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PROFESSIONAL ROLE AND AUTONOMY IN PHYSIOTHERAPY

A Study of Swedish Physiotherapists

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ABSTRACT. **A study of 163 physiotherapists' conception of their professional role and autonomy and the implications for their work has been completed. About half (55%) felt that physicians and other staff members primarily expected them to act as independent professionals, while about one-third (34%) felt that they were expected to undertake treatment after referral from or discussion with the physician. Most physiotherapists (86%) were firmly in control of their treatment methods, but had somewhat restricted freedom in deciding whom to treat, and when to terminate treatment. The majority (96%) regarded their professional tasks as being important for others. Few (14%) had carried out any systematic evaluation of their methods and results—hence few obtained any objective feedback from their work, which is believed to affect the quality of work, as well as work motivation and job satisfaction.**

Key words: physical therapy, professional competence, professional practice, role concept.

This investigation was designed to analyze the conception physiotherapists have of their professional role and autonomy and the implications for their work. In social sciences it has been demonstrated that the concept of role is useful in linking individuals and organizations (1, 2, 3). Thus, role theory was used as a conceptual scheme for this study. Additionally, the impact of job design on job motivation and satisfaction and also on the quality of work, as described by Hackman & Oldham (4) and Eppler & Nelander (5), was used for interpreting and summarizing the findings.

Role as a concept

Various authors have applied the role concept differently, but two major perspectives have dominated: the 'functionalist' and the 'interactionist' approaches (1, 2, 3). In the functionalist view of society, roles and norms are treated as established social phenomena, whereas the interactionist's interpretation of roles and role behaviour focuses on the meaning given by the individual to those acts. In the terminology of role theory, socialization refers to the process by which people acquire the knowledge, skills and dispositions that make them able members of society. In any professional group selective recruitment, long formal training, written ethical codes and common expectations from similar or related occupations and society at large create fairly uniform behaviour. Joas (2) concludes that "role is the normative expectation of situationally specific meaningful behaviour" (p. 44). There is, however, considerable scope for variation in how the professional role is perceived and played, when people's personalities are taken into account. One aspect of the relationship between the role and the individual actor is that people play more than one role. A physiotherapist may also be a family member, a parent, or may work in different occupational areas and simultaneously be involved in different aspects of physiotherapy. Playing different roles opens the way to potential conflicts (6).

Organizational structure is a major determinant of social behaviour. Conflicting or impossible demands on people within a structure can lead to role stress. This may generate role strain, feelings of frustration and anxiety. A high level of professional role strain can reduce goal attainment, and the effect of such role strain may lead to impaired quality or reduced quantity as regards care (6).

Hackman & Oldham (4) have developed a measurement tool, the Job Diagnostic Survey (JSD), to use when redesigning work in order to optimize job motivation and satisfaction. This instrument is further developed and described by Eppler & Nelander (5). Its basic idea is that certain core job dimensions will provide the individual with experiences, which in turn will lead to consequences in job motivation and satisfaction, individual development, and quality of work. The five core dimensions are: *Skill variety*, i.e. the degree to which a job requires a variety of differ-

ent activities in carrying out the work. *Entirety*, i.e. the degree to which a job can be completed from beginning to end with a visible outcome. *Importance for others*, i.e. the degree to which the job has a substantial impact on the lives or work of other people. *Autonomy*—independence in scheduling the work and in determining the procedures to be used in carrying it out. *Feedback*—direct and clear information about the effectiveness of the performance.

METHOD

Study population

The county of Västerbotten, northern Sweden, comprising approx. 245 000 inhabitants, was found to be a suitable area for this investigation. All 178 physiotherapists working in that county in March 1984 made up the study population. Although they were not randomly selected, they can be regarded as a typical sample of Swedish physiotherapists. The selection was made from a theoretical as well as a practical point of view. This study is part of a series of investigations concerning physiotherapists and their work.

Instrument and procedure

Each physiotherapist was mailed a questionnaire, including 39 items with both closed and open-ended questions. (The questionnaire can be obtained from the author, on request.) This article is based only on those closed questions concerning the physiotherapist's sex, age, family relationships, year of graduation, occupational area, working hours, education, professional role and role conflicts. Furthermore the physiotherapist's judgements concerning the character of the physiotherapy profession, professional norms, and status of four medical occupations were measured on bipolar, decimal scales with the extreme statements concerning the actual situation at either end of a decimeter line.

The questionnaire was pre-tested in a group of teachers at the School of Physiotherapy in Umeå, who were not involved in the study. This procedure resulted in minor changes in the formulation of the questions.

Statistics

Data are presented in relative frequencies and means with standard deviation (SD). Differences between sub-groups were tested by the chi-square method, using the SPSS statistical program (7), an Unpaired *t*-test was used for testing means. The level of significance used was 5%.

Some variables were dichotomized to simplify analysis and presentation. The occupational areas were divided into non-institutionalized (NI) and institutionalized/partly institutionalized (IPI) care. NI care includes primary health care, the occupational health services, private practice, preventive care, and sports medicine. IPI care includes in-patient somatic/geriatric care, psychiatric care and pediatric care, embracing care of the mentally retarded. The physiotherapists were also divided into two groups according to year of graduation, one from 1934 to 1979 and one from 1980 to 1984. The year 1980 was chosen as the break point on the assumption that any effects of the upgrading of physiotherapy training to university level ought to have appeared by then.

Table I. *Frequencies of male and female physiotherapists concerning age, year of graduation, and working hours*

	Women $n=124$ (%)	Men $n=39$ (%)	Total $n=163$ (%)
Age in years			
20–29	14	23	17
30–39	50	56	51
40–49	31	21	28
50–59	4	–	3
70–79	1	–	1
Year of graduation			
1934–1979	68.5	38.5	61
1980–1984	31.5	61.5	39
Working hours			
Full-time	50	85	58
Part-time	48	13	39
No given	2	2	3

RESULTS

Population

Questionnaires were received from 163 persons (92%), of whom 76% were women. More than half (51%) of the physiotherapists were between 30 and 39 years old, only 4% were older than 50. Their age range was 49 (21–70) years. The male physiotherapists were somewhat younger than the females. Mean ages were 37 years for the women and 34 years for the men. The majority (81%) were either married or cohabiting. They had on average 1.3 children. Most physiotherapists (61%) had graduated before 1980. The relative frequencies of male and female physiotherapists concerning age, year of graduation and working hours are displayed in Table I.

A good half of the physiotherapists (58%) worked full time. Most of those working part time worked 30 hours a week. Physiotherapists who graduated in the 1980s, however, worked full time to a significantly greater extent than was formerly commonplace, 86%, vs. 41% previously.

The largest areas of employment, numerically, were in-patient somatic/geriatric care (34%) and primary health care (27%). The relative frequencies of male and female physiotherapists in the various occupational areas are presented in Table II. Altogether 51% were working in IPI care.

A large proportion (84%) had participated in further education in physiotherapy, and 40% had earned between 1 and 9 university credits before or after

Table II. *Frequencies of male and female physiotherapists in noninstitutionalized (NI) care and institutionalized/partly institutionalized (IPI) care*

Occupational area	Women $n=124$ (%)	Men $n=39$ (%)	Total $n=163$ (%)
NI care			
Primary health care	23	39	27
Occupational health services	10	15	11
Private practice/ Other area[a]	4	3	4
Two areas[b]	2	15	6
IPI care			
In-patient somatic/ geriatric care	37	26	34
Psychiatric care	7	–	5
Pediatric care[c]	15	2	12
No area	2	–	1
Total	100	100	100

[a] Preventive care, sports medicine.
[b] Out of occupational health services, private practice, primary health care.
[c] Including care of the mentally retarded.

graduating in physiotherapy. The subjects were often of relevance for the physiotherapy profession, apart from physiotherapy, education, psychology, etc. A significantly larger proportion of women (48%) than of men (18%) had gained academic credits.

Two persons reported leave of absence as a reason for not returning the questionnaire, and 2 were on sick leave. The remaining non-respondents contained similar proportions of men and women, amounting to 6%.

Professional characteristics and norms

All respondents were asked to evaluate characteristics of the physiotherapy profession, by using certain bipolar, decimal scales with the extremes at either end. Fig. 1 shows the physiotherapists' mean scoring of those characteristics. As the figure shows, the physiotherapists regarded their profession as varied rather than monotonous, creative rather than routine, yet neither unduly well-defined nor very specific in its objectives. There were only minor differences between the opinions of female and male physiotherapists.

The more recently graduated physiotherapists regarded physiotherapy as significantly more well-defined than did those who graduated earlier, with a

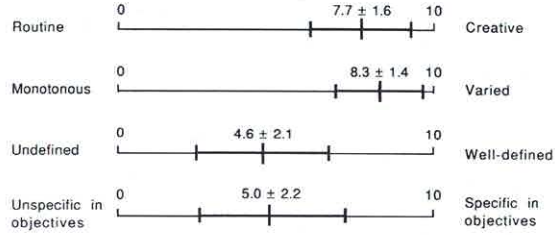

Fig. 1. The physiotherapists' mean scoring, with standard deviation (SD), of certain characteristics of the physiotherapy profession, on bipolar decimal scales, with the extremes at either end (N 152).

mean of 5.1 (SD 2.0) vs. 4.2 (SD 2.1) on the decimal scale, and also significantly more specific in its objectives, mean 5.5 (SD 2.2) vs. 4.8 (SD 2.2).

Opinions varied when the respondents were asked to estimate whether or not they had attained professional norms during their formal training. On a decimal scale with the extremes 'no, not at all', and 'yes, definitely', the mean was 4.4 (SD 2.4). Men and women, irrespective of occupational area, scored fairly equally, 4.2 (SD 2.6) vs. 4.4 (SD 2.4). Physiotherapists graduated in the 1980s, however, claimed a significantly better knowledge of the professional norms than those who graduated before 1980, mean 4.9 (SD 2.3) vs. 4.0 (SD 2.4) earlier.

Role expectations

A good one-third (36%) of the physiotherapists deemed physiotherapy to be indispensable to the treatment of patients; the remainder saw it as an important complement to other forms of treatment, or important for certain patient categories. Significantly fewer physiotherapists (23%), however, believed that their head of department regarded physiotherapy as indispensable in their sphere of work. Sex, year of graduation, or occupational area gave rise to no significant differences between the physiotherapists' estimations.

The physiotherapists were asked to rank what they believed were the three foremost expectations of their profession, by physicians, other staff, and patients, using a closed ended question with several reply alternatives. More than half of the physiotherapists (55%) believed the physician first to expect the physiotherapist either to be an active member of the team, or herself to choose whom to treat; alternatively to receive patients referred by the doctor for consultation or assessment. A good third (34%) believed the physi-

Table III. *Frequencies of the physiotherapists' hypotheses on the physicians' first expectations of them and their profession (n=163)*

Doctor-dominated practice	
– physiotherapists to treat patients after referral	20%
– physiotherapists to give services after consulting the physician	14%
Independent practice	
– physiotherapists to contribute their special knowledge to their field of work	31%
– to be able to refer patients to the physiotherapist	22%
– physiotherapists to choose whom to treat	2%
Other or no expectations	11%
Total	100%

cian foremost to want the physiotherapist to treat patients after referral from, or to treat patients after discussion with, the physician. Few (2%) believed that the physician had any other expectation or none at all. The remainder did not make any assumptions. The physiotherapists believed other staff to have rather similar expectations of physiotherapists, which were independent of sex, occupational area, or year of graduation. Table III illustrates the physiotherapists' hypotheses of physician's initial expectations of the physiotherapy profession.

The physiotherapists believed that patients first and foremost expected direct improvement to result from treatment (61%), or even cure (22%). Some 8 percent believed that the patients chiefly expected guidance and instructions only, or preventive measures. The remainder had other, more hazy expectations.

Role conflicts

Most of the physiotherapists (72%) seldom or never experienced any conflict between their family and their own professional role. There was, however, a significant difference between females and males in this respect, as there was between mothers and fathers. Of the women, 28% vis-à-vis 10% of the men constantly or often experienced such conflicts. Of the mothers, 36 per cent vis-à-vis 11% of the fathers constantly or often experienced conflicts between their family and their own professional role. Proportionally fewer of those mothers who graduated in the 1980s reported that they constantly or often experienced such role conflicts (18% vs. 42%, respectively).

Few physiotherapists reported conflicting expectations from doctors or nurses concerning occupational matters. Of the respondents, 86% had rarely or never experienced such conflicts with other medical staff, but around 30% in both IPI and NI care often met with conflicting expectations from their patients, and in this way experienced a role conflict.

Authority and decision making

The majority (86%) felt that they had satisfactory control over their treatment methods. Each was free to choose and initiate a specific therapeutical method. One physiotherapist in four (25%) always felt able to decide whom to treat, while another 55% were often able to do so. There were no significant differences between those possibilities as regards sex, year of graduation, or occupational area. More than half (53%) of the physiotherapists said that they were always able to decide when to terminate treatment, and 36% were often able to do so. A significantly larger proportion of those working in NI care (95%) than in IPI care (84%) reported that they could always or often decide when to terminate treatment.

Only 14% of the respondents had carried out any kind of systematic evaluation of their treatment of patients during working hours. Three had tried, unsuccessfully. More than half of the physiotherapists (58%) believed they could accomplish such an evaluation, but had not tried, because of time lack, unfamiliarity with research methodology, etc. No significant differences were found as regards sex, year of graduation, or occupational area.

The physiotherapists' opinion of occupational status

A different aspect of the perceived professional role concerns the physiotherapists' view of their place in the medical hierarchy. The respondents were asked to indicate their estimation of the status of a physician, a nurse, a medical social worker and a physiotherapist on a bipolar decimal scale, with the extremes 'low status' and 'high status'. The physiotherapists ranked the physician highest (mean 8.8, SD 1.5). Most physiotherapists ranked their own profession ahead of the other two para-medical personnel, mean 6.9 (SD 1.7) vs. 5.8 (SD 1.7) for nurses and 6.4 (SD 1.7) for the medical social workers.

Table IV shows male and female physiotherapists' estimation of the status of the different occupations.

Table IV. *The physiotherapists' mean scoring with standard deviation (SD) for the status of four medical professions on a bipolar decimal scale with the extremes 'low status' and 'high status'*

Differences between the means of men and women are presented in t and p-values and significant differences are indicated with * ($N=146$)

	Women		Men			
Profession	Mean	SD	Mean	SD	t	p
Physician	9.0	1.4	8.1	1.7	3.008	0.00*
Physio-therapist	7.2	1.6	6.0	1.6	3.738	0.00*
Medical social worker	6.7	1.7	5.6	1.6	3.379	0.00*
Nurse	5.9	1.7	5.4	1.6	1.594	0.11

The males ranked all professions except the nurse significantly lower than did the females. The congruency between the sexes regarding the hierarchy itself was fairly close, however, as was the agreement between physiotherapists in different occupational areas. Physiotherapists graduated in the 1980s gave nurses, medical social workers, and physiotherapists a significantly lower status ranking than did those who graduated earlier (5.4 (SD 1.6), vs. 6.0 (SD 1.7), 5.9 (SD 1.7), vs. 6.7 (SD 1.6), and 6.5 (SD 1.7), vs. 7.1 (SD 1.6), respectively).

A number of respondents (10%) refused to answer the question about the status hierarchy at their place of work. Reasons given for not answering were: 'impertinent question', 'irrelevant issue' and 'badly formulated question'.

DISCUSSION

Characteristics of the physiotherapy profession as related to educational background

Physiotherapy was considered a creative and varied profession, but neither unduly well-defined, nor very specific in its objectives. Up to 1978 the central curriculum for the study of physiotherapy, stipulated by the Board of Education together with the Board of Universities and Colleges, did not mention the word 'physiotherapy'. The words 'professional theory' and 'vocational training' were used instead. At that time more than today, the curriculum was orientated toward science and medicine, and reflected the opinion of the physician as the one being responsible for and expert in physiotherapy treatment. This state of affairs may explain why the physiotherapists felt somewhat uncertain about the definition of their profession, as well as of its objectives.

The physiotherapists have as a rule received a thorough training. These findings are consistent with findings from other countries (8, 9). However, the physiotherapists seemed to feel that they had a relatively subservient relationship towards professional expertise, i.e. as mere consumers. They took part in courses and university studies, but very few systematically and regularly evaluated their working methods or results. Consequently, few could evolve physiotherapeutic methods or knowledge.

After it became incorporated into university education in 1977, physiotherapy training in Sweden had by law to be based on research. Since then, the curriculum has consistently emphasized the ties between physiotherapy training and research and developmental work. Physiotherapy also gained a more distinct place in the curriculum, as a subject in its own right. Moreover, the physician's role as the expert in physiotherapy became less entrenched. These changes are in line with developments in other nations as reported by Nordholm & Westbrook (8), Ramsden (10), and Samuels (11). They have led to certain modifications in the physiotherapy curriculum, and may explain why physiotherapists, who graduated in the 1980s regard physiotherapy as better defined and more distinct in its objectives, than do those who graduated earlier.

Autonomy and decision making

Few physiotherapists reported incidents of role conflicts with other occupational groups, concerning physiotherapy, despite reported differences in expectations between patients and physiotherapists. This indicates that physiotherapy seems to be well adjusted to the work organizations and to other medical staff, but not equally well suited to the needs of the patients or the physiotherapists themselves. In view of the circumstances that most of the respondents regarded physiotherapy as rather diversified, and not very specific in its objectives, one would expect frequent discussions about the physiotherapy treatment between the physiotherapists and other medical staff. The reported lack of professional conflicts with other medical staff may indicate that the physiotherapists did not challenge the physicians' authority by making explicit their own physiotherapeutic opinions. The

absence of role conflicts might therefore be interpreted in terms of a low professional profile on the part of the physiotherapists.

Job dimensions and work outcomes

The physiotherapists regarded their profession as a varied and creative occupation. This obliges them to have at their command a wide range of skills and knowledge and the constant responsibility to be *au fait* with the latest forms of therapy in order to fulfil their duties satisfactorily. Usually skill variety is regarded as a positive work factor, promoting job motivation and satisfaction, but it must not become so great that it is felt to be burdensome and hence a drawback (4, 5). The job was also felt to be important for others, and was thus meaningful to the physiotherapists.

The physiotherapists were not completely autonomous in their profession. They were not always able to see their job through from start to finish and show visible and measurable results. The work thus lacked in entirety. They did not bear the ultimate responsibility for the outcome or the evaluation of their efforts. Responsibility for the outcome of one's work is said to be closely connected with autonomy (4, 5). Few systematically evaluated their treatments and methods and thus few obtained any objective feedback from their work. This must be detrimental to their ability to treat their patients in the best possible way. The physiotherapists did, however, experience a certain degree of autonomy within their field of therapy. This accords with earlier research on physiotherapists and their work (12, 13).

The results of this study indicate that it must be essential for physiotherapists to systematically examine the results of their measures, in order to improve the general quality of physiotherapy, and at the same time to increase job motivation and satisfaction. This in turn will most likely result in physiotherapy becoming better defined as a discipline, and more autonomous as a profession.

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