

# The Relationship of Academic Degree and Years in Practice to Occupational Therapists' Perceptions of the Status of the Profession and Educational Preparation

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## Abstract

*A questionnaire survey was sent to 2,000 occupational therapists and certified occupational therapy assistants to gather data on perceptions of the state of the profession and its educational system. Eight hundred and eleven questionnaires were returned and analyzed with a Kruskal-Wallis one-way analysis of variance. The results of two sections of the questionnaire are presented here. These results suggest that, in general, therapists feel that the status of occupational therapy should be improved and that the education of occupational therapists should change. However, there are significant differences of opinion about what should be done to improve the status of the profession and what changes should be made in education. These differences are related to subgroups in the profession. This article presents an overview of some of the differences in perceptions of the profession and its educational system according to two variables—academic degree held and years in practice.*

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A long-standing perception exists among some members of the profession that variations in education and clinical experience produce therapists with differing analytical and clinical skills. The majority of studies related to this issue have sought to determine whether such differences do exist and have been based on the assumption that therapists with master's degrees may be different on some dimension from those who hold bachelor's degrees.

Studies have indicated that therapists with master's degrees contribute more frequently to the professional literature than do those with bachelor's degrees (Rogers & Mann, 1980a, 1980b), have more confidence in their professional capabilities (Gilkeson & Hanten, 1984), and demonstrate more characteristics generally associated with professionalism (Bell & Bell, 1972; Clark, Sharrott, Hill, & Campbell, 1985). Some studies have indicated that educational factors are related to decisions regarding the tasks therapists may perform (Fidler, 1977; Grant, 1984).

In 1984, the Representative Assembly of the American Occupational Therapy Association (AOTA) charged the Executive Board to "manage a study designed to develop recommended strategies and justifications for Association actions related to appropriate entry-level educational preparation for professional practice" (AOTA, 1984, p. 814). As a result, the five-member Entry Level Study Committee was convened.

It was immediately clear to the members of that committee that the question of deciding which academic degree is appropriate for entry to the profession was not sufficiently complex to address the extensive set of issues that the charge comprised. As a part of its many research activities, the committee constructed, circulated, and analyzed two questionnaires. These attempted to gather information on what issues therapists saw as most critical to occupational therapy.

## Method

### Sample

Two thousand questionnaires were mailed from the AOTA national office to a randomly generated sample of registered occupational therapists and certified occupational therapy assistants. An additional 300 were mailed to representatives, state association presidents, and members of AOTA committees. Eight hundred and eleven questionnaires were returned, constituting a 35% return rate. Two important questions emerge at this point—that of sample representativeness and statistical confidence.

In any survey research, the issue of response bias (the over- or underinclusion of any particular group or groups) is an important issue. Although our return rate of 35% was quite good for this type of project, we needed to make sure that our sample accurately reflected salient characteristics of the population. Two steps were taken to ensure this. First, the 2,000 individuals were randomly selected by computer. Thus, every member of AOTA had an equal chance of being selected for inclusion in the study. Probability samples, such as this one was, are usually considered acceptably free from bias (Rosenthal & Rosnow, 1984). Second, to provide some empirical documentation for the representativeness of the sample, demographic information published in the 1985 AOTA manpower report was compared with the values obtained in our sample. This manpower report provides descriptive information concerning the entire population of occupational therapists. The closer our sample findings parallel those of the report, the more confidence we can place in the hypothesis that no sampling biases exist in our data. Indeed, sample characteristics of place of residence, gender, and ethnic origin closely parallel those outlined in the manpower report. Chi-square goodness-of-fit analyses were performed, and no significant differences between the characteristics of our sample and the characteristics of the population were found. In conjunction with the large response rate, these findings argue against the presence of any response biases in our data.

The second question is of statistical confidence, or the accuracy of our results. From this question two related issues arise. The first is concerned with power, or the probability of rejecting the null hypothesis. Values of power range from 0, *no chance of rejecting the null*, to 1, *definite chance of rejecting the null*. Power is determined by such variables as sample size, alpha level, and population effect size (the magnitude of a relationship between two or more variables in the population). In this study, assuming a standard .05 alpha level and a small population effect size (a conservative estimate), the power of this study is .8; assuming a .05 alpha level and a midsize to large population effect, the power estimate climbs to .99+. Therefore, if there is an effect occurring in the population, this study had at least an 80% chance of detecting it. The second issue concerns how closely the values obtained in this study (e.g., the percentage of individuals agreeing or disagreeing with a particular question) estimate the actual population values. The use in this study of procedures outlined by Kalton (1983), provides, with 95% confidence, sample estimates within 3.5 percentage points of the actual population values.

The above comments provide strong support not only for the representativeness of our survey but also for its ability to capture real effects that may be present in the population of occupational thera-

pists. Although the chance of error is always present, the analyses outlined above indicate that the probability of such sampling error is minimal.

### **The Questionnaire**

The questionnaire had 35 questions. Most were compound questions that asked the respondents to indicate their degree of agreement or disagreement with several items in a group on a 5-point Likert-type scale. This particular organization of items resulted in approximately 160 subquestions. The questions were grouped into six categories:

- 1a. Characteristics of viable professions
- 1b. Personal perceptions of academic education
- 1c. Perceptions of current occupational therapy education
- 1d. Future occupational therapists
2. Response to proposed recommendations
3. General perceptions of the profession

### **Data Analysis**

A Kruskal-Wallis one-way analysis of variance (ANOVA) was used to analyze the responses to questions according to four variables: academic degree held, professional role, role in AOTA, and years in practice. Variables 1 and 4 appeared to be the most relevant to the issues addressed in this report. Therefore, only Variables 1 and 4 will be discussed here.

It should be noted that it is likely that there is some correlation between these variables, as people who have been in the field longer may have higher degrees. Nonetheless, these two variables do provide unique perspectives on the data. For example, experience gained in practice does influence one's responses in a different manner than does education. Although the variables overlap, this interrelationship does not reduce the insight that each provides independently.

## **Results and Discussion**

### **Perceptions of the State of the Profession**

The questionnaire addressed a series of areas that may be a source of concern to occupational therapists and asked respondents to indicate their impression of the current state of the profession and of the need for change in each of these areas. When asked to select that area most

in need of change, respondents rated "recognition of the value of our service by third party payers," by "the general public" and by "other health professionals" as very important items (these items scored 4.3 to 4.7 out of a possible 5 points). Other areas in which a need for change was strongly indicated were "definite evidence of the effect of our service" (4.4) and "research for practice" (4.2). There was also a moderately strong indication (3.8) that occupational therapy education for practice should change. (The results for the entire set of questions are presented in *Table 1*.)

Respondents were also asked to select which of the items listed in *Table 1* they felt was in greatest need of change. The *recognition* items accounted for 62% of the total response. The breakdown was as follows: recognition by third party payers, 30%; by the public, 19%; and by other health professionals, 13%. "Definite evidence of the effect of our service" accounted for another 16% of the total response.

Clearly, therapists overall feel that they are not being recognized and, in some cases, reimbursed for the value of their service. They believe that the field has low visibility, recognition, and status, and that those outside the profession are too little aware of the effects of service.

There are differences in the way particular groups responded to these items. Therapists with master's degrees and those in administrative roles chose reimbursement as the greatest problem. Occupational therapy educators and those with doctoral degrees chose research for practice more strongly. It is evident from the response,

*Table 1*  
**Amount of Change Respondents Indicated Was Needed in  
Different Areas of the Profession**

Area	Rating
Process of service delivery	3.1
Use of complex techniques	2.9
Development of technology	3.5
Clear definition of occupational therapy service	4.5
Education for practice	3.8
Definite evidence of the effect of our service	4.4
Recognition of the value of our service by other health professionals	4.3
Recognition of the value of our service by third party payers	4.7
Recognition of the value of our service by the general public	4.5
Research for practice	4.2

*Note.* The higher the rating, the greater the perceived need for change. Highest possible rating was 5.0.

however, that therapists as a group want to change the visibility and status of the profession. How would they propose this change come about?

When asked, "What strategy should the profession pursue in order to change?" 34.4% of the respondents chose "more marketing" and 20.3% chose "more visibility." Fifteen percent preferred more research, and 10.9%, more education.

### Perceptions of Occupational Therapy Education

Therapists were asked questions concerning their own education, the education of current graduates, and the elements they thought should be stressed in occupational therapy education in the future. The questionnaire divided the educational process into 10 components, and respondents indicated how well they felt their own education had prepared them in each area. The results are presented in *Table 2*. Respondents indicated no area in which they felt especially well prepared as a result of their education. However, some scores are clearly higher than others. Five items—basic science, liberal arts, occupational therapy theory, occupational therapy technique, and professionalization—scored 3.6 or 3.7 on a 5-point scale. One might interpret these scores to mean that respondents felt that their educational preparation was adequate in these areas.

*Table 2*  
**Ratings of Effectiveness of Educational Preparation in  
Different Content Areas and Importance of These Content  
Areas to the Field**

Content Area	Educational Preparation (mean rank)	Percentage Selecting This Area as Most Important
Basic science	3.7	3.0
Liberal arts	3.6	1.0
Occupational therapy theory	3.7	19.0
Occupational therapy technique	3.6	27.4
Critical thinking	3.2	23.5
Research	2.1	1.2
Clinical judgment	3.2	16.4
Management	2.4	1.0
Personal development	3.2	2.9
Professionalization	3.6	4.6

*Note.* The higher the rating, the better therapists felt that their education had prepared them in that area. Highest possible rating was 5.0.

Personal development, critical thinking, and clinical judgment received more moderate scores (3.2), that is, a relatively neutral response. Respondents clearly felt that their education in management (2.4) and research (2.1) was inadequate.

The next question asked respondents to select from that same list the one item that they thought was the most important in occupational therapy education. Occupational therapy technique scored the highest, with 27.4% of the overall response. Three other items accounted for an additional 58% of the response. These items were critical thinking, 23.5%; occupational therapy theory, 19%; and clinical judgment, 16.4%. The remaining six items accounted for only 15% of the total response. These items were professionalization, 4.6%; basic science, 3%; personal development, 2.9%; research, 1.2%; liberal arts, 1%; and management, 1%.

### **Differences by Years in Practice**

Mean ratings give some indication of the overall perception of the profession by its members. However, they do not indicate the emphasis that particular groups may place on certain essential issues. An analysis of the results according to an important variable, years in practice, revealed some interesting differences between groups.

Respondents were divided into three groups on the basis of their years in practice (Group 1: 0-5 years; Group 2: 6-15 years; Group 3: 16+ years). Items concerning education were analyzed using a Kruskal-Wallis one-way ANOVA to determine if any differences in response existed between these groups. The results are presented in *Table 3*. Individuals with 16+ years in practice valued their liberal arts background more than the other two groups. Further, the 16+ group found their Levels I and II fieldwork and occupational therapy technique significantly less important than did the other groups. However, the 16+ group felt significantly better prepared in occupational therapy technique than did the other two groups. Those in the 6-to-15-year category felt that their education had least prepared them in the areas of personal development and professionalization. In the latter area, the 16+-year group felt the best prepared of all the respondents.

### **Differences by Degree Held**

Respondents were divided according to their academic degree, and differences concerning satisfaction with education were again examined. These results are presented in *Table 4*. Those with bachelor's degrees believed themselves significantly less well prepared in the areas of professionalization, management, and critical thinking than

Table 3  
 Mean Ratings and Kruskal-Wallis One-Way Analysis of Variance Results for Educational Satisfaction by Years in Practice

Item	Years in Practice			Kruskal-Wallis $\bar{X}^2$	$p <$
	0-5	6-15	16+		
How important were the following aspects of your education <sup>b</sup>					
Liberal arts	2.9	3.2	3.7	54.28	.0001
Occupational therapy technique	4.7	4.5	4.2	34.47	.0001
Level I fieldwork	4.3	4.1	3.7	23.35	.0001
Level II fieldwork	4.8	4.8	4.7	8.08	.01
How well did your education prepare you in the following areas <sup>c</sup>					
Occupational therapy technique	3.5	3.5	3.8	9.75	.01
Research	2.4	2.2	1.8	43.36	.0001
Clinical judgment	3.2	3.1	3.4	11.99	.005
Management	2.5	2.3	2.4	6.98	.05
Personal development	3.3	3.0	3.3	17.50	.0005
Professionalization	3.6	3.4	3.9	34.35	.0001
	( $n = 225$ ) <sup>d</sup>	( $n = 362$ ) <sup>d</sup>	( $n = 174$ ) <sup>d</sup>		

<sup>a</sup> All values have been corrected for ties.

<sup>b</sup> The higher the rating, the more important the element. Highest possible rating was 5.0.

<sup>c</sup> The higher the rating, the better prepared respondents felt they were. Highest possible rating was 5.0.

<sup>d</sup> Approximate  $n$  per group; missing values may cause variations in the exact number per analysis.

Table 4  
 Mean Ratings and Kruskal-Wallis One-Way Analysis of Variance Results for Educational Satisfaction by Academic Degree

Item	Academic Degree				Kruskal-Wallis $\bar{X}^2$	p <
	AA	BA	MA	PhD		
How important were the following aspects of your education <sup>b</sup>						
Liberal arts	2.8	3.1	3.6	4.1	79.05	.0001
Occupational therapy technique	4.8	4.5	4.3	3.7	58.41	.0001
Level I fieldwork	4.5	4.2	3.8	3.5	35.15	.0001
Level II fieldwork	4.9	4.8	4.8	4.2	27.92	.0001
How well did your education prepare you in the following areas <sup>c</sup>						
Basic science	3.4	3.8	3.8	3.8	19.88	.0002
Occupational therapy technique	3.9	3.5	3.6	3.9	19.75	.0002
Critical thinking	3.1	3.0	3.3	3.3	12.72	.005
Clinical judgment	3.2	3.1	3.4	3.1	16.63	.0008
Management	2.5	2.3	2.5	2.7	8.81	.05
Professionalization	3.8	3.5	3.6	3.8	10.37	.05
	(n = 101) <sup>d</sup>	(n = 400) <sup>d</sup>	(n = 270) <sup>d</sup>	(n = 35) <sup>d</sup>		

Note. AA = associate in arts; BA = bachelor of arts; MA = master of arts; PhD = doctor of philosophy.

<sup>a</sup> All values have been corrected for ties.

<sup>b</sup> The higher the rating, the more important the element. Highest possible rating was 5.0.

<sup>c</sup> The higher the rating, the better prepared respondents felt they were. Highest possible rating was 5.0.

<sup>d</sup> Approximate n per group; missing values may cause variations in the exact number per analysis.

did the other degree groups. Holders of doctoral and master's degrees also placed greater importance on liberal arts than did the associate or bachelor's degree groups. However, the latter groups perceived the clinical aspects of their education (e.g., occupational therapy technique, Levels I and II fieldwork) to be more important than did the holders of master's degrees. Associate degree holders felt best prepared in occupational therapy technique and professionalization and ranked these items as high as the doctoral group did.

### **Qualities of New Graduates**

When asked about the qualities of new graduates, respondents with doctoral degrees and those who had been in practice 16 years or more thought that the education of new graduates was good, especially in the areas of occupational therapy technique, self-confidence, and professionalization. Holders of bachelor's degrees and master's degrees felt that new graduates lacked basic knowledge, self-confidence, interpersonal skills, understanding of the health care system, and knowledge of clinical conditions.

### **Future Occupational Therapy Education**

Another group of questions addressed issues relative to the education of future occupational therapists. Twenty-one percent of all the respondents indicated critical thinking as most important; 18%, problem-solving skills; and 10%, clinical judgment. This constitutes 49% of the overall response to that question. All other responses were less than 9% each to items such as administration, negotiating, theory, and research. Clearly, therapists feel that future occupational therapy education should emphasize thinking skills more than other areas.

Respondents were asked to rate, on a 5-point scale, the aspects of occupational therapy education they thought should be emphasized. Twenty-five items were listed as possible choices. Clinical experience (with a rating of 4.1), direct practice in techniques (4.3), and problem solving (4.1) were rated highest.

The next question asked respondents to select from that same list of aspects of occupational therapy education the item they thought was the most important. Once again, responses were seen to differ widely when analyzed by the variables selected. The items fell into natural groupings which the authors titled practice skills, administrative skills, and cognitive skills. Analysis of these by degree held shows some interesting differences (see *Table 5*).

Holders of associate degrees primarily chose practice skills as the most important. Therapists with bachelor's degrees chose administra-

*Table 5*  
**Relationship Between Academic Degree Held and Elements  
 Considered Essential in Educational Training**

Degree	Element		
	PS	AS	CS
Associate	65	20	15
Bachelor's	137	160	102
Master's	56	100	111
Doctoral	—	12	20

*Note.* All values represent the number of individuals holding a particular degree who selected this element as essential. For all values,  $\bar{X}^2 = 95.28$ ,  $df = 6$ ,  $p < .0001$ .

PS = practice skills (specific occupational therapy techniques, specialty areas, professional identity); AS = administrative skills (interpersonal skills, administration and supervision, negotiating, marketing); CS = cognitive skills (clinical judgment, critical thinking, research skills, scientific knowledge, theory building).

tive skills, and doctoral degree therapists chose cognitive skills ( $\bar{X} = 95.28$ ,  $df = 6$ ,  $p < .0001$ ). The strong second choice for bachelor's degree therapists was practice skills, whereas the practical skills element was least important to the master's and doctoral degree therapists.

### Implications and Conclusions

The results of the analysis of the questionnaire indicate that a strong perception exists that the status of occupational therapy as a profession should change and that occupational therapy education should also change. However, views differ as to which specific aspects should change and how that change should be brought about. Differences in these views seem to be correlated with characteristics of the particular subgroups within the profession (e.g., academic degree, years in practice).

It is possible that these differences in perception and preferred strategy have been an influence on the 40-year history of the development of the requirements to enter the profession. Although there is clearly a strong perception that entry level requirements need to be changed, there is still no universal agreement on what to change. It is obvious from our results that those with higher educational degrees want to see a greater emphasis on research, theory, and clinical judgment, whereas those with lower degrees see a need to increase therapists' proficiency in applied skills, for example, in specific occupational therapy techniques. It is difficult to promote change without broad agreement on what should change and how that change should take place.

It may be that disagreements about specifics have prevented the profession from taking a broader view and mobilizing its resources to restructure the pattern of education and the image of the profession. Rather than attempting to decide whether an improvement in technical skills or in intellectual skills is the more important, perhaps we should conclude that both need to be improved.

In collaboration with the Entry Level Study Committee, we conducted this survey in an attempt to understand the complexity of the problems facing occupational therapy education for practice and to document therapists' views of those problems. It is hoped that the data presented here will give the reader some insight into these problems and some idea of the different viewpoints of members of our profession. We do not feel that it is appropriate to draw strong inferences and conclusions or to critically extend the possible meanings of the results of the questionnaire; rather, we hope this discussion will encourage further research into the central issues facing occupational therapy as a profession, both with regard to its status and with regard to its educational requirements.

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