Original Article

Job satisfaction among University of Kanazawa physiotherapy graduates

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Abstract

Purpose: To describe the current level of job satisfaction of the University of Kanazawa physiotherapy graduates (U of K grads). **Relevance**: This study would contribute to our knowledge of the positive and negative aspects of their daily working conditions. **Data sources**: This study utilized a descriptive correlation design to examine factors that lead to job satisfaction and dissatisfaction among a sample of U of K grads. Eighty-nine (70.6% return rate) respondents completed a self-administered questionnaire in the form of a Physiotherapist Job Satisfaction (PJS) scale about various characteristics of their work. Descriptive statistics and correlations were used to analyse the data. The theoretical foundation for this study was Herzberg's Dual Factor Theory of Job Satisfaction. **Discussion and Conclusions**: The reliability of the PJS scale was assessed as homogeneity, and its validity as construct validity. All of the items were found to have significant item-to-total correlations. The Cronbach's alpha coefficient for the scale was 0.94. Considerable evidence was found for construct validity in the four-factor solution, which explained 51.6% of the total variance. Factors derived from Spearman's rank correlation and factor analysis were 'professional growth,' 'situation/position,' 'administration,' and 'benefits,' with the rate of contribution being 32.9% (0.91), 7.5% (0.88), 6.5% (0.88), and 4.7% (0.76), respectively. Convergent validity, as a form of construct validity, was also supported for the scale. Overall job satisfaction of these U of K grads was minimally satisfied to minimally dissatisfied. They were found to be most satisfied with the social aspects of their jobs and least satisfied with the extrinsic factors. These satisfiers were social contact at work, recognition of their work from peers, social contact with colleagues after work, sense of being of value and their immediate supervisor. Least satisfaction came from their inability to deliver quality treatment, poor monetary bonuses, input into organisational policy, evaluation process of the client, and policy and opportunities to expand scope of practice and time to seek advanced education. From the results of this current study group, this PJS scale can, therefore, be considered a reliable and valid measure of documenting trends of importance in regards to job satisfaction of these U of K grads. **Implication**: The findings provide us with possible clues as to the solving of work-related problems, such as ones that concern the recruitment and retention patterns of physiotherapists *vis-à-vis* job dissatisfaction in the workplace.

Key words

physiotherapist, work experience, Herzberg's Dual Theory of Job Satisfaction, Physiotherapist Job Satisfaction Scale, scale testing

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Introduction

In the year 2006 the members of the Japanese Physical Therapy Association (JPTA) reached approximately 40,000. With the number of physiotherapy schools still on the rise nationwide, there is a high possibility of an increase in the number of these members in the future. However, there is a negative side to this possible influx. Because of the decrease in the number of 18-year olds, all future high school graduates will have a higher possibility of entering any college or university, which consequently may lead to the acceptance of physiotherapy students with a lower academic ability. This will, in turn, place extra demands on the physiotherapy clinicians, who already work in an increasingly taxing healthcare environment[1], for they will be required to provide post-registration training of junior staff and act as mentors for students' clinical affiliation. Further, the scope of physiotherapy practice is slowly expanding to outside of medical institutions, so that physiotherapists are increasingly expected to practise according to the societal needs[2]. This necessitates practitioners to become more aware of pressure for improvement in their quality of treatment from both inside and outside of the physiotherapy profession.

In order to deliver high-quality physiotherapy service it is necessary for the physiotherapist to have a firm commitment to their work, awareness of themselves as a professional, and motivation and ambition to apply present and past learning and work experience to their future work. In addition, experience obtained through one's work is an integral part of an individual's identity. A person's chosen profession is the principal means by which fulfillment of one's education, training, and abilities can be accomplished and, therefore, provides the worker with a sense of competence and accomplishment[3]. One of the premises for quality treatment is job satisfaction and this, in turn, influences employee retention in the work field, decreases absenteeism, improves work productivity, and enhances performance[4]. Therefore, an understanding of these factors that lead to job satisfaction is important to assist both employers and employees to improve the workplace[5]. Similarly, improvement in the work environment surrounding physiotherapists should be conducive to producing the highest quality of physiotherapy treatment through job satisfaction. Because there is currently a dearth of measuring scales to evaluate the degree of job satisfaction in the work field of physiotherapy, this study was considered valid.

A baccalaureate programme for physiotherapists' training in Japan was first instituted by the University of Hiroshima in 1992, followed by the University of Kobe in 1993 and the University of Kanazawa (U of K) in 1995. By 2006, the diploma programme had been replaced with that of a baccalaureate degree by all of the universities under the Ministry of Education, Science and Culture. The U of K Department of Physical Therapy, as of spring 2006, has seen the successful graduation of 167 graduates (grads) over a 7-year period. However, following their graduation there has been no empirical data on the job satisfaction of these U of K grads in their respective work environment. Therefore, the purpose of this study was three-fold: 1) to provide evidence for whether or not these U of K grads were satisfied with the level of professional practice of physiotherapy in their respective work environments; 2) to find out which factors caused satisfaction or dissatisfaction; and 3) to determine whether the scale for job satisfaction used in this study would be a reliable and valid measure for use in future studies. The results from a study such as this would, therefore, help contribute to our knowledge of both the positive and negative aspects in the daily working conditions of our U of K grads. They would also provide us with possible evidence for the resolving of work-related problems, such as ones that concern the recruitment and retention patterns of physiotherapists *vis-á-vis* job dissatisfaction in the workplace.

The conceptual underpinning for this study is Herzberg's Dual Factor Theory of Job Satisfaction[6]. Herzberg's theory is often applied to nursing research studies of job satisfaction, although it originated in a study for 200 accountants and

engineers[4]. Herzberg's theory states that job satisfaction and dissatisfaction represent two separate domains and can coexist. Thus, the opposite of job satisfaction is no job satisfaction and the opposite of job dissatisfaction is no job dissatisfaction. Herzberg used two independent categories of needs, animal needs (*hygienes*) and human needs (*motivators*). *Hygienes* (extrinsic factors) are dissatisfiers and are related to the environment in which workers do their jobs *vis-á-vis* company policy and administration, supervision, salary, interpersonal relations, security, and working conditions[7]. *Motivators* (intrinsic factors) are related to basic human needs and are satisfiers. These motivators are achievement, recognition, responsibility, advancement in the work field, and work itself. These two continua support the possibility that individuals may be content with some aspects of their jobs but not with others. In addition, satisfiers and dissatisfiers are dynamic, constantly interacting, highly subject to change, and relative to the employee[7]. Satisfiers, in general, dominate global job satisfaction, but if they are outweighed by the dissatisfiers, then general dissatisfaction occurs[4]. Global satisfaction plays an important role in determining whether or not workers find their jobs enjoyable and interesting, and it is also a strong predictor of whether or not workers are likely to remain in their current jobs.

Methodology
Instrumentation

A self-administered questionnaire survey was selected as the appropriate tool for data collection. In Part One of the two-part questionnaire the authors used a Physiotherapist Job Satisfaction (PJS) scale that was modified from the Misener Nurse Practitioner Job Satisfaction Scale (MNPJSS) originally developed by Terry R Misener in the United States of America (USA) in 2001[7], and this original MNPJSS identified 44 aspects of the professional practice of nurse practitioners. However, in our modified scale Item 34 (*Reward distribution*) was deleted because such practice as was depicted in that item does not exist in

Japanese healthcare institutions. Also deleted was Item 44 (*Acceptance and attitudes of physicians outside of your practice* [*such as the specialist you refer patients to*]) that also was outside the scope of the Japanese physiotherapists. Thus, our PJS scale contained 42 items.

Furthermore, five items of the PJS Scale were appropriately modified to coincide with contemporary physiotherapy practice in Japan: Item 7 to *Percentage of time spent in direct patient treatment*; Item 8 to *Time allocation for treating patient(s)*; Item 10 to *Quality of physiotherapy assistant*; Item 23 to *Interaction with other physiotherapists including faculty*; and Item 28 to *Ability to deliver quality treatment*.

Part Two of the survey sought the background and demographic information on the respondents in which they were asked about their gender, years of professional practice, taxable annual income, highest academic qualification obtained since their graduation and treatment preference (i.e. whether the respondents prefer to treat acute, subacute or chronic conditions).

Scoring

In answer to the questionnaire, the respondents were first instructed to rate each of the items on a six-point Likert-type scale and on a continuum from *strongly satisfied* to *strongly dissatisfied*. For each of the answers to the questions, a score of 6 indicated the highest degree of satisfaction and a score of 1 the highest dissatisfaction. A completely satisfied clinician would, therefore, score a total of 252, and a completely dissatisfied clinician 42.

Participants and procedures

The original English version of MNPJSS was translated into Japanese by the authors. Then, following modification of this PJS scale as described in *Instrumentation*, the physiotherapists at Kaga Onsen Hospital, Department of Physical Therapy critically examined the questionnaire for its wording and phrasing.

One hundred and twenty-six respondents were selected. Excluded from this study were those who were involved in teaching and research, were inactive at the time of the survey, or were part-time workers. 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 return 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 30 min. to complete.

The study was carried out in November 2006, and the required time period of return was within three weeks of receiving the mailed questionnaire. No reminder, by telephone or otherwise, was necessary.

Statistics

Reliability and validity of the PJS scale
Reliability was assessed as correlations between scores for each item and the whole scale using Spearman's rank correlation coefficient. This was followed by the calculation of the Cronbach's alpha (α) reliability estimates to further verify the internal consistency of the scale.

As for construct validity, the responses to all of the 42 items were submitted to a factor analysis; in this study it involved a principal component analysis with promax rotation. The number of factors was determined by using the factor scree plot. The factors obtained from the first-order factor analysis were used as variables for a second-order factor analysis. This was followed by the calculation of Cronbach's α in order to verify the internal consistency of each of the individually determined factors.

An attempt was also made to address convergent validity by using multiple regression analysis on the respondents' background as the independent variable and the PJS scale as the dependent variable. This was in order to know whether or not the total score could be predicted by any of the following variables: gender, treatment preference, years of professional practice, annual income and an advanced academic degree.

Job satisfaction Total score was determined by adding the 42 individual scores, followed by the calculation of the mean, standard deviation (SD) and range. The five items receiving the highest satisfaction ratings and those five items receiving

the lowest satisfaction ratings were extracted from the total items to determine whether or not they belonged to either the intrinsic or extrinsic factors *vis-á-vis* their job according to the Herzberg's theory.

In order to examine whether an individual respondent's background would have any influence on the job satisfaction of the U of K grads, stepwise multiple regression analysis was used. An alpha level of 0.05 was selected for statistical significance in this study, using the Statistics Package for Social Sciences version 11.5 (SPSS Japan Inc.) and the computer software *Microsoft Excel 2000* for the data analysis.

Results

Eighty-nine questionnaires were collected, resulting in a rate of return of 70.6%. We did, however, have to eliminate seven of the returned questionnaires because of non-response to the following information: 1 on treatment preference (7.9%), 4 on annual income (4.5%) and 2 on academic degree (2.2%). Table 1 presents sample characteristics.

Table 1. Demographic data for the U of K graduates participating in the study (*N*=89)

		No. of Respondents	%
Gender:	Men	43	48.3
	Women	46	51.7
Treatment Preference:	Acute	33	40.2
	Subacute	17	20.7
	Chronic	32	39.0
Professional practice: (years)	<0	10	11.2
	1	15	16.8
	2	11	12.3
	3	8	8.9
	4	13	14.6
	5	14	15.7
	6	11	12.3
	7	7	7.8
Annual income: (¥ in 10,000)	<350	42	49.4
	350~400	24	28.2
	400~450	10	11.7
	450~500	5	5.8
	>500	4	4.7
Academic qualification:	Baccalaureate	78	90.0
	Master's	7	8.0
	Doctorate	2	2.3

Table 2. Spearman's rank correlation coefficients for the individual items (*N*=89)

Item number	Main item content	Rs
1. Vacation/Leave policy		0.506**
2. Benefit package		0.429**
3. Retirement plan		0.451**
4. Time allotted for answering messages		0.481**
5. Time allotted for review of lab and other test results		0.464**
6. Your immediate supervisor		0.515**
7. Percentage of time spent in direct patient treatment		0.643**
8. Time allocation for treating patient(s)		0.617**
9. Amount of administrative support		0.649**
11. Patient scheduling policies and practices		0.577**
12. Patient mix		0.493**
13. Sense of accomplishment		0.475**
14. Social contact at work		0.536**
15. Status in the community		0.611**
16. Social contact with your colleagues after work		0.475**
17. Professional interaction with other disciplines		0.493**
18. Support for continuing education (time and ¥)		0.503**
19. Opportunity for professional growth		0.556**
2l. Amount of involvement in research		0.693**
22. Opportunity to expand your scope of practice		0.616**
23. Interaction with other physiotherapists including faculty		0.448**
24. Consideration given to your opinion and suggestions for change in the work setting or office practice		0.605**
25. Input into organisational policy		0.572**
26. Freedom to question decisions and practices		0.553**
27. Expanding skill level/procedures within your scope of practice		0.720**
28. Ability to deliver quality treatment		0.259*
29. Opportunities to expand your scope of practice and time to seek advanced education		0.681**
30. Recognition for your work from superiors		0.565**
31. Recognition of your work from peers		0.380**
32. Level of autonomy		0.633**
33. Evaluation process and policy		0.663**
34. Sense of value for what you do		0.564**
35. Challenge in work		0.420**
36. Opportunity to develop and implement ideas		0.572**
37. Process used in conflict resolution		0.564**
38. Amount of consideration given to your personal needs		0.581**
39. Flexibility in practice protocols		0.629**
40. Monetary bonuses that are available in addition to your salary		0.533**
41. Opportunity to receive compensation for services performed outside of your normal duties		0.438**
42. Respect for your opinion		0.589**

*p<0.05; **p<0.01

Reliability and validity

Out of the 42 items, Items 10 (*Quality of physiotherapy assistant*) and 20 (*Time off to serve on professional committees*) had to be discarded from the calculation because 20 questionnaires had no answer to the former and 13 questionnaires no answer to the latter.

The homogeneity of the PJS scale is displayed in Table 2 showing correlations between each statement and the whole scale. The correlation coefficients for all of the 40 items were statistically significant. The items with a correlation coefficient smaller than 0.4 were 2, 3, 4、5, 23, 28, 31 and 41, and those that were larger than 0.5 were 1, 6, 7, 8, 9, 11, 12, 13, 14, 15, 16, 17, 18, 19, 21, 22, 24、25, 26, 27, 29, 30, 32, 33, 34, 35, 36, 37, 38, 39, 40 and 42. There

Table 3. Factor loadings after promax rotation for the PJS scale (N=89)

Item	Factor 1 (*Professional Growth*)	Factor 2 (*Situation/Position*)	Factor 3 (*Administration*)	Factor 4 (*Benefits*)
13	0.702			
36	0.694			
21	0.665			
19	0.649			
29	0.605			
22	0.598			
14	0.593			
23	0.588			
27	0.550			
16	0.546			
7	0.536			
8	0.528			
11	0.476			
34	0.452			
35	0.442			
18	0.425			
31		0.838		
30		0.838		
42		0.649		
32		0.648		
5		-0.593		
15		0.528		
38		0.519		
39		0.374		
40		0.334		
6		0.330		
33			0.757	
9			0.726	
25			0.659	
4			0.568	
12			0.432	
24			0.424	
37			0.420	
26			0.418	
17			0.363	
2				0.767
1				0.618
3				0.590
41				0.377
Contribution	32.9%	7.5%	6.5%	4.7%
Cronbach's α	0.91	0.88	0.88	0.72

were no non-correlated items. Cronbach's α for the whole scale was estimated at 0.94.

Construct validity was, to a considerable degree, supported by the factor analysis, where four factors could be interpreted in a meaningful way. Factor 1 was labelled *Professional Growth*, Factor 2 *Situation/Position*, Factor 3 *Administration* and Factor 4 *Benefits*. These factors explained 51.6% of the total variance, and the Cronbach's α for each of the four factors was 0.91, 0.88, 0.88 and 0.76, respectively, showing sufficient internal consistency (Table 3).

As for convergent validity, the two variables *years of professional practice* and *academic*

Table 4. Items receiving the highest satisfaction scores

Aspect of job	Mean	SD
14. Social contact at work	4.27	1.14
31. Recognition of work from peers	4.25	0.82
16. Social contact with colleagues after work	4.23	1.11
34. Sense of value for what you do	4.22	1.00
6. Immediate supervisor	4.20	1.46

Table 5. Items receiving the lowest satisfaction scores

Aspect of job	Mean	SD
28. Ability to deliver	2.75	0.84
41. Compensation	2.91	1.44
25. Input into organizational policy	3.10	1.17
33. Evaluation process and policy	3.22	1.32
29. Scope of practice and advanced education	3.26	1.11

qualification were supported by stepwise multiple regression analysis. As a result, following the calculation by analysis of variance (ANOVA), the coefficient of determination (R^2) for these variables was 0.177 with a *p*-value of 0.0008.

Degree of satisfaction

The study sample scores ranged from 99 to 208, with a mean of 148.3 (*SD*=25.6) for the total scores and a mean of 3.7 for each item, which corresponded to *minimally dissatisfied* to *minimally satisfied*. The five items that received the highest satisfaction scores are shown in Table 4. Of these, only Item 34 was an intrinsic factor according to Herzberg's theory. Table 5 shows the five items that received the lowest satisfaction scores, of which Item 28 was the only intrinsic factor. The non-standardised coefficient (B) for the variable *years of professional practice* was −3.21 (standardised coefficient or β = −0.42) with a *p*-value of 0.0003. Similarly, B for the variable academic qualification was 7.05 (β = 0.27) with a *p*-value of 0.016.

Discussion

The reasons for non-response to Items 10 and 20 may be as follows: The definition of *physiotherapy assistant* was not made clear as to whether the assistant was qualified or not. Therefore, the term *assistive personnel* would have been more appropriate. Another reason may have been that the majority of the hospitals did not employ assistive personnel. In the case of Item 20 it may have been misunderstood as *executive of a branch of the physical therapy association* in the respondents' respective Prefecture instead of interpreting it as being a volunteer in that branch.

Reliability and validity

Regarding the item-to-total correlation, the following three items showed a high correlation:

Items 27 (*Expanding skill level/procedures within your scope of practice*), 21 (*Amount of involvement in research*) and 29 (*Opportunities to expand your scope of practice and time to seek advanced education*). These three items are categorised into Factor 1 (*Professional Growth*), meaning that the higher one's job satisfaction becomes, the more fulfilling one's professional growth as a physiotherapist will be.

Item 28 (*Ability to deliver quality treatment*) showed the lowest correlation. Knowledge and skills that physiotherapists possess are of prime importance in enhancing their job satisfaction[8], but rating one's ability to provide quality treatment is analogous to assessing *per se* one's own effort and on which colleagues or work environment have no effect. This may be the reason why Item 28 had a low correlation compared to the other items. All in all, the internal consistency of the PJS scale remained high with also a very high α coefficient and with no items showing non-correlation, which suggested that this scale could be judged to contain a group of items that can measure its attributes without excluding those with weak correlation. Thus, the authors determined that the reliability of this scale was satisfactory for the current study group.

Results of four factors derived from the factor analysis in this study reflected certain aspects of job satisfaction of the U of K grads (Table 3). Because the Cronbach's α for the aforementioned factors went beyond 0.7, it demonstrated a sufficient internal consistency. Thus, the items for these factors were considered of value, for they were representative of each of the factors. Overall, these four factors explained 51.6% of the total variance. In other words, slightly over half of the variance in the responses to these items could be

explained by these four factors.

Because R^2 was found to be 0.177, approximately 20 per cent of the total score could be predicted by the years of professional practice and academic qualification. Further, with the alpha level being 0.0008, the regression formula was found to be suitable for prediction of the total score. Thus, to a certain extent, convergent validity was also supported for the PJS scale.

Effect of intrinsic and extrinsic factors on overall job satisfaction

In this study four of the five items with highest satisfaction scores and four of the five items with the lowest satisfaction scores consisted of the extrinsic factors (Tables 4 and 5). In the Kacel et al.'s study carried out for nurse practitioners in the USA all of the five items with the highest scores were the extrinsic factors[9]. Koelbel et al. demonstrated that the intrinsic factors were the component of job satisfaction of the nurse practitioners, and, the extrinsic factors were found to be the major component of job dissatisfaction[4]. The intrinsic factors that scored high in this study were items concerning human relationships such as the extent of association and the evaluation of oneself by others. On the contrary, the extrinsic factors with low scores consisted of items concerning the workplace environment such as reward, performance appraisal and expression of opinions. In other words, although they were satisfied with the work-related human relationship, the U of K grads were found to be discontented with their workplace environment in the same way as had been found in respondents in other studies. Furthermore, the interesting finding in this study was the fact that *ability to deliver quality treatment* was the item with the lowest score and was one of the intrinsic factors. According to a study carried out on physiotherapists in the Republic of Turkey[10], the factors with the lowest job satisfaction were found to be salary and promotion, and, similarly, the factor with lowest job satisfaction of the Nigerian physiotherapists was also found to be salary[11]. However, the reason for salary not being a factor with the lowest score in this study may be due to the characteristic of

the U of K grads' years of professional practice being, at the most, of only 7 years' duration. In general, skilled clinicians such as those with more than 10 years of professional experience feel confident in their physiotherapy assessment procedures, but novice clinicians do not[12]. With this view in mind, the U of K grads may have felt a certain inadequacy to deliver quality treatment and, therefore, did not feel a great deal of discontentment with their salary.

Effect of the personal background on job satisfaction

This study demonstrated how the background factors of *years of professional practice* and *academic qualification* influenced the job satisfaction of the U of K grads. The implication of this fact shows that the longer the former is, the lower their job satisfaction will be, and the more advanced the latter is, the higher their job satisfaction will be. However, Speakman et al. demonstrated that there was no difference in job satisfaction according to gender, years of clinical experience and professional status within their workplace[13]. In regards to gender, Schunk found that the women physiotherapists showed higher job satisfaction than men physiotherapists[8]. According to the Japanese Physical Therapy Association's White Paper on Physical Therapy[14], 63.3 per cent of the women respondents stated that there was no difference in salary or promotion of genders in their workplace, and, in addition, 41.4 per cent of the women respondents stated that their work environment was favourable even if they were married and had a child. Thus, gender may be considered as not having any influence on the work environment of the women in this study. However, the respondents in the White Paper were senior to those in this study and more likely to be married, suggesting a possibility of gender difference if the proportion of married women had been higher among the U of K grads.

Schunk demonstrated that job satisfaction of physiotherapists with less than five years' experience was low, the fact of which was not in agreement with the finding from this study[8]. Physiotherapists in Ishikawa Prefecture with more

than 10 years of professional practice are obviously confident in their work, but at the same time, feel despondent because of a perceived decrease in the necessity to learn[15]. In this study item-to-total correlations for Factor 1 (*Professional Growth*) were found to be high. As a result, the U of K grads with relatively shorter years of professional practice scored high on these items, consequently yielding high total scores.

There has, as yet, been no study concerning job satisfaction in regards to the influence of academic qualification. The White Paper cited previously states that the number of physiotherapists with graduate degrees increased from 20.5 per cent in 2000 to 30.5 per cent in 2005. Thus, the number of physiotherapists with advanced academic degrees will be expected to increase in the future.

Limitations

One limitation of this study was that graduates from only one university were studied. In addition, because the data were collected anonymously, it is not known if this sample would differ from the ones who did not respond.

References

1) Watanabe K : Clinical education and on-the-job training for staff physiotherapists : a clinician's view. J Niigata Phys Ther Assoc 7 : 3-7, 2003

2) Japanese Physical Therapy Association : White Paper on Physical Therapy, p 41, p 93, 2000 (in Japanese)

3) Myers DG : Psychology : Myers in Modules. Worth Publishers, New York, 2001

4) Koelbel PW, Fuller SG, Misener TR : An explanatory model of nurse practitioner job satisfaction. J Am Acad Nurs Practition : 17-24, 1991

5) Tri DL : The relationship between primary health care practitioners' job satisfaction and characteristics of their practice settings. Nurs Practition, 16(5) : 46-52, 1991

6) Herzberg F, Mausner B, Snyderman BB : The Motivation to Work, 2nd ed. John Wiley & Sons, New York, pp 113-119, 1959

7) Misener TR, Cox DL : Development of the Misener Nurse Practitioner Job Satisfaction Scale. J Nurs Meas 9 : 91-108, 2001

8) Schunk C : Job satisfaction among employed physical therapists. Phys Ther 61 : 721, 1981

9) Kacel BRN, Miller MRN, Norris DRN : Measurement of nurse practitioner job satisfaction in a Midwestern State. J Am Acad Nurs Practition 17 : 27-32, 2005

10) Eker L, Tüzün EH, Daskapan A, et al : Predictors of job satisfaction among physiotherapists in Turkey. J Occup Health 46 : 500-505, 2004

11) Oyeyemi AY : Job satisfaction traits of Nigerian physical therapists. Physiother Theo Prac 17 : 257-268, 2001

12) Takeda T, Hidaka M, Takemasa S, et al : Self-evaluation of the physiotherapy assessment process. J Jpn Phys Ther Assoc 28 (Suppl 2) : 224, 2001 (in Japanese)

13) Speakman HGB, Pleasant IM, Sutton GB : The job satisfaction of physical therapists. Physiother Res Int 1 : 247-254, 1996

14) Committee for White Paper on Physical Therapy, Japanese Physical Therapy Association : Report on the Current Status of Physical Therapists in Japan, J Jpn Phys Ther Assoc 33 : 338-352, 2006 (in Japanese)

15) Ogiwara S, Araki H : Job satisfaction among physiotherapists in Ishikawa Prefecture, Japan. J Phys Ther Sci 18 : 127-132, 2006

金沢大学理学療法学専攻卒業生の職務満足度

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要　　旨

　金沢大学理学療法学専攻の卒業生の中から126名を抽出し、理学療法士職務満足度(PJS)尺度の信頼性と妥当性を検証するとともに、卒業生の職務満足度を郵送調査した。本研究ではハーツバーグの「職務満足に関する二要因理論」を概念的基盤とした。回答に対する得点の範囲は「大いに満足している」から「非常に不満である」までの6段階であった。調査票は89票（70.6％）回収され、回答者は男性43名、女性46名であった。本尺度の内的整合性に関しては40項目のすべてにおいて項目・全尺度相関が有意に認められ、クロンバックアルファ（α）信頼性係数は0.94であった。因子分析において構成妥当性の根拠がかなりの程度見出され、総分散の51.5％が明らかにされた。スピアマン順位相関と因子分析によって抽出された因子の構造は「成長」、「立場」、「管理運営」、「待遇」であり、寄与率はそれぞれ32.9％、7.5％、6.5％、4.7％であり、αもそれぞれ0.91、0.85、0.88、0.72であった。また臨床経験年数と学歴によって総得点の約2割を説明でき、重回帰式は総得点の予測に役立つことが判ったので、収束妥当性も本尺度を支持した。故にPJS尺度は、卒業生の職務満足度の実証においてかなりの信頼性と妥当性を有する。卒業生の職務満足度は「ごくわずかに不満」から「ごくわずかに満足」の範囲であった。最も満足している要因は社会的接触であり、最も不満な要因は外部要因であった。また卒業生は報酬よりも自分の治療能力に不満であった。