The Delineation of the Role of Entry-Level Occupational Therapy Personnel

(role delineation, entry-level practice, survey research)

Diane Shapiro

The role assumed by occupational therapists and occupational therapy assistants during the first year of practice was delineated as part of an examination development project. The methods used to collect and analyze data obtained from several hundred therapists, assistants, and supervisors are described. A section of the results is presented to illustrate the differences and similarities found between the two levels of personnel.

A role delineation study conducted by the American Occupational Therapy Association (AOTA) to the U.S. Department of Health, Education and Welfare (the subject of this article) was initiated in 1976 to serve as the basis for a criterion-referenced entry examination for occupational therapy assistants. Within the scope of the contract, both therapist and assistant levels of practice were described, and written and performance examinations were prepared for use in certification of occupational therapy assistants (1). In addition, the President of the AOTA charged the investigators to use the results of the study to delineate the differences and similarities between the two levels of practice.

A resolution passed at the 1979 AOTA Conference established a policy calling for a review of all role studies completed before January 1, 1980 to fill a recognized need for a thorough, descriptive statement of current occupational therapy practice to provide the bases for educational standards, practice standards, and initial and ongoing certification programs. The role study described here is presently being reviewed, together with several other studies.

The examination developed in a subsequent phase of this project is also under review by the AOTA Certification Committee. All, or part, of the examination may be used as the mechanism to certify occupational therapy assistants.

Dale Brown

The method used to delineate the role of entry-level occupational therapy personnel and the results of the methods are presented in this report.

Methodology

The AOTA employed the Professional Examination Service (PES) to assist in the design and development of the data collection instruments. An experimental psychologist, not on the PES staff, was hired as a consultant to design instruments that would verify the data collected. Six occupational therapists (OTRs) and two certified occupational therapy assistants (COTAs) were appointed to the working advisory committee. Five other OTRs served on a panel to verify the work of the advisory committee.

The advisory committee members agreed to limit the focus of the study to aspects of entry-level practice that involved only direct, client-related service. Entry level was defined as the role assumed by personnel during the first 12 months of practice following initial AOTA certification. Direct service was defined to include all tasks performed for the care of clients.

The six separate methodological...
steps used in the study are presented in the order in which they were implemented.

Worker Log. Subjects were asked to list each task performed on their jobs for 5 consecutive days and to include why and how the tasks were performed, to whom the service was directed, and the amount of time spent performing each task. All the tasks identified were to be verified via several other steps, ensuring that those not performed by entry-level personnel would be eliminated. The Worker Log, pilot-tested on a small sample of OTRs and COTAs, was revised and distributed to 297 OTRs and 223 COTAs certified by the AOTA in 1974, 1975, and 1976. The decision to include subjects certified for more than one year was based upon the following considerations: 1. The log was designed to uncover an array of tasks performed by occupational therapy personnel, and 2. subjects contributing to this step could not be called upon for subsequent steps. The number of personnel certified in 1976 was limited. Since a large sample was needed, these potential subjects could not participate in more than one step and, since the control on subsequent steps was of greater importance, subjects who had 2 and 3 years of experience were included in the Worker Log.

Because compliance with the Worker Log was time consuming, a small rate of return was anticipated. The distributed sample size was far larger than the number of responses needed. Ninety-eight OTRs and 35 COTAs returned completed logs within the allotted time. Only the first 90 logs were used because duplication of tasks was noted. The remaining 43 logs were examined for unique tasks, which were included in the analysis.

Each of the 90 logs identified approximately 50 tasks. Of 4,500 tasks identified, 2,500 were considered direct service. All of the direct service tasks were categorized into 72 different areas of service. Two hundred tasks proportionately representative of the total were organized into an outline that became the “skeleton” of the Structured Checklist Inventory (SCI).

Observation/Interview. The consultant helped the investigators to develop observation/interview recording forms and trained the advisory committee members in methods of interviewing and observing. Before the data were collected, the process and forms were pilot-tested.

A sample, representative of the types of settings that employ entry-level OTRs and COTAs, was selected by using a mail survey of all occupational therapy departments located within a 200-mile radius of each of the committee member’s homes. Thirty-three OTRs and 33 COTAs certified in 1976, observed while they administered treatment, were interviewed by 1 of the 8 committee members. These data provided descriptive statements that were added to the 200 tasks selected from the Worker Logs. The process also served to introduce, or reintroduce, the committee members to current entry-level practice in a variety of settings. This was important since committee members needed to be familiar with practice beyond their own expertise because they would be making judgments about general practice.

The committee members and investigators organized the 200 task statements yielded from Step 1 and the results of the observation/interview from Step 2 into a preliminary outline for the SCI. Decisions about the organization of the outline were based upon the judgments of the committee members.

Structured Checklist Inventory. The SCI was designed as a self-administered questionnaire suitable for computer analysis. Early drafts were pilot-tested and revised.

The SCI was divided into four sections, one containing demographic information, and three containing task statements titled “Evaluation,” “Planning,” and “Intervention and Program Termination.” Respondents were instructed to identify a specific client’s age and disability, and to indicate which of the tasks listed were performed for that client. In addition, the respondents were asked to indicate who determined that the task was to be performed and whether the performance was independent, under supervision, or delegated to someone else. Respondents were also asked to indicate which tasks in each section were, in their opinion, of greatest importance to occupational therapy practice.

The SCI was mailed to 803 OTRs and 429 COTAs certified by the AOTA in 1976. Four hundred and thirty OTRs and 108 COTAs completed them within the allotted time. A careful examination of the geographical locations of the respondents, the type of settings in which they were employed, and the types of professional and technical programs from which they graduated showed that they were representative of those OTRs and COTAs who received initial certification in 1976.

Supervisors’ Structured Checklist Inventory (SSCI). The same tasks included in the SCI were used for the SSCI, which was distributed to 100 supervisors of entry-level OTRs, and to 100 supervisors of entry-level COTAs. The sample of the supervisors of the OTRs was identified by telephoning entry-level OTRs for the names of their supervisors. Since
Table 1
Evaluation

<table>
<thead>
<tr>
<th>Task</th>
<th>COTA</th>
<th>OTR</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Solicit a referral.</td>
<td>1,3-6. These tasks are not specific to OT, but are a part of the role of most health personnel. The COTA seeks these data either as a routine part of the department's program or as so directed by an OTR. This information is gathered by a COTA specifically to obtain data regarding the client's occupational performance.</td>
<td>1,3-6. These tasks are not specific to OT, but are a part of the role of most health personnel. The OTR seeks these data as a part of the department's program or may delegate this to a COTA. The information is gathered by an OTR to obtain data regarding a client's components of performance.</td>
</tr>
<tr>
<td>2. Determine need for evaluation.*</td>
<td>2. Determination of need for evaluation may be referred to as screening. Any of the interview tasks and/or the other evaluation tasks can be used for this purpose.</td>
<td>2. Determination of need for evaluation may be referred to as screening. Any of the interview tasks and/or the other evaluation tasks can be used for this purpose.</td>
</tr>
<tr>
<td>3. Read medical chart to obtain diagnostic, prognostic, and/or treatment information.</td>
<td>8 and 9. The COTA discusses and explains OT services and method and/or purpose of evaluation with the client and/or family as directed by an OTR. In some instances, the COTA may initiate this interaction if the discussion is limited to the six occupational performances.</td>
<td>8 and 9. The OTR discusses and explains OT services and methods and/or purposes of evaluation to client and/or family. The OTR's discussions include the five components of performance.</td>
</tr>
<tr>
<td>4. Read report written by other staff for specific information about client's background.†</td>
<td>10-21. The COTA uses a structured format or is given a list of questions to ask the client and/or family. Interviews are limited to collecting information about occupational performance</td>
<td>10-21. The OTR uses structured or open-ended interview techniques to obtain information from clients and/or family. Interview includes questions related to the components of performance.</td>
</tr>
<tr>
<td>5. Communicate with professionals who have previously been involved with this client.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>6. Meet with other staff to obtain specific information about client's background.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>7. Select evaluation methodology.*</td>
<td></td>
<td></td>
</tr>
<tr>
<td>8. Describe OT program to client and/or family.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>9. Explain method and/or purpose of OT evaluation to client and/or family.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

INTERVIEW CLIENT AND/OR FAMILY FOR INFORMATION ABOUT:

10. medical history
11. developmental milestones
12. social history
13. self-care abilities
14. academic history
15. vocational history
16. play history
17. leisure interests and experiences
18. future plans and goals
19. accessibility of home environment
20. accessibility of work or school environment
21. accessibility of community

FOR EVALUATION PURPOSES, OBSERVE CLIENT ENGAGED IN:

22. a developmental task
23. a group activity
24. an assigned activity
25. an activity selected by the client.
26. an actual occupational performance task
27. a simulated occupational performance task
28. a simulated occupational performance task

22-27. The COTA observes client engaged in activities to evaluate occupational performance. Observations are based upon a specific procedure and recorded on a form or in a format as directed by OTR.
22-27. The OTR observes client engaged in activities to evaluate the components of performance.
ADMINISTER:
28. standardized developmental screening tests, e.g., The Denver Developmental Screening Test.
29. Developmental assessment, e.g., identification of developmental milestones.*
30. Life style assessment, e.g., an activity configuration
31. Vocational assessment
32. Interest inventory
33. Assessment of coordination*
34. Activity battery*
35. Developmental reflex and reaction evaluation*
36. Assessment of balance and equilibrium*
37. Functional manual muscle test*
38. Range of motion assessment*

COTA
28, 30-33. The COTA performs these assessments if they are a routine part of the department's evaluation or if an OTR instructs them to do so.
35, 39, 40-42. Sections of these OTR tasks may be delegated to COTA in some situations. For example, COTA may, given instructions from an OTR, observe client in an activity to assess range of motion.

OTR
43-50. The OTR would analyze, synthesize, report, and discuss the findings of all evaluations, particularly those related to the components of performance.

CONDUCT:
40. Home visit*
41. Evaluation of the client's work or school environment*
42. Evaluation of client's community environment and resources*
43. Review evaluation findings
44. Analyze scores or results of tests or assessments
45. Synthesize scores or results of tests or assessments
46. Report scores or results of tests or assessments
47. Discuss evaluation findings with staff
48. Discuss evaluation findings with client and/or family
49. Recommend that client receive occupational therapy
50. Recommend that client be referred to another discipline e.g., physical therapy, recreation therapy

*Refers only to OTR-level tasks.
†Staff includes all health practitioners, teachers, clergy, and other professionals involved in treatment of client. The staff person may or may not be employed by the facility.

this procedure was not expedient, a different procedure was used to locate COTA supervisors. The directors of COTA educational programs were telephoned and asked to provide the names of those who supervised the programs' recent graduates.

The supervisors were asked to indicate which of the tasks listed they considered to be a part of the role of entry-level personnel. The judgments of the 82 supervisors of entry-level OTRs and 64 supervisors of entry-level COTAs who returned completed SSCIs were used to verify the data obtained from the SCI.
Role Defined by Experts. Five OTRs from the AOTA Accreditation Committee formed a panel charged to prepare a descriptive role of occupational therapy practice. Those selected were knowledgeable about current occupational therapy education and were qualified to represent the profession. The panel members used their clinical, educational, and supervisory experience while making judgments about the role. One of the panel members was also a member of the advisory committee; the other four had not seen any of the instruments used or any of the results obtained from the earlier steps.

The project staff and consultants guided the panel members' deliberations in accordance with a structured decision-making model (5). The preliminary role definition was completed in a 2-day meeting. Later versions were mailed to members for refinement and agreement by a mail ballot.

Role Verification. The advisory committee members used the data obtained from the SCI to sort task statements into OTR and COTA categories, and to eliminate unreported tasks. The remaining tasks, compared with the supervisors' judgments (SSCI), were either eliminated or retained. The list was then compared with the role defined by the panel of experts. The collective judgments of the supervisors, panel members, and committee members resulted in the final version of the role.

Results

Demographic Data. The following descriptive analysis is based upon the information supplied by the 430 OTRs and 108 COTAs who returned completed SCIs. Both OTR and COTA respondents were employed for an average of 12 months and were certified for the first time by the AOTA in 1976. This implies that a number of respondents obtained positions before they passed the certification examination.

Sixty-four percent of the OTRs and 63.9 percent of the COTAs reported working in inpatient facilities. The most common work involved physical rehabilitation (OTRs, 45.5%; COTAs, 48.1%), with pediatric and geriatric specialties the next most common for OTRs, and geriatric and psychiatric specialties the next most common for COTAs.

Of the OTRs, 30.4 percent reported that they work in facilities in which they were the only occupational therapy personnel; 24 percent work in facilities that employ more than five OTRs. Approximately one-half of the COTAs indicated that they were the only occupational therapy personnel employed in their facility.

The OTRs reported spending more time attending meetings, supervising staff, and administering their departments than did the COTAs. Conversely, COTAs said they spend more time being supervised, maintaining supplies and equipment, and escorting clients.

Both OTRs and COTAs indicated that their clinical supervisor was, in the majority of situations, an OTR who was a staff member of the same facility. A minority (22.3% of OTRs and 13.9% of COTAs) indicated their supervisor was a facility administrator, who was not necessarily a health professional. Generally, both OTRs and COTAs indicated that their supervisor was readily available, but that supervisory sessions were not regularly scheduled. Both groups, however, indicated that the supervisor regularly evaluated their performance.

The Role of Occupational Therapy Personnel. One hundred and eight task statements comprise the role of occupational therapy personnel practicing in entry-level positions: 12 tasks are considered a planning function, 46 are part of the function labeled "intervention and program termination," and 50 tasks are considered to be a part of the evaluation function of occupational therapy personnel. The evaluation function only is illustrated in Table 1. The scope of the entire role delineation is limited to situations in which occupational therapists and occupational therapy assistants work together in the same department. This delineation does not address the role of the COTA who practices either without supervision or with OTR supervision on a consultant basis. Such roles are excluded because they are not defined as a part of entry-level positions. The OTR's role in the supervision of COTAs or other staff is also not included in this delineation, both because the role is an indirect service and because supervision is not considered the responsibility of entry-level OTRs.

In many instances, OTRs and COTAs reported responsibility for identical tasks. However, COTAs performed these tasks under supervision and were not responsible for determining that the task was to be performed. The roles defined by the panel of experts were further distinguished by a clarification of the purpose of performance. The following two definitions were used to account for differences noted in the two levels of practice:

Occupational performance is planning and participation in everyday activities. These activities are classified as self-care, work, academic, homemaking, leisure, and play.
Performance components are the learned and/or inherent elements of behavior that permit the planning and participation in everyday activities.

COTAs have primary responsibility for carrying out tasks related to the evaluation of clients, planning of individual intervention programs, and implementing intervention programs aimed at improving or maintaining clients' functioning in the six occupational performance categories. OTRs are responsible for evaluating clients, planning intervention programs, and implementing intervention programs aimed at correcting, improving, or maintaining the components of performance.

A majority, 80 of the 108 tasks that comprise entry-level roles, are performed by both OTRs and COTAs. This overlap in responsibility indicates that OTRs are expected to be able to perform tasks often delegated to COTAs, and that both levels of personnel are responsible for evaluation, planning, and intervention. The degree of responsibility, amount of supervision required, and the objective of the intervention differ for each of the two levels of personnel.

Discussion

A role delineation such as the one described is necessary for the foundation of educational and credentialing programs (4, 5). A complete and current delineation of practice that reflects both the ideal and the actual allows educators and evaluators to teach and measure desired competencies. Competency-based educational programs and criterion-referenced measurement techniques demand such thorough descriptions of practice.

The results of this study were used to design criterion-referenced credentialing examinations for occupational therapy assistants (6). The task statements were categorized according to function and were then further described in competency statements. Each competency statement was translated into a several-page long “test specification,” which specified the format and content of test questions. The content—diagnoses, evaluations, and techniques—was determined from a survey of education programs. This procedure ensured that the resulting examination was based upon information presented to candidates and was related to the performance expected of graduates of approved educational programs.

Since this role delineation study was conducted solely to develop an examination, the scope was limited to entry-level practice and specifically to the direct service or client-related aspects of practice. Because of this narrow focus, the results cannot be generalized beyond this intent. For example, the role delineation is not intended to represent standards of practice or standards of education. However, the methodology and the instruments developed could be used with advanced-level practitioners and specialists to design continuing education and recertification programs. Gilfoyle and Hays, in another government-funded project, have used the same methodology for a specialty role study (2), and several educational and clinical programs have used both the methods and results of this study in various ways (see Borg and Bruce article, this issue).

Acknowledgments

The authors thank all of the OTRs and COTAs who volunteered their time to provide the data needed for the study.

The members of the Advisory Committee: Barbara By, Elnora Gilfoyle, Jacqueline A. Moore, Judy Phillips, Nancy Prendergast, Kathleen Sturgis, Toni Walski, and Ruth Wells; and the panel of experts: Elizabeth Devereaux, Amy Lind, Susan McFadden, Nancy Prendergast, and Roy Swift are thanked for their time, advice, fine judgment, and good humor.

Thanks to Mary Georgatos and Barbara Kattaron, project secretaries, for their patience, skill, and stamina.

Philip Ferrara and Linda Ingison are acknowledged for their fine direction and advice; and Margaret A. Wilson for her most important contribution—wisdom, guidance, support, and interest.

The project was supported by contract No. 251-76-0052 from the Department of Health, Education and Welfare.

Note: To obtain a copy of the complete role delineation, write to AOTA Distribution Center, 1383 Piccard Drive, Rockville, MD 20850.

REFERENCES

6. Continuation of Study of Measures of Proficiency in Occupational Therapy, Contract No. 231-76-0052, Phase II Written Examination and Phase III Performance Examination, 1979, American Occupational Therapy Association, Inc., Rockville, Maryland