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Relationship Between Back Pain and Job Satisfaction among Teachers in Kelantan

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Abstract

Back pain is one of the most common health problems experienced among individuals, particularly among those who have jobs that require them to sit, stand or perform physically demanding activities for long hours. Teachers are one such group of professionals who are at higher risk of developing back pain due to the nature of their jobs. This has been acknowledged as a significant problem that can impact the job satisfaction of the teaching profession. This study aimed to identify the relationship between back pain and job satisfaction among teachers. This study examines on how back pain is related to the level of job satisfaction among teachers in Kelantan**.** A cross-sectional study was conducted among randomly selected teachers from thirty-four primary schools in Tanah Merah, Kelantan from December to February 2023. The level of lower back pain was assessed using an Oswestry Low Back Pain Disability, while for Teacher satisfaction scale (TJSS) was used to examine the teacher satisfaction level. The response rate of this study was 100% (n=208). The majority of respondents are females (n=170,81.7%), Malay(n=174,83.7%), married(n=163,78.4%), aged between 30- 39 years old(n=64,31.3%),40-49 years old(n=119,57.2%) and have more than 10 years of work experience. The level of back pain and job satisfaction among teachers (r=-.129, 95%CI=1.6970, 1.9059, P-value= .064) were no significant correlation between two variables. There is insufficient evidence to conclude that back pain among teachers is directly related to job satisfaction. Teaching may be physically stressful, and teachers often experience high levels of stress and burnout. However, the findings on relationship between back pain and job satisfaction are not related.

Keywords

Back pain, Job Satisfaction, Teachers

Introduction

Back pain can be divided into acute back pain and chronic back pain. Acute back pain is back pain which is severe and felt over a period of time short or brief. Acute back pain is a common phenomenon. Arguably between 50 to 80 percent of the population aged between 25 up to 60 years have had problems of back pain once in a lifetime. Chronic back pain is not as severe as

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acute but painful back pain this back is experienced over a period of time long. There are many factors that cause humans to work. Most of these factors are due to pressure factors life necessities. Kollmuss & Agyeman (2002), asserted that work is a human need that must be met in particular to achieve the need for self -perfection. Job satisfaction can be defined as a pleasure or positive feelings as a result of the value of a work or work experience. This feeling arises from the perception of each employee who describe the true values of their work in the work situation (Van der Walt & De Klerk., 2014). Job satisfaction also involves interactions between employees with work (Raza & Ahmed, 2017). Fleet et.al., (2010) explains that humans are more likely to be normal in the face of a task organization. Once they receive some rewards internal and external such as wage increases, praise and others the form of appreciation of the situation will soon change. They will be showing a high level of job satisfaction towards the job and its organization. On the other hand, those who are not rewarded would reflect a low level of satisfaction. Department of Safety and Health (DOSH) Malaysia, defines the occupation disease is a disease caused or caused by activities and factors in the workplace environment. Occupational disease also means free from mental, physical and social health related conditions as well as work practices applied (Slade, 2010). Risks from occupational diseases that can be encountered by workers is an ergonomic hazard i.e., stems from repetitive movements, postures, work duration and work force stress faced by employees of. Teachers are exposed to various physical hazards within the classroom environment such as poorly designed furniture, prolonged periods of standing, sitting, carrying heavy materials, repeated up and downstairs. These conditions can lead to musculoskeletal disorders, falls and other conditions (Bandpei et al., 2014).

Methodology

This study design was a quantitative Cross-Sectional Study. The focus of population is the teachers at Kelantan. The population of the teachers in Tanah Merah are 1306 (PPD Tanah Merah portal, 2021). The teachers are from all primary school in Tanah Merah state. The distribution was done by department for which they were taken randomly. In this study, the total sample involved consisted of 208 people aged between 35-49 years old. According to Kothari (2004), a sample size of 10% to 20 % of population was considered adequate. The sample size was sufficiently large to prevent dropout problems (attrition) that could have occurred throughout the implementation of the study. Two hundred ninety-eight questionnaires were distributed among the teachers (males=38, females=170) returned as completed and properly filled of the instrument. All respondents and schools' authorities provided informed consent prior to completion of the research instrument. Questionnaire in this study is indivisible into three parts namely Part A (demographic), Part B (back pain status) using Revised Oswestry Low Back Pain Disability Questionnaire, Part C (job satisfaction status) using Teacher Job Satisfaction Scale-9 (Ramalingam et al., 2023)

The data was collected through online survey data collection technique. Then, the data were entered and analysed using Statistical Package for the Social Sciences (SPSS) software version 20.0. Descriptive statistics of the collected data were done for most variables in the study using statistical measurements. Frequency tables, graphs, percentages, means and standard deviations were used. A spearman correlation coefficient was conducted to check correlation between two variables.

Results

Socio-demographic characteristics of respondents

A total of 208 respondents were responded to this study with a response rate 100%. In terms of socio demographic distribution, Table 1 shows that 10(4.8) were aged between 19-29 years old, 65(31.3%) were aged between 30 -39 years old, 119(56.2%) were aged between 40 -49 years old, and 14(6.7%) were aged 50 years old and above. The majority of the respondent were females (n = 170(81.7%) among them 45(18.3%) were single and 163(78.4%) were married. Most of the respondent, 174 (83.7%) were Malay, followed by 30(14.4%) were Chinese and 4(1.9%) were Indian. About 6(2.9%) of the respondent had experience working for 1 to 5 years, 19(9.1%) had experience working for 6 to 10 years, 30(14.4%) had experience working for 11 to 15 years, 72(34.6%) had experience working for 16 to 20 years, 61(29.3%) had experience working for 21 to 25 years and 20(9.6%) had experience working for 26 to 30 years. In summary, the majority of respondents are females, Malay, married, aged between 30-49 years old and have more than 10 years of work experience.

Table 1. Socio-Demographic Characteristics of Respondents

Socio- Demographic Characteristic		Frequency (n)	Percentage (%)
Age	19 -29 years old	10	4.8
	30 – 39 years old	65	31.3
	40 -49 years old	119	57.2
	50 years old and above	14	6.7
Gender	Male	38	18.3
	Female	170	81.7
Race	Malay	174	83.7
	Chinese	30	14.4
	Indian	4	1.9
Marital status	Single	45	21.6
	Married	163	78.4
Working experience	1-5 years	6	2.9
	6-10 years	19	9.1
	11 -15 years	30	14.4
	16-20 years	72	34.6
	21- 25 years	61	29.3
	26 -30 years	20	9.6

The level of back pain among teachers

Table 2 shows the frequency and percentage of level back pain among teacher.

Table 2. The Level of Back Pain among Teachers

Variable	Frequency (n)	Percent (%)
Pain intensity		
The pain comes and goes and is very mild.	106	51.0
The pain is mild and not much different.	43	20.7
The pain comes and goes and is moderate.	37	17.8
The pain is moderate and does not very much.	5	2.4
The pain comes and goes and is severe.	17	8.2
Personal care		
I would not have to change my way of washing /dressing in order to avoid pain.	70	33.7

I do not normally change my way of washing/dressing even though it causes some pain.	98	47.1
Washing and dressing increases the pain, but I manage not to change my way of doing it.	20	9.6
Washing and dressing increases the pain and I find it necessary to change my way of doing it.	20	9.6
Lifting		
I can lift heavy weights without extra pain.	74	35.6
I can lift heavy weights, but it causes extra pain.	78	37.5
Pain prevents me from lifting heavy weight off the floor.	32	15.4
Pain prevents me from lifting heavy weights off the floor, but I can manage if they are conveniently positioned.	24	11.5
Walking		
Pain does not prevent me from walking any distance	113	54.3
Pain prevents me from walking more than one mile.	52	25.0
Pain prevents me from walking more than ½ mile	28	13.5
Pain prevents me from walking more than ¼ mile	15	7.2
Sitting		
I can sit in any chair as long as I like without pain.	66	31.7
I can only sit in my favourite chair as long as I like.	94	45.2
Pain prevents me from sitting more than one hour.	32	15.4
Pain prevents me from sitting more than ½ hour.	16	7.7
Standing		
I can stand as long as I want without pain	70	33.7
I have some pain while standing, but it does not increase with time	44	21.2
I cannot stand for longer than one hour without increasing pain	78	37.5
I cannot stand for longer than ½ hour without increasing pain	16	7.7
Sleeping		
I get no pain in bed	128	61.5
I get pain in bed, but it does not prevent me from sleeping well	52	25.0
Because of pain, my normal night's sleep is reduced by less than one quarter	28	13.5
Social life		
My social life is normal and give me no pain.	132	63.5
My social life is normal, but increases the degree of my pain.	36	17.3
Pain has no significant effect on my social life apart from limiting my more energetic interests, My dancing.	24	11.5
Pain has restricted my social life and I do not go out very often.	16	7.7
Traveling		
I get no pain while traveling	140	67.3

I get some pain while traveling, but none of my usual forms of travel make it any worse.	40	19.2
I get extra pain while traveling, but it does not compel me to seek alternative forms of travel	28	13.5
Changing Degree of Pain		
My pain is rapidly getting better	124	59.6
My pain fluctuates, but overall is definitely getting better	60	28.8
My pain seems to be getting better, but improvement is slow at present	20	9.6
My pain is neither getting better nor worse	4	1.9

The Level of Job Satisfaction among Teachers

Table 3 shows the level of job satisfaction among teachers.

Table 3. The Level of Job Satisfaction among Teachers

Variable	**Frequency(n)**	**Percent (%)**
The quality of your relations with co-workers		
Satisfied	29	13.9
Very satisfied	121	58.2
Extremely satisfied	58	27.9
The extent to which your co-workers encourage you and support you in your work		
Satisfied	62	29.8
Very satisfied	109	52.4
Extremely satisfied	37	17.8
Your overall satisfaction with your co-workers		
Somewhat satisfied	1	.5
Satisfied	57	27.4
Very satisfied	113	54.3
Extremely satisfied	37	17.8
The extent to which students act in a self-disciplined manner		
Somewhat satisfied	1	.5
Satisfied	121	58.2
Very satisfied	76	36.5
Extremely satisfied	10	4.8
Your satisfaction with the behavior of students in your school		
Somewhat satisfied	2	1.0
Satisfied	122	58.7
Very satisfied	74	35.6
Extremely satisfied	10	4.8
Your overall level of satisfaction with student discipline in your school		
Somewhat satisfied	2	1.0
Satisfied	122	58.7
Very satisfied	74	35.6
Extremely satisfied	10	4.8

The degree of interest shown by parents in the education of their children		
Satisfied	128	61.5
Very satisfied	65	31.3
Extremely satisfied	15	7.2
The extent to which parents are supportive of the school and its programs		
Satisfied	128	61.5
Very satisfied	65	31.3
Extremely satisfied	15	7.2
Your overall level of satisfaction with parents where you work		
Satisfied	128	61.5
Very satisfied	65	31.3
Extremely satisfied	15	7.2

The relationship between back pain and the level of job satisfaction among teachers

A spearman correlation coefficient was conducted between all independent variable and dependent variable. Result on significant relationship is shown in table 5. Findings indicated that the relationship between back pain and job satisfaction were statistically no significant relationship between back pain among respondents.

Table 4. Result of Correlation Between Back Pain and Job Satisfaction

Variable (n=208)	Median (IQR)	95% C.I (LB, UB)	Level of job satisfaction	
			Correlation (r)	P- value
Level of back pain	1.5000 (1.20)	1.6970,1.9059	-.129	.064

Discussion

The aims of this study is to determine the relationship of back pain and job satisfaction among teachers in Kelantan. Back pain is common ailment that effects many people including teachers. They often spend long hours sitting or standing which can put strain on their backs. They may also be required to lift and move heavy objects such as books or equipment which can further exacerbate back pain. Job satisfaction is an important aspect of an individual's well-being and it is linked to many factors including physical health. Teachers who experience back pain may find it difficult to perform their duties effectively and may experience a decrease in job satisfaction as a result. This study also aims to understand how employers can support and accommodate employees with back pain to improve their job satisfaction and productivity. There is limited research on specific between back pain and job satisfaction among teachers in Kelantan. However, a previous study has shown that teachers in general have a high prevalence of back pain due to the physical demands of the job such as carrying heavy bags, prolonged sitting and standing, and inappropriate ergonomic set up in the classroom. This physical demand can lead to musculoskeletal disorders and chronic pain which can negatively impact job satisfaction (Erick et.al., 2022). A previous study indicated that there was a significant negative correlation between low back pain and job satisfaction, however this study was conducted between Iranian office workers (Loghmani et.al., 2013). Eighty-nine percent of participant experienced musculoskeletal pain and having a low to medium job satisfaction in

the 12 months, resulting in loss of function and work absence. The result in this study show that high percentage of the pain comes and goes and it's very mild which is 51.0% (n=106). Most of the respondents were reported that satisfied to very satisfy about their job including among workers, student and parents. According to other research, the relationship of back pain and job satisfaction maybe influenced by other factors. Back pain can be a source of discomfort and stress, it doesn't necessarily mean that the job satisfaction of the teacher is low. Factors such as the type of school, the teacher's age, the duration of their experience, and the level of support from their colleagues and management may play a role in how a teacher perceives and deals with the back pain and how it affects their job satisfaction. Additionally, teachers may have developed coping mechanisms or have found ways to manage the pain, thus not having it greatly impact their job satisfaction.

Conclusion

In conclusion, our study on the relationship between back pain and job satisfaction among teachers in Kelantan found no significant correlation between the two. This study found a negative correlation between back pain and job satisfaction among teachers in Kelantan.

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