times the action occurs either during the whole session or during a specified period of time. If the action occurs infrequently then the whole session may be observed (e.g. the client makes eye contact with the therapist twice during a half-hour session).

Interval recording and time sampling

If the action to be observed occurs frequently it may be more appropriate to take samples than to record it continuously. This can be done by noting the number of times the action occurs during brief, regularly spaced intervals of time, say, for 1 minute in every 10 (interval recording), or by making an observation at fixed intervals and noting if the action is occurring at that moment (time sampling). The results can be noted on a record sheet that specifies the action to be observed and only takes a moment to mark.

Duration recording

This method is used for actions that occur for longer periods or for variable periods of time. The easiest method is to use a cumulative stopwatch to record the total amount of time spent on the action in a given period, for example the amount of time a client concentrates on the task in hand during a 1-hour session.

Set tasks

When further information is required about a particular area of functioning, such as cooking a meal or planning an outing, the client can be asked to participate in a task designed to measure that function. The task may demand practical skills, such as hand–eye coordination, or cognitive skills, such as problem solving. It may be a social task that requires interaction with others or it may be designed to highlight the client's attitudes by making unusual demands.

A careful and detailed analysis of the task ensures that it requires the skills that the therapist hopes to observe. A knowledge of normal performance is also necessary so that the client's performance can be measured against it.

It is rarely possible to reproduce external conditions accurately within the treatment setting and it may be appropriate to visit the client's home or workplace to assess its particular demands or try out skills.

HOME VISITS

Home visits may be made at any stage of treatment for the purpose of assessment or treatment, or both. Within a multidisciplinary team it is necessary to coordinate with other staff to limit the number of people who do home visits and to share information obtained.

Doctors, nurses, social workers and therapists all commonly visit clients' homes but it may not be necessary for all of them to visit the same person.

Purpose

Home visits are an expensive use of staff time so it is important to establish the purpose clearly beforehand. The occupational therapist builds up a picture of the client's assets and needs from an assessment in the treatment setting, which the therapist can use to determine what to assess in the home environment.

The home visit can be used to:

- gain a picture of the client's life demands and role expectations
- observe the client's level of functioning in his normal environment
- carry out specific assessments, such as using the kitchen
- observe the physical environment, including where the house is situated and what type of accommodation it is
- meet the client's family and neighbours on their own territory.

The physical environment includes where the home is situated, whether it is convenient for transport, shops, libraries and open spaces, its distance from the workplace and the character of the neighbourhood. The home itself can be assessed for physical barriers to easy access, amount of space, opportunities for privacy, playing space outside for children, facilities, comfort and noise level.

The emotional environment is more difficult to assess in a single visit since the family dynamics will be changed by the presence of a stranger. However, the therapist may learn something about stresses and supports within the home by observing the number of family members and the amount of personal space each one has. More difficult to assess, but very useful to know, is how emotionally close to each other the family members are, what roles they take within the family, what methods of communication they use and their attitudes to the person who is receiving treatment. Neighbours' attitudes are also relevant, especially if the client lives alone.

Carrying out a home visit

A date and time for the visit are set to suit the therapist, the client and the client's family, taking into account transport. It will be easier to determine the length of the visit if the aims are very clear and specific. Uniform is not normally worn for home visits but the therapist can carry some form of identification for the benefit of the family.

Safety is an important consideration when carrying out home visits to clients and/or their families. It is important to let other staff know where you are going and when you expect to return so that they can check on you if you are late. A mobile phone may be carried so that any change of plan can be reported. If there are any anxieties about safety on a particular home visit, the therapist should take a colleague.

The purpose of the visit is clearly explained to the family, especially if the therapist has not met them before. Many families like to offer a cup of tea to a visitor and this can provide an opportunity for getting to know them in a relaxed way. Further structuring of the visit depends on what the therapist wishes to assess.

After a home visit, the therapist can discuss with the other team members the client's level of functioning against his life demands. They can then help the client to decide if any adjustments can be made to the environment or whether the client needs to make personal changes in order to cope. The visit described in Box 6.4 resulted in Mrs Temple being able to return to her own home with support that would allow her to live independently but safely. It was important that the therapist presented all her observations accurately and objectively to the team so that they could discuss with Mrs Temple the facts of the case, and not the therapist's opinion, in order to reach an acceptable solution.

FUNCTIONAL ANALYSIS

As described in the previous section, functional analysis is the part of the assessment process

Box 6.4 Case example 4

Mrs Temple, an 83-year-old widow, had been admitted to hospital 6 weeks previously in a confused state due to malnutrition. She was expressing paranoid ideas about the neighbours. She made a good recovery and was keen to return home but the team had some doubts about her ability to manage alone. The occupational therapist was asked to do a home visit with her to measure the home environment against her existing skills.

At first, Mrs Temple refused to consider taking the therapist home with her, insisting that she could manage well. She changed her mind when the therapist, knowing that Mrs Temple was a very sociable lady, suggested that they shop on the way home and Mrs Temple could cook lunch for them.

Mrs Temple had some difficulty getting on the bus but managed her shopping without any problems. Her house, which she owned, was a two-up two-down terrace house. It was heated by a gas fire in the living room, which also heated the water, and the old gas cooker had to be lit with matches. Several neighbours dropped in to see Mrs Temple while the therapist was there.

From her observations, the therapist felt that Mrs Temple would be able to continue to manage on her own, with some additional support, but that she needed a new heater and gas cooker. A referral was made to social services with a request for home care and a full occupational therapy assessment. The social worker from the hospital visited Mrs Temple regularly until the new arrangements were in place.

which looks at how people spend their time and at their capabilities and any problem areas. Over 200 different techniques have been devised for collecting data about how an individual functions in daily life (Unsworth 1993), but most of these focus only on activities of daily living (e.g. the Barthel Index and the Rivermead ADL Assessment), and most have been devised for use with elderly people.

The simplest way to collect data about function is probably to ask clients to say what they do in a typical day. The Canadian Occupational Performance Measure (Law et al 1994) recommends the therapist to 'Encourage clients to think about a typical day and describe the occupations they typically do'. A form can be used, dividing the day into half-hour sections (Fig. 6.3), which the client fills in to give a record of a typical day. This can then be analysed in various ways to find out where areas of dysfunction are occurring. The Canadian Occupational Performance Measure (Law et al 1994) suggests that the client first identifies the activities he needs, wants or is expected to do and then identifies which ones he can do to his own satisfaction. This gives an indication of the performance areas the client is having problems with.

One of the purposes of the analysis is to find what meaning clients place on different aspects of life, what activities are important to them, what purpose they see the different activities serving, what motivates them and what their main goals are for therapy.

Other questions that might be asked about the typical day include:

- Which activities does the client find pleasurable, unpleasant or neutral? This will highlight the balance of pleasurable activities in the individual's life.
- Are there any problems in the overall balance of activities – empty times in the day or times when there is too much to cope with?
- What life roles do the day's activities represent? Is the range of roles appropriate to the client's age/developmental level?

The therapist will also be interested in the social, physical and cultural environment in which the client will be functioning, and whether it will support the client in his chosen roles and occupations.

Functional analysis identifies areas of dysfunction as a starting point for deciding the focus of intervention. The client's own priorities should then be taken as a guide in selecting the area to work on first. Once the functional analysis has been completed, the therapist begins a more detailed assessment.

CHECKLISTS, PERFORMANCE SCALES AND QUESTIONNAIRES

Occupational therapists have always used checklists for assessing skills such as activities of daily living (ADL) and work skills but over the last 20 years there has been an increase in the number of assessment procedures developed for use within particular frames of reference. There has also been more interest in standardising assessments,

NAME : DATE :

Night hours	
05.00 am	
05.30 am	
06.00 am	
06.30 am	
07.00 am	
07.30 am	
08.00 am	
08.30 am	
09.00 am	
09.30 am	
10.00 am	
10.30 am	
11.00 am	
11.30 am	
12 noon	
12.30 pm	
01.00 pm	
01.30 pm	
02.00 pm	
02.30 pm	
03.00 pm	
03.30 pm	
04.00 pm	
04.30 pm	
05.00 pm	
05.30 pm	
06.00 pm	
06.30 pm	
07.00 pm	
07.30 pm	
08.00 pm	
08.30 pm	
09.00 pm	
09.30 pm	
10.00 pm	
10.30 pm	
11.00 pm	
11.30 pm	
12 midnight	
00.30 am	

Figure 6.3 Activities in a typical day.

although normative data have still to be collected for many tests that are in regular use.

Some checklists and performance scales measure directly observable performance, for example the ability to dress independently. Others assess functions which are more complex and may be more difficult to observe, for example the ability to participate in a mature group (Mosey 1986). In order to assess these functions they can be tied to behaviours which indicate their presence or to behaviours which indicate their absence. Mosey (1986) suggested that the ability to participate in a mature group is indicated by 'comfort in heterogeneous groups and the ability to take a variety of membership roles'. Lack of the skill is shown by 'preference for same sex or other types of homogeneous groups and excessive preoccupation with task accomplishment or satisfaction of social–emotional need'.

Other skills, such as level of cognitive ability, are not directly observable (Allen & Allen 1987). Again these skills can be assessed by linking them to observable performance. Allen & Allen (1987) suggested that the individual's level of cognitive disability is indicated by the activities he is unable to perform. A battery of craft activities was devised to measure precisely the level of disability.

Checklists can be used to make sure no skill area has been missed. The types of checklist commonly used by occupational therapists include:

- broad assessments, such as the Occupational Therapy Development Analysis, Evaluation and Intervention Schedule (DAEIS)
- assessments of specific skill areas, such as ADL checklists and task inventories
- multidisciplinary assessments, such as the Personal Assessment Chart (PAC).

Performance scales may be norm-referenced or criterion-referenced. Norm-referenced scales are those in which a typical range of performance has been identified by administering the test to a broad sample. The client's performance is compared with this typical, or normative, performance. Criterion-referenced scales are those in which the client's performance is judged against the desired outcome of intervention. A criterion sets the standard of performance which the client hopes to achieve by the end of treatment.

Some of the many areas of performance that can be assessed by the use of checklists or performance scales include adaptive skills, sensory integration, past and present life roles, balance of occupations, motivation, interests, locus of control and time structuring. Three of these will be described here: the Comprehensive Occupational Therapy Evaluation Scale (COTE), the Interest Checklist and the Occupational Questionnaire. Readers are recommended to follow up references at the end of the chapter for details of further methods.

Comprehensive Occupational Therapy Evaluation Scale

This instrument was developed by occupational therapists, working in an acute adult psychiatry unit in the USA, to provide a broad but consistent range of information about clients for the purpose of coordinating occupational therapy programmes with the different approaches of other staff (Brayman & Kirby 1982). The four objectives of developing such an evaluation were specified as being:

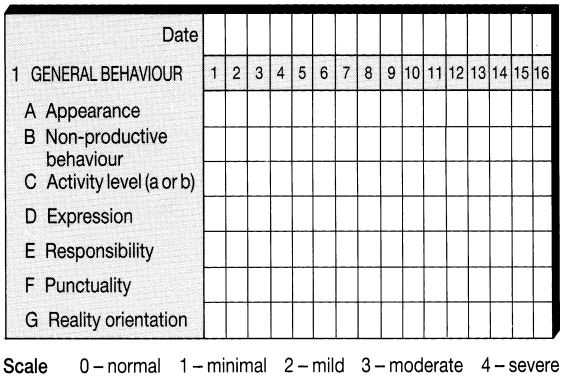

Figure 6.4 A comprehensive occupational therapy evaluation scale. (Taken from Hemphill B J 1982 The Evaluative Process in Psychiatric Occupational Therapy. Slack, New Jersey. Reproduced by kind permission of Slack Inc.)

1. to identify behaviours relevant to the practice of occupational therapy
2. to define the identified behaviours in such a way that they can be reliably observed and rated
3. to record information in a way that can easily be read by the referring agent and that can provide a record of client progress
4. to provide an efficient method for data retrieval to assist in treatment planning and evaluation.

The evaluation scale is divided into three sections, general behaviour, interpersonal behaviour and task behaviour, each of which is subdivided into skills that are given a numerical rating from 0 to 4 (Fig. 6.4). A total of 25 skills has been identified and clear definitions of the behaviour indicative of each skill are given on the back of the rating form. Performance in all the skills can be recorded for 16 days on a grid so that the results can be quickly recorded and compared.

It has been found that the COTE shows up areas of competence and deficiency and is therefore useful for setting priorities in developing a treatment plan. However, some more extreme behaviours or more subtle changes are not reflected on the rating scale and it is recommended that a descriptive note is added in such cases.

The Interest Checklist

The Interest Checklist was developed by Matsutsuyu (1969) to assess clients' interests in order to facilitate the selection of therapeutic activities that would evoke and sustain interest throughout the treatment programme. It includes 80 items that the client can mark under the headings of 'casual interest', 'strong interest' or 'no interest'. These include activities such as cooking, gardening, solitaire, religion and swimming. There is space to add any other interests not included in the list and space for a written report on the client's interests from schooldays to the present.

Matsutsuyu suggested six propositions to describe the properties of the interest phenomenon:

1. Interests are influenced by early experiences in the family.
2. Interests are affective in nature and evoke positive or negative emotional responses.
3. Making choices on the basis of interest leads to commitment to the roles chosen.
4. Interest leads the individual to engage in activities that teach him how to act effectively to achieve his goals.
5. Interest in a task can sustain action after the novelty of the task has worn off.
6. Interests reflect the image a person has of himself.

These six propositions became the theoretical basis for designing an interest checklist.

The data from this checklist can be classified by intensity of interest felt, ability to express personal preference, ability to discriminate type and intensity of interests and categories of interest. All the items on the list can be classified as manual skills, physical sports, social recreation, activities of daily living or cultural/educational.

From this information it should be possible to select activities that will maintain the client's commitment to treatment for the attainment of either short-term or long-term goals.

The Occupational Questionnaire

This questionnaire was developed for use within the model of human occupation (Kielhofner 1988). It consists of a daily timetable in half-hour blocks for the client to fill in to show his typical way of spending time on a working day or a non-working day (Fig. 6.5). Each activity can then be rated by the client as being, in the client's perception:

- work
- a daily living task
- recreation
- rest.

The client is also asked to rate each activity on a five-point scale for:

- how well he thinks he performs it – personal causation
- how important he thinks it is – values

Time	Typical activities	Question 1 I consider this activity to be: Work W Daily living task D Recreation R Rest RT	Question 2 I think that I do this: Very well VW Well W About average AA Poorly P Very poorly VP	Question 3 For me this activity is: Extremely important EI Important I Take it or leave it TL Rather not do it RN Total waste of time TW	Question 4 How much do you enjoy this activity? Like it very much LVM Like it L Neither like nor dislike it NLD Dislike it D Strongly dislike it SD
5.00 – 5.30 am		W D R RT	VW W AA P VP	EI I TL RN TW	LVM L NLD D SD
5.30 – 6.00 am		W D R RT	VW W AA P VP	EI I TL RN TW	LVM L NLD D SD
6.00 – 6.30 am		W D R RT	VW W AA P VP	EI I TL RN TW	LVM L NLD D SD
6.30 – 7.00 am		W D R RT	VW W AA P VP	EI I TL RN TW	LVM L NLD D SD
7.00 – 7.30 am		W D R RT	VW W AA P VP	EI I TL RN TW	LVM L NLD D SD

Figure 6.5 Sample worksheet from the Occupational Questionnaire. (From Smith N R, Kielhofner G, Watts J H 1986 The relationship between volition, activity pattern and life satisfaction in the elderly (activity analysis, geriatrics, human occupation, personal satisfaction). Copyright 1986 American Occupational Therapy Association Inc. Reprinted with kind permission.)

- how much he likes it – interest.

The questionnaire is designed to provide data about the client's habits, balance of activities, feeling of competence, interests and values and to show up problems in any of these areas. Used in collaboration with the client, it can assist in setting therapeutic goals. The results can be displayed in various ways to give a visual picture that the client will understand, for example a pie chart or a profile, since it is necessary for the client to be involved in interpreting the results.

The questionnaire can also be filled in for a time when the client feels he was functioning effectively, so that a comparison can be made with present functioning.

Other versions of the questionnaire are now being developed to measure different aspects of the client, for example one version highlights the amount of pain and fatigue the client is experiencing.

CLIENT-CENTRED ASSESSMENT TOOLS

Client-centred practice is an approach which has become increasingly popular in recent years and which appears to fit well with occupational therapy's philosophy. Several assessment tools have been designed for use with this approach, most notably the Canadian Occupational Performance Measure (described below).

Client-centred practice has been defined as:

> an approach to providing occupational therapy which embraces a philosophy of respect for and partnership with people receiving services. It recognises the autonomy of individuals, the need for client choice in making decisions about occupational needs, the strength clients bring to an occupational therapy encounter and the benefits of client–therapist partnership and the need to ensure that services are accessible and fit the context in which a client lives. (Law et al 1995)

The most important task in client-centred assessment is to ensure that the client understands the key issues of this approach. Understanding allows the client to enter into a partnership with the therapist in which together they discuss and agree the goals of the intervention and methods of assessment (Sumsion 1999).

Client-centred assessment often means using individualised measures of outcome rather than standardised assessment tools. Spreadbury (1998, p 108) wrote that 'individualised outcome measures capture what it is that the client wants out of therapy and what therapists achieve in day-to-day practice'.

Canadian Occupational Performance Measure

The Canadian Occupational Performance Measure (COPM) was designed for use by occupational therapists in a variety of fields of practice. It is an individualised outcome measurement which is appropriate for use within the individual programmes of care provided by occupational therapists (Spreadbury 1998).

The COPM (Law et al 1994) focuses on occupational performance and takes the form of a semi-structured interview. The client is assisted to identify occupational performance problems in the areas of self-care, productivity and leisure. He is then asked to rate each problematic activity for how important it is in his life on a 10-point scale from 1 (not important at all) to 10 (extremely important). The client is then invited to choose up to five activities that seem the most important for intervention. Each of these is rated on two further dimensions: performance and satisfaction. The client is asked to mark on a 10-point scale how well he thinks he performs the activity now, from 1 (not able to do it at all) to 10 (able to do it extremely well). He is also asked to rate how satisfied he is with the way he does the activity now from 1 (not satisfied at all) to 10 (extremely satisfied).

After an appropriate period of intervention, the client is asked to rate the activities again for performance and satisfaction. Changes in the scores demonstrate changes in performance and satisfaction.

The COPM has standardised instructions and methods for administration and scoring but it is not norm-referenced (Pollock et al 1999). It is only intended to measure changes in individual performance and satisfaction.

PROJECTIVE TECHNIQUES

Projective techniques were developed as a method of assessing emotions, motivations and values, none of which could be measured with existing tools. Early techniques included the Rorschach Inkblot Test, Morgan and Murray's Thematic Apperception Test and Cattell's Sentence Completion Test. All these tests present subjects with ambiguous stimuli to which they are asked to give meaning. Projective tests use standard stimuli that allow subjects to make their own interpretations. The theory behind them is that the subject does not know what is expected (i.e. what would constitute a good performance), and therefore performs spontaneously (Cutting 1968).

The material projected by the subject may be one of three types:

1. Projection was described by Freud as an ego-defence mechanism through which painful or unacceptable feelings are ascribed to someone else. This is an unconscious process.
2. Projection can also be a way of giving meaning to situations that are otherwise confusing by seeing them in terms of one's own motives and beliefs.
3. It may also be an unconscious method of wish fulfilment, for example a woman who does not find it easy to attract men may think that all men have designs on her (Munn 1966).

All three aspects of projection are involved in projective techniques.

The use of projective techniques by occupational therapists

Occupational therapists use projective techniques in two ways:

1. Creation of an object by the client, such as a painting, or presentation of a stimulus by the therapist, such as a poem, followed by a period of discussion in which the client is encouraged to express his feelings about the object freely. This is usually done in a group.
2. Presentation of a series of standard activities to the client with an assessment of how he copes with them.

Using projective techniques in groups

The distinguishing feature of occupational therapy as opposed to other therapies is the presence of objects that can be manipulated by the client. These objects may already be available or may be

created by the client (Azima & Azima 1959). Thus, projective techniques are an appropriate method of assessment for occupational therapists because they involve doing as well as talking.

Most of the projective techniques used by occupational therapists involve a phase of creating, which can be structured or unstructured, and a phase of talking about the created object or free-associating about it. The technique is used as assessment and as a form of treatment simultaneously, in that therapists help clients to accept projected material as their own and gain insight into how their own perceptions are formed.

The functions that are assessed by the use of projective techniques will vary according to the model being used, but may include:

- motor skills
- cognitive skills
- task skills
- interaction skills
- orientation
- motivation
- ego-organisation and control
- mood
- reality orientation
- level of activity
- self-image
- independence.

Projective tests developed by occupational therapists

Two types of projective tests developed by occupational therapists for individual use are the Azima Battery and the Goodman Battery.

The Azima Battery is a typical projective technique developed by an occupational therapist (Azima 1982). This utilises three tasks: a free pencil drawing, drawings of a person of each sex and a free clay model. These are presented to the client in a standard order and method. The client is given a set period of time to complete each task. During the 'doing' phase of the test the therapist records the time taken, the client's behaviour, any verbalisations and the techniques used. When the work is finished the client is asked to describe his productions.

An evaluation scale is used to interpret the results of the battery. This includes organisation of mood, organisation of drives and organisation of object relations, all of which are inferred from aspects of the client's observed behaviour and content of speech. Findings are analysed and presented as a summary to be used in differential diagnosis, treatment planning and prognosis (Azima 1982).

The Goodman Battery was developed from the Azima Battery and differs from it in that the tasks given are progressively less structured, thus making it possible to assess cognition and ego functioning under decreasingly structured conditions. It was designed for use with young adults and adults suffering from psychiatric disorders.

The four tasks in the battery are: copying a mosaic tile, spontaneous drawing, figure drawing and free clay modelling. The tester assesses the client's ability to conceptualise, to organise and to plan procedures that will enable him to complete the tasks. The theory underlying this technique is that the individual's ability to carry out practical tasks will be affected by the presence of conflicts and defences that consume energy, and by weak ego boundaries. When ego boundaries are weak, performance may be expected to deteriorate as the external structure becomes looser.

A guide has been developed to help in the recording and interpretation of findings, and rating scales are used for the different aspects of performance. These include ability to organise, independence and self-esteem (Evaskus 1982).

VALIDATING RESULTS

An increasing number of assessment procedures that were originally developed by occupational therapists to meet the needs of their particular setting have now been made widely available. Some have been described in this chapter.

If treatment results in general seem satisfactory, then standardisation may not appear important

to the therapist in the field who is working under pressure and simply wants to get through the work as efficiently as possible. However, we cannot justify our assessment results if the test used will not stand up to scrutiny.

In developing new testing procedures, or looking at existing ones, there are seven main points to consider:

1. What aspects of the client does the therapist wish to assess?
2. Have these aspects been identified in such a way that they can be measured accurately? (Reliability.)
3. How can the desired function be elicited for assessment?
4. Does the proposed assessment procedure measure what it is intended to measure? (Validity.)
5. Is there a clearly defined way of administering the assessment? (Standardisation of administration.)
6. How are the results to be recorded and scored?
7. Can the results be compared with the normal results for a comparable population? (Standardisation of results.)

Most of these points have been covered in this chapter. The frame of reference being used determines what is to be assessed, how it is assessed and how the assessment results are interpreted. The method of recording is influenced by who is to read the results and what they will be used for. Reliability, validity and standardisation are discussed below.

Reliability and validity

Vague and inaccurate assessment leads to vague and imprecise treatment. This is unacceptable for both ethical and practical reasons. The occupational therapist has a duty to use treatment that will benefit and not harm the client (see Ch. 11), therefore intervention must be based on accurate knowledge of the client's needs and abilities. The two most important concepts in ensuring accuracy of assessment procedures are reliability and validity.

Reliability

The first concern in legitimising an assessment procedure is whether or not it reliably elicits accurate information. There are two main ways of determining reliability:

1. *Test–retest*. The rater assesses the client and records the results. After a suitable interval to minimise the effect of practice, the test is given again and the results are compared. Obviously, results are more likely to be similar if the aspects being measured have been clearly defined and the testing procedure is standard.
2. *Interrater evaluation*. The assessment procedure is carried out on the same client by two or more raters and their results compared. This method is appropriate for evaluating procedures that involve observation. If possible, the raters observe the client doing the same activity, perhaps by using a videotape. The results are more likely to be similar if the testing procedure is standard and the raters have been trained in its use.

Validity

Establishing the validity of an assessment procedure is more difficult than establishing reliability, so it is only carried out on procedures that are known to be accurate and therefore worth validating.

Validation involves checking that the procedure measures what it is intended to measure – if we want to know whether a client is able to cook a meal on a gas cooker there is no point in assessing the client's performance on the department's electric cooker.

There are three main types of validity:

1. *content or face validity*: analysing the assessment procedure to see if it measures what it purports to measure
2. *criterion-related or concurrent validity*: comparing the assessment results with an external criterion such as data collected from other sources
3. *construct validity*: looking at the accuracy of the assessment procedure in measuring the theories or hypotheses behind the intervention.

Standardisation

If an assessment procedure is found to be both accurate and reliable, then it may be appropriate and useful to standardise it for use in a particular way with the client group it was developed for. Establishing a clear and uniform procedure for applying the test is called standardisation of administration and establishing the performance of a similar group of people for comparison is called standardisation of results, or norming.

Standardisation of administration

This means that the procedure can be repeated in exactly the same way by different people, at different times and on different subjects. This involves defining the functions to be assessed very clearly and giving precise instructions about administering and scoring the test. Objective tests are easier to standardise than tests that require an observer to make a judgement. Observer bias must be minimised by training the rater (Garfield 1982).

Standardisation of results

This is a lengthy procedure and is most likely to be neglected when an assessment procedure is developed. It involves administering a reliable and valid assessment procedure to a large number of people who are matched for such factors as sex, age, cultural background and, possibly, disability. The results can be used to show the normal range of performance for that group, to use as a comparison with the scores of an individual.

SUMMARY

This chapter covered the assessment stages of the occupational therapy process, including initial assessment, ongoing assessment and final assessment. It looked at what is assessed by the occupational therapist; function and dysfunction, motivation, performance, and relationship with the environment. Methods of assessment used by occupational therapists were reviewed, including review of client records, interviewing, observation, home visits, checklists, performance scales, questionnaires and projective techniques. Finally, there was a brief section on validating assessment results.

Chapter 7 covers the treatment planning and implementation stage of the occupational therapy process, which follows assessment.

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