Objective. The purpose of this study was to test the validity of a model of professional development that was based on occupational adaptation. This model proposes that students have three classes of adaptive response behaviors available for use: primitive, transitional, and mature.

Method. Eight Level II fieldwork students were assigned to the Department of Veterans Affairs Medical Center, Dallas, Texas, for 12 weeks. Experienced fieldwork supervisors at the medical center developed a taxonomy of behavioral statements consistent with the developmental model's three classes of adaptive response behaviors. This taxonomy was converted to a student log in which supervisors rated the frequency with which the Level II fieldwork students exhibited these behaviors.

Results. The patterns of behaviors, which were represented graphically for each of the students, generally supported the predictions of the model. Students demonstrated all three classes of behaviors. Primitive and transitional behaviors emerged when the students experienced increased or unusual demands, even when the students' modal behavior was mature. Students temporarily reverted to lower level behaviors when faced with situations that they perceived as too difficult or as too unfamiliar.

Conclusion. This model of professional development facilitates an understanding of students' development during their transition from classroom to practice setting. Generalization to other settings will require validation of the student log.

The clinical education of occupational therapy students has long been viewed as a responsibility of the occupational therapist (American Occupational Therapy Association [AOTA], 1991). Student supervision has been identified as a serious task, and specific functions and responsibilities have been delineated (Crepeau & LaGarde, 1991; Yerxa, 1991). There are four major tools currently in use at fieldwork sites that serve as guides for determining expectations and evaluating performance of Level II fieldwork students. The first tool, Essentials and Guidelines of an Accredited Educational Program for the Occupational Therapist (Essentials) (AOTA & AMA, 1991), outlines basic requirements. The second tool, Guide to Fieldwork Education (AOTA, 1991), offers information of a generic nature to assist development of Level II fieldwork experiences that comply with the requirements laid out in the Essentials. The third tool, the Fieldwork Evaluation (AOTA, 1991), assesses students' competence in the areas of performance, judgment, and attitude. The fourth tool, a compilation of facility-specific behavioral objectives, delineates expectations regarding the requirements for students' skill development outcomes in a particular setting.

In addition to the development of skills, the process of professional development of the student involves a
transition from classroom to practice setting. This transition from student to practitioner is often punctuated with characteristic problems encountered in student training (Cohn, 1993). There are models in the occupational therapy literature designed to assist the supervisor in understanding and dealing with these problems; however, most of these models do not address student transition in terms of occupational functioning. For example, Schwartz (1984) presented a model of professional development based on stages of ego development (psychosocial emphasis). Slater and Cohn (1991) offered a model that focused on clinical reasoning as the medium by which therapists advance through stages that range from novice to expert (cognitive emphasis). Models outside occupational therapy, such as one from counseling psychology by Loganhill, Hardy, and Delworth (1982), also emphasized ego development, particularly as it manifests in the supervisor–supervisee relationship.

In contrast, Schkade (1991), this article’s second author, presented a model based on the occupational adaptation frame of reference (Schkade & Schultz, 1992; Schultz & Schkade, 1992) that viewed student transition in the context of occupational functioning and included psychosocial, cognitive, and sensorimotor components of students’ occupational performance. This model, the Occupational Adaptation Model of Professional Development (OAMPD), is the subject of this article.

The OAMPD provides an occupational functioning framework for describing and understanding the process through which students achieve objectives outlined by a facility. It may be of particular value when both a fieldwork supervisor and a fieldwork student’s objectives are not being met. This study is an initial step in the validation of the OAMPD as a model with which to view and facilitate the professional growth of the student occupational therapist.

Literature Review

Fieldwork Education

The student’s required 6 months of Level II fieldwork experience under the supervision of a registered occupational therapist is an indispensable part of the training of a registered occupational therapist (AOTA, 1991; Cohn & Frum, 1988; Presseller, 1983; Stafford, 1986). Not only does Level II fieldwork foster “the development of a way of thinking, valuing, and communicating the essential elements of the occupational therapy profession” (Crepeau, 1991, p. xiii), but it has also been shown to be the most influential factor in the choice of practice areas and in the development of professional concepts, attitudes, and behaviors (Christie, Joyce, & Moeller, 1985a, 1985b; Crepeau & LaGarde, 1991; Vezza, 1991). Yet, many supervisors have little or no formal education or training in how to supervise fieldwork students.

Studies have identified the major stresses and problems encountered by the fieldwork supervisor (Christie et al., 1985b; Cohn & Frum, 1988; Presseller, 1983; Warrender, 1990). The student likewise faces great stresses and pressures in undertaking the fieldwork experience (Beck & Srivastava, 1991; Mitchell & Kemple, 1993; Presseller, 1983; Rauch, 1984; Wiemer, 1991). The transitional and developmental nature of movement toward entry-level competence in the student is recognized not only in the occupational therapy literature (Cohn, 1993), but also in that of other disciplines, such as psychology (Dodds, 1986), physical therapy (Jensen, Shepard, & Hack, 1990), and nursing (Bradby, 1990).

This literature review revealed a limited organized theoretical basis for explaining and guiding the transition from occupational therapy student to competent practitioner. The literature identified and described isolated characteristics of the student-to-practitioner process but provided minimal guidance regarding facilitation of the student’s transition.

Occupational Adaptation Frame of Reference

Occupational adaptation provides a means of explaining the interaction between the person and the occupational environment; it is viewed as a process through which occupational functioning develops. The ideal outcome of this interaction is the person’s relatively effective, efficient, and satisfying response to the challenges faced within the environment (i.e., relative mastery). The occupational adaptation process is most evident during times of major life transitions. A person whose occupational adaptation capability is functioning well will be able to perform with competence during these transitions. In contrast, a person whose occupational adaptation is functioning at a marginal level will be at greater risk for occupational dysfunction.

Professional transitions involved in job changes, promotions, and new responsibilities challenge the adaptation capability (Cohn, 1993). During professional transition, a person is at risk for occupational dysfunction, particularly when role demands seem to exceed the person’s adaptive capacity (Schkade, 1991). The two principal situations in which the transition from classroom to clinical setting may promote occupational dysfunction are (a) when role performance expectations involved in the fieldwork environment exceed the student’s capabilities, and (b) when the student’s perceptions of the role expectations differ from those of the facility staff members.

The OAMPD proposes that students have three classes of adaptive response behaviors available for use: primitive (hyperstabilized), transitional (hypermobilized), and mature (exhibiting blended stability and mobility). These behaviors can be observed in sensorimotor, cognitive, and psychosocial activity. The model suggests that students’ initial attempts to respond to challenges may elicit primitive behaviors. When the student per-
receives task demands as too difficult or too unfamiliar, primitive behaviors emerge as the student attempts to stabilize an ego threatened by the perception of impending failure. The student may demonstrate “frozen” posture, attempts to avoid or escape, denial of requisite knowledge, and other indications of anxiety-induced immobility. The use of primitive behaviors as a temporary balance-restoring strategy is considered normative because it promotes the restoration of equilibrium from which movement can then occur. Extended use of primitive behaviors leaves the student stuck and seemingly unable to produce adaptive movement.

The student who becomes unstuck may then exhibit transitional behaviors that involve high levels of sensorimotor activity that appear to be random. Transitional behaviors stem from the perception of activity as goal. They reflect the student’s awareness that some sort of action is expected. But without clear goal direction, a student may attend to irrelevant stimuli and fail to attend to relevant stimuli. These behaviors show minimal evidence of goal direction or purpose. However, the student may demonstrate behaviors that are closer to the desired responses than to the primitive class of responses and, among these, the supervisor can find responses to reinforce in order to help the student reach an intermediate step in mature behavioral expression.

When the student is able to adapt successfully to the challenges of Level II fieldwork, mature responses are exhibited. As the student begins to understand relationships between theory, goal, and activity, the immobilizing anxiety about failure and the random activity focused on preventing failure come under the student’s control. The mature behaviors are characterized by a blending of stability, which is overexpressed in primitive behaviors, and mobility, which is overexpressed in transitional behaviors. Thus, the movement, thought, and interpersonal activity that the student demonstrates become more modulated and goal directed.

It is important to note that the classes of behaviors are not viewed as a series of stages through which a student progresses to reach a permanently higher level. Students will continue to have all three classes of behavior in their response repertoires. They may respond with mature behaviors under one circumstance and with primitive behaviors under the next. It is not unusual for students who appear to be responding essentially with mature behaviors to revert to a higher frequency of primitive or transitional behaviors when a new situation unduly challenges their capacities. This mix of behaviors is normative unless primitive or transitional behaviors become so dominant that they preclude the development or expression of mature behaviors. Students’ movement between classes of behaviors can be self-induced when students perceive their performance as unsatisfactory and alter their behaviors in order to respond more successfully. This movement can also occur as a result of a supervisor who provides feedback that assists the student in understanding the nature of the performance deficits.

Understanding these primitive, transitional, and mature behaviors, not as stages but as classes of behavior, is one feature that distinguishes the OAMPD from other models of student transition. In their counseling psychology model, Loganbill et al. (1982) named stages that are very similar to the OAMPD behavior classes: stagnation, confusion, and integration. Schwartz (1984) also posited three stages (conscientious, explorer, and achiever) that have similarities to the behavior classes in the OAMPD, as do the five stages (novice, advanced beginner, competent, proficient, and expert) identified by Slater and Cohn (1991).

The distinguishing characteristic of the OAMPD is that whereas primitive, transitional, and mature behaviors may represent levels of adaptive responses, no distinctive sequence is essential, and achievement of mature behaviors in one situation does not necessarily lead to achievement of mature behaviors in the next situation. This perspective can assist both supervisor and student in understanding situations in which the student responds inconsistently.

In this study, we document the frequency of a group of Level II fieldwork students’ classes of adaptive response behaviors as identified in the OAMPD. This study was conducted as a preliminary step in the model validation process and in the initial use of a particular instrument for recording the behaviors.

Method

Subjects

Subjects were eight Level II fieldwork students who were assigned to the Department of Veterans Affairs Medical Center, Dallas, Texas for 12 weeks. These students were considered to be strong students, with ratings on the Fieldwork Evaluation from average to above average.

Instrumentation

An instrument to document the occurrence of the students’ primitive, transitional, and mature behaviors, referred to as the student log, was developed for the study by the first author. The instrument consisted of 45 randomly placed statements reflecting a taxonomy of primitive, transitional, and mature behaviors in sensorimotor, cognitive, and psychosocial areas for each of five critical elements of student performance that were identified by supervisors at this facility. These elements included students’ (a) communication with clients and patients, (b) evaluation and assessment of patients to determine details from observations made during evaluations, (c) treatment planning and implementation in which choices stressed function of client, rather than activity, (d) initiative and responsibility taken in learning activi-
ties and in daily routines, and (c) documentation of patients' information in written work and reports. (See Table 1 for an example of the taxonomy for the treatment planning and implementation performance element.)

Each behavior statement was rated by supervisors on a 5-point scale—never, rarely, sometimes, usually, and always—with point values assigned from 1–5, respectively. The potential scores for each behavior class (primitive, transitional, and mature) ranged from 15 to 75. A score of 15 represented a consistent rating of never and was thus considered to be a subthreshold response from the student.

Procedure

The data were recorded by seven occupational therapists, including the first author, who served as fieldwork supervisors. One of the seven supervisors rated two students. The other six rated one student each. The student supervisory experience of these therapists ranged from 3 years to 20 years.

Supervisors competed the student logs at the end of each of the 12 weeks of the Level II fieldwork. They then turned over the logs to the first author who tabulated the data only after students completed the 12-week period, so that supervisors would not receive feedback that might have induced alteration in supervision or in teaching methods over the course of the fieldwork. At the end of the rating period, weekly numerical ratings for primitive, transitional, and mature responses were totaled by the first author across the five critical elements of communication. After summation of the ratings, the first author held informal discussions with the supervisors to gain additional insight into circumstances and events that would help to explain the ratings for particular students.

Results

The results for all eight students were plotted individually (see Figure 1). In the interest of space, the results of only four students are presented. These particular cases were chosen to illustrate a variety of the students' behavioral responses to the Level II fieldwork.

Case 2

Because of a staffing change, a new supervisor became responsible for this student at the midpoint of the Level II fieldwork. The consistent pattern noted in the graphed scores at the time of the supervisor change (weeks 6 and 7) suggested consistent ratings by the two supervisors.

An increase in this student's primitive and transitional response behaviors and an accompanying decrease in mature response behaviors were noted during week 8. These behavioral changes appeared to be related to changes in occupational challenges that usually occur at the midpoint of students' Level II fieldwork. At this time, students are expected to demonstrate increased independence and greater responsibility for all aspects of treatment planning and implementation. Discussion with the supervisor of this student provided an explanation to the altered time frame revealed in this student's graph: The increase in expectations usually seen at the midpoint of the fieldwork experience actually occurred approximately 2 weeks later, as the new supervisor became familiar with the student's skills and needs.

Case 3

The behavior demonstrated by this student indicated high levels of independence as well as notably good judgment and problem-solving skills. Scores reflected an initial display of high numbers of mature response behaviors and a corresponding decrease in the numbers of primitive and transitional behaviors. However, in week 7, mature behaviors decreased whereas concurrent primitive and transitional behaviors increased. This change in behavioral responses occurred during a time when the student (along with the supervisor) was moved to another clinic as a result of staffing changes. Because of this upheaval in the overall occupational challenge for this student (i.e., unfamiliarity with the patients, staff members, and clinic routine), the behaviors in the three classifications were similar to those in weeks 1 and 2. However,
Figure 1. Graphed scores for students' adaptive response behaviors. Broken lines = subthreshold score of 15.
mature behaviors quickly reemerged at week 8, as the student adjusted to the new environment.

The pattern of change observed in this graph is consistent with the OAMPD in that a major change or increase in the occupational challenge faced by a student resulted in a temporary increase in primitive and transitional behaviors. Therefore, the temporary change in the ratings of all behaviors, followed by a return to a high level of mature response behaviors, was considered normative and expected.

**Case 6**

Discussion with the supervisor of this student revealed that during the first 4 weeks of Level II fieldwork, the student exhibited a high degree of anxiety that gradually decreased toward the midpoint. The graph of this student’s behaviors appeared to reflect the therapist’s verbal report of an initially high anxiety level. However, in the second half of Level II fieldwork, the student used a high degree of mature response behaviors and a minimum of primitive and transitional response behaviors.

**Case 7**

The supervisor of this student verbally reported that during the last half of the Level II fieldwork, the student had an extremely difficult situation that involved an interpersonal issue with a patient on her caseload. The supervisor otherwise reported a high level of independence and initiative on the part of this student.

This graph reflects steady patterns of decreases in primitive and transitional behaviors and increases in mature behaviors. A high number of mature behaviors were noted throughout the fieldwork experience. Only a slight decrease in mature behaviors was noted at the midpoint of Level II fieldwork, with no accompanying increase in primitive and transitional behaviors. A notable decrease in mature behaviors and an increase in primitive and transitional behaviors was observed during week 10. This time period corresponded with the time of the student’s difficulty, as noted above.

**Discussion**

The graphed results of the students’ primitive, transitional, and mature behaviors showed a variety of behavior profiles that reflected the idiosyncratic nature of student performance. Three of the eight students’ graphs showed the initial ratings of primitive, transitional, and mature behaviors to be within a narrow, 10-point range (Cases 1, 2, and 5). Only two students demonstrated a wide range of behaviors: Cases 4 and 6 showed initial ranges of 45 points and 31 points, respectively. Cases 3, 7, and 8 showed initial ranges that were moderately wide. These figures were consistent with the OAMPD, which predicted that mature behaviors would initially be relatively low and that primitive and transitional behaviors would be relatively high, particularly when the demands of the situation were perceived by the student as very difficult or as very unfamiliar.

With the exception of cases 4 and 8, changes were noted at approximately the midpoint of the Level II fieldwork, a time during which expectations for the students’ independence and responsibility increased. Visual inspection of the graphs indicates that this pattern was more pronounced with some students than with others. Such a finding is consistent with the OAMPD.

Case 8 illustrated the OAMPD principle that moving toward relative mastery is not synonymous with skill development. This student demonstrated a high level of mature behaviors and a minimum of primitive and transitional behaviors throughout the Level II fieldwork. However, this student did not initially demonstrate accomplished professional skills, but rather showed a steady acquisition of these skills with an asymptote (an apparent plateau with the magnitude of increases showing a progressive decrease) seen in the ratings at approximately week 6.

This study attempted to document the presence of adaptive response behaviors as defined by the OAMPD in order to test the validity of the model when applied to Level II fieldwork. The results generally followed the predictions of the model (i.e., that all three classes of behaviors are present and that primitive and transitional behaviors may emerge when the student experiences increased or unusual demands, even when the student’s modal behavior is mature). The prediction that these changes would be temporary—lasting until the student became able to deal effectively with new levels of professional challenge—was also supported by the results.

**Study Limitations**

The exploratory nature of this study limits the conclusions that can be drawn relative to validation of the OAMPD. The graphed data were consistent with the OAMPD when there were major changes in circumstances or expectations for the student. However, the information regarding when the changing demands occurred was obtained informally from the supervisors after the data collection period ended. Revision of behavior statements on the student log and more careful notation of situational events could provide a more specific and sensitive matching of behavioral changes and their relationship to situational changes, as observed by the supervisors.

A second limitation affecting interpretation of results is that the statements on the student log were specific to the work culture in this facility. Because the behavioral items were developed by the supervisors in this setting, the supervisors’ expectations might have led them to note frequencies of behaviors consistent with their un-
derstanding of the OAMPD as related to their particular supervisory experience. Therefore, although the random arrangement of items in the student log was an attempt to eliminate such bias, it is not possible to rule bias out as an explanation for the results. However, all students in this study were considered to be strong students. Had any of the students been considered marginal, an explanation of supervisory bias might be easier to support because there might have been a tendency to emphasize the primitive and transitional behaviors.

Some of the supervisors commented that the developmental sequence of experiences built into the fieldwork was such that students did not have an opportunity to exhibit some of the mature behaviors very early in the fieldwork. For example, students could not have demonstrated mature behaviors in treatment planning and implementation because they did not have responsibility for those functions until the end of week 2 or the beginning of week 3. Thus, the lack of mature behaviors in the early stages may have been a function of the lack of opportunity. However, when students were given that responsibility, the behaviors exhibited were consistent with an OAMPD interpretation (i.e., that primitive and transitional behaviors would dominate early and decrease in frequency as mature behaviors increased in frequency).

Another limitation is that no attempt was made to validate the student log. Because it was the product of supervisory experience with students at this particular facility, it is believed to at least have face validity for this group of supervisors. The log was intended to be used to test the predictions of the OAMPD at this facility, not to serve as a standardized diagnostic or evaluation tool. Further use of the model and the log in various settings is needed to determine whether they have validity outside this one setting.

The OAMPD was articulated primarily to provide a structure for “naming and framing” (Parham, 1987, p. 557) the variable nature of student occupational performance during Level II fieldwork. From this study we learned that the OAMPD can provide such a structure. We believe that when the cause of a student’s marginal performance seems difficult to identify, an understanding and acceptance of that variability as normative may be particularly useful both to new and experienced supervisors. We also believe that this model can provide a system through which Level II fieldwork students can assess their own experiences to gain an understanding of their own responses and facilitate their own progress. Anecdotal evidence from students who have used the model in this manner tends to support that belief. Additional use and research of this model in other facilities will be necessary to determine its validity and utility to supervisors and to students. ▲

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References


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