

A Profile of Job Satisfaction among Physical Education Teachers in Hong Kong and Their Intention to Change Jobs.

香港體育教師工作滿足感的概況及離職的意向

Robert Ng Siu Kuen

Physical Education Section

Hong Kong Polytechnic University, HONG KONG

吳兆權

香港理工大學體育部



Abstract

The purpose of this study was to investigate the job satisfaction of Physical Education (P.E.) teachers in Hong Kong and their intention to stay or leave P.E. profession and teaching career. By means of proportional stratified random sampling, 400 questionnaires of Chinese version of Job Descriptive Index (JDI) and Job in General (JIG) were distributed to the full time Hong Kong P.E. teachers. Useable data from 181 respondents (62.4% from primary school teachers; 45.9% were male) representing 45.3% response rate. The .05 level was employed to evaluate the significance of the statistical relationships.

68.5% and 79.6% of P.E. teachers were dissatisfied or very dissatisfied in the facets of 'present pay' and 'promotion', respectively. 26.0% (n=47; male=18, female=29) of the respondents reported not willing to teach P.E. within 5 years. 'Physical and mental exhaustion' (29.5%) and 'dislike of teaching P.E.' (27.3%) were the most commonly stated reasons. 17.7% (n=32; male=15, female=17) of the respondents intended to leave teaching profession within 5 years. Their stated reasons were 'physical and mental exhaustion' (24.0%), 'changing job' (24.0%) and 'migration' (20.0%). Low multiple R squares were found between JDI, JIG and the demographic data. Implications of the study and recommendations for further research were suggested.

摘要

本文目的是探討香港體育教師工作滿足感的概況及其在五年內離職的意向。這項研究採用分層隨機抽樣寄出四百份調查問卷。在一九九六年四月至六月期間收回可應用的問卷共 181 份，回應率為 45.3%。研究結果顯示接近七成及八成體育教師分別不滿意或非常不滿意他們現在的薪酬及晉升機會。在未來五年內，打算不任教體育科的教師佔 26.0% (男=18 人；女=29 人；合共 47 人)，其原因為身心筋疲力竭的佔 29.5%，對任教體育科失去興趣的佔 27.3%。此外，有 17.7% (男=15 人；女=17 人；合共 32 人) 的體育教師打算在未來五年內離職，他們所持的原因分別為身心筋疲力竭和轉職的各佔 24%，移民外國的佔 20%。研究結果促請有關部門及主管儘早訂立長遠計劃改善體育教師的待遇，以維持和提高現有教師對工作的積極性，進而提升教師的工作滿足感。

Introduction

Research had demonstrated that job satisfaction did affect commitment, stress, burn out, and performance efficiency among teachers (Abelson, 1986; Fejgin, Ephraty & Ben-Sira, 1995; Koslowsky, 1991; Reyes & Imber, 1992). In Hong Kong, the teaching profession had long been plagued with problems of low morale and high resignation rates (Subsidized Secondary School Council, 1990; Education Commission, 1992; 1995; Education Department, 1996). Wong (1990) found that 40 percent of Hong Kong secondary school teachers in his sample

intended to leave the teaching profession. Education Department (1996) reported that the drop-out rates of Hong Kong teachers were 10.8% and 10.4% during the academic year of 1993/4 and 1994/5 respectively.

Teaching in Hong Kong included at least six categories of duties such as teaching, extracurricular activities, discipline, guidance, administration and miscellaneous affairs (Tai & Cheng, 1994). Additionally, Physical Education (P.E.) teachers were not only have to teach P.E. and other academic subjects, but also coach school teams after school. It was a very time

and energy demanding profession. The special standing and status of P.E. in school (Giroux, 1983; Hargreaves, 1977; Kirk, 1988;), the varying role expectations and duties as perceived by other teachers (Musgrove & Taylor, 1969), by students and parents (Fejgin et al. 1995), and by P.E. teacher themselves (Sparkes, Templin & Schempp, 1990) - might result in a social isolation of the P.E. teacher in school. Their varying roles might also lead to a source of stress (Locke & Massengale, 1978; Earls, 1981), role conflict (Hart, Hasbrook & Mathes, 1986) and time conflict (Hart et al., 1986; Pastore, 1991) for them. Besides, another source of stress might involve the availability of facilities and equipment; weather condition; supervision by the principal, teachers and passersby; discipline problem as well as student safety (Fejgin et al., 1995).

Job satisfaction could be measured globally to establish a general level of satisfaction or dimensionally to determine the various facets or components of job satisfaction. Some dimensions of job satisfaction were financial rewards, working conditions, supervisory practices, company policies, co-workers, opportunities for advancement, security, and the content of the job (Glick, 1992; Hill, 1994). Job Descriptive Index (JDI) was developed by Smith, Kendall, and Hulin (1969) and was one of the most popular instrument to assess job satisfaction (O'Connor, Peters & Gordon, 1978; Yeager, 1981; Roznowski, 1989; Smith, 1992). The development of JDI were based on the two-factor theory of Herzberg, Mausner and Snyderman (1959). They argued that the sources of satisfaction and dissatisfaction were separate and distinct. Satisfaction aroused from need-fulfilling, intrinsic aspects of the job while dissatisfaction came from the conditions at work and other external factors. Five facets of job-related satisfaction were measured in the JDI: 'Work on Present Job', 'Supervision', 'Pay', 'Promotion', and 'Co-workers' (Smith et al., 1969).

In Western countries, the JDI had been used to assess job satisfaction in teachers (Lombardo & Lombardo, 1987; Titanji, 1995), physical educators (Daniel, 1983) and coaches (Pastore, 1993; Snyder, 1990). In Hong Kong, research related to job satisfaction among teachers was rare. Wong and Pennington (1993) employed a Chinese version of JDI to investigate 'how satisfied Resource Class English teachers in Hong Kong were with their jobs'. They found that the teachers were satisfied with their Job in General (JIG) and with the JDI facet 'Co-workers'. They were neither satisfied nor dissatisfied with the facets 'Work on Present Job', 'Pay', and 'Supervision'; but were dissatisfied with the facet 'Promotion'. More recently, Tai and Cheng (1994) found that Hong Kong secondary school teachers' job characteristic were strongly related to affective outcomes in teachers such as job satisfaction, internal motivation, intention to change schools, and intention to change jobs.

To date, no published studies addressed the job satisfaction of P.E. teachers in Hong Kong. There was a need to (1) employ the Chinese version of JDI (Wong & Pennington, 1993) to measure the job satisfaction of Hong Kong P.E. teachers, (2) identify the major dimensions which describe their intention for not teaching P.E. and leaving the teaching career within 5 years and (3) assess the statistical relationships and associations between the dependent variables of job satisfaction (five facets of JDI & JIG) and the independent variables of demographic data. The understanding of teachers' expectations about the job and the work environment could provide physical educators and administrators with valuable information which they could utilize in planning and decision making concerning the promotion of job satisfaction.

Method

By means of proportional stratified random sampling, 400 questionnaires were distributed to the full time Hong Kong P.E. teachers in 178 primary and 111 secondary schools out of total 1,028 primary (576) and secondary (452) schools from 19 districts. Teachers in private international schools and special schools were excluded in the sample population. Each selected primary school and secondary school received one and two questionnaire(s) respectively. The researcher asked the principals from the selected schools to distribute the questionnaires to their P.E. teachers with the covering letter explaining the purpose of the study. The confidentiality of teachers was maintained by having participants mail in their responses in the self-addressed and stamped envelopes provided.

Instrument

The questionnaire consisted of three pages containing four sections. (i) Demographic information and job-related information included age of teacher; gender of teacher; marital status of teacher; number of children; level of teacher education; teaching experience of teacher; length of service in present school; self-perceived health; salary; type of tenure; type of school and workload. (ii) There were two open-ended questions asking respondents to list any other factors contributing to their job satisfaction and dissatisfaction. (iii) The level of job satisfaction was assessed. (iv) The respondents were asked to state and give reason(s) whether or not they would teach P.E. subject and leave the teaching career in the coming five years.

Job Satisfaction was assessed by means of Chinese version of Job Descriptive Index (JDI) (Wong & Pennington, 1993) which measured five separate facets of job satisfaction: 'Work on Present Job', 'Pay', 'Promotion', 'Supervision', and 'Co-workers'. The overall job satisfaction was measured by the

Job in General (JIG) (Ironson, Smith, Brannick, Gibson & Paul, 1989). The 72 items on the five components of JDI subscale and the 18 items of JIG were descriptive phrases. The phrases were both favourable (e.g. stimulating) and unfavorable (e.g. boring). Respondents indicated agreement or disagreement with each phrase or adjective by marking “√” for yes, “x” for no, or “?” for undecided. The scales ‘Work on Present Job’, ‘Supervision’, and ‘Co-workers’ each contained 18 items; and the scales ‘Pay’ and ‘Promotion’ contain 9 items each. The scoring system was as follows: 3 points were given for a “√” response to a positive adjective, a “x” response to a positive adjective received a score of 0. A “√” response to a negative adjective received 0 point and a “x” response to a negative adjective received a score of 3. Each “?” received 1 point (Balzer et al., 1997, p.21). The scores for each scale were totaled to produce scale (facet) scores. The scores on the ‘Pay’ and ‘Promotion’ subscales (only nine items each) were doubled for analysis so that the possible range of scores for each JDI scale was 0 - 54 points. Subscale scores were independently analyzed and were not totaled for a global score. The five components of the JDI and the JIG scale were scored separately. The scoring system of JIG was similar to the JDI; however, it required the respondent to think about their overall job satisfaction when answering the instrument rather than specific aspects of their job such as pay and promotion. The possible range of scores for the JIG was 0 -54 points.

The method recommended by Balzer et al. (1997) was commonly used to interpret the scores on the JDI and JIG. Mean scores of ≥ 32 indicated satisfaction, and mean scores of ≤ 22 indicate dissatisfaction. Mean scores falling in the middle range (23 - 31) were interpreted as neutral attitudes (i.e., neither satisfied nor dissatisfied).

Validity & Reliability

The high levels of discriminant and convergent validity for the original JDI (Balzer et al., 1997; Dunham, Smith & Blackburn, 1977; Evans, 1969; Gillet & Schwab, 1975; Johnson, Smith & Tucker, 1982; Jung, Dalessio & Johnson, 1986; Smith et al., 1969) and the bilingual version of the JDI (Wu & Watkins, 1994) had been demonstrated. The average internal consistency (alpha) was reported as 0.88 (Balzer et al., 1997), 0.84 (Johnson, Smith & Tucker, 1982) for original JDI and 0.81 (Wu & Watkins, 1994) for the bilingual (Cantonese - English) version of JDI. The validity for the JIG was demonstrated through the correlation with other global measures of satisfaction and the correlation with the JIG ranged from 0.66 to 0.80 (Balzer et al., 1997). The average internal consistency reliability of the present Chinese version questionnaire (Wong & Pennington, 1993) for five facets of JDI was 0.72, ranged from 0.62 to 0.84 and the JIG was reported as 0.69.

Statistical Analysis

Firstly, the relationships among all dependent variables (scores of JDI and JIG) was assessed by means of Pearson Product Moment Correlations. Secondly, t-tests were conducted to determine any significant difference in satisfaction level between (1) single and married teachers; (2) gender differences at primary and secondary schools; (3) teachers who intended to stay and leave P.E. profession within 5 years; (4) teachers who intended to stay and leave teaching profession within 5 years. Thirdly, a series of one way analysis of variance (ANOVA) were also performed to test any significant difference in satisfaction level among (1) teachers with five age-groups; (2) teachers with different teaching experiences; (3) teachers in three districts; (4) teachers in three different positions. Significant interactions were analyzed by the post hoc Turkey tests. Lastly, a series of multiple regression analysis were then computed on all respondents to determine the relationship between the criterion variables (five facets of JDI and JIG) and the predictor variables (demographic data). All data were analyzed using the Statistical Package for the Social Sciences (SPSS version 6.1). The 0.05 level was employed to evaluate the significance of the statistical relationships.

Results

Sample Description

There were 202 questionnaires received between 1 April, 1996 and 30 June, 1996, representing 50.5% response rate. However, 21 of them were returned uncompleted. Therefore, data was gathered from 181 returned questionnaires, for a return rate of 45.3%. Among the respondents, 16.6% (30/181), 27.1% (49/181) and 56.3% (102/181) were from Hong Kong Island, Kowloon and New Territories respectively. 45.9% (83/181) were from males, 61.3% (111/181) were married with majority one child (40.6%, 28/69) and two children (46.4%, 32/69). All respondents were Chinese. Most of the respondents (89.5%, 162/181) were working in subsidized schools, with 62.4% (113/181) teaching in primary schools. Among the five age groups, 43.6% (79/181) were between 26 and 35, the mean age of the respondents was 36.0 years of age, with the youngest aged 22, and the oldest aged 65. The majority (62.4%) of the respondents were certificate masters/mistresses, with only 8.3% (15/181) and 24.9% (45/181) were graduated masters/mistresses and assistance masters/mistresses respectively. The mean monthly salary of the respondents were HK\$23,252. Almost all of the respondents (99.4%, 180/181) were employed on full time basis with permanent contract. With regard to their health, only one of the respondents reported poor health, remain reported their health being excellent (8.8%), or good (69.1%),

or satisfactory (19.3%). All the respondents received their P. E. teacher training in the Hong Kong Institute of Education or the former College of Education. In terms of the highest academic qualifications achieved, 61.9% (112/181) held a teaching certificate, 35.9% (68/181) of the respondents had received tertiary education. The mean teaching experience of the respondents was 13.3 years with the majority (26.5%, 48/181) in the 0 - 5 years group. The years of service in their present schools were average 8.8 years, ranging from 0.5 year to 38 years.

Overall Satisfaction

The results in Table 1 showed that 35.4%, 68.5%, 79.6%, 40.9%, 35.9% and 36.1% of the respondents were dissatisfied or very dissatisfied in the facets of 'Work on Present Job', 'Present Pay', 'Promotion', 'Supervision', 'Co-workers' and Job in General respectively. 38.7%, 18.8%, 4.4%, 36.5%, 47.5% and 46.1% of the respondents were satisfied or very satisfied in the facets of 'Work on Present Job', 'Present Pay', 'Promotion', 'Supervision', 'Co-workers' and Job in General respectively.

Table 1. Percentage and Number of the Respondents to the Scores of 'Work on Present Job', 'Present Pay', 'Promotion', 'Supervision', 'Co-worker' and Job in General Scales.

Facets Scores	n	Mean	S.D.	Responses				
				Very Dissatisfied (0-12)	Dissatisfied (13-22)	neither Satisfied nor Dissatisfied (23-31)	Satisfied (32-41)	Very Satisfied (42-54)
Work on Present Pay	181	28.0	11.5	8.3% (n=15)	27.1% (n=49)	26.0% (n=47)	24.3% (n=44)	14.4% (n=26)
Present Pay	179	25.0	10.2	51.9% (n=94)	16.6% (n=30)	11.6% (n=21)	6.6% (n=12)	12.2% (n=22)
Promotion	180	16.0	8.7	34.8% (n=63)	44.8% (n=81)	15.5% (n=28)	3.3% (n=6)	1.1% (n=2)
Supervision	180	29.0	12.3	4.4% (n=8)	36.5% (n=66)	22.1% (n=40)	15.5% (n=28)	21.0% (n=38)
Co-workers	179	31.2	12.7	3.3% (n=6)	32.6% (n=59)	15.5% (n=28)	21.0% (n=38)	26.5% (n=48)
Job in General	180	31.0	12.1	3.9% (n=7)	32.2% (n=58)	17.8% (n=32)	18.9% (n=34)	27.2% (n=49)

Note. A total score of 54 points.
 Very Dissatisfied (0 - 12); Dissatisfied (13 - 22); neither Satisfied nor Dissatisfied (23 - 31);
 Satisfied (32 - 41); Very Satisfied (42 - 54)
 S.D. = Standard Deviation, n = number of the respondents

Table 2 showed that in general all the respondents were neither satisfied nor dissatisfied with all the dimensions except the 'Promotion' facet which were dissatisfied and 'Co-workers' facet which were satisfied among the three groups and female respondents respectively.

Table 2. Scale Scores of JDI and JIG among All, Male and Female Respondents.

Facets	All Respondents (n = 181)				Male Respondents (n = 83)				Female Respondents (n = 98)			
	Mean	S.D.	min.	max.	Mean	S.D.	min.	max.	Mean	S.D.	min.	max.
JDI												
WPJ	28.0	11.5	2	54	26.7	11.6	3	54	29.1	11.3	2	52
Present Pay	25.0	10.2	0	50	23.6	10.5	0	48	26.0	9.9	8	50
Promotion	16.0	8.7	0	54	16.1	8.2	0	38	16.0	9.2	2	54
Supervision	29.0	12.3	2	54	27.9	12.1	2	51	29.8	12.5	3	54
Co-workers	31.2	12.7	3	54	29.6	12.4	5	54	32.5	12.9	3	54
Job in General	31.0	12.1	0	54	30.4	12.0	0	52	31.4	12.2	2	54

Note. A total score of 54 points. Q
 Very Dissatisfied (0 - 12); Dissatisfied (13 - 22); neither Satisfied nor Dissatisfied (23 - 31);
 Satisfied (32 - 41); Very Satisfied (42 - 54)
 S.D. = Standard Deviation, min. = minimum, max. = maximum
 n = number of the respondents, JDI = Job Descriptive Index, WPJ = Work on Present Job

Association with JDI and JIG

Table 3 presented the intercorrelations of scores of JDI and JIG for all respondents. All facets of job satisfaction were significantly correlated to each other. The correlation values ranged from 0.18 to 0.77.

Table 3. Scale Score Intercorrelations of JDI and JIG.

Dependent Variables	n	Job Descriptive Index					Job in General
		Work on Present Job	Present Pay	Promotion	Supervision	Co-workers	
Work on Present Job	181	1.00	0.38** (.000)	0.34** (.000)	0.53** (.000)	0.56** (.000)	0.77** (.000)
Present Pay	179		1.00	0.24** (.001)	0.33** (.000)	0.37** (.000)	0.41** (.000)
Promotion	180			1.00	0.20** (.003)	0.19** (.006)	0.18** (.007)
Supervision	180				1.00	0.59** (.000)	0.59** (.000)
Co-workers	179					1.00	0.73** (.000)
Job in General	178						1.00

**p<.01

(significant value)

n = number of the respondents

Marital Difference

Results of the t test in Table 4 showed that there were no significant differences in the job satisfaction level between the single respondents and married respondents.

Table 4. Results of t test for the 'Work on Present Job', 'Present Pay', 'Promotion', 'Supervision', 'Co-workers' and Job in General Scales by Marital Stage.

Facets	Marital Stage	
	Single	Married
	Mean Score (n)	Mean Score (n)
Work on Present Job	26.5 (67)	29.1 (111)
	p = .146	
Present Pay	23.6 (67)	25.9 (110)
	p = .157	
Promotion	14.7 (66)	16.9 (111)
	p = .096	
Supervision	28.4 (67)	29.3 (110)
	p = .645	
Co-workers	30.0 (67)	32.0 (109)
	p = .315	
Job in General	29.1 (67)	32.4 (110)
	p = .073	

Note. A total score of 54 points.

Very Dissatisfied (0 - 12); Dissatisfied (13 - 22); neither Satisfied nor Dissatisfied (23 - 31);

Satisfied (32 - 41); Very Satisfied (42 - 54),

n = number of respondents,

p = probability

Comparisons between Five Age-groups of Teachers

The age groups were divided as follows: ≤ 25, 26-35, 36-45, 46-55, and ≥ 56. The aim was to investigate whether different age-groups of teachers differed in their job satisfaction. An one-way analysis of variance was employed and indicated that the dependent variables of 'Work on Present Job' (F[4, 176] = .33, p = .858), 'Present Pay' (F[4, 175] = 1.36, p = .250), 'Promotion' (F[4, 175] = 1.43, p = .227), 'Supervision' (F[4, 175] = .82, p = .517), 'Co-workers' (F[4, 174] = 2.

29, p = .062), and Job in General (F[4, 175] = .07, p = .564) were all not significant at the .05 level.

Comparisons between Teaching Experiences of Teachers

The aim was to find out whether teachers with different teaching experiences differed in their job satisfaction. An one-way analysis of variance was employed and the dependent variables were 'Work on Present Job' (F[4, 175] = .60, p = .662), 'Present Pay' (F[4, 174] = 3.14, p = .016), 'Promotion' (F

[4, 174] = .70, $p = .596$), 'Supervision' ($F[4, 174] = 2.75$, $p = .030$), 'Co-workers' ($F[4, 173] = 2.80$, $p = .028$), and Job in General ($F[4, 174] = 2.00$, $p = .096$) were obtained. If a significant result was obtained, a Turkey's post hoc procedure was utilized to identify the source of differences. The results showed that there were significant differences between the two groups (6 - 10 years > at or over 21 years of teaching experiences) in the facet 'Co-workers' and the two groups (6 - 10 years > at or below 5 years of teaching experiences) in the facet 'Present Pay'.

Gender Differences at Primary and Secondary Schools

Results of t test in Table 5 showed that with the exception of the facets 'Work on Present Job' and 'Present Pay' in male respondents, there was no significant difference between the respondents teaching in primary and secondary schools.

Table 5. Mean Scores, Gender and School Type Differences for the Facets on the Job Descriptive Index and Job in General.

Respondents Schools			Job Descriptive Index					Job in General
			Work on Present Job	Present Pay	Promotion	Supervision	Co-workers	
Primary	A	111	27.4	25.6	15.4	29.2	30.7	30.9
Secondary	A	68	29.0	23.9	17.0	28.5	31.9	31.0
Primary	F	56	30.0	26.5	16.0	31.3	32.3	32.5
Secondary	F	42	28.1	25.5	16.1	27.8	32.8	29.9
Primary	M	55	25.0	24.7	14.9	27.0	30.6	29.3
Secondary	M	26	30.4*	21.3*	18.6	29.7	29.1	33.0
			(.045)	(.021)				

* $p < .05$ (2-tail significant)

Note. A = All respondents, M = Male respondents, F = Female respondents, n = number of respondents

Comparison between Three Districts (Hong Kong Islands, Kowloon, and New Territories)

An one-way analysis of variance was indicated that the dependent variables of 'Work on Present Job' ($F[2, 178] = 1.66$, $p = .192$), 'Present Pay' ($F[2, 177] = 1.55$, $p = .215$), 'Supervision' ($F[2, 177] = .48$, $p = .623$), 'Co-workers' ($F[2, 176] = .02$, $p = .978$), and Job in General ($F[2, 177] = .34$, $p = .710$) were all not significant at the .05 level except the facet 'Promotion' ($F[2, 177] = 4.30$, $p = .015$). Results in the Turkey post hoc testing showed that the 'Promotion' scores of the respondents taught in the New Territories were statistically significant higher than that in Kowloon district.

Comparison between Teaching Positions

The teachers with various position including Certificate Master/Mistress, Assistant Master/Mistress, and Graduated Master/Mistress were being analyzed by the one way ANOVA and indicated that the dependent variables of 'Work on Present Job'

($F[3, 177] = .62$, $p = .601$), 'Present Pay' ($F[3, 176] = .68$, $p = .565$), 'Promotion' ($F[3, 176] = 2.28$, $p = .081$), 'Supervision' ($F[3, 176] = .22$, $p = .881$), 'Co-workers' ($F[3, 175] = .07$, $p = .978$), and Job in General ($F[3, 176] = .05$, $p = .987$) were all not significant at the .05 level.

Continuity in the P.E. Profession

26% (n=47; male=18, female=29) of the respondents reported not willing to teach P.E. within 5 years. About half of the respondents (11.1%; n=20) and (14.9%; n=27) came from primary and secondary schools respectively. Their average age was 36.0 years with more than half (53.1%, n=17) with teaching experience of not more than five years. In order to investigate whether there were any differences between the respondents who intended to stay and leave P.E. profession to the dependent variables, a series of t test were performed. Results in Table 6 showed that with the exception of the facets 'Work on Present Job' and 'Supervision', there was no significant difference between the two groups.

Table 6. Mean Scores of Job Descriptive Index of Respondents Responded to the Continuity in the P.E. Profession and the Intention to Leave Teaching Profession.

	n	Job Descriptive Index Scores (probability)					Job In General
		Work on Present Job	Present Pay	Promotion	Supervision	Co-workers	
NOT P.E.	47 (26.0%) (18M;29F)	25.1	24.8	14.9	25.5	30.0	29.6
P.E.	129 (71.2%) (63M;66F)	29.1* (.043)	25.5	16.3	30.1* (.031)	32.2	32.0
NOT DECIDED	5 (2.8%)						
NOT TEACH	32 (17.7%) (15M;17F)	26.4	25.9	13.4	26.1	30.0	29.7
TEACH	141 (77.9%) (65M;76F)	28.6	25.3	16.6	29.9	31.7	31.7
NOT DECIDED	8 (4.4%)						

*p<.05 (2-tail significant)

Note. M = Male, F = Female, n = number of the respondents, Very Dissatisfied (0 - 12); Dissatisfied (13 - 22); neither Satisfied nor Dissatisfied (23 - 31); Satisfied (32 - 41); Very Satisfied (42 - 54)

In Table 7, the reasons for not teaching P.E. were listed in order of mentioned frequency. It should be noted that 'physical and mental exhaustion' (29.5%), and 'lose interest of teaching P.E.' (27.3%) were the most commonly stated reasons.

Table 7. Reasons for Not Teaching P.E. within 5 year. (n=44).

Reasons	Frequency number (percentage)
Physical and mental exhaustion	13 (29.5%)
Lose interest of teaching P.E.	12 (27.3%)
The job of teaching and coaching were too demanding	8 (18.2%)
Further studies	2 (4.5%)
Migration	2 (4.5%)
Aware of students' safety	2 (4.5%)
Change to other administrative job	2 (4.5%)
Retirement	2 (4.5%)
No prospect	1 (2.3%)

Note. Respondents were limited to one choice, therefore the total percentage equal to 100%.

Intention to Leave Teaching Profession

17.7% (n=32; male=15, female=17) of the respondents intended to leave teaching profession within 5 years. About two-third (12.2%; n=22) and one-third (5.5%; n=10) came from primary and secondary schools respectively. Their average age was 38.5 years with more than a third (37.5%, n=12) with

teaching experiences not more than five years. There was no significant differences in the dependent variables between the two groups as shown in Table 6. Referring to their stated reasons in Table 8, 'physical and mental exhaustion' (24%), 'changing job' (24%) and 'migration' (20%) were the most commonly stated reasons.

Table 8. Reasons and Frequencies of the Respondents with Intention to Leave Teaching Profession.

Reasons	Frequency number (percentage)
Physical and mental exhaustion	6 (24.0%)
Taking up employment outside teaching profession	6 (24.0%)
Migration	5 (20.0%)
Retirement	3 (12.0%)
Further studies	2 (8.0%)
Find teaching difficult	1 (4.0%)
Not respected	1 (4.0%)
No prospect	1 (4.0%)

Note. Respondents were limited to one choice, therefore the total percentage equal to 100%.

Open-ended Questions

Table 9 and 10 presented the responses of the two questions related to the stated factors contributing to their job dissatisfaction and satisfaction respectively in order of importance. The feeling of 'time/resource difficulties' and the 'cooperation of the other colleagues, principal and students' were the main factors of dissatisfaction and satisfaction respectively.

Table 9. Factors Contributing to Their Job Dissatisfaction.

	Sources	Frequency
Time/ Resource Difficulties	Inadequate resource	27
	Time limited	18
	Limited training and coaching methods	9
	No private and rest time	6
	Self study	4
	Total:	(64)
Heavy Workload	Too much workload	31
	Too much paperwork	9
	Demands on after school time (e.g. training and coaching school teams after school and during weekends)	8
	Too much time spent on counseling	6
	Attending conferences and meetings	5
	Total:	(59)
Lack of Support and Cooperation	Lack of cooperation from P.E. colleagues	20
	Lack of support from principal	17
	Lack of cooperation from parents	3
	Total:	(40)
Pupil Misbehaviour	Students were not interested in P.E.	21
	Total:	(21)
Professional Recognition Needs	The existing school system was not perfect	10
	Not respected and low status among colleagues	8
	Total:	(18)

Table 10. Factors Contributing to Their Job Satisfaction.

Sources	Frequency
Support and cooperation from colleagues, principal, students and parents	79
Good teaching environment and climate	25
Good discipline of students	20
Good working condition	10
Adequate resource and field	9
Good experiences	5
Support from family members	4
Reasonable workload	2
Good selection of P.E. topics	1

A series of stepwise multiple regression analysis were performed in order to test for the degree to which the 5 facets of JDI and the overall job satisfaction were related to the demographic variables. In each analysis, one of the 5 facets of JDI and JIG was predicted using the demographic items. The squared multiple R ranged from .047 to .445 and from .045 to .119 for the facets of JDI and JIG respectively. The 0.05 level was employed to evaluate the significance of the statistical relationships.

A moderate and statistically significant relationship was found between the criterion variable 'promotion' and the predictor

variable of 'gender' (multiple R=0.667), explaining about 44.5% of the variance. The variable 'time spent on administrative work' (multiple R=0.192) was entered on step number 2, improving the explanation power of the variance to 73.7% (Table 11). This revealed that female respondents with fewer administrative work exhibited higher satisfaction with promotion opportunity.

Pay satisfaction for all respondents showed a low and statistically significant relationship with 'time spent on correction work' (multiple R=0.278), explaining 7.7% of the variance. The variable 'salary' was entered on step number 2, improving the multiple R to 0.364 with 13.3% explaining power of the variance.

The variables 'gender' (multiple R=0.056) was entered on step 3, further improving the explaining power of the variance to 17.6% (Table 11), indicating that female respondents with higher paid and spent fewer time on correction work appeared to be more satisfied with pay.

'Work on Present Job' satisfaction for all respondents showed a low and statistically significant relationship with 'self-perceived health' (multiple R=0.335), explaining 11.2% of the variance. The predictor variable 'time spent on administrative work' (multiple R=0.059) was entered on step number 2, improving the explanation power of the variance to 15.5% (Table 11). The indication was that the respondents with good health and fewer time spent on administrative work exhibited higher satisfaction with work.

Significant relationship was found between the criterion variable of 'Job in General' and the predictor variable of 'self-perceived health' (multiple R=0.345), explaining 11.9% of the variance in job satisfaction. The variable 'type of school they taught' (multiple R=0.06) was entered on step number 2, improving the explanation power of the variance to 16.4% (Table 11). Results indicated that the respondents with good health and working in aided schools appeared to be a higher overall job satisfaction.

Co-workers satisfaction had a relatively low statistically significant relationship with the predictor variable of 'self-perceived health' (multiple R=0.231), explaining 5.3% of the variance (Table 11). This findings showed that those with good health exhibited higher satisfaction with co-workers. No relationship was found between 'supervision' and the predictor variables.

Table 11. Multiple Regression of Job Satisfaction on All Respondents

Predictor Variables	Criterion Variables														
	Promotion			Present Pay			Work on Present Job			Co-workers			Job in General		
	Mult. R	R ²	Step	Mult. R	R ²	Step	Mult. R	R ²	Step	Mult. R	R ²	Step	Mult. R	R ²	Step
Perceived Health				0.278*	0.077	1	0.335**	0.112	1	0.231*	0.053	1	0.345**	0.119	1
Corr. Time															
School Type													0.405**	0.164	2
Salary				0.364**	0.133	2									
Gender	0.667*	0.445	1	0.420**	0.176	3									
Admin. Time	0.859*	0.737	2				0.394**	0.155	2						

*p<.05; **p<.01
 Note. Mult. R = Multiple R, R² = R square, Corr. Time = Time spent on correction work,

Admin. Time = Time spent on administrative work, Not Teach = Intended to leave teaching profession

Discussions and Conclusion

In the present study, the Hong Kong P.E. teachers concerned more at their fiscal benefits at work i.e. extrinsic rewards, which could be suggested by the high dissatisfaction level in payment (68.5%) and promotion opportunity (79.6%). The remained dimensions like 'Work on Present Job', 'Co-workers', 'Supervision' and 'Job in General' tended to be neutral. These data corresponded to reports by Wong and Pennington (1993) regarding English teachers in Hong Kong and Wong (1989) about Hong Kong secondary teachers. This prolonged dissatisfactions in salary and promotional opportunity affecting the teachers' morals and the teaching and learning process. The Government of Hong Kong Special Administrative Region and Education Department should pay attention and take necessary reform to improve the diminished job satisfaction.

Findings regarding the gender difference in the satisfaction level suggested that there was no significant difference between

job satisfaction levels for male and female teachers. This result was in agreement with the findings of Weaver (1977), Borg and Falzon (1989), and Sweeney (1993), but it was in contrast to the findings of Kniveton (1991). Another interpretation related to the equal dissatisfaction responses of promotions opportunity between male and female respondents showed that there were no obvious unequal opportunity-based policies. In general female respondents were more satisfied than the male respondents in the 5 facets of JDI and JIG. This could be partly explained by Hansen (1967) that women had other interests such as the family, while men channel most of their energies into the job. However, the whole picture were influenced by job level, promotional opportunities, sex discrimination within their schools. These factors had not been studied in the present study and this is an area for further research. It was also generally found that married P.E. teachers were more satisfied with their jobs than single people, although they were not statistically significant at 0.05 level. This trend indicated that the more settled teachers tended to be the more satisfied.

Results showed that age was not identified as a significant factor in job satisfaction. Similar finding was reported by Green-Reese, Johnson and Campbell, (1991) regarding high school physical education teachers. This observation was in contrast to the U-shaped and positive linear relationship suggested by Herzberg, Mausner, Peterson and Capwell (1957) and Clarke, Gerrity, Laverdiere and Johns (1985) respectively. Concerning their teaching experiences, there were no obvious trend between teaching experiences and job satisfaction. This supported the findings of Borg and Falzon (1989) and Kniveton (1991) who reported that job satisfaction did not relate to the length of teaching experience. However, this observation was at variance with the findings of Clarke and his co-workers (1985).

With regard to the type of school they taught, it was also interesting to note that there were significant difference at 0.05 level in the facets 'Work on Present Job' and 'Present Pay' in male respondents who taught in primary and secondary schools. This findings were at variance with those given by Borg and Falzon (1989) and Kniveton (1991), they suggested that the age of the pupils taught did not have an impact on job satisfaction. It seemed that the male teachers in the present study more satisfied teaching in secondary schools than in primary schools. However, the condition was reversed concerning payment.

A point of concern could be raised regarding the high intention of not to teach P.E. (17.7%) and leave teaching profession (26.0%) within 5 years in the present samples. This situation was more severe compared with the study conducted by Wong (1989), he found that about 10% of Hong Kong secondary teachers would actively seek opportunities to quit the profession. With regard to their demographic data, this finding was similar with the survey of all Hong Kong teachers conducted by the Education Department (1996) in 1995, they reported that the average age of the dropout teachers was 36.0 years with two-third of them was under 40 years of age. The overall dropout rate for P.E. teachers reported by Education Department (1996) was 9.5% in 1994/95 academic year, representing 14.0% and 6.2% for graduate and non-graduate P.E. teachers respectively. Although their mentioned intentions to leave P.E. and teaching career in the present study were over-exaggerate, it was a way for them to express their feelings of dissatisfaction. Since researches found that the best predictor of turnover was the intention to quit (Horner & Hollingsworth, 1978; Kraut, 1975; Kyracou & Sutcliffe, 1979; Mobley, 1977), the problem brought to light by this paper was a real threat to physical education in Hong Kong.

In the present study, the facets of 'Supervisions' and 'Work on Present Job' were found to be a significant contributors to the continuity in the P.E. profession. Teaching and coaching

were the main duties of Hong Kong P.E. teachers which involved a great deal of stress and uncertainty (Fejgin et al., 1995). The P.E. teachers in the present study spent average 4 hours per week after their normal working hours on training and coaching school sports teams. This amount of extra workload was similar with the study by Hong Kong Sports Development Board (1991) concerning 272 P.E. teachers in Hong Kong. They reported that 46% of these P.E. teachers spent 5 to 12 hours per week on training and coaching sports teams while 10% had to spend 13 hours or more every week. Besides, the stress also came from the results of the interschool competitions, and the extra workload of organizing annual swimming gala, athletic meet and other extra-curricular activities. Therefore, it was important that the administrators and the co-workers of these schools should provide the necessary support to their P.E. teachers. The teachers needed recognition and understanding from their supervisors for their efforts and their diligent execution of the programs. This was in agreement with the findings of Davis (1986/7) that they found teachers were isolated during the day and needed support from supervisors and administrators to help reduce stress. The present results substantiated this assertion.

Refer to the sources of job satisfaction mentioned, it was associated with teachers' feelings about the process of teaching and closely related to the work itself, including their interaction with pupils, working condition, availability of teaching resource and field, and the work load involved. Relations among teachers and principal were also a factor in their general level of satisfaction. It was interesting to note that work autonomy was not mentioned by the present respondents as a source of job satisfaction. The present findings also confirmed the concept of Herzberg's (1966) 'two-factor theory', which suggested that satisfaction and dissatisfaction were best conceived not as opposite ends of a single continuum, but as two distinct continua. Those factors which gave rise to job satisfaction were called 'satisfiers', these were intrinsic to the job.

The major sources of job dissatisfaction perceived by teachers in the present study mainly fell into five components: pupil misbehaviours, time/resource difficulties, professional recognition needs, heavy workload and poor colleague relations. These findings were in agreement with the literature (Borg, Riding & Falzon, 1991; Boyle, et al., 1995), they found that these were the major dimensions of teacher stress and positively associated with job dissatisfaction. Among the five factors, time/resource difficulties, heavy workload, poor colleague relations and pupil misbehavior were the orders which contributed to the source of job dissatisfaction perceived by P.E. teachers in the present study. This findings fell within Herzberg's (1966) definition of 'hygiene factors' which caused dissatisfaction but

did not of themselves bring satisfaction. However, the results were in variance with the findings of House and Wigdor (1967) and Hill (1994) that Herzberg's (1966) two dimensions were not as discrete as he maintained.

Self-perceived health was one of the predictor variables that showed a consistent relationship with job satisfaction, although the explanation powers were not high. This observation showed that good health was a need to perform various duties as perceived by P.E. teachers. The low multiple R square values indicated that the demographic characteristics of respondents in the present respondents were not highly related to the satisfaction of present pay, co-workers, work, supervision and JIG. The responses to the sources of job satisfaction and dissatisfaction also suggested that this job satisfaction scale misses some important dimensions of "satisfaction", at least for P.E. teachers in Hong Kong. However, we could not determine the effect of these factors on the results from the present data. This would be worth to examine the construct of job satisfaction within Hong Kong culture.

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