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# Occupational Therapy Practitioners' Perceptions of the Impact of Continuing Education Activities on Continuing Competency

Lori T. Andersen

Key Words: competence • learning preferences

**Objective.** *The purpose of this exploratory study was to evaluate Florida-licensed occupational therapy practitioners' perceptions of the impact of various continuing education activities on their continuing competency.*

**Method.** *A self-report mail survey was used to evaluate occupational therapy practitioners' perceptions of various continuing education activities in three domains: (a) learning, (b) application, and (c) results. The respondents' perceptions of the impact of specific continuing education activities were compared.*

**Results.** *As rated by the respondents, formal programs 1 or more days in length had a significantly greater impact than most informal continuing education activities. On-the-job training (in the domain of application) and being mentored had a significantly greater impact than formal educational programs less than 3 hr in length.*

**Conclusion.** *Informal continuing education activities, in some cases, are perceived to have as effective an impact on continuing competency of occupational therapy practitioners as formal continuing education activities.*

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In recent years, controversy has surrounded the development of continuing competency programs. The issue is not *whether* professionals, including occupational therapy practitioners, should maintain competence, but *how*. Many states have mandated continuing education requirements for licensed health care practitioners; the National Board for Certification in Occupational Therapy (NBCOT) is developing a mandatory certification renewal program (Collins, 1996); and the American Occupational Therapy Association (AOTA) continues to develop a voluntary program (AOTA, 1999). The recent NBCOT–AOTA debate on continuing competency represents the mandatory versus voluntary debate taking place in many other professions.

Competency is the ability of a professional to use knowledge, skills, attitudes, and judgment associated with a profession to practice with skill, efficiency, and safety (Kane, 1992; Nagelsmith, 1995). Society grants professionals certain privileges, with the tacit agreement that professionals take responsibility to remain competent in view of the continual changes in the health care system and the rapid advances in technology (Frye, 1990; Garrett, Baillie, & Garrett, 1993). Many professional associations, such as AOTA, support and promote individual and professional responsibility to remain competent. The AOTA addresses this professional responsibility in its Code of Ethics (AOTA, 2000a).

Lori T. Andersen, EdD, OTR/L, is Visiting Clinical Associate Professor, Department of Occupational Therapy, Florida International University, University Park Campus, Miami, Florida 33199. (Mailing address: 4021 SW 72nd Terrace, Davie, Florida 33314)

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In recent years, the consumer movement and interest in quality of services has increased concern about accountability of health care professionals (Marks, 1996; Osborn, 1989). Proponents of mandatory continuing education believe that professionals do not always accept professional responsibility to maintain their competence (Carpenito, 1991b). This belief prompted many professional organizations and regulatory agencies to implement mandatory continuing education requirements to demonstrate accountability of individual professionals and professions as a whole ("Kansas Beliefs Regarding Continuing Education," 1995; Richards & Cohen, 1980).

With the objective of ensuring continuing competency, health care professionals are required by law in several states to participate in continuing education activities as a requirement of relicensure. Presently, 32 states require occupational therapy practitioners to obtain continuing education for relicensure (AOTA, 2000b). The types of educational activities that meet the requirements of mandatory continuing education programs are determined by each state, each profession, or both. Most mandatory programs only recognize participation in formal educational activities as a means to ensure continuing competency. However, some mandatory programs also recognize specific informal learning activities.

The literature debates the limitations of formal educational programs, the backbone of most mandatory programs. Formal continuing education programs often give a false sense of security, as competency is not ensured by attendance (Garganta, 1989; Kerr, 1998). Carpenito (1991b) and Marks (1996) suggested that mandatory continuing education programs rarely determine individual learning needs, nor do they help the learners apply new skills to the work situation despite the fact that application of skills to improve quality of care is the ultimate purpose of continuing competency.

In support of informal learning, Kozlowski (1995) has advocated for increased recognition and integration of informal learning activities in the work setting to maintain competence. Phillips (1987) wrote that a health care professional's work setting and his or her role as a member of a health care team provide an excellent environment for learning and application to the work situation. Others concur, stating that active learning in work situations, professional conversations and visits with colleagues, observation of skilled clinicians, effective supervision, and mentoring also maintain competency (Carpenito 1991a; Swift, 1983).

The andragogical model of learning views learners as self-directed in determining learning needs and objectives, identifying and using learning resources, and evaluating the effectiveness of learning (Knowles, 1979). Consistent with this model, Warmuth (1987) advocated employing a method to evaluate effectiveness of learning by looking at the use of new knowledge from the participant's perspec-

tive. Warmuth believed that the individual professional is in a unique position to evaluate effectiveness of learning, as professionals often modify new knowledge when applying it to the workplace.

A majority of surveyed occupational therapy practitioners and interviewed payers, consumer advocates, and representatives of accreditation and certification organizations have identified individual practitioners and employers as key groups to set competency standards (National Commission on Continued Competency in Occupational Therapy, 1999). The AOTA Commission on Practice also has acknowledged the importance of the individual practitioner and context, stating that competency is dynamic and multidimensional in relation to the practitioners' various professional roles (AOTA, 1999). The Commission on Practice is developing a voluntary continuing competency program that uses, in part, self-assessment (AOTA, 1999).

Although occupational therapy practitioners believe that they maintain competence through both formal activities and informal activities, such as work experiences, limited research demonstrates this. Few states mandating continuing education programs for occupational therapy practitioners have evaluated these programs to determine their effectiveness (Kerr, 1998) partly because of the inherent difficulties and associated costs. The complexities of evaluating the effect of mandatory continuing education programs do not mean that these programs have not contributed to continuing competency, only that the worth of these programs has not been established (Marks, 1996; Phillips, 1987). True for voluntary continuing education activities as well, Cooper (1978) noted that self-directed learning is not easily measured and is, therefore, frequently overlooked as a valid method to maintain competence.

The purpose of the present exploratory study was to determine Florida-licensed occupational therapy practitioners' perceptions of the impact of various continuing education activities on maintaining their competency. The study was designed to determine which mandatory activities (those recognized as meeting the requirement of state law for relicensure) and which voluntary activities (those not recognized by state law) were perceived to affect continuing competency. The data were also analyzed for differences in the degree of perceived impact between various continuing education activities. The null hypothesis was as follows: There will be no significant difference between the level of perceived impact of specific mandatory and voluntary continuing education activities on continuing competency of Florida-licensed occupational therapy practitioners.

## Method

A self-report survey was developed to evaluate Florida-licensed occupational therapy practitioners' perceptions of the impact of mandatory and voluntary continuing education activities on their continuing competency. Nine for-

mativ and summative committee members provided feedback during the development of the survey and validated the final version. The survey was field tested on 25 occupational therapy practitioners. Their feedback was used to clarify certain phrases. For example, specific dates of the biennial license period were included instead of using the general term *biennial license period*.

In the survey, respondents were asked to indicate whether they participated in various mandatory and voluntary continuing education activities. The list of mandatory continuing education activities was taken from the Florida Occupational Therapy Council rule outlining continuing education requirements for relicensure. The list of voluntary continuing education activities was developed from (a) the literature, (b) mandatory continuing education requirements for other health care professionals in Florida but not included in Florida's rule, and (c) mandatory continuing education requirements for occupational therapy practitioners in other states but not included in Florida's rule.

Respondents also were asked to indicate whether they participated in any specific activities and, if so, to indicate on a 5-point Likert scale their perceptions of the impact of these activities. Impact was divided into three domains based on models developed by Alspach (1995) and Kirkpatrick (1996): learning, application, and results. Related to each activity, respondents indicated level of agreement (from strongly disagree to strongly agree) for the following statements:

1. This resulted in my gaining new professional abilities (learning).
2. This resulted in my new professional abilities being used in my work setting (application).
3. This resulted in my new professional abilities making a difference in the quality of patient care and/or occupational therapy practice (results).

### *Sample*

The target population was occupational therapy practitioners who were licensed in Florida for more than 1 year of the first biennial license period (February 1, 1995–January 31, 1997). State law required this population to obtain continuing education for relicensure. Twenty-five percent (1,356) of Florida-licensed occupational therapy practitioners residing in the continental United States were selected with a systematic random sampling technique from a zip code–ordered mailing list. The mailing list was obtained from the Florida Department of Business and Professional Regulation. Participation in the study was voluntary and anonymous. Anonymity was important because any respondent who indicated lack of participation in mandatory continuing education activities was in violation of the law. Surveys were mailed on October 1, 1997, with a requested return date of October 21. A follow-up postcard was mailed 2 weeks after the initial mailing. All surveys

returned by October 31 were included in the study.

Of the 1,356 surveys mailed, 391 were completed by respondents who met the inclusion criteria. The response rate was calculated as 28.8%. The other returned surveys included 101 completed by respondents who did not meet the inclusion criteria; 41 nondeliverables; 7 with incomplete data; and 27 returned blank, indicating the respondent did not want to participate in the study.

The sample was made up of 346 (88.5%) registered occupational therapists and 45 (11.5%) certified occupational therapy assistants. This distribution compares to Florida licensees (81.2% registered occupational therapists, 18.8% certified occupational therapy assistants). Demographic data on survey respondents' employment status and highest degree earned were compared with that obtained from the *AOTA 1995–96 Member Data Survey Update* (AOTA, 1996) because specific demographic data on Florida occupational therapy practitioners were not available. This comparison showed that the 391 respondents were similar to the national population of occupational therapy practitioners.

### *Data Collection and Analysis*

The mean level of agreement was calculated at all three domains of impact for each specific activity that had 100 or more participants—five mandatory activities and six voluntary activities. Next, the mean scores of each mandatory continuing education activity were compared with that of each voluntary continuing education activity, using a dependent *t* test (two-tailed) to determine whether a significant difference existed in perceived impact at the .05 level. Only scores from those who responded to the impact statements for both specific activities being compared were used in this calculation. Because of inflation of alpha due to multiple *t* tests, a .004 level of significance was used to reduce the chance of a Type I error. Using this level of significance for each comparison maintains the overall level of significance at .05 (Glass & Hopkins, 1984).

### **Results**

Table 1 lists the mean score for each domain of impact for the mandatory and voluntary continuing education activities. The activities reported to have the greatest perceived impact in all domains were (a) formal programs of more than 2 days in length, (b) formal programs 1 to 2 days in length, (c) formal programs from 3 hr to 8 hr long, (d) being mentored, (e) on-the-job training, and (f) observing skilled practitioners.

Table 2 compares the perceived impact of mandatory and voluntary continuing education activities. Formal educational programs 1 or more days in length had a significantly greater perceived impact compared with all voluntary activities, except being mentored. Formal programs more than 3 hr long had a significantly greater per-

**Table 1**  
**Occupational Therapy Practitioners' Perception of the Impact of Mandatory and Voluntary Continuing Education Activities on Continuing Competency**

Activity	Domain 1 (Learning)			Domain 2 (Application)			Domain 3 (Results)		
	<i>n</i>	<i>M</i>	<i>SD</i>	<i>n</i>	<i>M</i>	<i>SD</i>	<i>n</i>	<i>M</i>	<i>SD</i>
Mandatory									
Program of < 3 hr	233	4.0386	.7447	231	3.9957	.8049	233	3.9442	.8766
Program 3 hr–8 hr	243	4.2263	.6251	243	4.2181	.6410	243	4.2058	.6609
Program 1–2 days	329	4.4438	.5978	328	4.3750	.6970	331	4.3807	.6788
Program > 2 days	186	4.6237	.5385	185	4.5459	.6336	188	4.5691	.6295
Presenting continuing education programs	102	4.0392	.9111	101	4.0099	.8426	100	4.1600	.8375
Voluntary									
Student supervision	180	3.8556	.9162	178	3.6854	.9279	178	3.7584	.9875
Mentoring	168	3.7798	.8986	167	3.6946	.8761	170	3.9176	.9194
Being mentored	106	4.4623	.6199	106	4.3396	.7022	108	4.3611	.7789
Observing skilled practitioners	259	4.2625	.6534	256	4.2109	.7266	256	4.2188	.7133
On-the-job training	180	4.3056	.6858	180	4.2667	.7138	180	4.2444	.7812
Reading professional literature	377	3.9204	.7950	374	3.8610	.8265	374	3.9118	.8155

Note. *n* = number of respondents indicating participation in a specific continuing education activity.

ceived impact compared with the voluntary activities of student supervision, mentoring, and reading professional literature. The voluntary activities of on-the-job training (in the domain of application) and being mentored had a significantly greater perceived impact compared with the mandatory activity of attending formal programs less than 3 hr long. No significant differences were found between formal educational programs of 3 hr to 8 hr long and on-the-job training, observing skilled practitioners, and being mentored or between formal programs of 1 or more days in length and being mentored.

## Discussion

The results show a trend toward formal educational programs of 1 or more days in length to have more of a perceived impact than most informal educational activities. Additionally, a trend was found for the informal educational activities of being mentored, observing skilled practitioners, and on-the-job training as being perceived as effective, and in some cases more effective, than formal educational activities of 8 hr or less.

Formal programs 1 or more days in length had a greater perceived impact than most of the voluntary activi-

**Table 2**  
**Mean Differences of Perceived Impact of Mandatory Activities Compared With Voluntary Activities**

Voluntary Activity and Domain <sup>a</sup>	Mandatory Activity														
	< 3 hr			3–8 hr			1–2 Days			> 2 Days			Present Programs		
	<i>n</i>	<i>M</i>	<i>p</i>	<i>n</i>	<i>M</i>	<i>p</i>	<i>n</i>	<i>M</i>	<i>p</i>	<i>n</i>	<i>M</i>	<i>p</i>	<i>n</i>	<i>M</i>	<i>p</i>
Student supervision															
1	112	.1964	.035	117	.3675	.000*M	156	.6859	.000*M	96	.6979	.000*M	58	.1379	.271
2	111	.3333	.001*M	116	.5690	.000*M	155	.8000	.000*M	96	.8125	.000*M	57	.1754	.199
3	111	.2973	.003*M	115	.4696	.000*M	155	.7032	.000*M	95	.7368	.000*M	57	.1404	.357
Mentor															
1	111	.2432	.018	115	.4261	.000*M	146	.7192	.000*M	90	.8222	.000*M	64	.3594	.001*M
2	109	.3028	.006	114	.4825	.000*M	146	.7808	.000*M	90	.8333	.000*M	62	.2742	.016
3	112	.0536	.583	115	.2609	.002*M	149	.5683	.000*M	91	.6484	.000*M	62	.2097	.140
Being mentored															
1	76	-.3816	.001*V	74	-.1351	.105	92	.0870	.240	56	.1607	.060	36	-.2500	.130
2	75	-.3867	.000*V	74	-.0270	.748	92	.1304	.103	56	.1429	.242	36	-.2500	.152
3	77	-.3896	.001*V	76	-.0395	.717	94	.1489	.099	57	.1228	.301	37	-.2703	.151
Observe skilled practitioner															
1	163	-.1718	.012	176	.0057	.923	223	.2646	.000*M	132	.3106	.000*M	74	-.2162	.032
2	162	-.1605	.036	174	.0805	.183	221	.2579	.000*M	132	.3030	.000*M	72	-.2083	.066
3	163	-.1779	.020	174	.1034	.095	221	.2579	.000*M	132	.3333	.000*M	72	-.0972	.374
On-the-job training															
1	124	-.2016	.013	128	.0859	.199	156	.2692	.000*M	100	.3100	.000*M	56	-.2321	.074
2	124	-.2581	.003*V	128	.0938	.152	156	.2436	.000*M	100	.2400	.001*M	56	-.3214	.023
3	124	-.2500	.007	128	.1172	.112	156	.2500	.000*M	100	.2700	.001*M	56	-.1786	.214
Read professional literature															
1	226	.0841	.151	238	.2857	.000*M	317	.5394	.000*M	181	.5470	.000*M	99	-.0808	.402
2	224	.1250	.050	237	.3418	.000*M	316	.5253	.000*M	180	.5000	.000*M	97	-.0722	.409
3	225	.0267	.668	237	.2743	.000*M	316	.5032	.000*M	182	.4835	.000*M	97	.0619	.500

Note. \*M = mandatory continuing education had a greater impact at the .004 level of significance; \*V = voluntary continuing education had a greater impact at the .004 level of significance (.004 level of significance for each comparison maintains overall level of significance at .05).

<sup>a</sup>Domain of impact: 1 = learning, 2 = application, 3 = results.

ties. This finding supports the viewpoint that use of an instructional design process, where learning needs are determined and programs developed according to these needs, is an effective method (Kemp, Morrison, & Ross, 1994; Phillips, 1987).

The voluntary activities of on-the-job training (in the domain of application) and being mentored were perceived to be more effective than formal programs of less than 3 hr. Being mentored was reported to be as effective as attending formal programs of 1 or more days. This finding is consistent with the literature that addresses adult learning principles, stating that effective learning takes place in a time and place relevant to the learner and his or her needs and that informal learning activities are effective (Alspach, 1995; Carpenito, 1991a; Heimericks, 1993; Leist & Kristofco, 1990; Phillips, 1987; Swift, 1983). This finding about the perceived effectiveness of informal learning may also support the concept of the teachable moment in which learning takes place when the professional has a need and is ready to learn. The finding also appears to refute the premise of some mandatory programs that learning and continuing competency depend primarily on the amount of time spent in formal continuing education programs.

Professionals have different educational backgrounds, levels of experience, cognitive styles, and learning styles (Alspach, 1995). In this study, if the characteristics of an educational activity, formal or informal, more closely matched the learner's characteristics, respondents may have perceived that activity to have more of an impact on continuing competency than another. Competency is dynamic within a professional's role and work environment, and learner characteristics are dynamic within one's career (AOTA, 1999). Therefore, preference for and impact of an educational activity varies among professionals and may change with the context.

### Limitations

In this study, the reliability of the newly developed survey instrument has not yet been determined. The 28.8% response rate was too low to ensure that a representative sample was obtained; therefore, with the low response rate, a nonresponse bias may have affected the results. Another limitation was the narrow range of the mean levels of agreement of impact of various activities. The range was less than 1 point on a 5-point Likert scale for each domain and, therefore, may affect interpretation of results.

### Directions for Future Research

It is recommended that a similar study on a national scale, with a representative sample, and with a more fully tested instrument be conducted to determine practitioners' perceptions of types of activities that affect continuing competency. Development of an instrument for actual measurement of the effect of continuing education on con-

tinuing competency also is needed for further research in this area.

## Conclusion

Although many mandatory continuing competency programs recognize formal learning activities as the only effective method to maintain competency, Florida-licensed occupational therapy practitioners perceived voluntary activities and informal learning activities as also affecting continuing competency, in some cases, more effectively than formal learning activities. The expense associated with any continuing competency program warrants careful consideration of the variety of activities that contribute to continuing competency. Because occupational therapy practitioners have perceived both formal and informal learning activities to affect continuing competency, consideration needs to be given to including a variety of activities when developing mandatory continuing competency programs. ▲

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