This study analyzes the time allocation patterns at work of a sample group of Israeli occupational therapists who function in different roles and specialty areas. The sample consisted of 89 female occupational therapists working in the areas of physical impairment, rehabilitation, psychiatry, and pediatrics. Subjects recorded all of their activities during one work week and rated 23 previously identified occupational therapy activities according to perceived levels of importance. The results indicated that, on the whole, occupational therapists in all areas devoted at least two-thirds of their time to treatment-related activities (direct and indirect treatment). The results led us to conclude that the time allocation patterns used may have been conducive to "burnout." Therefore, to facilitate professional growth, we recommend that priorities be set and followed and also that role definitions be adhered to more strictly.

The variety of specialty areas within the field of occupational therapy, the number of different facilities within which occupational therapists work, and the variety of activities practiced by occupational therapists suggest the need to closely examine the professional activity patterns of occupational therapists. In 1979, Clark (1) called attention to the growth occurring in the field and also to the diffusion of occupational therapists' roles.

The final report of ad hoc committee on administration of the American Occupational Therapy Association (AOTA) states that to organize productive occupational therapy services, the manager must have a clear knowledge of the procedures involved in the evaluation and of the treatment and prevention methods offered. The committee also said that to maximize a worker's achievement, his or her personal needs, such as satisfaction, incentives, and rewards, need to be considered (2). This intensifies the need for a clearer understanding of the daily activities of occupational therapy practice.

A review of the literature published in the American Journal of Occupational Therapy over the last ten years yields three articles dealing with the professional activities that make up the work of an occupational therapist. One article discussed a project where the procedures used in 15 occupational therapy facilities were evaluated, and a 12-item list of occupational therapy-related activities was developed (3). This list included intake, evaluation and treatment planning, treatment of different kinds, and termination and follow-up. In another article, Shapiro and Brown (4) identified and categorized over 200 occupational therapy entry-level practitioner tasks into the following groups: evaluation, treatment, and aftercare. However, the scope of this study was limited to the directly patient-related aspects of occupational therapy.

After the passage of the "All Handicapped Children Act" of 1975 (PL 94-142), which provides for the development and implementation of programs that enhance education to meet individual needs of students with handicaps, a Victor Florian, PhD, is Senior Lecturer and Scientific Consultant, School of Social Work, Michal Sheffer, MEd, OTR, is Research Coordinator, and Dalia Sachs, OTR, was director, School of Occupational Therapy, all at University of Haifa, Mount Carmel, Haifa 31999, Israel.
survey to identify the roles and functions of school-based occupational therapists was conducted (5). The following five primary roles emerged from that survey: evaluation, program planning, implementation of intervention, management/supervision, and consultation.

However, one of the cited studies mentions the time allocated for the different activities. Occupational therapy textbooks that describe theory, various treatment techniques, the population to be treated, and the activities involved in offering occupational therapy services also do not discuss the daily time spent on professional activities during one week. In other words, no single activity took up the major part of the therapists' time (12). In an investigation of vocational rehabilitation counselors, Fraser and Clowers (13) found that client-counselor activities, in addition to case reporting and recording, were perceived as the activities consuming substantial portions of the work week. Another study by Rubin and Emener (14), found that vocational rehabilitation counselors spent relatively little time in counseling and guidance activities and relatively much time doing paperwork and arranging for services. The differences in the professional time allocation patterns indicated by these studies suggest that a discipline with a wide range of roles and techniques, such as occupational therapy, will reveal a unique time allocation pattern.

Method
Sample

The target population consisted of the 115 registered occupational therapists working at the 20 institutions at which the Occupational Therapy School of the University of Haifa has clinical training sites. These institutions include general and psychiatric hospitals, ambulatory treatment centers, medical rehabilitation centers, and special education schools in the northern and central regions of Israel. Our final sample consisted of 89 female therapists (a 77% response rate) divided into the following three age groups: 21 to 25 years old (N = 9; 10%), 25 to 40 years old (N = 69; 77.5%), and 40 years old or older (N = 11; 12.4%). The number of years of seniority accrued varied between 0 and 3 years (N = 36; 40.4%), 4 and 10 years (N = 40; 45%), and 11 years or more (N = 14; 15.7%). Subjects were divided into the following two role categories: administrators (N = 30; 33.7%) and staff members (N = 59; 66.3%).

The therapists practiced in the following specialty areas: physical impairment and illness (N = 16; 18%), psychiatry (N = 25; 28%), medical rehabilitation (N = 27; 30.3%), and pediatrics (N = 21; 23.6%).

Instruments

Two types of instruments were used to gather data. The first was a self-report form that asked the subjects to describe, in half-hour time slots, all the activities they were involved in at work for one week. The form had six identical pages, each one representing one day's work. (In Israel, the work week has six workdays.) The instructions stated that the occupational therapists were to fill out the form without help from others and at their convenience. "Work time" was defined as all the time scheduled for work on a given day. The "work week" was defined as all regularly scheduled days within one calendar week. Subjects were asked to write down all activities within their scheduled work time, whether they considered them job-related or not and whether they considered them important or trivial. The data collected from the forms were subjected to a content analysis.

For the purpose of the content analysis, a 23-item list of activities that usually take place in different occupational therapy clinical settings was developed by the faculty of the School of Occupational Therapy at the University of Haifa. The faculty used relevant information from the professional literature (15) to discuss and decide on an inclusive list of activities.

Each of the activities described by the subjects was categorized according to the 23-item list. A specially trained faculty member evaluated, classified, and quantified all forms according to the time spent on each of the 23 activities. A score for each activity was calculated by using the corresponding time units spent on the activity during the entire work week. The raw data
appeared in hour units. The units were then translated into percentages (the total work hours within one week of the responders equaled 100%). With this method, the results for each item appeared as a percentage of time spent in one activity versus another.

The second measure used in the study was a checklist based on the 23-item list. This checklist rated each activity according to a scale of three levels of importance (not so important, important, very important). The subjects checked one of the three responses for each of the 23 activity categories. To preserve spontaneity, just ten minutes were allowed for completion of the checklist. In addition to these two forms, subjects completed a short demographic information form.

Procedure

The subjects were asked to complete the one-week work activities form. The data were gathered during a period of eight weeks rather than one week to avoid the possibility of encountering all the subjects in a particular week of special activities. The checklist was then individually administered to each subject by a research assistant at the subject’s work site.

Results

The first step in analyzing the results was the identification of the primary activities to which the total sample of therapists dedicated work time. All activities to which 2.5% or less of work time was dedicated were considered to be of secondary importance. Out of a total of 23, the following eight types of primary activities were left: providing occupational therapy individual treatment (34.5%), attending interdisciplinary staff meetings (8.4%), performing miscellaneous duties (5.4%), doing paperwork and administrative tasks (6.1%), performing occupational therapy group treatment (5.4%), reporting and recording (4.6%), screening and evaluating (4.5%), and doing equipment repair, cleaning, and arranging (3%).

For further analysis, 22 of the 23 activities identified in our study were assigned to five major groups of activities based on the AOTA uniform terminology definitions (15). One type of activity (performing miscellaneous duties) was discarded from further analysis because it did not contribute to the research purpose. The five groups included the following activities: 1) providing direct treatment (individual treatment, group treatment, screening and evaluation, home visits, family consultations); 2) providing indirect treatment (treatment planning, reporting and recording, reading patients’ reports, designing and preparing special equipment, repairing equipment, transferring patients); 3) performing administrative duties (administrative paperwork, public relations); 4) participating in continuing education activities (reading professional material, supervising students, attending lectures and courses, doing research); and 5) fostering professional relations (attending staff meetings, interdisciplinary staff meetings, consulting with other professionals, supervising staff and outside therapists).

Two criteria were used to analyze these groups of activities: a) the amount of time devoted to each group of activities and b) the importance attached to each group (according to the subject’s conceptual framework). These criteria were evaluated in two analyses of variance, with each referring to a different independent variable. In the first analysis, the subjects were compared based on their areas of specialty (physical disabilities, psychiatry, rehabilitation, or pediatrics). Tables 1 and 2 show the means and standard deviations on the “time” and “importance” criteria for each of the four groups.

A general overall analysis of variance (ANOVA) with Wilke’s criterion was performed on these data and revealed a significant difference \( f(30,223) = 2.11; p < .01 \). In light of the existence of significant differences between the specialty groups, a one-way ANOVA was performed on the data regarding time distribution to locate the sources of statistical variance. Significant differences between subjects in different specialty areas were revealed in the categories of giving direct treatment \( f(3,85) = 6.5; p < .001 \) and in fostering professional relations \( f(3,85) = 4.9; p < .03 \). For Direct Treatment, a DMRT revealed that psychiatric occupational therapists dedicated more time to these activities than did occupational therapists in physical illness and impairment and in rehabilitation; however, the pediatric occupational therapists dedicated more time to these activities than did rehabilitation occupational therapists \( p < .05 \).

The one-way ANOVA also revealed significant differences in the importance occupational therapists attached to giving direct treatment \( f(3,85) = 3.5; p < .02 \). Both physical and pediatric occupational therapists considered direct treatment to be more important than did psychiatric occupational therapists. It should be noted that no significant differences in perceived importance were revealed in the other four groups of activities.
Wilke’s criterion, referred to the independent variable of the professional role. The two roles defined were a) staff member and/or student supervisor and b) director/supervisor and/or assistant director. The results of the ANOVA were significant \[ f(4,84) = 7.46; p < .001 \], and one-way ANOVAs were carried out to investigate individual differences. Occupational therapy staff members were found to invest more time in giving treatment (direct and indirect) than were administrative occupational therapists \[ f(1,87) = 19.2; p < .001; \text{mean} = 57.7\%, \text{SD} = 21.3 \] for administrative occupational therapists and mean = 68.6%, SD = 13.0 for occupational therapy staff members. In contrast, as was expected, administrative occupational therapists invested more time than occupational therapy staff members in professional duties other than treatment (administrative duties, continuing education activities, professional relations \[ f(1,87) = 26.3; p < .0001; \text{mean} = 41.6\%, \text{SD} = 21.3 \] for administrative occupational therapists and mean = 23.45%, SD = 12.0 for occupational therapy staff members). No significant differences were revealed in the importance the two groups attached to treatment vs. administration.

An additional variable, years of seniority, was correlated with the “time” and “importance” criteria regarding the five groups of activities within each specialty area. The results indicated positive correlations between seniority and administrative duties \( r = .30, p < .003 \) and between seniority and continuing education activities \( r = .23, p < .03 \). Years of seniority had no correlation with the other three activities (direct treatment, indirect treatment, and professional relations). In the importance criterion, only one significant correlation was revealed: the importance attached to direct treatment was negatively correlated with years of seniority \[ r = -.23, p < .03 \]. The importance attached to the remaining four activity groups did not correlate significantly with years of seniority.

**Discussion**

The field of occupational therapy encompasses a wide range of professional activities and duties. Therefore, the time distribution among occupational therapists performing these activities is important. The results of our research indicate that occupational therapists (in Israel) spend most of their work time giving treatment (direct or indirect). This finding agrees with the view that occupational therapy is primarily a treatment-oriented discipline. In fact, even therapists working as administrators or supervisors were found to spend over 50% of their time in treatment. The large proportion of time devoted to treatment is particularly significant if compared with the time devoted to treatment in other care professions (12-14).

Our results also indicate that the time left over from treatment is thinly spread out among numerous other professional activities. Subjects consistently evaluated these other activities as highly important; this may create a situation of conflict considering the limited time available to complete these activities. Thus, an imbalance between expectations of professional accomplishment and actual achievement may result, which could cause frustration and be conducive to professional burnout (2).

Studies have shown that a heavy
work load increases the tendency toward burnout among professionals (16, 17). Moreover, Maslach (18) found that the amount of direct contact with patients is a central factor in the development of burnout because of the accompanying interpersonal tension.

Another possible source of frustration for therapists is the limited amount of time they are able to spend in supervision and continuing education activities. Research on other care professions has shown that such activities tend to positively affect a person's ability to cope with burnout symptoms (17, 19).

A careful analysis of the differences in time distribution between therapists practicing in the four different specialty areas reveals that psychiatric occupational therapists spend significantly less time on treatment than do therapists in the other areas. Also, psychiatric therapists spend proportionately more time on professional relations and continuing education activities. A possible explanation is that psychiatric occupational therapists experience relatively high on-the-job stress because of the nature of the patients that they treat and that they attempt to cope with this situation by reducing treatment time and increasing stress-reducing activities, such as interdisciplinary staff discussions and professional supervision.

Finally, it is necessary to indicate some limitations of the generalizations suggested in this study. The first problem was our questionnaire, which referred to the importance subjects attached to each activity. The objective was to obtain a list of activities ranked in order of importance; however, subjects responded to each activity on an absolute scale of importance, thus producing an insufficient response distribution. This was apparently the result of an idealization of professional goals at the time the study was carried out. A second problem was that although the theory, practice, and educational methods applied in Israel are similar to those applied in the United States, the results cannot be directly applied to occupational therapists in other countries. This is because the perception of professional problems is affected by local sociocultural and economic factors. Therefore, further studies on time allocation are recommended and should include cultural investigation using more sophisticated instrumentation.

However, the following conclusions can be drawn. The burnout risks indicated by unbalanced time allocation suggests that the proportional allocation of the time available to occupational therapists should be based on sound priorities. Occupational therapy as a profession could better develop if occupational therapists working in different job roles (e.g., as educators, administrators, staff occupational therapists) limited their activities to those strictly required for the satisfactory fulfillment of their roles. In this way, frustration could be reduced because therapists could devote more time to the principal tasks of each role and would have less of a need to spread their time over a wide range of disparate activities.

REFERENCES

2. Final report of the ad hoc committee on administrative issues, parts I and II. Am J Occup Ther 34:5–9; 34:81–84, 1980