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ASSESSMENT OF THE CONTINUING EDUCATION NEEDS
OF OCCUPATIONAL THERAPISTS
IN NORTHERN CALIFORNIA

A Thesis

Presented to

The Faculty of the Department of Occupational Therapy

San Jose State University

In Partial Fulfillment

of the Requirements for the Degree

Master of Science

by

Stephanie Pierce

May, 1996

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ABSTRACT

ASSESSMENT OF THE CONTINUING EDUCATION NEEDS OF OCCUPATIONAL THERAPISTS IN NORTHERN CALIFORNIA

by Stephanie Pierce

A study was conducted to determine the continuing education needs of occupational therapists in northern California. A survey was used to gather data on current level of participation in continuing education programs, current level of satisfaction with continuing education programs, barriers to participation, reasons for participation, and desired content and structure of continuing education programs.

Results indicated that the continuing education needs of occupational therapists in northern California are not being met by current programming. Occupational therapists were motivated to participate in continuing education by the desire to learn specific skills and become better informed. Significant barriers to participation included availability of pertinent courses and travelling distance over 100 miles. Occupational therapists preferred clinical topics related to treatment approaches and evaluation/assessment. The preferred delivery method was 1- or 2-day workshops instructed by a clinician who specialized in a particular area of occupational therapy. They preferred to attend continuing education at a hotel/convention center, all day, on Friday or Saturday, during spring or autumn. The results have implications for continuing education program planners.

ACKNOWLEDGEMENTS

I would like to thank the Institute for Professional Research and Development for their funding of this project, Dr. Anne MacRae for her support and willingness to advise from afar, and the other members of my thesis committee, Professor Elizabeth Cara, and Professor Amy Killingsworth. Thanks to all my classmates for their support, laughter, and culinary contributions to the process. A special thanks goes out to Teri for her service as my west-east liaison. I would also like to thank my Vermont contingent: Dan, Chris, Bill, and my family. Thanks for the statistical support, the editing expertise, and the love and confidence. You are all truly amazing and I thank you for supporting me through this process and through life.

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CHAPTER 1

INTRODUCTION

Purpose

The purpose of this study is to identify the continuing education needs of occupational therapists in a state where continuing education has not been mandated by licensure and to ascertain whether the identified needs are being met by current programming.

Specifically, this study is designed to obtain data on (1) current level of participation in continuing education programs, (2) current level of satisfaction with continuing education programs, (3) perceived barriers to participation in continuing education, (4) factors motivating occupational therapists to participate in continuing education, (5) desired instructional content of continuing education programs, (6) desired structure of continuing education programs, and (7) demographic information.

Statement of the Problem

Continuing competence is the responsibility of every health professional. Continuing education is one established mechanism for ensuring that health professionals maintain their competence to practice (Houle, 1980). The need for ongoing acquisition of knowledge and development of skills is becoming increasingly important for health professionals due to the changing service environment influenced by rapid technological, scientific and organizational change.

The increasing importance of continuing education in the health professions is reflected by the adoption of mandatory continuing education as a

relicensure or recertification requirement by many health professions. Currently, the American Occupational Therapy Association (AOTA) does not mandate or regulate continuing education. Licensure of occupational therapy in many states has provided a vehicle for mandating continuing education, but a survey examining the relationship between continuing education requirements and licensure by Garrahy, Thibodaux, Hickman, and Caldwell (1992) revealed that less than half of licensed states had continuing education requirements. Lack of continuing education requirements provides a challenge for providers of continuing education, because participation is voluntary. To attract and retain participants, programming must reflect the learning needs of the audience (Houle, 1980).

The occupational therapy profession has a responsibility to respond to the continuing education needs of occupational therapy practitioners by ensuring that the needs of practitioners are met. There is a paucity of published studies in the occupational therapy literature describing the continuing education needs of occupational therapy practitioners, so the continuing education needs of occupational therapists are currently unclear.

Research Questions

The study sought to answer the following research questions:

1. What is the current level of participation in continuing education programs among occupational therapists in northern California?

2. What is the current level of satisfaction with continuing education programs?

3. What are the perceived barriers to participation in continuing education?

4. What motivates occupational therapists to participate in continuing education?

5. What are the perceived continuing education needs of occupational therapists in northern California?

A. What is the desired instructional content of continuing education programs?

B. What is the desired structure of continuing education programs?

Limitations

The Occupational Therapy Association of California (OTAC) member sample was limited to members of OTAC who were listed in the 1994-1995 Membership and Facilities Directory and who were members of one of seven OTAC chapters serving residents of northern California. The nonmember sample was limited to nonmembers who reside in the geographic areas served by these chapters and were listed on a mailing list provided by OTAC. Use of this nonrandom sample limits generalization of the results. The small sample of responses invalidates data as representative of the population of occupational therapists in northern California. Findings cannot be generalized to other geographic locations.

Due to limited financial resources, follow-up postcards were sent to only half of the respondents. This may have impacted the response rate for this survey, limiting the quantity of information obtained.

As the questionnaire is self-report, all responses are based on the

judgment and opinion of the respondent. The tendency of respondents to give socially desirable answers is a major problem in survey research (Sudman & Bradburn, 1982) and may have influenced the results of this study despite attempts to minimize this problem through appropriate design of the survey questionnaire.

Definitions

Occupational therapist: A person who has completed a certificate, baccalaureate degree or advanced degree at the master's level from an occupational therapy educational program accredited by the American Occupational Therapy Association and the Association or Accreditation Council for Occupational Therapy Education, and has passed the examination necessary to be certified as a Registered Occupational Therapist.

Continuing education: Professionally related learning activities beyond entry-level requirements.

Need: For the purpose of this study, need will be defined as "the expressed preferences among possible activities perceived as potentially satisfying educational needs" (Knowles, 1980, pp. 88-89), a category of need described by Knowles as educational interest.

Northern California: For the purpose of this study, northern California was defined by the geographic areas served by the Golden Gate, Diablo View, Monterey Bay, Mountain Valley, Redwood, Central California, and Santa Clara chapters of the American Occupational Therapy Association of California (OTAC).

Assumptions

This study was conducted under the following assumptions:

1. A sufficient number of respondents would return the questionnaire after initial mailing and reminder postcards were sent.

2. Occupational therapists are capable of accurately identifying their needs for continuing education.

3. Respondents would answer the questions truthfully and accurately.

4. The continuing education needs of occupational therapists are similar to those identified by nurses and other allied health professionals.

Significance of the Study

The professional literature indicates that academic educational programs do not adequately prepare occupational therapists for the complexities of practice or provide occupational therapists with the advanced experience, knowledge, and skills necessary for specialized practice. The literature also suggests that ongoing acquisition of knowledge and skills is necessary for competent performance as the practice environment changes in response to political, cultural and societal trends. Additional knowledge and skills must then be acquired after entry into practice. One established vehicle for ongoing adaptation of knowledge and skills is continuing education.

This study gathered data on the specific continuing education needs of occupational therapists, data that was currently not available in the literature to continuing education programmers. The resulting data base will facilitate

continuing education programming that is responsive to the needs and preferences of occupational therapy practitioners.

CHAPTER 2

LITERATURE REVIEW

A comprehensive review of the occupational therapy literature revealed that little has been written on continuing education. A similar tendency was evident in the physical therapy literature. This paucity of research on continuing education stands in contrast to other health professions, such as nursing, which has devoted an entire journal to the study and exploration of continuing education. To develop a more comprehensive understanding of the factors affecting continuing education in occupational therapy, it was necessary to review the literature on continuing education that has been produced by other health disciplines. Adult learning literature was also incorporated in the literature review.

Definition of Continuing Education

Lack of consensus regarding the definition of continuing education has resulted in diverse interpretations and uses of the term. Continuing education is used generically to refer to the adult portion of the lifelong learning continuum (Jones & Kirkland, 1984). Characteristic of more specific definitions of continuing education in the literature is Zamir's (1970) definition of *continuing education* as "an ongoing process that provides the practitioner with the knowledge, skills, insights and attitudes necessary to increase his professional and personal competence" (p. 195). Zamir's definition is consistent with Jones and Kirkland's (1984) definition of *continuing professional education* as "ongoing education that is necessary to maintain and increase competence in the professions" (p. 503), a distinction in terminology that contributes to the lack

of clarity in the literature. The term *continuing education* is also used synonymously with the term *continuing professional development*, further complicating understanding of the use of the term.

Ambiguity regarding the goals and purposes of continuing education is also characteristic of the literature. Kicklighter (1984) reviewed the nursing literature and identified the following ten purposes of continuing education: (1) avoiding professional obsolescence, (2) keeping abreast of new developments, (3) repairing deficiencies, (4) maintaining or improving competence, (5) serving society, (6) improvement in the quality of health care, (7) improving the health care delivery system, (8) professional and self-improvement, (9) self-serving, and (10) assuring success of educational institutions. A narrower conceptualization of continuing education was provided by Abreu and Blount (1993), when they distinguished continuing education from graduate education by identifying the sole purpose of continuing education as the transmission of knowledge with practical and clinical application.

Competence

A goal of continuing education that is consistent throughout the literature is maintenance or improvement of competence. Continuing education is viewed as an obligation to the consumer (Wilk, 1986) and is defined as the ability of a practitioner to carry out responsibilities of any position s/he fills throughout his or her career (Wilson, 1977). This professional obligation to remain competent is recognized in the Occupational Therapy Code of Ethics. Principle 2 of the Code states that "the individual shall recognize the need for competence and shall participate in continuing professional development" (American

Occupational Therapy Association [AOTA], 1993, p. iii.1).

Houle (1980) specifies legally or professionally mandated formal continuing education as one measure of competence in the professions. Though increased competence is a frequently stated goal of continuing education, the effectiveness of continuing education as a competency assurance mechanism has not been documented (Gray, 1977; Sultz, Sawner, & Sherwin, 1984; Wilk, 1986; Young & Willie, 1984). Despite exploration of continuing education as a competency assurance mechanism in the past (Resolution 300-71, AOTA, 1971), AOTA currently maintains that continuing education alone is not a measure of competence.

Professionalism

Closely aligned with the concept of competence is the concept of professionalism. Professions have been defined by a variety of criteria including advanced degrees, certification, ideal of service, licensure, and specialized knowledge (Pellegrino, 1983). A professional denotes "a person who not only possesses unique knowledge and skills but who also is endowed with certain admirable behavior patterns resulting from a learned set of moral and ethical tenets" (Sultz et al., 1984, p. 276). One such behavior pattern endorsed in the literature is lifelong learning. Breines (1988) supports ongoing knowledge acquisition as a criterion for professionalism, and Strickland (1993) supports continuing education as a means to validate occupational therapy practice through the generation and refinement of ideas. Houle (1980) states the need for professionals to remain current, master new conceptions of their profession, study the basic disciplines underlying their profession and grow personally as

well as professionally. AOTA endorses continuing education as a personal and professional responsibility (Jones & Kirkland, 1984). A standard for professional standing stated in the Reference Documents of the American Occupational Therapy Association (1993) under Standards of Practice for Occupational Therapy is "an occupational therapy practitioner shall maintain and update professional knowledge, skills, and abilities through appropriate continuing education. . ." (AOTA, 1993, p. iv.1). Underlying the professional's need to update knowledge and skills is the professional's ethical obligation to assess her/his competence and practice in a manner compatible with current practice.

Impact of the Environment

Occupational therapy practice occurs in a rapidly changing system impacted by political, societal and cultural trends. The practice environment has and is rapidly changing in response to the changing demographics and health issues of the population, reimbursement patterns, and technological advances. Aging of the population, increased incidence of chronic illness and greater emphasis on health promotion are affecting service delivery patterns (Acquaviva, 1986). New funding patterns include prospective payment systems and diagnostic related groups with productivity and cost containment directing service provision. Technological advances have resulted in increased specialization and individualization of health professionals (Acquaviva, 1986; Bruhn & Phillips, 1985; Evert, 1993). Procedures and equipment have become increasingly complex, and use of computers has heightened the complexity of the work environment from a management and administrative perspective (Acquaviva, 1986; Evert, 1993; Puetz & Peters, 1981).

Within this increasingly complex service environment, the roles of occupational therapists are also changing. Two trends are evident in the literature. The first trend is increased specialization and individualization resulting from technologic change. The second and seemingly contradictory trend is increased generalization. Many occupational therapists are performing multiple roles (Madill, Brintnell, Stewin, Fitzsimmons, & Macnab, 1985) to meet the personnel needs of small facilities and facilities in under served rural and inner city areas, and for reasons of cost containment (Bamberg & Blayney, 1984; Cook, Beery, Sauter, & DeVellis, 1987). Continuing emphasis on cost containment could lead to further generalization of the roles of occupational therapists and other allied health personnel.

Identification of Need

The increasing complexity of the service environment and the changing roles of occupational therapists are sufficient evidence that acquisition of knowledge and skills must be ongoing. Occupational therapists are prepared as generalists; thus, entry-level therapists are unable to address the complexities of specialized practice independently (Dunn & Rask, 1989). Results of an American Occupational Therapy Certification Board job analysis study revealed that many newly certified occupational therapists were providing services that were considered beyond the competencies of newly certified occupational therapists (Evert, 1993). The disparity between educational preparation and the expectations of practice and the need for acquisition of knowledge and development of specialized skills after entry into the profession has been well-documented in the literature (Ahlschwede, 1992; Baum, 1987; Breines,

well-documented in the literature (Ahlschwede, 1992; Baum, 1987; Breines, 1988; Dunn & Rask, 1989; Evert, 1993; Fidler, 1977; Gray, 1977; Masagatani, 1986; Ottenbacher, 1987; Parham, 1987; Strickland, 1991; Wittman, 1990; Zamir, 1970).

Research has documented the need for continuing education in various specialty areas. The need for continuing education to facilitate research development by increasing knowledge of statistics and forms of research was documented in a study by Colburn (1993). Similarly, the need for advanced level management and leadership training was identified by Gomes (1991). Results of a national needs assessment identified need for continuing education related to fieldwork (Cohn & Frum, 1988). Lastly, occupational therapists and physical therapists surveyed by Wickersham, Fike, Rousseau, Boyer, Meredith, and Clay (1982) reported a need for continuing education in arthritis. These studies provide evidence that supports the need for continuing education programs.

Beyond these descriptive studies of need, little research has been conducted exploring the factors affecting occupational therapists' participation in continuing education. Kristjanson and Scanlan (1989) examined the nursing literature and identified four variables affecting participation in continuing education: (1) clientele analysis, (2) relevance of educational topics and format, (3) motivational factors, and (4) deterrents.

Clientele Analysis

Clientele analysis refers to the study of learner characteristics that might be predictors of participation in continuing education programs. Frequently

examined are characteristics such as age, sex, number of years in practice, practice specialty, full or part-time work status, education, marital status, income and geographic location. In the occupational therapy literature, studies have examined the continuing education preferences of practitioners in rural or urban areas. Harvey (1983) reported minimal differences between urban and rural therapists regarding their continuing education needs and preferences. Kohler and Mayberry (1993) also focused on the rural population in an attempt to identify their unique practice needs. Inadequate continuing education opportunities was reported as a great concern of therapists in this study. Cook et al. (1987) explored the preferences of occupational therapists and physical therapists in North Carolina for continuing education in arthritis. Preferences regarding policies, scheduling, and content varied from one region of the state to another. While practitioners in one region desired information regarding 'cutting-edge advances,' others preferred an academic, research approach to programming. In all these studies, therapists were surveyed in a defined geographic area. Studies have also determined that graduates from master's degree programs participate in continuing education programs more frequently than baccalaureate graduates (Clark, Sharrot, Hill, & Campbell, 1985; Rogers & Mann, 1985). Cannon and Waters (1993) reviewed the nursing literature and reported that relationships between continuing education participation and various demographic variables such as age, perceived needs, full-time work status, and commitment of nurses and their institutional decision-makers have been identified.

Relevance of Educational Topics and Format

Research indicates that an individual's willingness to participate in continuing education is affected by the relevance of the program content (Kristjanson & Scanlan, 1989). The adult learning literature consistently states that adults want learning to be problem-centered, concrete, and immediately applicable (Cross, 1981; Houle, 1980; Knowles, 1980). This assumption is supported by the nursing literature which reports that willingness to learn in continuing education is related to the practical utility or application of course content (Dolphin & Holtzclaw, 1983) and the problems encountered in everyday practice (Puetz & Peters, 1981).

The preferred topics for continuing education reported in the occupational therapy literature are consistent across populations studied. The continuing education topic listed as most important by rural therapists surveyed by Kohler and Mayberry (1993) was specific evaluation or treatment techniques. Evaluation was also ranked as the highest learning need by both the rural and urban therapists surveyed by Harvey (1983). Lowest need was identified for continuing education addressing the use of therapeutic materials and equipment. In Broski and Upp's (1979) study of allied health professionals, 77.4% of respondents reported interest in continuing education topics that addressed clinical skills. Therapists interested in pursuing continuing education in arthritis were also primarily interested in information and procedures that could immediately be applied to practice, according to a survey conducted by Cook et al. (1987). A follow-up study of therapists who had participated in a refresher course revealed that therapists had unmet needs for workshops on

specific clinical content (Meyers, 1994). Lack of availability of pertinent continuing education programs was also identified as an overwhelming barrier for physical therapists in Georgia (Karp, 1992a). Respondents in this study identified availability of pertinent courses and course information as the factors most influencing their participation in continuing education.

The nursing literature supports these findings as several studies indicate that the continuing education programs of most interest to nurses are those that update clinical skills and focus on topics immediately relevant to clinical practice (Cannon, Paulanka, & Beam, 1994; Cannon & Waters, 1993).

Once selected, content must be delivered in a format that allows ease of access and participation. Structural factors linked to participation in continuing education include costs, distance, delivery method, time requirements and scheduling of programs (Biers & Murphy, 1970; Cannon et al., 1994; Cannon & Waters, 1993; Harvey, 1983; Karp, 1992a; Kohler & Mayberry, 1993; Wickersham et al., 1982).

Structural preferences for continuing education reported by occupational therapists in the occupational therapy literature varied. Harvey (1983) compared the continuing education needs of rural therapists with the needs of urban therapists. Both groups of therapists preferred 1- or 2-day workshops. Two to 3-day workshops were also popular among therapists surveyed by Wickersham et al. (1982), with 77.2% of respondents indicating interest in this delivery method. Despite this high level of interest, self-study guides were the most preferred mode of learning, with 84% of respondents reporting interest in this option. Biers and Murphy (1970) studied the preferences of active and

inactive therapists. Both groups considered annual 1- or 2-week courses to be of greatest importance in upgrading the knowledge and skills of occupational therapists. Rural therapists surveyed by Kohler and Mayberry (1993) reported that they would be willing to travel 300 miles for relevant continuing education programming. Willingness to travel was attributed to the desire for professional and social interchange afforded by this delivery method. Several studies have examined the continuing education structural preferences of nurses, but the results are inconclusive. Preferences varied regarding day of the week and time of day. Conference attendance was the preferred delivery method (Cannon & Waters, 1993; Cannon et al., 1994), with course attendance another popular option (Cannon et al., 1994). High interest in continuing education opportunities that provided academic credit was reported in both these studies. Nurses surveyed consistently agreed that continuing education should be geographically convenient or available at the workplace (Cannon & Waters, 1993; Cannon et al., 1994).

Karp (1992a) studied the continuing education preferences of physical therapists. Consistent with the reported preferences of nurses, physical therapists identified distance as an important factor affecting participation. Availability of course information and pertinent courses were also rated as being very important. The majority of respondents preferred instructional delivery systems, and the preferred setting was hotels or convention centers. Preferred seasons were winter and autumn, preferred days, Friday and Saturday, and the preferred time was during the morning. Cost was identified as an important consideration in selection of continuing education programs, with

$30 an hour the most therapists were willing to pay.

Evident from the results of these studies is the diversity of structural factors affecting participation in continuing education and the varied preferences of different populations of allied health professionals and subgroups within these populations. As the structure of continuing education programs should be contingent on the preferences of the population being served, the importance of identifying the programming preferences of specific groups is evident.

Motivational Factors

Understanding the motivational orientations of continuing education participants provides organizers of continuing education with valuable information regarding the types of programming desired by participants. Urbano, Jahns and Urbano (1988) found that the values, attitudes and motivational orientations of nurses were important predictors of participation in continuing education, and Darkenwald and Merriam (1982) noted high degrees of correlation between the motivational orientations of actual and future participants in nursing continuing education programs. The importance of identifying the motivations of learners is intensified in the absence of continuing education requirements, as participation is most likely to be intrinsically motivated.

Motivation for learning is defined by Cross (1981) as a function of the interaction between internal psychological factors and one's perception and interpretation of environmental factors. Boshier (1977) reviewed the nursing literature and identified six motivational orientations, which Urbano, Jahns and Urbano (1988) claim are representative of research findings in this area. The six

motivational orientations are: (1) social relationship, (2) external expectations, (3) social welfare, (4) professional advancement, (5) escape/stimulation and (6) cognitive interest. No studies have examined the motivational orientations of occupational therapists as related to participation in continuing education, but several studies have examined the reasons why nurses participate in continuing education. These studies generally focus on either motivating factors that influence voluntary participation or those that influence mandatory participation.

Nurses surveyed by Thomas (1986) were motivated primarily by desires for professional knowledge, professional advancement and social welfare skills. These findings were supported by Chesney and Beck (1985), who surveyed 400 nurses in the Coastal Bend area of Texas and found that respondents were responsive to courses which focused on personal and professional advancement. Cognitive interest and desire for professional advancement and competency also motivated nurses surveyed by Urbano et al. (1988) to participate in continuing education. Concern for mankind was also a motivating factor but to a lesser extent. O'Connor (1979) surveyed nurses to determine what motivated them to participate in mandatory continuing education. Results revealed that the respondents were more motivated to participate by the desire to maintain currency of knowledge and skills and the desire to improve their ability to care for patients than by the mandatory requirements. This could reflect the previously discussed tendency of survey respondents to give socially desirable responses. The obligation orientation was ranked as being second in importance. The obligation fulfillment orientation was also ranked as a

secondary factor influencing participation by physical therapists surveyed by Karp (1992b). The primary factor motivating physical therapists to participate in continuing education was the desire to gain knowledge. This finding was supported by Hightower (1973). Research indicates that nurses do not view continuing education as a means to socialize or relieve boredom or frustration (Thomas, 1986; Urbano et al., 1988).

Deterrents

Obstacles prevent occupational therapists from participating in continuing education despite interest in attendance; thus, to increase the likelihood of participation, it is important to identify obstacles as well as continuing education interests. Smorynski and Parochka (1979) report that stated interest in participation does not necessarily lead to actual participation due to the many obstacles that exist. Cross (1981) classifies barriers to adult learning as institutional, situational or dispositional. Institutional barriers are defined as "the practices and procedures that exclude or discourage working adults from participating in educational activities" (Cross, 1981, p. 98). Institutional obstacles that are frequently cited include lack of information about course offerings, inconvenient scheduling and inability to obtain course credit. Situational barriers arise from one's current situation in life and include such obstacles as family responsibilities, lack of transportation, and cost. Dispositional barriers are related to personal attitudes and one's perception of self as a learner. Smorynski and Parochka (1979) identified four steps that allied health professionals go through when deciding whether to participate in a continuing education program. Relevance of program content is considered first

followed by program convenience. The program is then examined to see if it is compatible with the professional's work situation. The final step involves a cost-benefit analysis of the program's relative worth given the professional's work environment, educational needs, and financial situation.

Smorynski and Parochka (1979) surveyed 482 allied health professionals in an attempt to identify the barriers that prevent allied health professionals from participating in continuing education. Time and location were the most important planning considerations followed by course credit and cost. In the occupational therapy literature, studies that have identified barriers to participation in continuing education have focused on specific populations. Urban and rural therapists surveyed by Harvey (1983) reported different barriers. Urban therapists identified family responsibility and lack of time as the two greatest barriers to access, while rural therapists found transportation and distance to be greater obstacles. Distance was also a barrier inhibiting participation of rural therapists surveyed by Kohler and Mayberry (1993), but cost was the biggest obstacle with lack of institutional funding support an important factor affecting participation. Bailey (1990) surveyed occupational therapists who had left the field to identify reasons for attrition. Lack of continuing education opportunities was identified by 53 respondents, with cost, lack of leave from work, lack of educational events on weekends and lack of in-services reported as barriers to access.

Barriers to participation were not identified in the nursing literature reviewed. Physical therapists studied by Karp (1992a) identified lack of availability of pertinent courses and course information, cost, and distance as

the three biggest barriers to their participation in continuing education. Experience with previous courses, loss of family time, and loss of vacation time were also reported as significant barriers.

Conceptual Framework

The Model of Human Occupation (Kielhofner, 1985) conceptualizes humans as open systems interacting in the environment through occupation. Occupational behavior is enacted through the dynamic interaction of three subsystems: volition, habituation and performance. Arranged in a hierarchy, volition enacts and guides choice of behavior, habituation maintains behavior through habits and internalized roles, and performance produces behavior through skills. The human's innate urge to explore and master the environment fuels the system, and the change that occurs within the open system as the result of this interaction demands adaptation.

The model of human occupation is an appropriate framework for examining the continuing education needs of occupational therapists as the continuing education needs of therapists evolve within the personal, social and professional contexts of their environment. Continuing education needs are fluid, changing in response to the demands and expectations of the environment, a force that Kielhofner (1985) refers to as environmental press. Environmental press is manifest in the rapidly changing service environment, the inadequate educational preparation of entry-level therapists, and the expectations that consumers, employers, and the professional occupational therapy associations share regarding the need for occupational therapists to perform competently in their roles.

Role performance, a component of the habituation subsystem, is influenced by perceived incumbency, one's identification with past, present, and future roles, internalized expectations of role performance, and current balance of roles. Performance of roles is dependent on adequate performance of skills; thus, as roles change in response to the personal, social, and professional demands of the environment, additional skills must be acquired for competent performance. When an individual does not have the skills necessary to meet the expectations of the environment, an individual may experience stress. If the expectations of the environment are too little, boredom may result. Both of these situations may stimulate the individual to acquire new skills, to increase ability to perform competently or to seek new challenges.

Adaptation of skills is ultimately governed by the volitional subsystem which Kielhofner defines as "an interrelated set of energizing and symbolic components which together determine conscious choices for occupational behavior" (Kielhofner, 1985, p. 58). Behavior is guided by the three components of the volitional subsystem: interests, values, and personal causation, beliefs and expectations held regarding ones's effectiveness in the environment. Identification of continuing education needs is a self-directed process, based on occupational therapy practitioners' perception of their efficacy in the environment, their values and interests, and current demands in their personal, social, and professional environments. This study seeks to identify the values that motivate occupational therapy practitioners to participate in continuing education, the educational interest that impacts participation, and the barriers in the environment that constrain participation.

Summary of the Literature

The occupational therapy literature on continuing education consists of descriptive studies of need (Biers & Murphy, 1970; Cohn & Frum, 1988; Dunn & Rask, 1989; Jones & Kirkland, 1984; Strickland, 1993) and discussions of continuing education as it relates to competence (Abreu & Blount, 1993; Evert, 1993; Gray, 1977; McLean, 1987) and professionalism (Breines, 1988; Fidler, 1977; Garrahy et al., 1992). Few studies explore the factors affecting occupational therapists' participation in continuing education or identify the continuing education needs of occupational therapists. The limited literature that does exist focuses on narrowly defined populations such as rural therapists (Harvey, 1983; Kohler & Mayberry, 1993), therapists interested in further arthritis training (Cook et al., 1987; Wickersham et al., 1982), or therapists who recently re-entered the work force (Meyers, 1994). Results of the few studies that have been conducted are consistent with the results of studies that have focused on other allied health professions such as nursing and physical therapy. Consideration of the continuing education needs of occupational therapists in relation to this literature is thus warranted. Continuing education courses of most interest to occupational therapists, nurses, and physical therapists are those that update clinical skills and focus on topics immediately relevant to clinical practice (Broski & Upp, 1979; Cannon, Paulanka, & Beam, 1994; Cannon & Waters, 1993; Harvey, 1983; Karp, 1992a; Kohler & Mayberry, 1993). A preference for continuing education offerings presented in workshop form was evident (Harvey, 1983; Karp, 1992a; Little, 1993; Wickersham et al., 1982) but other structural preferences were diverse across the three targeted allied

health populations. Literature identifying the motivational orientations of occupational therapists was not available, but nurses and physical therapists consistently reported acquisition of professional knowledge and professional advancement as the primary factors motivating them to participate in continuing education (Chesney & Beck, 1985; Hightower, 1973; Karp, 1992b; Thomas, 1986; Urbano et al., 1988). Deterrents reported by occupational therapists and physical therapists varied from study to study depending on the population studied, but cost and distance were the two most frequently reported barriers (Bailey, 1990; Karp, 1992a; Kohler & Mayberry, 1993; Smorynski & Parochka, 1979).

Diverse preferences regarding the content and structure of continuing education programs are evident in the literature, even within narrowly defined populations. The varied continuing education needs of populations of health professionals and subgroups within these populations suggest the need for diverse continuing education programming that is responsive to the specific needs of the population that is targeted.

Evidenced by this search of the literature is the need for study of the specific continuing education needs of occupational therapists. The population targeted in this study was occupational therapists residing in northern California.

CHAPTER 3

DESIGN AND METHODOLOGY

Purpose

The purpose of this study is to identify the continuing education needs of occupational therapists in a state where continuing education has not been mandated by licensure and to ascertain whether the identified needs are being met by current programming.

Specifically, this study is designed to obtain data on (1) current level of participation in continuing education programs, (2) current level of satisfaction with continuing education programs, (3) perceived barriers to participation in continuing education, (4) factors motivating occupational therapists to participate in continuing education, (5) desired content of continuing education programs, (6) desired structure of continuing education programs, and (7) demographic information.

Research Questions

The study seeks to answer the following research questions:

1. What is the current level of participation in continuing education programs among occupational therapists in northern California?

2. What is the current level of satisfaction with continuing education programs?

3. What are the perceived barriers to participation in continuing education?

4. What motivates occupational therapists to participate in continuing education?

5. What are the perceived continuing education needs of occupational therapists in northern California?

A. What is the desired instructional content of continuing education programs?

B. What is the desired structure of continuing education programs?

Selection of Population

The sample selected for this study consisted of 500 occupational therapists who were residing in northern California, as defined by residence in the geographic areas served by the seven chapters that comprise the Occupational Therapy Association of California (OTAC) in northern California (Appendix A). OTAC members and nonmembers were included in the sample. The sample of OTAC members was drawn from the Facilities and Membership Directory of OTAC, and the sample of nonmembers was selected from a computer-generated list of nonmembers provided by OTAC in mailing label form. A mailing list was developed with the number of participants selected from each chapter area on the basis of the total number of occupational therapists (OTAC members and nonmembers) residing in that area relative to the total population of occupational therapists in the seven targeted chapters. Of this percentage, an equal number of OTAC members and nonmembers were randomly selected to ensure equal representation of both groups. Through this process, the relative distribution of occupational therapists in northern California was incorporated into selection of the sample.

Procedures

A mailed survey questionnaire with quantitative and descriptive components was utilized to obtain information about the continuing education needs of occupational therapists in northern California.

A five-page questionnaire developed by the researcher was used to gather data (Appendix B). To develop the questionnaire, the researcher relied on information that was discussed in the literature. The researcher also consulted with occupational therapists practicing in the Santa Cruz and San Jose communities and faculty members at San Jose State University to draw upon their experiences in the field.

A pilot study was conducted with five occupational therapists from the San Jose and Santa Cruz communities. The pilot group was asked to critique the instrument for clarity of instructions, readability, and semantics. Minor revisions were made to the instrument on the basis of feedback from participants in the pilot study. Responses from the pilot study were not used in the final analysis.

The questionnaire was organized into six sections with 35 closed and open-ended questions designed to elicit information on the following:

1. Level of participation in and satisfaction with continuing education programming during the 2-year period prior to completion of the questionnaire
2. Barriers to participation
3. Factors motivating occupational therapists to participate in continuing education
4. Desired instructional content of continuing education programs
5. Desired structure of continuing education programs:

A. Delivery method

B. Cost

C. Location

D. Time

6. Demographic information: Age, sex, life setting, educational level, OTAC membership, employment status, work setting, areas of practice, job responsibilities, years of OT experience.

Questions were formatted in a variety of ways to sustain respondent interest in the questionnaire and to discourage automatic response patterns. Questions that demanded self-disclosure were designed as closed ended or numerical response questions to minimize the tendency of respondents to provide socially desirable responses. The demographic section was placed at the end of the questionnaire to further minimize this bias.

Resources used in conducting this study were The Institute for Research and Professional Development of San Jose State University, which provided funding and assistance with compilation of the questionnaire materials, and The Occupational Therapy Association of California (OTAC), which provided a Membership and Facilities Directory from which half the sample was selected and nonmember mailing labels from which the other half of the sample was selected. Additional resources included San Jose State University faculty members and occupational therapists in the San Jose and Santa Cruz communities who contributed topics of current interest for the "continuing education topics" section of the questionnaire.

Data Collection and Analysis

The survey questionnaire was mailed on June 30, 1995, to the 500 occupational therapists on the list with a cover letter explaining the purpose of the questionnaire (Appendix C). A stamped, addressed envelope was enclosed to facilitate return of the questionnaire and increase the likelihood of response. A total of 135 questionnaires were received by July 20, 1995. A follow-up postcard (Appendix D) was sent to the 250 OTAC members on July 15, 1995, to encourage participants to return a completed questionnaire. Follow-up postcards were not sent to the 250 nonmembers due to financial limitations. Fifty-one additional questionnaires were received after July 20, 1995. This resulted in a total response of 186 questionnaires or 37.2%. A total of seven questionnaires could not be used in the data analysis. Five respondents indicated that they were retired and only completed the demographic section of the questionnaire. Two respondents indicated that they are currently working in other fields and did not complete the questionnaire. The remaining questionnaires were sufficiently complete to be included in the analysis. Thus, a total of 179 questionnaires were used for data analysis, a return rate of 35.8%.

Descriptive statistics were used to analyze the data. These procedures are an effective means of reducing large amounts of data into usable information, from which data can be interpreted. Most relevant were frequencies and central tendencies (mean), which were used to describe the characteristics and preferences of the population studied.

CHAPTER 4

DATA AND RESULTS

Results and interpretation of the data follow in two sections: demographic information and research findings. Findings are presented as they relate to the research questions. Data presented in narrative form are in order from highest or most frequent to lowest or least frequent response, and data presented in tabular form are in the order they appear on the questionnaire.

Demographic Information

A total of 500 questionnaires were mailed to occupational therapists in northern California and 186 were returned (37.2%). Among those, 179 (35.8%) were sufficiently complete to be included in the data analysis.

The mean age of respondents was 41 years with a range of 23 to 69 years (see Table 1). The greatest number of occupational therapists surveyed, 43.3%, were 30 to 39 years, and many, 29.2%, were within the 40-49 year range. Few, 13.5%, were 50-59 years, 20 to 29 years (7.8%), or 60-69 years (6.4%). Almost all of the respondents, 94.9%, were female. Most, 44.3%, lived in suburban, and urban areas (31.6%), followed by town (12.6%) and rural (11.5%) settings. A very large percentage, 74.6%, reported that they held a baccalaureate degree, 24.9% had completed a master's degree program, and 0.6 % held a doctoral degree. The majority, 72.5%, were members of the Occupational Therapy Association of California (OTAC). Of the 116 respondents who indicated OTAC membership, 85.3% identified the name of the chapter to which they belonged. The greatest number, 42.4%, belonged to the Santa Clara Chapter, 17.2% belonged to the Diablo View Chapter, 13.1% to the Golden Gate Chapter,

Table 1

Demographic Characteristics of Respondents

Variable	n	%
Age (n = 171)		
20 to 29 years	13	7.6
30 to 39 years	74	43.3
40 to 49 years	50	29.2
50 to 59 years	23	13.5
60 to 69 years	11	6.4
Sex (n = 176)		
Female	167	94.9
Male	9	5.1
Life Setting (n = 174)		
Rural	20	11.5
Suburban	77	44.3
Town	22	12.6
Urban	55	31.6
Education (n = 177)		
Associate	0	0.0
Baccalaureate	132	74.6
Master's	44	24.9
Doctoral	1	0.6
Occupational Therapy of California Membership (n = 160)		
OTAC member	116	72.5
OTAC nonmember	44	27.5

Continued.

Table 1. Continued.

Variable	n	%
OTAC Chapter Membership (n = 99)		
Santa Clara	42	42.4
Diablo View	17	17.2
Golden Gate	13	13.1
Mountain Valley	11	11.1
Redwood	9	9.1
Monterey Bay	4	4.0
Central Valley	3	3.0
Employment Status (n = 177)		
Full-time	113	63.8
Part-time	56	31.6
Leave	2	1.1
Retired	3	1.7
Unemployed	3	1.7
Work Setting (n = 175)*		
Private	27	15.4
Home health	24	13.7
School based	31	17.7
Rehabilitation	47	26.9
Academic	1	0.6
Wellness	2	1.1
Nursing home	38	21.7
Work related	6	3.4
Hospital	64	36.6
Other	25	14.3

Continued.

Table 1. Continued.

Variable	n	%
Areas of Practice (n = 175)*		
Physical disabilities	127	72.6
Mental health	34	19.4
Developmental	23	13.1
Gerontology	73	41.7
Pediatrics	43	24.6
School based	22	12.6
Education	14	8.0
Other	27	15.4
Job Responsibilities (n = 177)*		
Administration	78	44.1
Consultation	80	45.2
Teaching	69	40.0
Research	12	6.8
Patient care	152	85.9
Other	13	7.3
Not applicable	1	0.6
Years of Occupational Therapy Experience (n = 165)		
0 to 5 years	23	13.9
6 to 10 years	48	29.1
11 to 15 years	40	24.2
16 to 20 years	25	15.2
21 to 25 years	16	9.7
26 to 30 years	7	4.2
31 to 35 years	4	2.4
36 to 40 years	2	1.2

* More than one response allowed.

11.1% to the Mountain Valley Chapter, 9.1% to the Redwood Chapter, 4% to the Monterey Bay Chapter, and 3% to the Central Valley Chapter. Almost all of the respondents, 95.4%, were currently employed with 63.8% of respondents holding full-time positions and 31.6% of respondents holding part-time positions. Of those respondents who were not currently employed, 1.1% were on leave, 1.7 % were retired, and 1.7% were currently unemployed.

The questions regarding work setting, areas of practice, and job responsibilities asked respondents to check as many as applied. A large number of respondents reported working in more than one setting (35.8%), practicing in more than one area (66.9%), and performing more than one job responsibility (70%). The largest proportion, 36.3%, reported working in a hospital setting, followed by rehabilitation facility (26.9%), nursing home (21.7%), school-based setting (17.7%), private practice (15.4%), home health (13.7%), work-related setting (3.4%), wellness (1.1%), and academic setting (0.6%). The other category was selected by 14.2% of respondents. Other work settings written in by respondents included outpatient clinic (4%), day treatment programs (1.7%), residential programs (1.1%), ICF (1.1%), and subacute (0.57%). The majority of respondents, 72.6%, identified their area of practice as physical disabilities and a large number, 41.7%, reported work in geriatrics. Pediatrics was identified as an area of practice by 24.6%, and mental health by 19.4% of respondents. Other practice areas identified by 15.4% of respondents included hands (8.6%), management (0.57%), home care (0.57%), substance abuse (0.57%), and American Disabilities Act (0.57%). An overwhelming percentage, 85.9%, reported patient care as a job responsibility. Consultation,

selected by 45.2%, administration (44.1%), and teaching (40%) were also frequently reported job responsibilities. Few respondents, 6.8%, were involved in research. Other job responsibilities written in by respondents included fieldwork coordinator (1.1%), supervisor (1.1%), and director (1.1%).

Respondents had been employed in occupational therapy for intervals varying from 0 to 40 years receiving a mean score, M, of 13.5 years. The greatest number of occupational therapists, 29.1%, had been employed for 6 to 10 years, and many, 24.2%, had been employed for 11 to 15 years. The 16 to 20 year range, selected by 15.2%, and the 0 to 5 year range, selected by 13.9%, were less common. Few, 17.5%, had over 20 years of experience.

Research Findings

Question 1: What is the current level of participation in continuing education among occupational therapists in northern California?

Respondents were asked to select their sources of information regarding continuing education from a list of nine potential sources (see Table 2). All of the occupational therapists who responded to the survey identified at least one source of information and 90% identified three or more sources. Almost all of the respondents, 92.2%, identified direct mailings from organizations providing courses as a source of information. Professional newsletters, selected by 75.4%, were also revealed as important sources for information regarding continuing education (see Figure 1). Other popular sources included OT Week (68.2%), other occupational therapists (57%), and Advance magazine (49.2%). Little used sources of information included information provided by employers (32.4%), local educational institution catalogues and flyers (30.7%), membership in non-occupational therapy professional organizations (22.3%), and journals (19%). Those respondents who identified professional newsletters as a source were asked to specify the specific source of the publication. No preference for a particular newsletter was noted as OTAC: State Chapter was selected by 72.6%, American Occupational Therapy Association (AOTA) by 66%, and OTAC: Local Chapter by 65.2%. The other category was selected by 12.9% of respondents. Other sources identified included American Society of Hand Therapists (5), Association of Pediatric Therapists (3), special interest group newsletter (3), mailings through school district (1), medical mail (1), Bay Area Occupational Therapy Psych Forum (1), computer study group (1),

Table 2

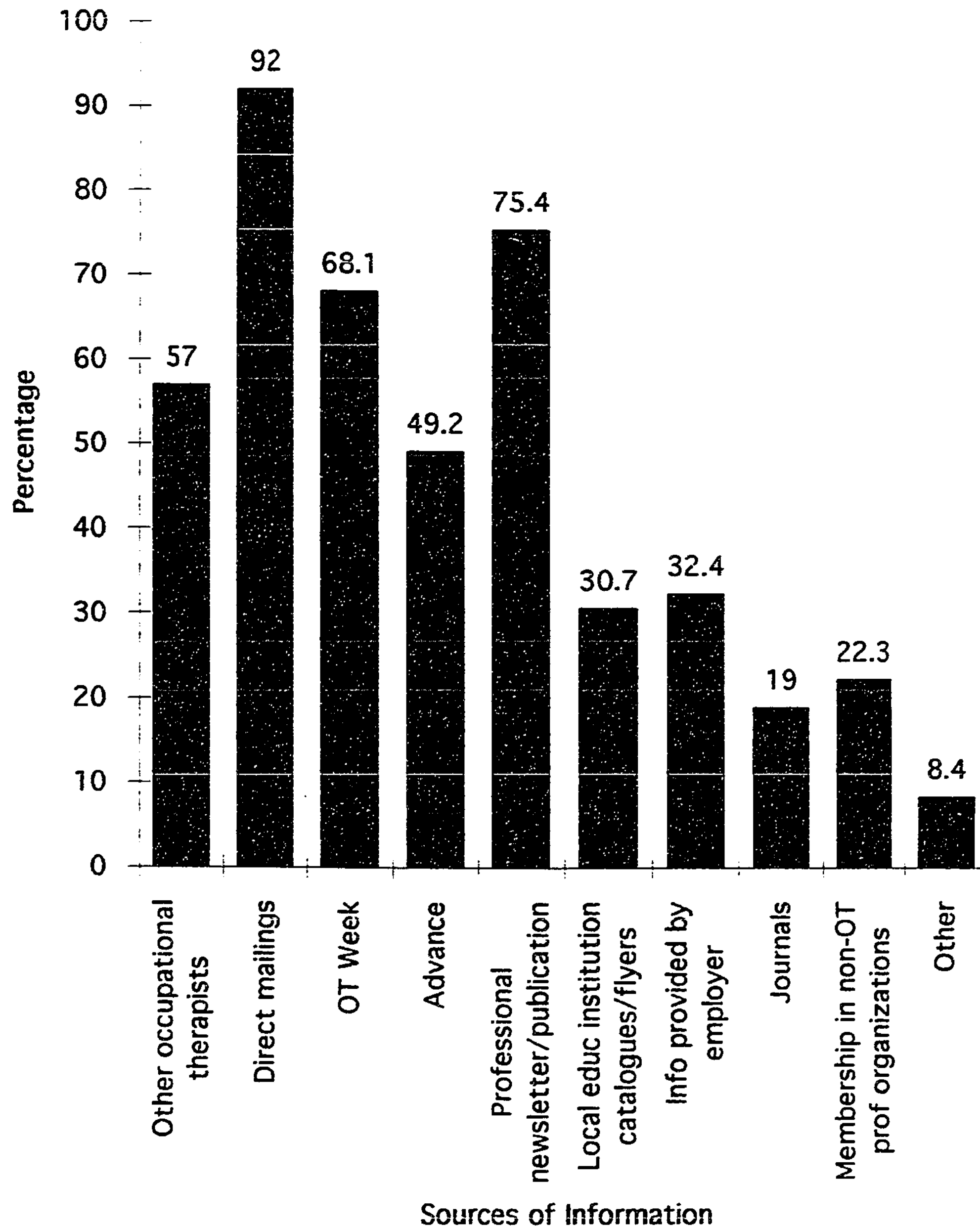
Sources of Information Regarding Continuing Education (n = 179)

Source	n	%
Other occupational therapists	102	57.0
Direct mailings from organizations providing courses	165	92.2
OT Week	122	68.2
Advance	88	49.2
Professional newsletters or publications	135	75.4
Local educational institution catalogues/flyers	55	30.7
Information provided by employer	58	32.4
Journals	34	19.0
Membership in non-occupational therapy professional organizations	40	22.3
Other	15	8.4
Source of professional newsletters/publications (n = 135)		
OTAC: State chapter	98	72.6
AOTA	89	66.0
OTAC: Local chapter	88	65.2

Note. More than one response allowed.

Figure 1

Sources of Information Regarding Continuing Education



Note. More than one response allowed.

Arthritis Foundation (1), DME equipment vendor (1), and NDTA (1).

Respondents were asked to identify the number of occupational therapy and non-occupational therapy or interdisciplinary continuing education offerings they had participated in during the two years prior to their completion of the questionnaire. Numerical values were requested (see Table 3). Respondents had attended from 0 to 35 occupational therapy continuing education offerings ($M = 3.2$) and from 0 to 30 non-occupational therapy or interdisciplinary continuing education offerings ($M = 2.4$). The majority of respondents, 80.7%, had participated in at least one occupational therapy offering and a large percentage, 66.9%, had participated in at least one non-occupational therapy or interdisciplinary offering (see Figure 2). Half of the occupational therapists had participated in 1-3 offerings and an almost equal percentage, 46.5%, had participated in 1-3 non-occupational therapy offerings. More respondents, 22.2%, had participated in 4-6 occupational therapy offerings than 4-6 non-occupational therapy offerings, indicating a slightly higher rate of participation in occupational therapy continuing education. Few respondents had participated in more than seven occupational therapy or non-occupational therapy offerings.

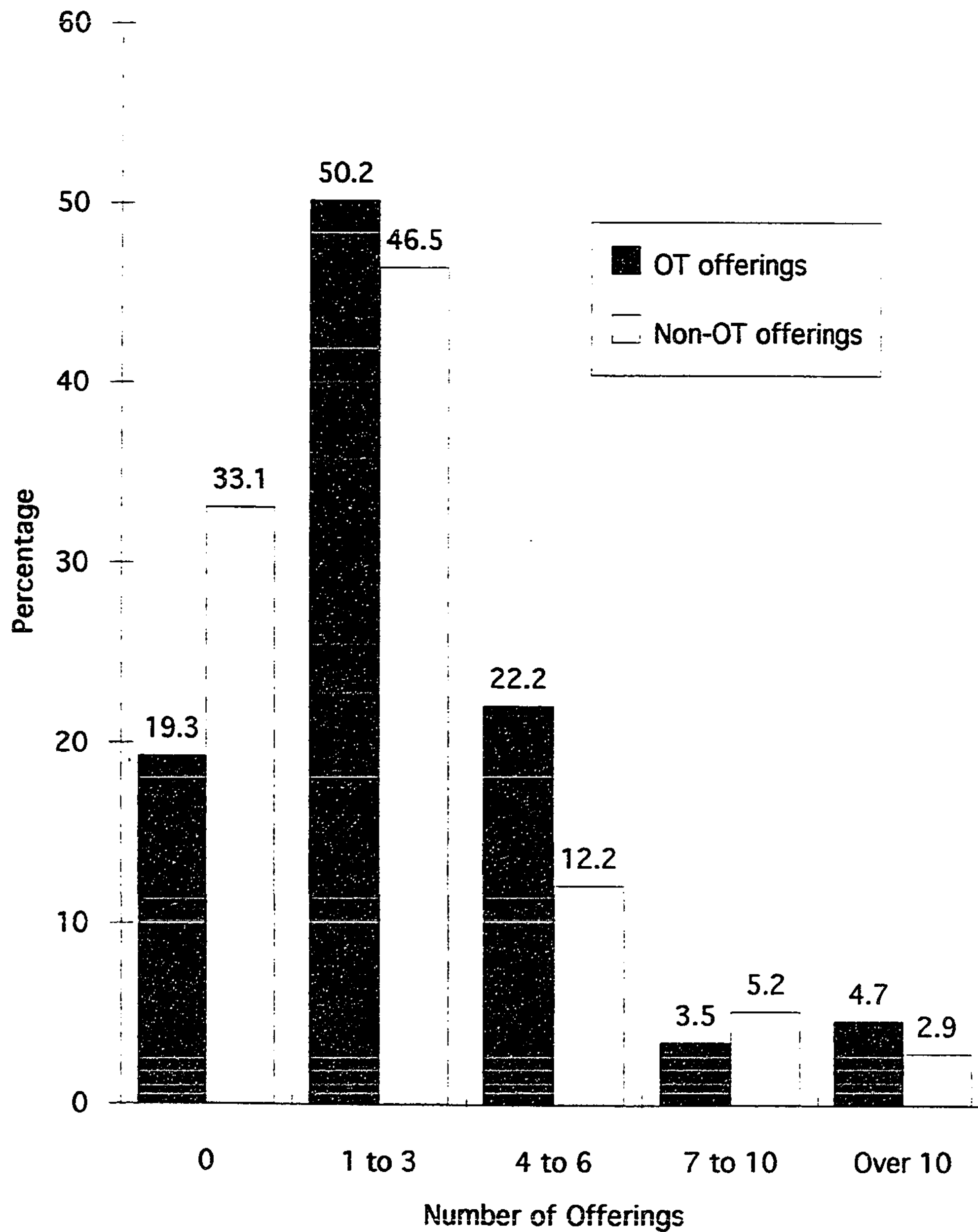
Table 3

Level of Participation in Continuing Education

Number of Offerings	n	%
	Occupational therapy (n = 171)	
0	33	19.3
1-3	86	50.3
4-6	38	22.2
7-10	6	3.5
>10	8	4.7
Mean = 3.2	SD = 4.66	
	Non-OT/Interdisciplinary (n = 172)	
0	57	33.1
1-3	80	46.5
4-6	21	12.2
7-10	9	5.2
>10	5	2.9
Mean = 2.4	SD = 3.58	

Figure 2

Level of Participation in Continuing Education



Respondents were asked to select the sponsors of the continuing education programs they had attended from a list of seven potential sponsors (see Table 4). Identified as a sponsor by 60.2% of respondents, independent providers had clearly sponsored the majority of the courses attended, followed by other professional organizations (36.7%), and employers (33.1%) (see Figure 3). AOTA was selected by 30% of respondents, state OTAC chapter by 25.3%, local OTAC chapter by 19.3%, and academic institution by 22.3%. It is important to note that although individual occupational therapy professional organizations did not sponsor a large number of the courses attended, when grouped together, occupational therapy professional organizations were

Table 4

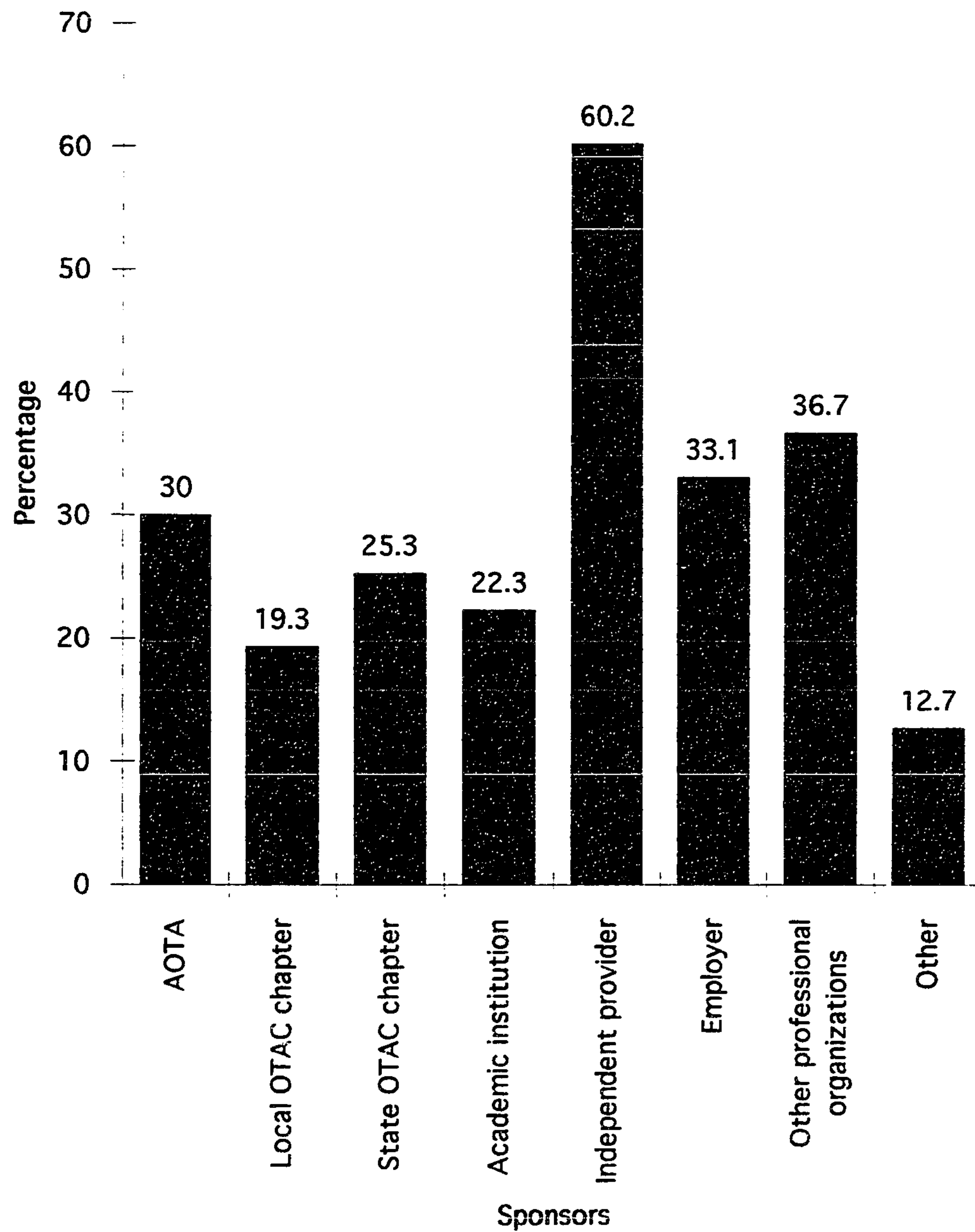
Sponsors of Continuing Education Programs Attended (*n* = 166)

Sponsors	*n*	%
AOTA	49	30.0
Local OTAC chapter	32	19.3
State OTAC chapter	42	25.3
Academic institution	37	22.3
Independent provider	100	60.2
Employer	55	33.1
Other professional organizations	61	36.7
Other	21	12.7

Note. More than one response allowed.

Figure 3

Sponsors of Continuing Education Programs Attended



Note. More than one response allowed.

identified as sponsors by 74.6% of the respondents. The other category was selected by 12.7% of respondents. Sponsors identified by these respondents included American Society of Hand Therapists (5), Association of Pediatric Therapists (2), manufacturer (1), Special Education Local Planning Agency (1), CC Waves (1), Roy Matheson (1), Keep Pace (1), Occupational Therapy Director's Forum (1), Psychology Forum (1), Association of Rheumatology (1), Arthritis Foundation (1), San Jose State University (1), computer group (1), hand therapy study group (1), University of Missouri Eye Institute (1), and DME vendor (1).

Respondents were asked to identify the average cost of the continuing education programs they had attended (see Table 5). The average cost of courses varied considerably but the greatest number of respondents, 24.5%, reported average cost as $250-300, followed by $200-250 (19.5%), >$300 (17%), $100-150 (14.5%), $150-200 (13.8%), and $50-100 (10.7%). The mean cost of the continuing education programs attended by the occupational therapists surveyed was $217 with a standard deviation of 80.58.

Table 5

Average Cost of Continuing Education Programs Attended (n = 159)

Average Cost per Course	n	%
$50-100	17	10.7
$100-150	23	14.5
$150-200	22	13.8
$200-250	31	19.5
$250-300	39	24.5
Over $300	27	17.0
Not aware of cost	0	0.0

Mean = $216.82 SD = 80.58

Question 2: What is the current level of satisfaction with continuing education programs among occupational therapists in northern California?

Occupational therapists responding to the survey were asked to rate their level of satisfaction with the content of the continuing education programs they had attended (see Table 6). A scale of 1-5 was used with 1 meaning not satisfied, 3 meaning neutral, and 5 meaning extremely satisfied. A very large percentage, 74.9%, were satisfied with the content and 24% rated their level of satisfaction as neutral (see Figure 4). Only 1.2% of the occupational therapists indicated that they were not satisfied with the content of the programs they had attended.

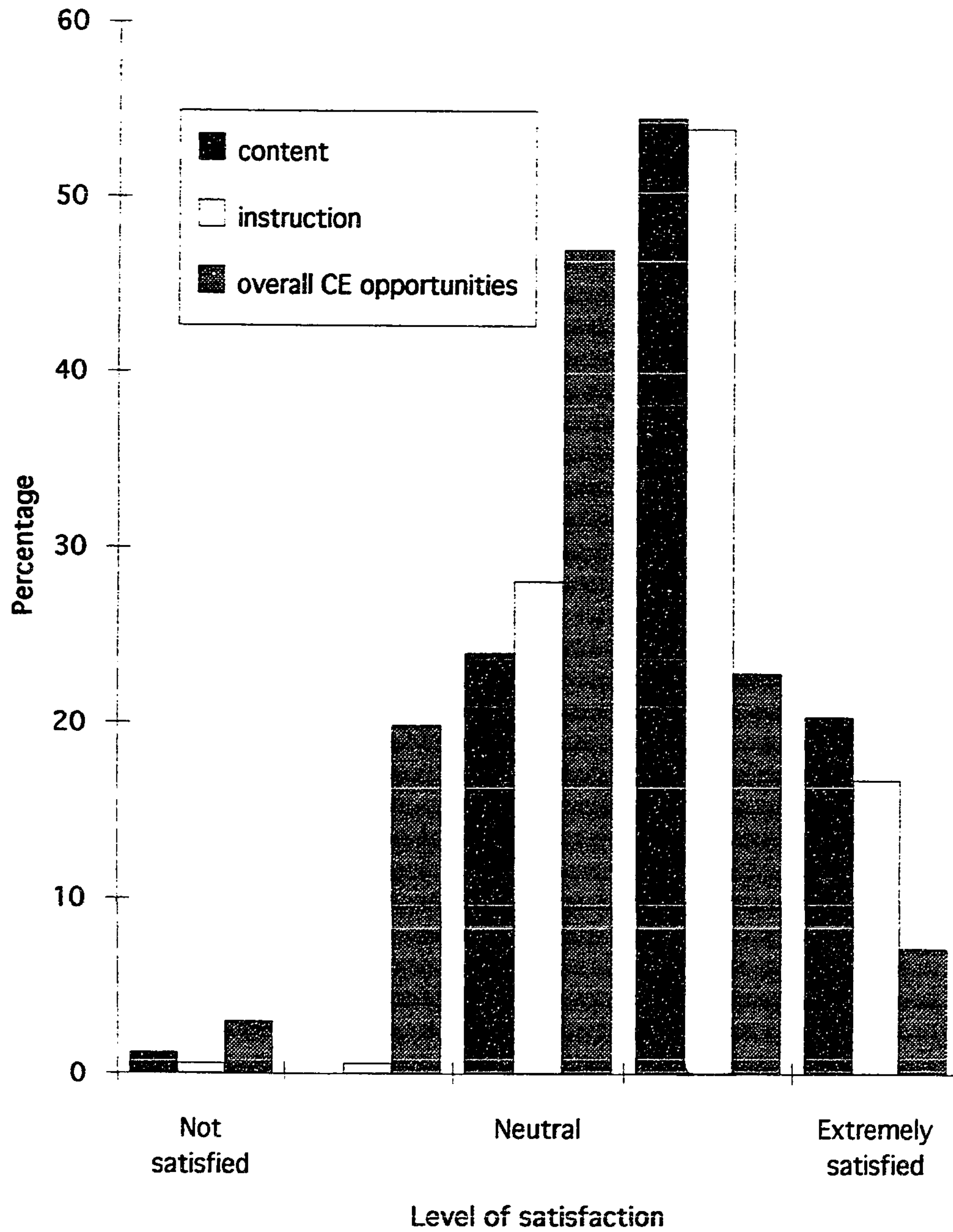
Table 6

Satisfaction with Content of Continuing Education Programs Attended (n = 167)

Not Satisfied		Neutral	Satisfied	
1	2	3	4	5
2 (1.2%)	0 (0%)	40 (24%)	91 (54.5%)	34 (20.4%)
	Mean = 3.93		SD = .74	

Figure 4

Level of Satisfaction with Continuing Education



Respondents were asked to rate their level of satisfaction with the instruction of the continuing education programs they had attended using an identical scale (see Table 7). Again, the majority, 70.7%, reported that they were satisfied with the instruction. Neutral feelings were reported by 28.1% of the occupational therapists and a very few, 1.2%, reported dissatisfaction with the instruction.

The same five-point scale was used to elicit respondents' level of satisfaction with continuing education opportunities in northern California (see Table 8). The level of satisfaction with overall continuing education opportunities in northern California proved to be much lower than that for content or instruction with only 30.1% of respondents reporting that they were satisfied with the available opportunities. The majority, 47%, rated their level of satisfaction as neutral and 22.9% were not satisfied with available programming.

Table 7

Satisfaction with Instruction of Continuing Education Programs Attended (n = 167)

Not Satisfied 1	2	Neutral 3	Satisfied 4	5
1(.60%)	1 (.60%)	47 (28.1%)	90 (53.9%)	28 (16.8%)
	Mean = 3.86		SD = .71	

Table 8

Satisfaction with Continuing Education Opportunities in Northern California (n = 166)

Not Satisfied 1	2	Neutral 3	Satisfied 4	5
5 (3%)	33 (19.9%)	78 (47%)	38 (22.9%)	12 (7.2%)
	Mean = 3.11		SD = .91	

Question 3: What are the perceived barriers to participation in continuing education?

Respondents were asked to rate 11 barriers to participation in continuing education on a scale from 1 to 5 with 1 meaning not important, 3 meaning somewhat important, and 5 meaning extremely important (see Table 9). Availability of pertinent courses emerged as an overwhelming barrier to participation in continuing education with 83.1% of respondents rating this barrier as important (see Figure 5). Travel was identified by most respondents as an important barrier for distances of 100 miles or greater with the importance of this barrier increasing with increased distance to the continuing education course. Travel over 200 miles was considered a significant barrier for 78% of respondents. Other factors that are clearly considered in selection of courses were reputation of presenter (63.3%), availability of information on courses (62.1%), registration fee (58.2%), loss of family time (55.4%), and experience with previous courses (54.8%). Of less importance to respondents were hotel/meal costs (43.0%), loss of vacation (35.6%), loss of pay (33.3%), and burden to co-workers (26.6%).

Respondents were asked to indicate the number of miles they would be willing to travel for continuing education by providing a numerical value. There were 156 responses to this question. Responses ranged from 10 to 3000 miles with a mean score of 408 miles. The greatest number of respondents, 64.7%, reported that they would be willing to travel 100 miles to attend continuing education.

Table 9

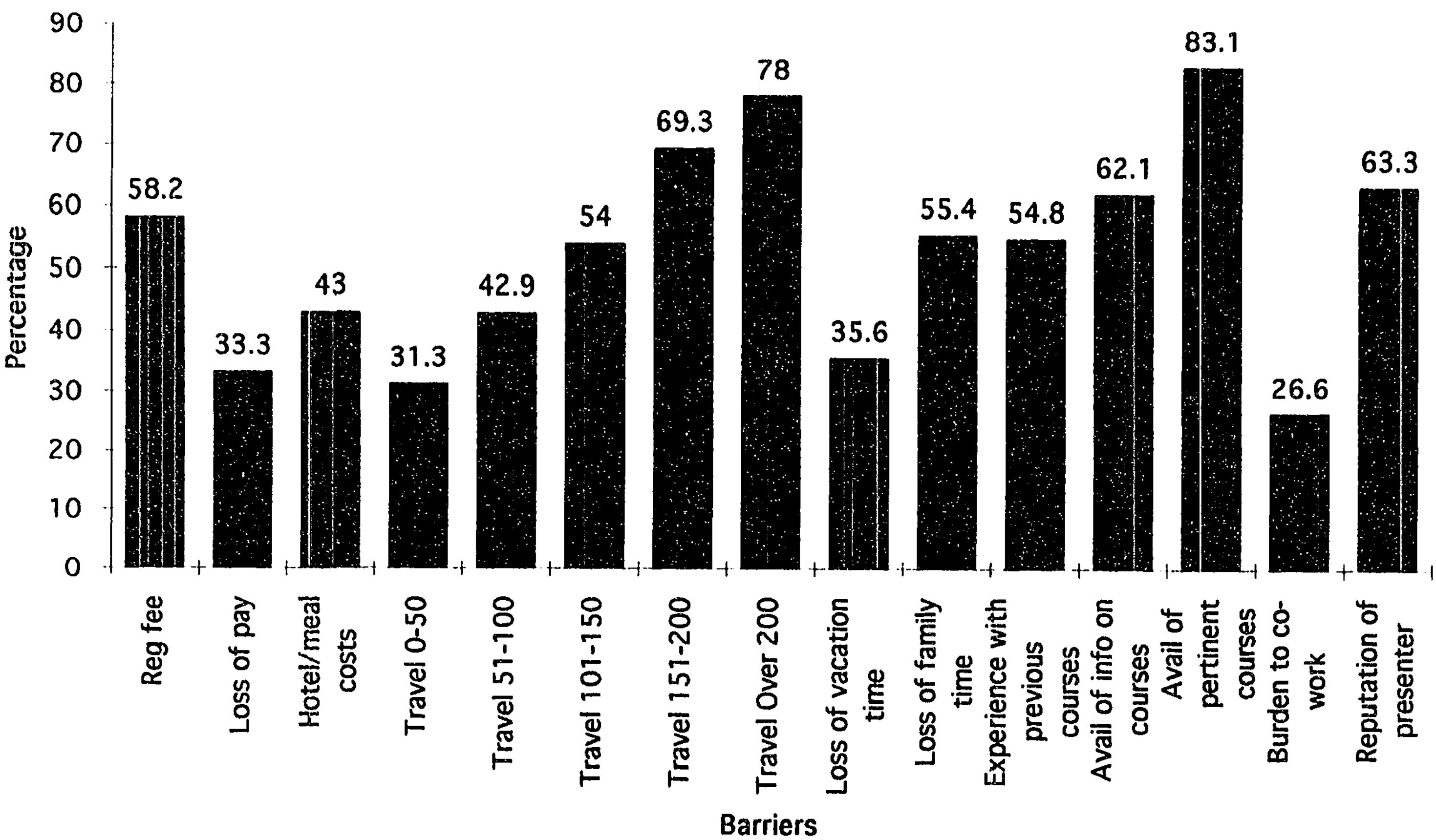
Perceived Barriers to Participation in Continuing Education (n = 177)

Barriers	n (Percent) of Respondents		
	Not Important	Somewhat Important	Important
Registration fee	20 (11.3)	54 (30.5)	103 (58.2)
Loss of pay	70 (40.0)	48 (27.1)	59 (33.3)
Hotel/meal costs	44 (24.9)	57 (32.2)	76 (43.0)
Traveling *			
0-50 miles	88 (54.0)	24 (14.7)	51 (31.3)
51-100 miles	59 (36.2)	34 (20.9)	70 (42.9)
101-150 miles	44 (27.0)	31 (19.0)	88 (54.0)
151-200 miles	35 (21.5)	15 (9.2)	113 (69.3)
Over 200 miles	26 (16.0)	10 (6.1)	127 (78.0)
Loss of vacation	82 (46.3)	32 (18.1)	63 (35.6)
Loss of family time	45 (25.4)	34 (19.2)	98 (55.4)
Experience with previous courses	28 (15.8)	52 (29.4)	97 (54.8)
Availability of information on courses	16 (9.0)	51 (28.8)	110 (62.1)
Availability of pertinent courses	10 (5.6)	20 (11.3)	147 (83.1)
Burden to co-workers	78 (44.1)	52 (29.4)	47 (26.6)
Reputation of presenter	17 (9.6)	48 (27.1)	112 (63.3)

* n = 163 for traveling section.

Figure 5

Barriers to Participation in Continuing Education



Question 4: What motivates occupational therapists to participate in continuing education?

Respondents were presented with a list of 13 reasons for participation in continuing education identified in the literature and were asked to identify the two top reasons why they participate in continuing education with 1 indicating the primary reason and 2 indicating the secondary reason (see Table 10).

The occupational therapists surveyed overwhelmingly agreed that the primary reason they participate in continuing education is "to learn specific new skills" (52.2%) or "to be better informed" (30.8%) (see Figure 6). The remaining reasons were of far less importance with "to meet continuing education requirements" identified as the primary reason for attendance by 5% of respondents, followed by "to work for a degree/certificate" (3.8%), "to satisfy employer requirements" (2.5%), and "to network" (1.9%). Respondents clearly did not participate in continuing education "to get a new job," "to advance in a present job," "to satisfy curiosity," or "to change routine." Personal reasons such as "to have a sense of belonging," "to forget personal problems," or "to be a better person," selected by no respondents, also clearly did not motivate respondents to participate in continuing education.

The two most important primary reasons for participation in continuing education were also the two most frequently reported secondary reasons for continuing education attendance, further evidence of the powerful motivating force of these objectives. "To be better informed" was selected by the greatest number of respondents, 41.2%, followed by "to learn specific new skills," selected by 29.4%. Secondary reasons of less importance to the

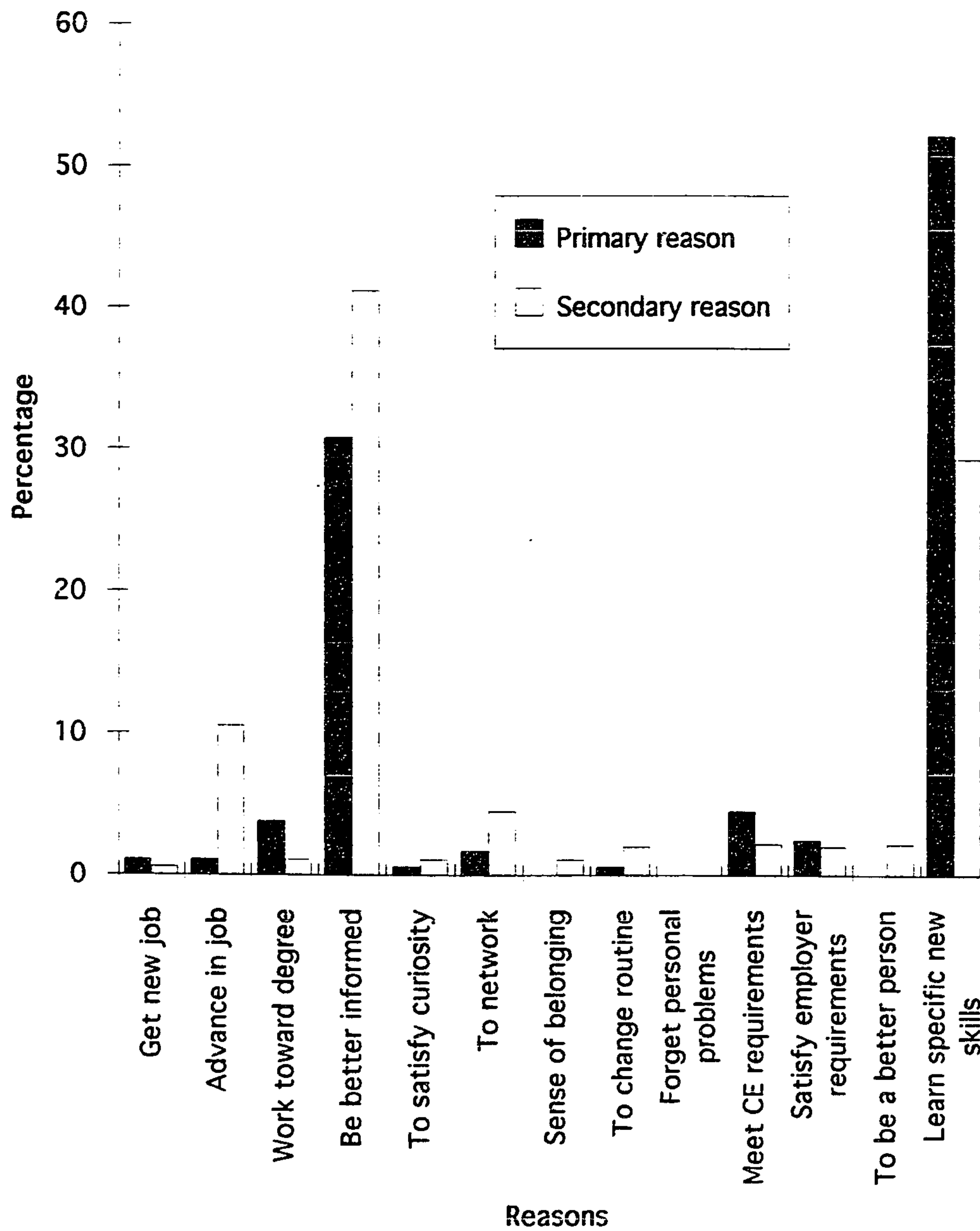
Table 10

Reasons Motivating Respondents to Participate in Continuing Education

Reason	Primary (n =159)		Secondary (n =153)	
	n	%	n	%
To help me get a new job	2	1.3	1	0.7
To advance in my present job	2	1.3	16	10.5
To work for a degree/certificate	6	3.8	2	1.3
To be better informed	49	30.8	63	41.2
To satisfy curiosity	1	0.6	2	1.3
To network	3	1.9	8	5.2
To have a sense of belonging	0	0.0	2	1.3
To change routine	1	0.6	3	2.0
To forget personal problems	0	0.0	0	0.0
To meet continuing education requirements	8	5.0	4	2.6
To satisfy employer requirements	4	2.5	3	2.0
To be a better person	0	0.0	4	2.6
To learn specific new skills	83	52.2	45	29.4

Figure 6

Reasons Motivating Respondents to Participate in Continuing Education



occupational therapists surveyed were "to advance in my present job" (10.5%), "to network" (5.2%), "to meet continuing education requirements" (2.6%) and "to be a better person" (2.6%). "To change routine" and "to satisfy employer requirements, receiving the same number of responses" (2%), and "to work for a degree/certificate," "to satisfy curiosity," and "to have a sense of belonging," all selected by 1.3% of respondents, were of least interest to the occupational therapists surveyed. One respondent (0.7%) identified "to help me get a new job" as a secondary reason for attendance. No respondents selected "to forget personal problems" as a secondary reason.

A space was provided for respondents to identify other reasons for their participation in continuing education. Twenty-four reasons were written in with responses grouped to facilitate analysis. The reasons submitted are as follows: to better serve occupational therapy clients (8), to stay current (6), to avoid burnout (3), to maintain certification as a Certified Hand Therapist (3), to make myself more marketable (3), and learning for the sake of learning (2).

Question 5: What are the perceived continuing education needs of occupational therapists?

Part A. What is the desired instructional content of continuing education programs?

Respondents were asked to indicate their level of interest in 55 topics of current interest to occupational therapists, which were organized under eight general categories: general practice concerns, specific diagnoses, treatment approaches, evaluation/assessment, professional relationships, documentation/billing, management, and education. A scale of 1-3 was

presented with 1 indicating no interest, 2 indicating some interest, and 3 indicating extreme interest. Level of interest in each topic and category was tabulated using central tendencies (means). Table 11 shows the preferences of the occupational therapists surveyed for these continuing education topics and categories.

Mean responses to 12 of the 55 continuing education topics fell above 2.0, indicating above average to high interest in these topics. These topics are listed in order from highest mean score:

1. Neurodevelopmental Treatment (NDT)/Bobath
2. Cognitive dysfunction
3. Myofascial release
4. Cerebrovascular accident (CVA)
5. Functional goals/outcomes
6. Splinting
7. Motor learning
8. Streamlining documentation
9. Adult splinting
10. Use of modalities
11. Adult evaluation/assessment
12. Vision dysfunction

Respondents reported greatest interest in topics that fell within the general category of treatment approaches ($\underline{M}$ = 1.95) with five of the high interest topics falling within this category. Topics falling within the evaluation/assessment

Table 11

Preferences for Instructional Content of Continuing Education (n=179)

Topic	Mean	SD
General practice concerns	**1.70**	**.572**
Client-centered treatment	1.87	.824
Family collaboration	1.75	.739
Clinical reasoning	1.73	.739
Multi-cultural OT	1.46	.771
Specific diagnoses	**1.84**	**.519**
Cognitive dysfunction	2.27	.797
CVA	2.14	.853
Vision dysfunction	2.02	.824
Dysphagia	1.93	.797
Head injury	1.91	.769
Dementia	1.70	.754
Spinal cord	1.61	.664
Ventilator-dependent patients	1.50	.737
Serious mental illness	1.45	.712
Treatment approaches	**1.95**	**.468**
NDT/Bobath	2.31	.801
Myofascial release	2.15	.824
Motor learning	2.09	.840
Adult splinting	2.05	.836
Use of modalities	2.04	.866
Sensory integration	2.00	.800
Affolter	1.83	.778
Therapeutic touch	1.77	.785
Feldenkrais	1.73	.746
Pediatric splinting	1.69	.828
Behavioral modification	1.63	.734

Continued.

Table 11. Continued.

Topic	Mean	SD
Evaluation/Assessment	**1.85**	**.518**
Adult	2.02	.800
Geriatric	1.93	.832
Specific evaluations	1.76	.870
Pediatric	1.70	.832
Professional relationships	**1.66**	**.553**
Consultation	1.82	.803
Professional collaboration	1.72	.721
OTR-COTA partnerships	1.59	.724
OTR-OTA partnerships	1.53	.689
Documentation/Billing	**1.80**	**.568**
Functional goals/outcomes	2.12	.780
Streamlining documentation	2.09	.830
Physical disability documentation	1.93	.845
Computerized charting	1.93	.807
Physical disability documentation (outpt)	1.85	.808
Reimbursement	1.85	.808
Physical disability documentation (inpt)	1.85	.831
Psychosocial documentation	1.49	.760
Psychosocial documentation (outpt)	1.41	.731
Psychosocial documentation (inpt)	1.40	.698
Management	**1.66**	**.559**
Managed care	1.96	.847
Continuous quality improvement	1.82	.780
Stress management	1.66	.758
Coping with change	1.63	.763
Supervisor role	1.61	.766
Writing/negotiating capitation contracts	1.56	.772
Roles	1.53	.721
Manager/director role	1.53	.744

Continued.

Table 11. Continued.

Topic	Mean	SD
Education	**1.75**	**.607**
Fieldwork supervision	1.82	.817
Cross training	1.78	.788
Competency issues	1.77	.792
Research	1.63	.757

Note. A higher number indicates a stronger rating of importance. Boldface headings represent general topic categories.

category (M = 1.85) were of next greatest importance followed by specific diagnoses (M = 1.84) and documentation/billing (M = 1.80). Topics related to education (M = 1.75), general practice (M = 1.70), management (M = 1.66), and professional relationships (M = 1.66) were of least interest to the occupational therapists surveyed.

A space was provided to allow respondents to add desired continuing education topics. One hundred sixty-nine topics were submitted and organized under the six general categories to facilitate analysis. An additional category labeled "areas of practice" was added due to the large number of responses that fell within this category. The largest number of topics identified (33.1%) were related to evaluation/assessment, followed by areas of practice (18.3%). Of next greatest interest were topics related to treatment approaches (16.6%), followed by specific diagnoses (13.6%), general practice concerns (11.2%), management (4.7%), professional relationships (1.8%), and documentation (.60%). A complete list of suggested topics are reported in Appendix E.

Part B: What is the desired structure of continuing education?

Questions 24-27 on the survey elicited respondents preferences for continuing education delivery method (see Table 12). Central tendencies (means) were used to describe responses.

Occupational therapists responding to the survey were asked to rank their preferences for type of continuing education on a scale from 1 (most interested) to 9 (least interested). An overwhelming preference for workshops was noted, with a low mean rating of 1.64. Conferences were also of interest to respondents (M = 2.41). TV/videotapes (M = 3.93) and college course enrollment (M = 4.86) were of little interest and other individual modes of instruction such as self-study (M = 5.19), audiotapes (M = 5.45), and telephone conference (M = 6.77) were of no interest to the occupational therapists surveyed. The other category received a mean rating of 7.93. Five respondents wrote in other types of continuing education. These included: computer network (3) and study groups (2). The none category received the lowest mean rating (8.10).

Those respondents interested in attending workshops were asked to rank their preferences for type of workshop offered on a scale from 1 (most interested) to 6 (least interested). There were 168 responses to this question, further evidence of the high level of interest in workshops among respondents. One-day workshops (M = 1.84) and 2-day workshops (M = 2.03) were of great interest to respondents. Respondents were not interested in series of 1-day workshops over several months (M = 3.45), evening series weekly over several weeks, (M = 4.48), or week-long workshops (M = 4.58). The other category

Table 12

Preferences for Continuing Education Delivery Methods

Variable	Mean	SD
Type of continuing education (n=169)		
Telephone Conference	6.77	1.931
Workshops	1.64	0.973
Audiotapes	5.45	2.053
College Course Enrollment	4.86	2.233
Conferences	2.41	1.639
TV/Videotapes	3.93	1.904
Self-study	5.19	1.988
None	8.10	1.504
Other	7.93	1.930
Type of workshop (n=168)		
One-day workshop	1.84	0.912
Series of one-day workshops over several months	3.45	1.730
Two-day workshop	2.03	1.126
Week-long workshop	4.58	1.601
Evening series weekly over several weeks	4.48	1.721
Other	5.04	1.757
Type of instructor (n=165)		
Faculty member	4.50	1.710
Clinician	3.00	1.279
Clinician who specializes in a particular area	1.32	0.634
Recognized scholar	3.41	1.780
Independent provider	4.15	1.510
Clinician from a field other than OT	4.29	1.605
Other	5.91	2.061
Length of individual workshop sessions		
Evening series (hours each session) (n =159)	2.50	0.739
One- or two-day workshop (hours each day) (n =170)	7.00	0.948
Week-long workshop (hours each day) (n =145)	6.60	1.613

Note. A lower number indicates a stronger rating of importance.

received a mean score of 5.04. Thirteen respondents submitted other types of workshops. These included: 3-day workshops (6), weekend workshops (3), 3-week workshops (2), evening series over consecutive days (1), and 1/2- or 1-day workshops offered over consecutive weeks or every other week (1).

Respondents were asked to rank their preferences for continuing education instructor on a scale from 1 (most interested) to 7 (least interested). Respondents overwhelmingly preferred instruction by clinicians, most notedly clinicians who specialize in a particular area of occupational therapy, which received a very low mean rating of 1.32. Instruction by a "recognized scholar" (M = 3.41) was also of some interest but respondents were clearly not interested in being taught by an "independent provider" (M = 4.15), a "clinician from a field other than occupational therapy" (M = 4.29), or a "faculty member" (M = 4.50). A space was provided for respondents to identify the titles of clinicians they would desire as instructors. Respondents wrote in 34 titles. The 34 titles submitted follow in order of frequency of response: physical therapist (23), medical doctor (14), speech therapist (12), psychologist/psychiatrist (4), optometrist (2), ergonomist (2), and nurse (2). Massage therapist, osteopath, insurance agent, educator, behavioral specialist, and vocational rehabilitation representative were each identified by one respondent. The other category received a mean rating of 5.91.

Respondents were asked to specify desired length of individual workshop sessions by providing numerical values for number of hours desired for each session of an evening series, each day of a 1- or 2-day workshop, and each day of a week-long workshop. Responses were tabulated using central tendencies

(means). The mean score for length of each session of an evening series was 2.5 with scores ranging from 2 to 7. There were 155 responses to this question. Desired length of sessions for 1- or 2-day workshops was 7, based on the mean rating with scores ranging from 4 to 8.5. There were 170 responses to this question. The mean score for each day of a week-long workshop was 6.6 with scores ranging from 6 to 8.

An open-ended question was provided to allow respondents to identify names and addresses of speakers they would be interested in hearing. This section was completed by 24 respondents with 31 names submitted. Responses are reported in Appendix F.

Questions 29-31 elicited information regarding cost and funding of continuing education programs. Respondents were asked to select the price range that represented the highest dollar amount they would be willing to pay for a continuing education course from a list of six options (see Table 13). The largest number of respondents selected $50-100/course (24%), followed by $100-150/course (21%), $150-200/course (17.4%), $250-300/course (17.4%), $200-$250/course (11.4%), and over $300 (10.2%). The mean response was $222.

Table 13

Preferences for Cost of Continuing Education (n = 167)

Cost per Course	n	%
$50-100	40	24.0
$100-150	35	21.0
$150-200	29	17.4
$200-250	19	11.4
$250-300	27	16.2
Over $300	17	10.2

Mean = $222.31

Occupational therapists responding to the survey were asked to indicate whether continuing education funds were available to them from their employer by circling yes or no (see Table 14). Of the 168 respondents who completed this question, a very large percentage, 66%, reported that funds were available. When asked to specify the dollar amount of their yearly allowance, 84.6% provided a figure. Continuing education funds available to the occupational therapists surveyed varied dramatically from $65/year to $1600/year, with the mean response $610/year. The occupational therapists reported their yearly allowance as follows: $401-600 (36.7%), $801-1000 (20%), $201-400 (17.8%), $1-200 (13.3%), >$1000 (7.8%), and $601-800 (4.4%).

Table 14

Availability of Funding for Continuing Education from Employers

	n	%
CE funding available from employer (n=168)		
Yes	111	66.0
No	57	34.0
Yearly allowance (n=90)		
$1-$200	12	13.3
$201-$400	16	17.8
$401-$600	33	36.7
$601-$800	4	4.4
$801-$1000	18	20.0
>$1000	7	7.8
Mean = $610		

Questions 32-35 elicited respondents preferences for location and time of continuing education programs (see Table 15). Central tendencies (means) were used to describe responses.

Respondents were asked to rank their preferences for location of continuing education programs on a scale from 1 (best) to 5 (worst). Respondents were most interested in attending continuing education at a hotel or convention center, which received a low mean score of 1.49. Respondents also indicated interest in attending programs at a hospital/health care facility (M = 2.19) or an academic institution (M = 2.68). The home/correspondence option (M = 3.86) was of very little interest to the occupational therapists surveyed. The other category received a mean rating of 4.69. The other

Table 15

Preferences for Location and Time of Continuing Education

Variable	Mean	SD
Location (n =162)		
Hospital/health care facility	2.19	0.907
Hotel/Convention center	1.49	0.760
Academic institution	2.68	0.063
Home/correspondence	3.86	1.006
Other	4.69	0.985
Season (n =158)		
Winter	2.60	1.248
Spring	1.97	0.916
Summer	3.23	1.069
Autumn	2.08	0.807
Time of Day (n =149)		
Morning	2.25	0.980
Afternoon	2.63	0.811
Evening	3.30	1.085
All day	1.71	1.095
Day (n=164)		
Sunday	4.22	2.403
Monday	4.25	1.908
Tuesday	4.53	1.785
Wednesday	4.89	1.889
Thursday	4.27	2.045
Friday	2.91	1.784
Saturday	2.81	2.183

Note. A lower number indicates a stronger rating of importance.

locations suggested by three respondents were resort (2), and facility with free parking (1).

Occupational therapists responding to the survey were asked to rank their preferences for which season they would like continuing education to be offered in. A scale from 1 (best) to 4 (worst) was used. Spring (M = 1.97) and autumn (M = 2.07) were the two highest rated seasons. Respondents were least interested in attending continuing education programs during winter and summer, which received mean scores of 2.60 and 3.23, respectively.

Respondents were asked to rank their preferences for the time of day they would like continuing education to be offered. The time preferred by the occupational therapists surveyed was all day with a mean score of 1.7, followed by morning (M = 2.30), afternoon (M = 2.63), and evening (M = 3.30).

Respondents were asked to rank their preferences for the day they would like continuing education to be offered on a scale from 1 (best) to 7 (worst). An overwhelming preference for attendance on Saturday (M = 2.80) or Friday (M = 2.91) was reported. No preferences for the remaining days of the week were noted with Sunday (M = 4.22), Monday (M = 4.25), Thursday (M = 4.27), Tuesday (M = 4.53), and Wednesday (M = 4.89) all receiving nearly identical mean ratings.

CHAPTER 5

DISCUSSION AND IMPLICATIONS

In this chapter, results of the study are discussed as they relate to the literature and the Model of Human Occupation. Implications for the occupational therapy profession, limitations of the survey, and recommendations for future research are presented.

Discussion

Question 1: What is the current level of participation in continuing education among occupational therapists in northern California?

Eighty-one percent of the occupational therapists had participated in at least one occupational therapy continuing education program during the two year period prior to the survey, and 67% had participated in at least one non-occupational therapy or interdisciplinary program. Though the occupational therapists participated in more occupational therapy programs, an average of 3.2, than non-occupational therapy or interdisciplinary programs, an average of 2.4, the levels of participation in these two types of programming were almost equal. This high rate of participation in non-occupational therapy or interdisciplinary continuing education programming may reflect the trend towards increased generalization of roles discussed in the literature, or the lack of availability of pertinent occupational therapy continuing education programs reported by the occupational therapists.

Results of this study reveal that occupational therapists in northern California learned about continuing education programs from multiple sources.

Almost all of the occupational therapists, 92.2%, used direct mailings from organizations providing courses and the majority, 75.4%, also sought information from professional newsletters. Professional newsletters published by the local and state Occupational Therapy of California (OTAC) chapters and the American Occupational Therapy Association (AOTA) were all used as sources with no preference for any particular newsletter noted. Publications such as OT Week, and other occupational therapists were also used as sources of information by over half of the occupational therapists surveyed.

Despite the diverse number of continuing education providers in northern California, results indicate that two groups of providers are attracting the majority of participants. A huge percentage of the occupational therapists, 75%, reported that occupational therapy professional organizations including AOTA, local OTAC chapters, and state OTAC chapters had sponsored at least one of the courses they had attended, and 60% identified independent providers as a sponsor of one or more courses. This finding may reflect the successful marketing strategies of these providers as professional newsletters and direct mailings from providers were identified as the primary sources of information regarding continuing education.

The average cost of the continuing education programs attended varied considerably but 61% of the respondents reported that the courses they had attended had cost a minimum of $200. The occupational therapists were not asked to specify the type or duration of the continuing education programs they had attended; thus, the quantity and quality of the continuing education they received for a given dollar amount is unclear. This is an area for further

research. Given this limitation, it is difficult to draw accurate conclusions regarding the cost of continuing education in northern California; but, the knowledge that 61% of respondents were willing to pay a minimum of $200 to attend continuing education offers insight into respondents' spending patterns with regard to continuing education, valuable information for continuing education planners.

Question 2: What is the current level of satisfaction with continuing education programs among occupational therapists in northern California?

In general, occupational therapists were satisfied with the content and instruction of continuing education programs in northern California, but the fact that only 20.4% were extremely satisfied with the content and only 16.8% were extremely satisfied with the instruction indicates that there is still considerable opportunity for improvement of these educational experiences. This high level of satisfaction with content is surprising given the fact that availability of pertinent courses was selected as the greatest barrier to participation in continuing education by respondents. This could indicate that location of a pertinent course is challenging, but once located, the content of the course is satisfactory.

Despite the general satisfaction with the content and instruction of courses, most of the occupational therapists expressed a neutral level of satisfaction with regard to continuing education opportunities in general in northern California. This reveals that other factors besides content and instruction are negatively impacting occupational therapists' satisfaction with continuing education, and suggests the need for further study of the factors impacting occupational

therapists' satisfaction with continuing education. Given the results of this study, contributing factors could be the limited number of pertinent offerings, limited information regarding courses, or structural factors such as those investigated in this study including delivery method, cost, location, and time of continuing education offerings.

The apparent lack of congruence between the high level of satisfaction with content and instruction of continuing education and the low level of satisfaction with overall continuing education opportunities might also reflect a discrepancy between the expectations held by occupational therapists for continuing education and the reality of the courses offered. Again, this is an area for further investigation. It can be concluded from these results that all the continuing education needs of occupational therapists in northern California are not being met by current programming.

Question 3: <u>What are the perceived barriers to participation in continuing education?</u>

Seven of the 11 barriers presented were rated as important by the occupational therapists indicating that there are currently substantial barriers to participation in continuing education in northern California. The occupational therapists surveyed perceived availability of pertinent courses as an overwhelming obstacle to participation with 83.1% of respondents rating this barrier as important. This parallels the findings of Karp (1992a) who reported that 87% of Georgia physical therapists viewed availability of pertinent courses as a significant barrier. Seventy-three percent of the occupational therapists indicated that distance was an important consideration and 65% reported that

they would be willing to travel up to 100 miles to attend continuing education. This supports the findings of Kohler and Mayberry (1993) and Harvey (1983) for rural occupational therapists but is inconsistent with the findings of Harvey (1983) for urban therapists who identified family responsibility and lack of time as greater barriers to access.

Other barriers that impacted participation of over half of the occupational therapists were reputation of presenter, a barrier not previously examined in the literature, availability of course information, course cost, and experience with previous courses. Cost has been identified as an important barrier in previous studies (Bailey, 1990; Karp, 1992a; Kohler & Mayberry, 1993; Smorynski & Parochka, 1979), as has availability of course information (Karp, 1992a). It is interesting to note that four of the top five barriers identified by the occupational therapists in this study correlated with the top four barriers identified by physical therapists (Karp, 1992a), providing evidence of a correlation between the barriers to participation in continuing education perceived by occupational therapists and those perceived by physical therapists.

When classified into the categories proposed by Cross (1981), all the barriers rated as important by the occupational therapists would be considered institutional barriers with the exception of course cost, a situational barrier. Thus, it would appear that the practices and procedures of continuing education programming are limiting participation as opposed to the life situations of participants. The dynamic interaction between individuals and their environment, and the impact of the environment on occupational behavior is evidenced by the constraining impact of the educational environment on

occupational therapists' participation in continuing education.

Question 4: What motivates occupational therapists to participate in continuing education?

Results of this portion of the survey can be analyzed in relation to the six motivational orientations identified by Boshier (1977). These included: (1) social relationship, (2) external expectations, (3) social welfare, (4) professional advancement, (5) escape/stimulation and (6) cognitive interest. Eighty three percent of respondents identified "to learn specific new skills" or "to be better informed" as their primary reason for participation in continuing education, and 70.6% of respondents selected one of these reasons as their secondary reason for participation in continuing education. Remaining responses were divided among the other 11 reasons with no clear patterns evident. These findings overwhelmingly indicate that occupational therapists are motivated to participate in continuing education programs by the desire to learn specific new skills and be better informed. Both of these reasons fall within the "cognitive interest" motivational orientation category identified by Boshier. This supports the findings of other allied health disciplines. Hightower (1973) and Karp (1992b) reported that desire to gain knowledge was the primary factor motivating physical therapists to participate in continuing education. Reasons related to cognitive interest have also consistently been identified in the nursing literature as primary factors motivating participation in continuing education (Chesney & Beck, 1985; O'Connor, 1979; Thomas, 1986; Urbano et al., 1988). This interest in acquisition of specific clinical skills could reflect the perceived need of northern California occupational therapists to update their skills in order

to perform competently given the environmental press of the changing health care environment, rapid advances in technology and science, and the changing roles of occupational therapists. The nursing literature also revealed that nurses were motivated to participate in continuing education by the desire for professional advancement (Chesney & Beck, 1985; Thomas, 1986; Urbano et al., 1980). This desire was not evident among the occupational therapists surveyed as only 6.4% of respondents selected one of the three reasons related to professional advancement as their primary reason for participation in continuing education, and only 12.5% selected one of these reasons as their secondary reason. The external expectations orientation, identified as an important secondary factor influencing participation of nurses (O'Connor, 1979) and physical therapists (Karp, 1992b) in continuing education also had little impact on the participation of occupational therapists in continuing education. This could be attributed to the lack of mandatory continuing education requirements in California.

As the impact of external expectations on participation in continuing education is difficult to assess in the absence of such expectations, investigation of the factors motivating occupational therapists to participate in continuing education in states where continuing education is required for licensure is necessary to obtain a more accurate picture of the motivational orientations of occupational therapists. Study of the level of participation in continuing education in these states as compared to participation in states where there are no requirements would provide additional insight into the relationship between motivation and participation in continuing education.

Reasons for participation related to social relationship, social welfare, and escape/stimulation were of little importance to respondents. Based on the results of this survey, it appears that occupational therapists in northern California value acquisition of professional knowledge and skills, and the ability to perform competently in their role as occupational therapists. It further appears that therapists are intrinsically motivated to participate in continuing education by these values and their desire for efficacy in their changing professional environments. This finding is inconclusive, though, and may apply to only a limited portion of the occupational therapy population in northern California. As reminder postcards were only sent to OTAC members, this survey may have been biased towards those occupational therapists who are most motivated to grow professionally and would most likely participate in continuing education, as evidenced by their involvement in a professional organization.

Question 5: What are the perceived needs of occupational therapists for continuing education?

Part A: What is the desired instructional content of continuing education programs?

The continuing education topics selected by northern California occupational therapists reflect their desire to learn specific new skills that are immediately applicable to clinical practice, a finding consistent with the adult learning, occupational therapy, and nursing literature. Of greatest interest to the occupational therapists were topics related to treatment approaches and evaluation/assessment. This supports the findings of Kohler and Mayberry (1993), and Harvey (1983) who studied the preferences of urban and rural

occupational therapists. Topics related to specific diagnoses and documentation/billing were also of interest to the therapists surveyed. Topics related to education, general practice, management, and professional relationships were of least interest. The topics in each of the four most popular categories focus on clinical skills. This finding may reflect the job responsibilities of the population studied as 85.9% of the occupational therapists were involved in patient care. This preference for clinical topics is supported by the results of previous studies (Broski & Upp, 1979; Cook et al., 1987; Harvey, 1983; Kohler & Mayberry, 1993) and appears to be consistent across the allied health disciplines investigated.

Eight of the 12 most popular topics relate specifically to the physical disability treatment setting, which may reflect the physical disability practice focus of the population studied (72.6%). This finding may have been influenced by the researcher's failure to include sufficient psychosocial topics from which to choose; but, the topics selected by the researcher were those identified as of current interest to occupational therapists by occupational therapists in the communities studied. Furthermore, respondents were given the opportunity to name topics of interest that were not included on the questionnaire and of the 169 topics submitted, only eight specifically addressed concerns relevant to psychosocial practice.

The large number of additional topics submitted reflects the diverse interests of respondents, and one could conclude that occupational therapists in northern California have an active interest in the content of the continuing education programs offered. This interest is consistent with Smorynski and

Parochka's (1979) finding that relevance of program content is considered first by allied health professionals in their selection of continuing education programs.

Part B: What is the desired structure of continuing education?

In this study, the instructional delivery systems preferred by the occupational therapists were those that allowed them the opportunity to learn with others, as opposed to the more individual modes of instruction, a finding supported by many previous studies of health personnel (Cannon et al., 1994; Cannon & Waters, 1993; Harvey, 1983; Little, 1993). Long distance learning is thus contraindicated. The instructional delivery method clearly preferred was 1- or 2- day workshops. This preference has been previously reported by Harvey (1983) in her study of urban and rural occupational therapists and Karp (1992a) and Little (1993) in their studies of physical therapists. An interest in conference attendance was also apparent, a finding consistent with the results of several studies in the nursing literature (Cannon et al., 1994; Cannon & Waters, 1993). Low interest in the none category suggests that most respondents are interested in some type of continuing education, and low interest in the other category further suggests that the types of continuing education presented to choose from were representative of the types in which they would choose to participate.

An overwhelming preference for instruction by a clinician who specializes in a particular area of occupational therapy was reported, a finding that may reflect the trend towards increased specialization discussed in the occupational therapy literature. This type of instructor may also be viewed as the best source

for information regarding the specific clinical skills sought by occupational therapists. Of least interest to the occupational therapists was instruction by individuals outside of the field of occupational therapy or removed from the clinical setting.

The maximum amount of money the occupational therapists were willing to pay for a continuing education course varied considerably. Results revealed that only 26% of the occupational therapists would be willing to pay more than $200 for a continuing education course. The 1-day workshop format is thus recommended to meet the expressed need for low cost courses. It is interesting to note, though, that despite the unwillingness of the majority of respondents to pay more than $200, 61% of them reported that they did pay at least $200 for the continuing education courses they had attended. This indicates that occupational therapists may be willing to pay more than $200 for a course but are more likely to participate if the cost is $200 or less. The diverse range of responses may reflect the varied life situations of the occupational therapists, the value placed on continuing education by individual therapists, or the availability or lack of availability of continuing education funding from employers.

Most therapists have funding for continuing education available to them from their employer, indicating a commitment to continuing education among employers. The specific monetary amount available varied dramatically, but the average amount was $610. As $217 was the average cost of the continuing education courses attended, this monetary amount would have allowed therapists to attend three courses per year. As the majority of therapists had

participated in only 1-3 continuing education offerings during the two year period prior to the completion of the questionnaire, it would appear that the funds available for continuing education from employers are not being used by many occupational therapists.

The preferred locations of continuing education programs were consistent with the preferences for instructional delivery systems as sites located in the community were preferred over home/correspondence options. Again, long distance learning is contraindicated. Most occupational therapists would prefer to attend a continuing education program at a hotel or convention center, a preference also evident among physical therapists studied by Karp (1992a). The occupational therapists also expressed interest in attending a course at a health care facility or an academic institution. Also consistent with the results of Karp's study (1992a) was the occupational therapists' clear preference for participation in continuing education on Friday or Saturday. Spring and fall were the most popular seasons for continuing education among the occupational therapists surveyed. The popularity of these seasons may be attributed to their correspondence with most academic calendars and the fact that individuals are less apt to vacation during these months. A preference for participation in continuing education during work hours was apparent with all-day attendance preferred over morning or afternoon sessions.

Professional Implications

One means of developing leadership and assuring growth of the occupational therapy profession is continuing education. Given the rapid advances in science and technology and changes in health care delivery, it is

becoming increasingly important for occupational therapists to continually update their knowledge and practice base. As AOTA endorses continuing education as the personal and professional responsibility of every practitioner, an educational goal of the occupational therapy profession should be to provide educational offerings that meet the diverse needs of occupational therapy practitioners. This study assessed the continuing education needs and preferences of occupational therapists in northern California. Data reveals that the continuing education needs of occupational therapists in northern California are not being met by current continuing education programming. To respond to the continuing education needs of these therapists, the identified topics and structural preferences must be incorporated into the development of continuing education courses that are useful and relevant to this population of occupational therapists. While the response rate to this survey was low, it may be assumed that the occupational therapists who responded are more interested in participating in continuing education than nonrespondents, as evidenced by the time and effort invested in completion of the questionnaire.

An understanding of the motivational orientations of occupational therapists assists continuing education planners in the development of programs that are in congruence with the expressed motivations of the learning audience. Given the absence of mandatory continuing education requirements in California, participation in continuing education is left to the individual occupational therapy learner. Based on the results of this study, increases in attendance can probably be attained by marketing programs as opportunities to develop specific clinical skills or become better informed.

Another implication for publicizing continuing education offerings may be derived from the occupational therapists' identification of direct mailings from organizations providing courses as their primary source of information regarding continuing education. As direct mailings appear to the most effective means of advertising courses, development of a mailing list with names, addresses, and areas of interest in continuing education, is recommended. As professional newsletters were also an extremely popular source of information, advertising programs in these newsletters may increase participation. Based on the assumption that individuals who completed the questionnaire are more interested in continuing education than those who did not, marketing continuing education programs to members of OTAC may result in a higher rate of participation, as 46% of the OTAC members surveyed returned the questionnaire and only 17.6% of nonmembers returned the questionnaire. This dramatic difference in response rate may be attributed to the fact that only OTAC members received reminder postcards.

The occupational therapists were clear in identifying barriers to participation. That the majority of barriers identified are institutional barriers has important implications for continuing education planners. As the practices and procedures of continuing education programming are limiting participation as opposed to the life situations of participants, elimination of these obstacles, and subsequent increased participation in continuing education is within the control of continuing education programmers. To address the expressed need for pertinent continuing education courses, it is recommended that programmers offer courses that teach skills that are immediately applicable to clinical practice,

skills related to treatment approaches, evaluation and assessment, specific diagnoses, and documentation and billing. Given the occupational therapists' active interest in the content of educational programs, collaboration between educational providers and practice is recommended so that the continuing education programs offered reflect the educational goals of each. Potential participants could be consulted on a regular basis to identify topics of current interest to occupational therapists, perhaps via the same mailing list used to advertise programs.

To eliminate the barrier of distance, it is recommended that continuing education courses be offered in different locales and be marketed to the occupational therapists who live within a 100 mile radius of a given location. Regular distribution of information regarding courses, via the mail, may help therapists locate pertinent courses, and discussion of the instructor's credentials in this literature may address the occupational therapists' need for information regarding the reputation of the presenter.

Based on the structural preferences of the occupational therapists surveyed, 1- or 2-day workshops are recommended. One day programs may be most appropriate based on the expressed need for low cost courses. The suggested length of individual workshop sessions is seven hours and courses that cost $200 or less are affordable to most occupational therapists. Cost of the continuing education program is important to consider as registration fee was a significant barrier to participation for many of the occupational therapists. Occupational therapists would be most receptive to courses instructed by a clinician who specializes in a particular area of occupational therapy; but, there

appears to be an audience for courses taught by a clinician or a recognized scholar as well. Planners might market programs as being taught by experts in the field. Intensive 1-day courses with narrow topic boundaries that focus on one specific skill may best meet the needs of the population surveyed.

Occupational therapists prefer to attend courses at a hotel or convention center, health care facility, or academic institution. Programs scheduled in autumn or spring may be better attended and full-day programs may be more attractive than part-day programs, particularly if scheduled on Friday or Saturday. Scheduling continuing education programs on weekdays during work hours does not appear to be a problem as loss of pay, loss of vacation time, and fear of being a burden to co-workers were not significant barriers. Loss of family time did impact the participation of therapists, though, so overall, Friday is the best day for continuing education programs.

Given the results of this study, it is clear that the continuing education needs of occupational therapists are similar to those of other allied health personnel, most notedly physical therapists. Future studies of these professionals may help to further clarify the continuing education needs of occupational therapists and as such, should be considered a valuable resource for continuing education program development. Despite the high interest among occupational therapists in continuing education topics specific to the occupational therapy profession, results of this study indicate that occupational therapists are participating in non-occupational therapy or interdisciplinary continuing education programs. This finding supports the existence of the two seemingly contradictory trends reported in the occupational therapy literature:

the trend towards increased specialization and the trend towards increased generalization with occupational therapists expected to perform multiple roles. The diverse and complex needs of occupational therapists for continuing education are clearly apparent, presenting a challenge to any continuing education planner. To address the needs of occupational therapists for more specialized skills, courses that focus on specific skills with instruction by specialists in the field are recommended. To address the needs of occupational therapists whose roles are expanding and are in need of more general skills, collaboration between disciplines is encouraged to share information, promote the growth of interdisciplinary continuing education programming and ensure that the continuing education needs of all health professionals are met.

Summary and Recommendations

The following limitations in the survey were noted:

1. The length of the questionnaire may have discouraged respondents from completing all questions and impacted the overall response rate to the survey.
2. The date the questionnaires were mailed may have impacted the response rate. As they were sent during the summer, just prior to a holiday, potential respondents may have been on vacation, limiting the quantity of information obtained.
3. Sending reminder postcards exclusively to OTAC members may have biased the sample towards those occupational therapists who are most likely to participate in continuing education, assuming motivation evidenced by their involvement in a

professional organization.

4. Results of this survey cannot be generalized to occupational therapists practicing in psychosocial treatment settings as the continuing education topics presented and the demographic profile of the sample overwhelmingly biased this survey towards the physical disability area of occupational therapy practice.
5. Generalization of results is also limited by use of a nonrandom sample.
6. As the majority of questions on the questionnaire were categorical and not truly open-ended, important information may have been missed.
7. Rank-order questions asked respondents to rank too many choices as evidenced by the partial completion of these questions by many respondents. This problem could have been avoided by asking respondents to rank only their top three choices. A more extensive pilot study or use of focus groups may have prevented this problem.
8. The suggested topics for continuing education presented on the questionnaire may not have accurately represented topics of current interest to occupational therapists as evidenced by the large number of additional topics submitted by respondents. Again, a more extensive pilot study may have prevented this problem.
9. Several respondents reported that it was difficult to rate overall

level of satisfaction with content and instruction of continuing education courses due to their varied experiences with continuing education courses.

As a result of this study a number of recommendations can be made for further research:

1. To repeat this study with a different population of occupational therapists.
2. To further explore the barriers to participation in continuing education and the relationship between these barriers and actual participation in continuing education.
3. To compare the educational goals of occupational therapists' and continuing education providers'.
4. To investigate occupational therapists' level of satisfaction with continuing education programming in northern California after recommended changes have been implemented.
5. To investigate the relationship between interest in continuing education participation and actual participation in continuing education programs.
6. To investigate occupational therapists' level of satisfaction with the content, instruction, and structure of specific occupational therapy continuing education courses to further clarify the relationship between specific attributes of a continuing education course and satisfaction of participants.
7. To compare the level of participation in continuing education in

states where continuing education is required for licensure to the level of participation in those states where it is not required.

8. To investigate the factors motivating occupational therapists to participate in continuing education in states where continuing education is required for licensure.

9. To further explore the motivational orientations of occupational therapists who do not belong to occupational therapy professional organizations in northern California to clarify the motivational orientations of this population of occupational therapists.

10. To explore the expectations of occupational therapists for continuing education and compare the identified expectations with the reality of the courses offered.

11. To identify continuing education topics of interest, and investigate the continuing education needs of occupational therapists practicing in psychosocial settings.

12. To examine the relationship between cost and quantity and quality of continuing education courses.

The complexity of continuing education is clear and it is further evident that continued study of the continuing education needs of occupational therapists is necessary to understand the continuing education needs of this diverse population. The continuing education needs of the population of northern California occupational therapists studied are explicit. They need affordable 1- or 2-day workshops that focus on specific clinical topics such as treatment approaches or evaluation tools, skills that can be immediately applied in

practice. Pertinent programs need to be offered on Friday or Saturday in diverse locations and information about the programs needs to be more accessible. To meet the continuing education needs of this population of occupational therapists, continuing education programmers must now develop programs that incorporate these stated preferences. In the rapidly changing health care environment of today, though, it is critical that the continuing needs of occupational therapists be recognized as fluid and dynamic, evolving within the personal, social and professional contexts of their environments. Continuing education needs must be regularly reassessed to ensure that the continuing education needs of occupational therapists are being met.

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APPENDIX A

OTAC CHAPTER MAP

CALIFORNIA'S 58 COUNTIES

APPENDIX B

CONTINUING EDUCATION QUESTIONNAIRE

CONTINUING EDUCATION NEEDS ASSESSMENT

CURRENT LEVEL OF PARTICIPATION

1. How do you currently obtain information about continuing education in occupational therapy?(**Check all that apply**)

____Other occupational therapists
____Direct mailings from organizations providing courses
____OT Week
____Advance
____Professional newsletters or publications: (Please specify the specific source of the Publications)
 ____ OTAC : State chapter
 ____ OTAC : Local chapter
 ____AOTA
____Local educational institution catalogues and flyers
____Information provided by your employer
____Journals
____Membership in non-occupational therapy professional organizations
____Other: Please specify ______________________________

2. How many occupational therapy CE offerings have you participated in during the last two years? ______

3. How many non-OT or interdisciplinary CE offerings have you participated in during the last two years?____

4. Who sponsored the CE programs that you attended? (**Check all that apply**)
____AOTA
____Local OTAC chapter
____State OTAC chapter
____Academic institution
____Independent provider
____Employer
____Other professional organizations
____Other: Please specify _________
____

5. What was the average cost of the CE programs that you attended ? (**Check only one**)
____$50-100 per course
____$100-150 per course
____$150-200 per course
____$200-250 per course
____$250-300 per course
____ Over $300 percourse
____ Not aware of cost

Please rate your level of **satisfaction** with the continuing education programs you attended on a scale from 1 to 5
(1=not satisfied, 5=extremely satisfied)

Please Circle Response

6. In general, how satisfied were you with the Content of the programs?	1	2	3	4	5
7. In general, how satisfied were you with the Instruction of the programs?	1	2	3	4	5
8. In general, how satisfied are you with the CE opportunities in northern CA?	1	2	3	4	5

BARRIERS

Please **circle** the response that best describes how much each factor has impacted your participation in continuing education?

	Not Important		Somewhat Important		Extremely Important
1. Registration fee	1	2	3	4	5
2. Loss of pay	1	2	3	4	5
3. Hotel/meal costs	1	2	3	4	5
4. Traveling					
0-50 miles	1	2	3	4	5
51-100 miles	1	2	3	4	5
101-150 miles	1	2	3	4	5
151-200 miles	1	2	3	4	5
over 200 miles	1	2	3	4	5
5. Loss of vacation	1	2	3	4	5
6. Loss of family time	1	2	3	4	5
7. Your experience with previous courses	1	2	3	4	5
8. Availability of information on courses	1	2	3	4	5
9. Availability of pertinent courses	1	2	3	4	5
10. Burden to co-workers	1	2	3	4	5
11. Reputation of presenter	1	2	3	4	5

12. How many miles would you be willing to travel for CE? ________ miles.

MOTIVATION

Please indicate the two top reasons why you participate in continuing education
(1=FIRST CHOICE 2=SECOND CHOICE)

____To help me get a new job
____To advance in my present job
____To work for a degree/certificate
____To be better informed
____To satisfy curiosity
____To network
____To have a sense of belonging
____To change routine
____To forget personal problems
____To meet continuing education requirements
____To satisfy employer requirements
____To be a better person
____To learn specific new skills

Other reasons. Please specify ____
____
____

CONTINUING EDUCATION TOPICS

The following is a list of possible subject areas for continuing education programming. Please rate each topic based on your **interest in attending** a continuing education course focusing on that topic.

1=NOT INTERESTED 2=SOMEWHAT INTERESTED 3=EXTREMELY INTERESTED

Clinical Topics

General Practice Concerns
- Multi-cultural OT ____
- Clinical Reasoning ____
- Client Centered Tx ____
- Family Collaboration ____

Specific Diagnoses
- Dysphagia ____
- Dementia ____
- Spinal Cord ____
- Cognitive dysfunction ____
- Vision dysfunction ____
- Ventilator dependent pts ____
- Head Injury ____
- Serious Mental Illness ____
- CVA ____

Treatment Approaches
- NDT/Bobath ____
- Affolter ____
- Feldenkrais ____
- Sensory Integration ____
- Motor Learning ____
- Therapeutic Touch ____
- Use of Modalities ____
- Myofascial Release ____
- Behavioral Modification ____
- Splinting ____
  - Adult ____
  - Pediatric ____

Evaluation/Assessment
- Adult ____
- Pediatric ____
- Geriatric ____
- Use of Specific Evaluations ____
  - Please Specify:
  - ________________
  - ________________

Administrative/Management Topics

Professional Relationships
- OTR-COTA Partnerships ____
- OTR-OTA Partnership ____
- Professional Collaboration ____
- Consultation ____

Documentation/Billing
- Functional Goals/Outcomes ____
- Reimbursement (Medical) ____
- Computerized Charting ____
- Streamlining Documentation ____
- Psychosocial Documentation ____
  - In-patient ____
  - Out-patient ____
- Physical Disability ____
  - In-patient ____
  - Out-patient ____

Management
- Continuous Quality Improvement ____
- Managed Care ____
- Stress Management ____
- Coping with change ____
- Writing/Negotiating
  - Capitation Contracts ____
- Roles:
  - Supervisor ____
  - Manager/Director ____

Education
- Fieldwork Supervision ____
- Research ____
- Competency Issues ____
- Cross Training ____

If there are any additional topics in which you would be interested, please list them below:

________________ ________________ ________________

________________ ________________ ________________

________________ ________________ ________________

PREFERRED STRUCTURE OF CONTINUING EDUCATION

Preferred Delivery Method

Please rank the answers to questions 1, 2, and 3 from what you are most interested in to what you are least interested in.

1. What **types** of Continuing Education (CE) would you be interested in attending? **(1=Most interested, 9=Least)**

___ Telephone Conference
___ Workshops
___ Audiotapes
___ College Course Enrollment
___ Conferences
___ TV/Videotapes
___ Self-study
___ None
___ Other :Please specify ___________

2. If interested in **workshops**, what types of workshops would you be interested in attending? **(1=Most, 6=Least)**

___ One day workshop
___ Series of one day workshops over several months
___ Two day workshop
___ Weeklong workshop
___ Evening series weekly over several weeks
___ Other: Please specify ___________

3. I would be interested in attending a CE offering if the **instructor** was a: **(1=Most, 7=Least)**

___ Faculty member
___ Clinician
___ Clinician who specializes in a particular area
___ Recognized Scholar
___ Independent provider
___ Clinician from a field other than OT. Please specify ___________
___ Other Please specify ___________

4. Desired length of individual workshop sessions: **(Fill in blanks with desired number)**

Evening series: _______ hours each session

1 or 2 day workshop: _______ hours each day

Weeklong workshop: _______ hours each day

5. Are there any **speakers** you would be especially interested in hearing? If yes, please list below. Please include name, discipline, address and phone number if possible.

1. ___________________ 2. ___________________ 3. ___________________

Preferred Cost

6. What is the most you would be willing to pay for a CE course? (Check 1)

____ $50-100/course
____ $100-150/course
____ $150-200/course
____ $200-250/course
____ $250-300/course
____ $Over $300/course

7. Are CE funds available to you from your employer? Yes No (1) (2)

8. If yes, what is your yearly allowance? $___________

Preferred Location

Preferred Time

Please rank the answers to the following questions from best to worst.

9. Where would you like CE offerings to be held?
(1=best, 5=worst)
____Hospital/health care facility
____Hotel/Convention center
____Academic institution
____Home/Correspondence
____Other. Please specify
____

10. What are the best **seasons** for you to attend CE?
(1=best, 4=worst)
____Winter
____Spring
____Summer
____Autumn

11. What are the best **times** for you to attend CE offerings?
(1=best, 4=worst)
____Morning
____Afternoon
____Evening
____All day

12. What are the best **days** for you to attend CE?
(1=best, 7=worst)
____Sunday
____Monday
____Tuesday
____Wednesday
____Thursday
____Friday
____Saturday

DEMOGRAPHIC INFORMATION

1. What is your age? _____ years

2. What is your sex? F M

3. Life Setting (Check ony one)
____Rural
____Suburban
____Town
____ Urban

4. Educational background
____Associate
____Bachelor's
____Master's
____Doctoral

5. OTAC Member? Yes No

6. OTAC Chapter (if applicable)
____

7. Employment Status
____ Full-time
____ Part-time
____ Leave
____ Retired
____ Unemployed

8. Work Setting
____Private
____Home Health
____School
____Rehabilitation
____Academic
____Wellness
____Nursing home
____School-based
____Work-related
____Hospital
____Other

9. Areas of Practice (Check all that apply)
____Physical disabilities
____ Mental Health
____ Developmental
____Gerontology
____Pediatrics
____School-based
____Education
____Other

10. Job responsibilities (Check all that apply)
____Administration
____Consultation
____Teaching
____Research
____Patient Care
____Other
____Not Applicable

11. Years of OT experience ______

THANK YOU FOR YOUR HONESTY AND PARTICIPATION!

APPENDIX C
COVER LETTER
FOR PARTICIPANTS

A campus of The California State University

College of Applied Sciences and Arts • *Department of Occupational Therapy*
One Washington Square • San José, California 95192-0059
Main Office: 408/924-3070 • Fieldwork Office: 408/924-3078 • FAX: 408/924-3088

June 30, 1995

You are invited to participate in a research study designed to identify your needs for continuing education. Results of the survey can be used by providers of continuing education to design relevant learning events that truly meet the continuing education needs of occupational therapists in northern California.

Please complete the enclosed questionnaire and return it in the stamped envelope provided by July 21, 1995. Completion of the questionnaire will take approximately 15-20 minutes and the information that you provide will help continuing education providers meet your needs!

This survey is being done as a partial requirement for my Master's of Science degree in Occupational Therapy, and is supported by the Institute for Research and Professional Development of San Jose State University. The title of the thesis will be "A Needs Assessment of the Continuing Education Needs of Occupational Therapists in Northern California". The results of this study will be published as a thesis and possibly in journal article form but any information that could result in your identification will remain confidential. Please understand that your participation is voluntary and that choosing not to participate in this study will not affect your relations with San Jose State University. There are no risks or benefits associated with participation in this study.

If you have any questions regarding your participation, please contact Amy Killingsworth, M.A., OTR, Interim Chair, Occupational Therapy Department, at (408)924-3072. If you have questions or complaints about research subjects' rights, please contact Serena Stanford, Ph.D., Associate Vice President for Graduate Studies and Research, at (408) 924-2480.

I greatly appreciate your interest and participation. Thank you!

Sincerely,

Stephanie Pierce

Stephanie Pierce
Occupational Therapy Graduate Student

APPENDIX D

REMINDER POSTCARD

FOR PARTICIPANTS

Dear OTR July 14, 1995

I need your help! About 2 weeks ago, you were mailed a questionnaire entitled, "Continuing Education Needs Assessment." If you have not yet returned your copy, please put it in the mail today. Your input is very important. Continuing education programs cannot be responsive to your needs unless your needs are identified.

Thank you again for your help!!

Stephanie Pierce

APPENDIX E

SUGGESTED TOPICS

FOR CONTINUING EDUCATION

Suggested Topics for Continuing Education

Evaluation/Assessment (56)

Hands (5)
Work-Jobsite evals (5)
Claudia Allen (4)
Functional capacity (3)
UE evaluation (3)
Cognitive (3)
Sensory Integration testing (2)
Pediatric standardized evals (2)
Perceptual evals (2)
Sensory evals (3)
Behavioral eval
Psychosocial evals
School-based norm evals
Public school evals
Driving eval
Home/enviromental /architectural assessment
Ergonomic assessment
Computerized hand assessment
Soft tissue trauma/provocative testing
Miller assessment
Peabody
OP-SCI
RSI
SIPT
PEDI
HELP
CPM
Bruninks-Oseretsky
KELS
Barthel index
Geriatric functional rating index
Gesell
Affolter
Laurie Efferson's Vision evaluations

Areas of Practice (31)

Hand Therapy (14)
Ergonomics (4)
Work hardening (3)

Home Care (2)
Psychosocial OT
Forensic OT
OT in community mental health
OT in education
Acute care
Sexuality
Wellness programs for industry
Job Coaching

Treatment Approaches (28)
Assistive technology (2)
Modalities (2)
Adaptive seating
Body work
Acupressure
East/West blend treatment approach
Wound care for OT
Static or dynamic splinting
Advanced hand treatment
Treatment for cumulative trauma
Specific hand care
Art therapy
Music therapy
Vestibular therapy
Acquatic treatment
Balance rehabilitation
NDT in pediatrics
Treatment in Pediatrics
Early intervention with school aged children
Mental health treatment approaches
Psychosocial rehabilitation techniques
Psychoeducational group facilitation
Addressing psychosocial issues
Functional maintenance program in SNF environment
Risk management
Use of restraints

Specific Diagnoses (23)
Visual dysphagia
Visual dysfunction in peds
Myofascial release

CTD problems/treatment
Treatment of Dyspraxia/Apraxia
Oral motor treatment-pediatric
Hyperactivity
ADD
Balance reactions in elderly
Longterm prognoses of diagnoses
RSD
Cumulative trauma-RMI
Orthopedic injuries
Autism
Fragile X
Sensory defensiveness
Specific diagnoses
Mentally retarded adults
Dual Diagnosis Axis I and II
Hand therapy & UE issues c RSI
Hand function in the mildly involved or LD child
Cumulative trauma injuries
UE injuries/problems

General Practice Concerns (19)
ADA (4)
Clinical observation
Future outlook/fields in OT
OT Fact
Treatment futility
Theory in OT
Bioethics
Ethics
D/C predictors
Funding for WCs and equipment at SNF level
Overview of current disabilities and comparisons of treatment
Review of anatomy & physiology as it relates to specific dx
Refresher course
Neuroanatomy review
How to re-enter practice
Shoulder and arm anatomy review

Management (8)
Private practice
Consulting

Case management
HMO reimbursement-justification
Consultation related to school systems
Ethics of private practice and contract therapists
Marketing
Self-employment

Professional Relationships (3)
Integrated treatment approach SI/NDT/Vision therapy
Integrated Service delivery OT/PT/Speech
Working with ophthamologists

Documentation/Billing (1)
School therapy-documentation

APPENDIX F
SUGGESTED SPEAKERS
FOR CONTINUING EDUCATION

SUGGESTED SPEAKERS FOR CONTINUING EDUCATION

NAME	ADDRESS
Multiple requests (#):	
Josephine Moore, Ph.d., OTR (**3**)	
(Creativity and Expertise)	
Geri Logeman, ST (**2**)	
(Dysphagia)	
Gary Kielhofner (**2**)	
Patricia Wilbarger, OTR (**2**)	
(Sensory defensiveness)	
One request:	
Cathy Runyan, OTR	Los Gatos Rehabilitation
Claudia Allen, OTR	
Rene Padilla	Creighton University
Anne MacRae, Ph.d., OTR	San Jose State University
Dr. Ivar Lovas	UCLA
(Behavioral intervention)	
(Autistic spectrum disorders)	
Susan Peloquin	
Deborah Pitts, OTR	Rehab Option
	West LA VA Hospital
	1-310-478-3711 x48085
Cathy Geary	Mental Health Consultant
(Managed Care)	11230 Gold Express Drive
	Ste 310-157
	Gold River, CA 95670
Ken Lamb	
Rosalyn Evans	
Erma Blanche, OTR,	
(Pediatrics)	
Jan Davis, OTR	
Connie Burgess	
Pat Davies	
Lela Llorens	San Jose State University
Lori Efferson, OD, OTR	
(Vision)	
Carol B. Lewis	

Joy Huss	
Mary Benbow	
Charlotte Exner	
Guy McCormick	
Marjorie Meyer Palmer	(408) 651-2285
Regis Boehme	
Emil Pascarelli, MD	Miller Institute, New York
Instructors	Sensory Integration Int'l