Perceived Influence on Service Goals Among Community-Working Occupational Therapists in Norway

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Abstract
Aim: This study aimed to assess the perceived influence that community-working occupational therapists in Norway have on the service goals of their respective organizations. In addition, we aimed to assess sociodemographic and work-related factors associated with the perceived level of influence. Methods: A cross-sectional survey was distributed to occupational therapists in community-based services in Norway (n = 1767), to which 561 (32%) responded. By multivariate regression analysis, factors associated with “self-perceived influence” were assessed. Results: After controlling for all variables, having a master’s degree (β = 0.09, P < .05), being involved in a research and development project (β = 0.25, P < .001), and not working with assistive technology (β = −0.19, P < .001) were associated with higher perceived influence. Conclusions: For occupational therapy to reach its potential in Norwegian community-based health care, the profession needs to establish itself more firmly and increase its influence within the health care services. To do so, it appears important to support occupational therapists’ educational aspirations, their participation in research and development projects, and their autonomous role in relation to the provision of assistive technology equipment.

Keywords
assistive technology, community-based practice, job satisfaction, occupational therapy

Introduction
In Norway, the current restructuring of the entire public sector results in a large number of municipalities being merged into bigger units. The current 422 municipalities will be reduced to 356 in year 2020. In line with an aging population, changes in the population’s health care needs and the Coordination Act, the health care services are also changing toward placing more emphasis on community-based practice, and less on hospital-based treatment. The municipalities are the employing agencies for more than half of the country’s 4855 employed occupational therapists. As it will become an obligatory element of health care services in the municipalities starting from 2020, community-based occupational therapy is expected to increase. Consequently, community-working occupational therapists appear to be well positioned to influence the content and organization of community-based health care in the future. Whether this is also descriptive of the current state of affairs is the focus of this article.

Having an influence over one’s own working conditions and over the goals and strategies of the employing organization appear to be important for job satisfaction. In relation to this, Karasek and coworkers introduced 3

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work variables with proposed relationships to job satisfaction and job productivity. First, job demand is the level of demand placed on the worker. Optimally, this would not be too high such that it exceeds the worker’s possibility of succeeding with the task, but should not be too low as this may promote boredom and idleness. Higher levels of demand may be placed on workers in cases where the worker receives more support, which can alleviate some of the burden associated with the increasing demands. Finally, more worker control or autonomy over task content and the pace of work is believed to affect positively on job satisfaction. The demand, support and control concepts are generally considered relevant in the field of job satisfaction and job productivity, and a recent meta-analysis further investigated the intrinsic relationships between the variables. This study found that support from supervisors, support from co-workers, and perceived control all predicted perceived levels of demand. Thus, job demands appear not to be determined entirely by external forces, but rather seem to operate in context with other aspects of the working environment.

Studies of job satisfaction particularly among occupational therapists are far between, and their focus have been ambiguously related to the variables used in the Karasek model. In an Australian study, the levels of job satisfaction between men and women were compared. The male and female therapists were very satisfied with their jobs as pertaining to 4 aspects (work on the job, supervision, coworkers, and the job in general), but the female therapists were more dissatisfied with a view to their opportunities for promotion. An older American study found that the occupational therapists held moderately positive attitudes toward their jobs and their autonomy at work. Feelings of achievement, interpersonal relationships with coworkers, and the nature of the work itself were factors that improved job satisfaction. Also in the United States, Akroyd and coworkers found that having an interest in the work itself, or finding it rewarding, was the single most significant predictor for job satisfaction. Interest and intrinsic reward were rated as more important than autonomy, salary, relationships with coworkers, supervision, and general work conditions. These findings mirror those of a recent Norwegian study, where having more interest in the job was strongly associated with higher job satisfaction. Perceived control, however, was not associated with job satisfaction.

The findings emphasizing interest in and personal reward from the work, as opposed to job autonomy or Karasek’s control concept, contrasted the findings from a study conducted in Northern Ireland. In this study, involvement in decision making was found to be very important for maintaining the participants’ job satisfaction. Similarly, a more recent qualitative inquiry among occupational therapists in Australia found that autonomy was one of the factors of importance for their job satisfaction.

In summary, the public health sector in Norway is changing. The change in legislation from 2020, by which time occupational therapy will become a municipality service required by law, appears to pave the way for occupational therapy in community-based health services. However, having a required presence in the municipalities does not necessarily mean an autonomous, strategic presence where one exerts influence over the municipality’s goals. Moreover, to assess in the future whether occupational therapists’ perceived influence will be different following the legislative change in 2020, comparable data needs to be collected prior to this change.

Study Aim

This study aimed to assess the perceived influence that community-working occupational therapists in Norway have on the service goals of their respective organizations. In addition, we aimed to assess sociodemographic and work-related factors associated with the perceived level of influence.

Methods

Design

This study employed a cross-sectional design based on survey methodology.

Participants

Participants were occupational therapists working in community-based practice in Norway, and the sample was recruited by convenience. The membership list of Ergoterapeutene, the Norwegian association of occupational therapists, was used to identify the informants. In total, 1833 members were registered as employed by a municipality, thus representing the study population. The survey was sent to 1767 of the 1833 occupational therapists known from the member list to be eligible for participation, the difference owing to invalid e-mail addresses of recipients, possibly a result of recent changes in employment. Of the 1767, 561 (31.8%) chose to participate in the study and responded to all items in the survey. The age and gender distribution in the sample ($M = 42.2$ years, $SD = 11.5$ years, age range 22-66 years, 92.9% women) was similar to that of the identified population ($M = 41.2$ years, $SD = 11.7$ years, age range 22-68 years, 92.0% women). Thus, in these respects we considered the population to be well represented by the sample.
The Survey

A comprehensive questionnaire was developed for the purpose of the study, based on the information that should be collected. “EasyFact” was used as the electronic survey program. Seven randomly chosen occupational therapists working in rural or urban community practices agreed to pretest the electronic draft version of the questionnaire. Based on their experiences the questionnaire was revised. The revisions included adding more questions and probes; ensuring that all relevant response options were included; and rephrasing some questions to prevent ambiguity. Subsequently, the final electronic survey was set.

Procedure

On behalf of the project group, an e-mail with link to the survey and invitation to participate was sent through Ergoterapeutene. Two reminders were provided to nonresponders, after 1 and 2 weeks, respectively. The survey was closed after 3 weeks, and all data were transferred to the project group. The present study uses data concerned only with the participants’ characteristics and aspects related to their employment and perceived influence on their respective organizations’ service goals.

Variables and Coding

Age and experience as an occupational therapist were registered in years. Education level was registered as bachelor’s degree (1) and master’s degree level (2) (no responses indicated education at the doctoral level). Further education was categorized as having further education (1) or not (0). Job change was registered as having changed job during the last year (1) or not (0). Job size was coded as having a full-time employment (1) or less than full-time employment (0). Jobs were classified as including work with assistive technology (1) or not (0), and the participants reported whether they were involved in project or development work as part of their job (1) or not (0). Self-perceived influence on the service goals of the organization (municipality/city district) was assessed with the following question (translated from Norwegian): “To what extent do you feel that you have an impact on the service goals of the municipality/city district where you work?” Responses were provided on a 1 to 5 scale (1 = not at all, 2 = a little, 3 = somewhat, 4 = much, 5 = very much).

Data Analysis

The data were analyzed descriptively, using frequencies and percentages for categorical variables and means and standard deviations for continuous variables. Differences between men and women in the sample were analyzed with χ²-tests (or Fisher’s exact test) for categorical variables and with independent t-tests for continuous variables.

A hierarchical linear regression analysis was performed to assess factors independently associated with the participants’ perceived influence on the service goals of the organization. Independent variables were included in two blocks representing sociodemographic factors (age, gender, education level, further education, and years of work experience as an occupational therapist) and work-related factors (job change, job size, working with assistive technology, and involvement in research or development project). The model also assessed the outcome variance proportions explained by the two blocks of independent variables. The strengths of associations are reported as standardized beta weights (β), and statistical significance was set at $P < .05$. All analyses were performed using IBM SPSS for Windows.

Ethics

Approval for the study was obtained from the Norwegian Data Protection Official for Research (project number 52827). Participants were informed that participation was voluntary and anonymous, and completing the survey was considered informed consent to participate.

Results

The Sample

The characteristics of the study sample is shown in Table 1. The mean level of perceived influence in the sample as a whole was 2.72 ($SD = 0.91$), indicating a level between “a little” and “somewhat.” Statistically significant gender differences were shown on 3 of the variables. Women had longer experience from working as an occupational therapist compared with men ($M = 10.0$ years [$SD = 10.0$ years] vs $M = 11.9$ years [$SD = 7.1$ years], $P < .001$). A larger proportion of men had full-time employment compared to women (95.0 % vs. 74.3 %, $P < .01$), and men had a higher mean level of perceived influence on the service goals of the organization they worked for compared with the women ($M = 3.0$ [$SD = 0.9$] vs $M = 2.7$ [$SD = 0.9$], $P < .05$).

Factors Associated With Self-Perceived Influence on Service Goals

The results from the linear regression analysis are shown in Table 2. In the final model, 4.4% ($P < .001$) of the outcome variance was explained by the sociodemographic variables. Having education at the master’s degree level (compared with having education at the bachelor’s degree level)
showed a statistically significant association with perceived influence, but the association was relatively weak (β = 0.09, P < .05).

The independent variables in the second block added substantially to the proportion of explained outcome variance (R^2 change: 11.8%, P < .001). The participants whose work included tasks related to assistive technology had lower perceived influence on the service goals of their organization, compared with their counterparts (β = −0.19, P < .001). On the other hand, participants whose work included involvement in project or development tasks had higher perceived influence, compared with those who were not involved in such tasks (β = 0.25, P < .001). The full model accounted for 16.3% of the variance in the participants' perceived influence on the service goals of their organization (P < .001).

**Discussion**

**General Results**

This study showed that men had higher ratings of perceived influence, compared with women. However, after controlling for all variables in the multivariate analysis, the gender effect was no longer statistically significant. Instead, having a master’s degree and being involved in a research or development project were independently associated with more perceived influence. On the other hand, having a job that included working with assistive technology was associated with lower perceived influence.

**Discussion of Results**

In this study, none of the participants had a doctoral degree, and only a small minority of 5.5% had a master’s degree level education (Table 1). However, when controlling for all variables, this factor was associated with the participants’ perceived influence over the goals of the employing organization (Table 2). Higher degree education can provide the person with the theoretical and practical tools required to influence his or her employing organization. Embarking on higher degree studies can also be viewed as motivated, at least in part, by a desire and willingness to
take on larger responsibilities as a professional worker. This would be in line with “rational choice” theory, suggesting that workers’ will orient themselves toward what will secure their current position, but also what will help them get more income, recognition from peers and supervisors, and chances for promotion. Our results indicate that those who had completed master’s degree level education do get to shape the content of their own jobs in a way that leads to their exerting more influence over their respective organizations. This appears to be a rational choice, securing their current employment and income, and possibly their opportunities for promotion. Having better opportunities to influence the service goals of the employing organization may also increase their personal interest in the job, and consequently to higher job satisfaction, as suggested from other studies.

Involvement in research and development projects was also associated with higher perceived influence (Table 2), and the association may be bidirectional: the efforts of research and development groups may result in suggesting changes in the organization’s goals, and occupational therapists involved in such groups may therefore be in a position to influence goals. Conversely, having an influential position may provide an easier access to groups conducting research and development projects. A previous study based on the same data showed that having further education was positively associated with involvement in research and development. Thus, associations between education level, research involvement and perceived influence appear to align with rational choice theory. As derived from this view, increasing one’s education level and becoming involved in research and development projects may be guided by a motivation to secure and strengthen one’s opportunities in current and future employments.

As community-working occupational therapists in Norway are frequently involved in tasks related to the delivery and use of assistive technology, we also explored this factor in relation to perceived influence. Interestingly, we found that those whose jobs included work related to assistive technology reported lower levels of perceived influence on the service goals of the employing organization (Table 2). Arntzen and co-workers recently analyzed the job content, perceived dilemmas and priorities of community-working occupational therapists, and found that they alternated between seeing themselves as “the all-rounder,” “the innovator,” “the fire-extinguisher,” and “the passive provider of assistive device.” In particular, it seems viable that seeing oneself as “the fire-extinguisher” or “the passive provider of assistive device” can go together with low levels of perceived influence. Occupational therapists who often find themselves taking care of pressing needs as defined by others, or provide assistive devices with little independent consideration of how these will affect the clients’ needs, may tend to see themselves as less influential in their work role.

A large proportion of the sample performed tasks related to assistive technology (88%). Although this vast proportion may be appropriate for the study participants, a previous Norwegian study found that community-working occupational therapists frequently feel they are not used well enough, and this gives cause for concern. The concern should address the occupational therapists themselves, who may be at risk of experiencing a lack of influence, and therefore reduced job satisfaction. It should also address their clients, who may be at risk of receiving a very limited version of the best possible occupational therapy practice. Practice in primary care entails an extensive list of possible interventions that can be implemented by occupational therapists. Thus, it seems important to increase occupational therapists’ autonomy such that they can provide the best possible service to their clients. The provision of assistive technology equipment may be one aspect of good occupational therapy practice, while such practice cannot reach its potential if the individual therapist’s autonomous clinical judgment is suspended or compromised.

Study Limitations and Suggestions for Future Studies

The study had a cross-sectional design, which precludes us from establishing causal inferences. Several of the questions in the survey tool had not been used in previous research, but were developed specifically for this project. A pilot study was conducted to verify that the questions and response options were deemed relevant and appropriate, and the participants’ suggestions for improvement were incorporated into the survey before the data were collected. As the data collection procedure involved recruiting participants from a membership list, formal sample size calculations were not performed prior to commencing the study. However, the sample size was considered appropriate for the employed analyses, whereas the response rate (32%) was rather low. On the other hand, it was similar to the response rate obtained in a previous member survey, and to the response rate that is commonly experienced in large population surveys.

The model explored in our study was relatively simple; thus, we did not perform a more sophisticated path analysis to confirm model fit. In future studies, using this option could strengthen the validity of the results. Moreover, the model used to explain perceived influence among the participants accounted for only a modest proportion of the variance. This might be attributed to confounding variables not included in our study. For example, intrinsic motivation, based on autonomy, affiliation, and competency as outlined by Deci and Ryan, may have had an impact. Similarly, the
participants’ level of job satisfaction may have played a part. Addressing these factors in a subsequent follow-up study may improve our ability to explain community-working occupational therapists’ perceived influence on the service goals of their respective organizations.

Conclusion

In the sample of Norwegian community-working occupational therapists, the mean level of perceived influence on the employing organization’s service goals was between “a little” and “somewhat.” After controlling for all variables, having a master’s degree and being involved in a research or development project were independently associated with more perceived influence. Conversely, having a job that included providing assistive technology equipment was associated with lower perceived influence. For occupational therapy to reach its potential in Norwegian community-based health care in the years ahead, it appears the profession needs to establish itself more firmly and increase its influence within the health care services. To do so, it will be important to support occupational therapists’ educational aspirations, their participation in research and development projects, and their autonomous role in relation to the provision of assistive technology equipment. Future studies are needed to assess whether occupational therapists’ influence will be perceived at the same level after having become a required health care service in the municipalities in 2020. Moreover, also after 2020, studies may examine whether the same or other variables are associated with occupational therapists’ perceived influence.

Declaration of Conflicting Interests

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