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Job Satisfaction among Physiotherapists in Ishikawa Prefecture, Japan

SHIMPACHIRO OGIWARA, RPT, SRP(UK), ONC(UK), MCPA(C), BPT(C), MA(USA), PhD(USA)¹⁾, HITOMI ARAKI, BHSc, RPT²⁾

E-mail: oggy@mhs.mp.kanazawa-u.ac.jp

Abstract. This study analysed the responses of 183 clinicians in Ishikawa Prefecture to a Japanese version of the Speakman's scale on job satisfaction in the form of a self-administered questionnaire. Specifically, the questionnaire sought the clinicians' responses to 10-item statements related to their jobs concerning paperwork, challenge, physical demand, professional autonomy, fulfillment, and stress. The degree of agreement with the scale was moderate, though the respondents considered themselves to be engaged in rewarding work. The causes of their job dissatisfaction were excessive paperwork and physical/mental stress. Despite these negative feelings, the clinicians were able to find the positive aspects of their job. The degree of importance for the scale as a measure of job satisfaction was also moderate, as opposed to that of their American colleagues who rated it high when Speakman et al. conducted their study in 1996. This finding suggests that clinicians from Ishikawa Prefecture may find the 'hygiene' factors (ie. salary and fringe benefits) to be of more importance for their daily job satisfaction. The results should be interpreted in terms of culture and mores, differences in healthcare systems and the time period in which the studies were carried out.

Key words: Job satisfaction, Japanese Version of the Speakman's scale, Physiotherapist

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INTRODUCTION

Experienced physiotherapy clinicians are invaluable assets to the hospitals and institutions where they practise. Anecdotal evidence shows that job turnover of physiotherapy clinicians in Ishikawa Prefecture, Japan, has been rising in recent years. There are numerous reasons for this turnover. Whether these are economic or otherwise, they all give cause to seek employment elsewhere. One influencing factor is a chronic nationwide shortage of physiotherapists and, in addition, burnout may be a contributing factor as to why clinicians leave their employment. Although factors for burnout vary considerably¹⁾, job dissatisfaction may be one that

plays a role.

According to Broski and Cook, studies on job satisfaction of healthcare professionals began in 1971 when laboratory personnel in the United States of America (USA) were surveyed on this matter²). Since then, studies on this subject have encompassed other healthcare professionals^{3–13}). However, the findings of one of these studies carried out in El Paso, Texas, USA by Speakman, et al. in 1996⁵) indicated a relatively high level of overall satisfaction on the part of the physiotherapists. In addition, the Texan clinicians considered all statements used in the questionnaire measured important aspects of physiotherapists' job satisfaction.

¹⁾Division of Rehabilitation Science, Department of Health Sciences, Graduate School for Health Studies, The University of Kanazawa: 11-80 Kodatsuno 5, Kanazawa, Ishikawa 920-0942, Japan. TEL +81 76-265-2616 FAX +81 76-234-4351

²⁾Department of Medical Rehabilitation Services, Kariya Toyota General Hospital

However, there are currently no empirical data on job satisfaction of Japanese physiotherapy clinicians. Therefore, the purpose of this preliminary study was four-fold: 1) to provide evidence to show whether or not clinicians in Ishikawa Prefecture were satisfied with the level of professional practice of physiotherapy; 2) to find out which factors caused satisfaction or dissatisfaction; 3) to determine if the statements presented in this study were considered important for job satisfaction in clinical practice; and 4) to contrast the findings of this study with those of the former study by Speakman et al.⁵⁾. The results from a study such as this will help contribute to our knowledge of both the positive and negative aspects in daily working conditions of physiotherapists. They will also provide us with possible clues for resolving work-related problems, such as ones that concern the recruitment and retention patterns of physiotherapists vis-á-vis job dissatisfaction in the workplace.

METHODS

Instrumentation

A self-administered questionnaire survey was selected as the appropriate tool for data collection. The questionnaire consisted of two parts. In Part 1 the authors used Speakman's scale that identifies 10 aspects of the professional practice of physiotherapy with one statement representing each aspect (Table 2)⁵⁾. These statements developed by Speakman et al. were considered important in the assessment of job satisfaction in the professional practice of physiotherapy⁵⁾.

In his dual-factor theory of job satisfaction Frederick Herzberg used two independent categories of needs: animal needs <hygienes> and human needs <motivators>14). Hygienes, or extrinsic factors, are dissatisfiers and are related to the environment in which workers do their jobs: company policy and administration, supervision, salary, interpersonal relations, security, and working conditions. Motivators, or intrinsic factors, are related to basic human needs and are satisfiers.

Speakman's scale excludes *hygiene* factors, so that all of the statements are directly related to actual working practice issues. In the questionnaire, the respondents were first asked to rate their level of *agreement* or *disagreement* for each of the

statements on a seven-point Likert-type scale on a continuum from *strongly disagree* to *strongly agree*. Half the statements were worded positively and half negatively, thereby avoiding bias. Moreover, the statements were arranged in such a way so that positively and negatively worded statements alternated. Second, in order to examine the relevance of the 10-item statements with regard to physiotherapists, the respondents were asked to indicate how important they felt that the statement related to their job satisfaction on a seven-point scale of *importance* (Table 2).

Part 2 of the survey sought background and demographic information on the respondents: gender, years of professional experience and professional status.

Scoring

For each of the five positive statements, an *agreement* score of 7 indicated the highest degree of satisfaction and a score of 1 the highest dissatisfaction. As for each of the five negative statements, the scores were reversed so that a score of 1 indicated the highest degree of satisfaction and 7 the highest dissatisfaction. A completely satisfied clinician would score a total of 7 for each of the individual positive statement and 1 for each of the individual negative statement. Thus, the maximum possible *agreement* score would be 70, but a completely satisfied clinician would in fact score 40. The scale of *importance* extended from 1 to 7 with a neutral point of 4 with the maximum possible score being 70.

Participants and procedures

The original English version of Speakman's scale was translated into Japanese by the authors. Then, physiotherapists at the University of Kanazawa Hospital, Department of Physical Therapy critically examined the questionnaire for its wording and phrasing.

Three hundred and fifty-two respondents were selected from a convenience sample of physiotherapists practising in Ishikawa Prefecture. Because of the relatively small number of physiotherapists making up the total membership in the prefecture, almost all of the members were selected from the 2005 membership directory of the Ishikawa Physical Therapy Association. The physiotherapists who were excluded from this study were those who were either involved in teaching

and research or were inactive at the time of the survey.

Surveys were mailed to all of the prospective participants with a letter of explanation concerning the purpose of the study, together with a stamped addressed reply envelope. The questionnaires were anonymous.

The instructions to respondents included a guarantee of confidentiality, the need to respond to every statement and the absence of a right or wrong answer. The survey took approximately 15 min to complete.

The rate of return was 53.1 per cent excluding two questionnaires that were returned because the potential respondents had left their employment. The study was carried out in November 2005, and the required time period of return was within three weeks of receiving the mailed questionnaire. No reminder, by telephone or otherwise, was necessary. Three incomplete questionnaires were excluded from the analysis. Thus, the final sample consisted of 183 (52.3%) clinicians.

Statistics

First, the demographic data of the respondents was compiled. Pursuant to Speakman's method⁵⁾, the respondents were divided into two groups according to their gender. Then, each gender was stratified into four subgroups based on the length of their professional experience, namely, ≤ 2 , 2.1-5, 5.1-10, and >10 years. As for their professional status, the genders were further divided into two groups of respondents of ones who held a senior position or that of departmental head and those who were staff physiotherapists. Then, the mean and standard deviation of the importance scores and agreement scores were calculated for each statement from the two groups.

Employing the *chi-square* test, tests of independence were carried out between gender and professional experience, and between gender and professional status. As a result, it was found that, for the latter, gender influenced the professional status. Thus, in order to prevent confounding of gender and professional status the authors randomly selected three respondents from each gender who held a position of senior or departmental head and seven from each gender who were staff physiotherapists. The variables *gender* and *professional experience* were confirmed independent, which prompted the authors to

randomly select 10 respondents from each of the four subgroups based on their period of professional experience. The difference between gender and professional status was analysed using the two-tailed Mann-Whitney U test. The authors used the Kruskal-Wallis test to examine what influence the length of professional experience had among the groups, and, if the null hypothesis was rejected, the Steel-Dwass test was employed for comparisons among groups. An alpha level of 0.05 was selected for statistical significance in this study, using the computer software Microsoft Excel 2000 for the data analysis.

RESULTS

The respondents were fairly evenly distributed in terms of length of professional experience except for those in the >10-years category (Table 1). Table 2 shows the mean *agreement* and *importance* scores for each of the 10 statements for all of the 183 respondents, which is contrasted with those of Speakman's study⁵). There was a significant difference found in the *agreement* scores for statements 9 and 10; specifically, between 2.1–5 and >10 years for statement 9 (*I am overworked*) and, between ≤ 2 and ≥ 10 years, and between ≤ 10 years for statement 10 (*I am learning and improving in my work*).

DISCUSSION

The positive aspects concerning agreement with

Table 1. Respondents' background and demographic data (N=183)

		No. of Respondents	%
Gender:	Women	102	55.7
	Men	81	44.3
Professional			
experience (years):	≤2	32	17.4
	2.1-5	38	20.8
	5.1-10	38	20.8
	>10	75	41.0
Professional status:			
Departmental hea	ıd		
or		53	29.0
Senior position			
Staff physiotherapist		130	71.0

Table 2. Job satisfaction statements

	Mean (SD) agreement score		Mean (SD) Importance score	
	Current	Speakman et al.5)	Current	Speakman et al. ⁵⁾
1. There is too much paperwork.	4.9* (1.4)	5.3*	4.2 (1.5)	5.3
2. My job is challenging in a positive sense.	5.6** (0.9)	6.0**	6.1 (0.8)	6.2
3. I am not given enough autonomy (freedom to				
do my work the way I want to).	3.0* (1.2)	2.7*	5.3 (1.1)	5.9
4. My job is fulfilling (i.e. enables me to use my abilities).	4.8** (1.1)	5.9**	5.7 (1.0)	6.4
5. My job is mentally stressful.	4.6* (1.4)	4.1*	5.0 (1.6)	5.4
6. I have sufficient independence in decision-making.	4.1** (1.5)	6.0**	4.6 (1.4)	6.2
7. My job is too physically demanding.	4.2* (1.4)	3.5*	4.5 (1.4)	4.6
8. My work is interesting.	5.1** (1.1)	6.2**	6.0 (0.9)	6.3
9. I am overworked.	3.7* (1.4)	4.4*	4.3 (1.4)	5.3
10. I am learning and improving in my work.	5.4** (1.1)	5.9**	5.7 (1.3)	6.3

SD: standard deviation.

Speakman's scale for the clinicians in Ishikawa Prefecture were focused on statements 2 (*My job is challenging in a positive sense*), 10, and 8 (*My work is interesting*), all of which yielded comparatively high scores. The negative aspects of *agreement* to the scale focused on statements 1 (*There is too much paperwork*), 5 (*My job is mentally stressful*), and 7 (*My job is too physically demanding*).

As for the aspect concerning the *importance* of Speakman's scale, the scores for statements 1, 7, and 9 for the clinicians in Ishikawa Prefecture hovered around the intermediate point, averaging 4.9. This finding shows, in contrast to Speakman's survey on the *importance* aspect⁵⁾, that these statements may not be regarded by the clinicians in Ishikawa Prefecture as being very important as a means of measuring job satisfaction. Rather, the Ishikawa clinicians may find that *hygienes* play a more important role for their daily job satisfaction.

Contrary to the findings of Speakman's study⁵⁾, the clinicians with 2.1–5 years of professional experience responded more affirmatively to statement 9 than those with >10 years' experience. Similarly, the clinicians with ≤2 and 5.1–10 years of professional experience responded more affirmatively to statements 10 than those with >10 years' experience. The answer for why this is so may be found in the Japanese Physical Therapy Association's White Paper on Physical Therapy published in 2000, which stated that, among the clinicians with less than 15 years of professional experience, those who engaged in direct client care

for 32–40 hours per week constituted the largest numbers. In addition, among the clinicians with more than 15 years of professional experience, those spending 24 to 32 hours per week on direct client care constituted the largest numbers. The White Paper also stated that there is a tendency for the number of clinicians who spend less than 24 hours per week on direct client care to increase as they gain professional experience¹⁵⁾. Thus, these differences in the time spent with clients suggest that the clinicians in the current study with more than 10 years of professional experience may not feel overworked due to the fact that they are relaxed and confident in their work. In addition, becoming more skilled in their practice as clinicians may also be a contributing factor behind these findings.

In general, skilled clinicians such as those with more than 10 years of professional experience feel confident in their physiotherapy assessment procedures¹⁶). This includes the choice of specific assessment items and integration and interpretation of these findings in comparison to that of novice clinicians¹⁶⁾. Furthermore, while the newly qualified clinicians usually have high expectations, hence high job satisfaction, in their new employment, their morale may fall as they gain selfconfidence and realise the level of their capability and knowledge. This reasoning is somewhat paradoxical, but may lead to malcontents and discontentment in their workplace, vague anxiety for their future, and consequently to job dissatisfaction¹⁷⁾. The experienced clinicians may,

^{*:} A score below 4 represents satisfaction.

^{**:} A score above 4 represents satisfaction.

at the same time, feel less challenged in their routine work and, consequently, less contented with their work. Therefore, this is likely to lead to job dissatisfaction.

One of the positive aspects of agreement found in the study of Speakman et al., to which 97 American clinicians responded, was represented in statement 8 that received a high score of 6.2, followed by statements 2 and 6 both with a score of 6.0^{5}). Further, comparatively high scores (5.9) were obtained for statements 10 and 4 (My job is *fulfilling*). Similar findings were obtained in the current study as mentioned above. Therefore, both the US and Ishikawa clinicians feel that they are engaged in satisfying work. These findings are in agreement with those of Blau, et al. 18). However, there was a discrepancy between the two surveys in the results for statement 6 (I have sufficient independence in decision-making). In the current study statement 6 yielded a score of 4.1, whereas the score for this statement in the study of Speakman et al. was much higher⁵⁾. The reason for this may be found in the disparity of the working conditions of the respondents. The latter study included 17 private clinicians⁵⁾. According to the current regulations in Japan, physiotherapists are not permitted to practise privately, and almost all of them work in hospitals and institutions. Therefore, the degree of autonomy of physiotherapists in decision-making in physiotherapy practice in Japan is much lower than that of their colleagues in the USA.

One of the negative aspects of agreement in the study of Speakman et al. was with statement 5 (My job is mentally stressful), which received a high score of 5.4, followed by statements 1 (5.3) and 7 $(4.6)^{5}$. Mental stress, paperwork, and physical demand were all considered excessive and were common factors applicable to all of the respondents in both studies. Physiotherapists' work involves a great deal of emotional labour, which is a factor of burnout¹⁹). Emotional labour is defined as that in a job, in which a person is employed in face-to-face communication, and there are professionally appropriate and inappropriate emotions. An important job description for this constitutes emotional work that is conducive to appropriate emotional behaviour²⁰. Difficulties in controlling interpersonal relationships derived through daily encounters in diverse human relationships in professional practice—e.g. the physiotherapist's relationship with clients and his/her

family, superior/colleague/subordinates at work, doctors and other healthcare professionals, and, sometimes, students in clinical placement—are possible causes of excessive emotional stress.

According to a survey of physiotherapists on the nationwide vacancy rate of physiotherapists, 45.6% of them in Ishikawa Prefecture perceived that the rate of filled vacancies is 60–70%¹⁵⁾. Although five years have passed since the year 2000 when the above survey was conducted, and physiotherapists have since increased in number, the workload per physiotherapist is probably still high. Moreover, because of the *graying* Ishikawa population, the age of clients receiving physiotherapy has inevitably risen, and, consequently, the amount of physical assistance required must also be increasing. This may be a factor that is responsible for the response to statement 7.

The mean *importance* score for the 10 statements as a whole was 5.9 in the study of Speakman et al., which proved the importance for all the statements to be used in the measurement scale⁵⁾. The only item that scored below 5 was statement 7 $(4.6)^{5}$. However, the mean *importance* score for the current study was 4.9, so we may conclude that these 10 statements are not regarded as so important for job satisfaction for the clinicians in Ishikawa Prefecture compared to the respondents of Speakman et al. Especially, statements 1, 7, and 9 resulted in scores close to the intermediate range. These three statements in the former study also resulted in slightly lower scores⁵⁾. However, the mean scores for statements 2 and 8 for the current study exceeded 6.0 with statements 4 and 10 being very close to 6.0. Thus, the clinicians in Ishikawa Prefecture may place their job satisfaction on these aspects. Therefore, the degree of job satisfaction can be kept relatively high if the job remains challenging in a positive sense and the clinician perceives that they are learning and improving in their work, despite excessive paperwork and the work being too physically demanding. Further, because statements 2, 8, and 10 yielded high agreement scores, it can be stated that the clinicians in Ishikawa Prefecture can find positive and rewarding aspects in their daily working lives¹⁸; the capability of finding the positive aspects in their professional lives despite, at times, feeling stressed and discontented implies that they have accomplished a means of obtaining job satisfaction.

In conclusion, the degree of agreement with

Speakman's scale was moderate, though the respondents considered themselves to be engaged in rewarding work. Furthermore, comparatively low importance was shown to Speakman's scale by the results from the respondents for the measurement tools of job satisfaction in the current study, whereas it was highly rated by their American counterparts⁵). The results should be interpreted with consideration to the disparity in culture and mores, healthcare systems and the time period in which the studies were conducted.

Limitations

One limitation of this study was the relatively low response rate (52.3%), and also the respondents were from only one out of the 47 prefectures in Japan. In addition, because the data were collected anonymously, it is not known if this sample is representative of those who did not respond.

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