

Does Involvement in Sports lead to a Productive Employee?

Evidence of a Case Study

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Abstract—Is a physically active employee a productive one? This question formed the basis for the research, that is, whether university staff who are involved in sports would perform better than their peers who lead a sedentary lifestyle. With a workforce of 5,000, the scope of the cross-sectional survey focused on just 200 Universiti Teknologi MARA's (UiTM) staff who participated in the recent sports carnival. Questionnaires were self-administered to the units of analysis and the response rate was 95% (190/200). Although Pearson's correlation output indicated that sports participation and work performance is not statistically significant ($r=.049$, $p<.05$), it was hypothesized that a positive relationship would exist between these two variables, that is, higher participation in sports is associated with higher or better work performance and productivity. Based on the empirical evidence, it is hoped that the university will revise its policy by emphasizing the need for its employees to be more physically active as the benefits gained would spill over into other aspects for the individual such as a better quality of life and wellbeing.

Keywords—sports participation, quality of life, wellness, work performance, productivity

I. INTRODUCTION

A healthy population leads to a healthy nation. Good health and well-being can be maintained through participation in sports or engaging in any physical activity or exercise regime [35]. A healthy individual would lead to better outcomes in work and life, for example, an employee would be able to perform well and achieve high productivity including meeting certain key performance indicators in his or her job description. Furthermore, there would be few visits to the doctor and his or her personal life would be more fulfilling.

We know that exercise is good for us, but why do we not participate in sports or any physical activity? — Do fitter employees mean better productivity? [25]. An *impromptu* interview with the doctors at UiTM's Health Center at the main campus in Shah Alam showed that there have been a dramatic increase in the number of patients and procurement for medicines for the university staff. The doctors acknowledged that the increase in the number of sick staff is due to limited physical inactivity and thus, they are prone to simple illnesses. Alleviation and avoidance of simple ailments such as influenza and headaches could be avoided

if the employees are in good health and this is achieved through exercise. The culture of leading a sedentary lifestyle and inactivity would naturally lead to a decline in health and slows down our mental capacity to be alert [35]. Sitting at lengthy meetings and working in front of computers are examples of inactivity for most of the university staff. As a result, they are susceptible to common diseases and obesity. When at home, watching television would be another inactive lifestyle and this adds to the decline in stamina, fitness and health. Literature ferreted showed that employees who are actively involved in sports and leads a healthy lifestyle will be less stressed [26] [20] and this is reflected in their high productivity as are evidenced in their annual performance appraisals. Therefore, this research is timely as there is a real need to assess the staff participation in sports and present the findings to UiTM's management in order to extol the virtue of being physically active.

II. SIGNIFICANCE OF STUDY

Every year, UiTM will hold the much-anticipated Inter-faculty Sports Carnival or popularly known as SAF where staff will vie in many sporting events such as track and fields, golf, indoor sports, etc. In relation to this, the minimal participation of staff at the recent SAF was of great apprehension to the Vice Chancellor (VC) of UiTM. With a workforce count of 5000 and less than five percent participation in sports, this situation did not augur well for the VC in terms of wellness, quality of life and social interaction. At a press conference after the closing ceremony, the VC voiced his concern over the lack of participation among the staff - perhaps they are indifferent towards the idea of being involved in sports. Thus, this study is significant for UiTM's management in its quest towards substantial contribution and, sustained quality of work and productivity. Moreover, the participation of staff in sports would create a better social networking opportunity for the staff from various departments in UiTM's web and hence, evoke a sense of collegiality amongst them.

Additionally, it is important for the UiTM's management, especially UiTM Sports Center to realize the factors that influence the staff to participate in sports activities. From that, the University management can avoid wasting funds in

terms procuring sports-related equipment and facilities that would remain *white elephants*. In other words, UiTM's management could focus on grooming those who excel in sports and to provide popular sports facilities for external users or hosting international sports events. Besides contributing towards knowledge and literature on wellness, the findings from this study would provide justification for UiTM to turn the Shah Alam campus into a more conducive university/academic environment. Also, the research report can be shared with other public universities as well as the Ministry of Higher Education-Malaysia.

III. LITERATURE REVIEW

Literature on the relationship between sport participation and the involvement of employees in physical activities relative to job performance have shown mixed findings. Take for example Din *et al* [7] and Hartmann's [15] studies of high school students' academic achievement with regards to their involvement in extracurricular activities; the findings showed a correlation of a better academic achievement in direct relation to sport activity. The same can be applied to employees who are involved in sports and fitness activities, where there is a positive relationship between physical fitness and worker productivity [31] [36]. Whether they be students or workers, fitness, recreation or sports programs do contribute to human wellbeing [31] [25].

Nevertheless, according to Lüschen [22], there is no general phenomenon nowadays which spreads beyond national frontiers that is more worthy of a sociological and physiological study, than sports. Sports should include sociology equally with biology, medicine, psychology and others. Sports participation should be encouraged since primary school because it is beneficial as a healthy body and mind will definitely influence good academic performance. A study published in the August 2007 issue of *Medicine & Science in Sport & Exercise* found that students who took part in more vigorous sports like soccer or football or skateboarding, did approximately 10% better in math, science, English and social studies classes. Participation in extracurricular activities in general, is associated with an improved grade point average, higher educational aspirations, increased college attendance, and reduced absenteeism [4]. Many extracurricular activities which include sports have proven to be beneficial in building and strengthening academic achievement, even if the activities are not obviously related to academic subjects [23]. According to Kavussanu and McAuley [18], sports participation could also create intrinsic values for students. Highly active individuals were significantly more optimistic and experienced greater self-efficacy than those non-active or low active people. In essence, when students participate in sport activities, they tend to be more positive in their life.

In addition, studies on the effects of high school sports participation on African – American male students had

presented mixed findings. Sport participation seemed to have positive effects on their educational aspirations [3] [14] [27] [37], college enrolment and graduation [3] and competitive orientation [37]. According to Broh [4], there are several sociological explanations on how involvement in extracurricular activities influences and improves student development and achievement. Broh [4] introduced the developmental model which asserts that, "...participating in sport socializes adolescents in ways that promote educational success...by teaching characteristics such as strong work ethic, respect for authority, and perseverance, sports participation develops skills that are consistent with educational values and thus helps student achieve". This impact was seen from the sociological perspective. When students participate in sports activities, they learn about ethical values indirectly. Broh [4] concluded that, "...playing sports develops 'character' in athletes that increases their desire and ability to achieve academically". Other than that, Broh [4] also explains the positive impact of sport participation through 'social capital model'. The theory explains that the strong relationship between activity involvement and higher academic performance as an opportunity to accumulate sources of information and contacts through the formation of and membership in social networks.

Previous research suggests that involvement in extracurricular activities such as sports increases students' overall interest and commitment to school as well as their engagement in more personal student – teacher contact, more positive attitudes about school, and greater parent – school contact [34]. In addition, the students are more committed to attending school and indirectly, this positive attitude will influence their academic achievement. For example, full commitment to school means zero absenteeism, therefore, the students will benefit academically. Moreover, according to Eidsmore [10], school athletes enjoy several advantages over non athletes, including academic performance. That is clearly shown when students who participate in sport activities gain more advantages as they excel in both sports and academe as compared to their non-participative and passive peers [8]. However, there has been contradictory and inconsistent evidence in the early analysis of the effect of sports participation versus academic achievement. Some researchers found that participating in sports activities gives benefits but some do not. Even today, there is inconsistent evidence, but most research tends to lean toward the idea that that participation in athletic does, in fact, improve academic performance [4]. Furthermore, Broh [4] stated that longitudinal studies on school sports have suggested that such participation raises students' grades and test scores. This is supported by Stephen and Schaben [33] who noticed that students who participate in at least one sport each year outperformed those who participated in one or less, in class rank, overall GPA, and math GPA. Its mean, students who

are active in sports do better as shown in their grade point average (GPA), rather than students who do not participate. Moreover, past research found that participation in sports activities has positive correlation to mathematics. The students who participate actively, could do better in math rather student who passively participate. In a recent econometric analysis, Lipscomb [21] found that high school sports participation resulted in a two percent (2%) increase in standardized math and science test scores on a national survey sample, net of other background factors and social variables. Also, student athletes were five – percent (5%) more likely to aspire to college attendance than their non-athletic peers.

Interest in sports is one of the factors why people participate in sports activities. Research by Sport and Recreation New Zealand (SPARC) has found that between half and two-thirds of youngsters are interested in participating in a new sport or active leisure. The finding also proved that there is increase in participation among the youngsters. But what about adults? Another factor that contributes to the participation in sport activities is gender. Several researchers have noted that sports and athletic activities are still generally considered to be a masculine domain [19] [33] and that girls may have difficulty reconciling the physical and competitive nature of sports with their emerging feminine-self concept [9] [1]. This means that men are more active in sports than women. According to Sallis and Saelens [29], the most consistent findings are that boys are more active than girls, and younger generation are more active than older youth [28]. Furthermore, gender difference in sports activities is also evident in the sports involvement [30]. Male youngsters usually like to be involved in extreme physical sports such as football, rugby, basketball and others while women like to participate in netball, badminton, bowling and others which not as physical. For example, currently in Malaysia, *futsal* is popular among the female youngsters, This means that the type of sports also influence student and staff participation. Which type of sports that they are interested with highly motivate them to be involved in sports activities.

Peer pressure is another factor that leads to the student or staff participation in sports activities. Several researches showed that the social influences on physical activity in children and adolescent include parents, siblings, peers and physical education teachers [29] [7]. Perceptions of parental support, peer support and teacher support shows that it gives an impact towards the individual's perceptions of gender regarding an academic activity and the values meaningfulness of the activity. For boys, sports participation influence by parents, teachers and peers to be actively in sport. The participation in sports, exercise and physical activity is consistent with society's definition of masculinity and is reinforced, emphasized, and encouraged

by the attitudes of parents, teachers, coaches, and peers [12] [13] [16]. Greenockle et al [11] found that usually peers and teachers strongly impact participation in physical activities. Thus, what should UiTM management consider when deciding whether to sponsor a university's sporting event such as the bi-annual Inter-campus event? Understanding the nature of the commitment of staff and students is a prerequisite for the event success. Measurements of student achievement and employee productivity are very subjective, so are absenteeism and turnover which could be used as potential yardsticks. Details of employee programs must also address the issue of participation as well as the frequency, intensity and duration. Future research must separate the effect of the fitness improvement from the benefits derived from just being participating in sports. The measurement of productivity and the long-term effect of sports activities and fitness programs could also be looked into as these events involve huge budget allocation.

IV. RESEARCH METHODOLOGY

A cross-sectional survey design was employed for this case study. The scope or units of analysis were the staff at Universiti Teknologi MARA (UiTM) who participated in the annual sports event. The list of participants was provided by the university's Sports Center. As such consensus sampling was used as all the names in the list were contacted via email to request their participation in answering the questionnaire. Prior to the actual data collection, a pilot study or a small-scale research was undertaken to test the reliability and validity of the instrument as this would reduce the risks of flaws when conducting the actual research project [17] [32]. Also the findings from the pilot study can not be generalized but it is the right step towards the approach and conduct of a larger-scale study. Thus, an online survey instrument or an e-questionnaire was administered to 40 university staff who were conveniently sampled and are not part of the participants in the list.

As for the questionnaire, it was divided into two sections; Section A was on demographic profiles and Section B operationalized the variables such as interest and impact of sports participation on performance evaluation. The independent variables were measured on a five-point Likert scale of: Strongly disagree = 1, disagree = 2, neither agree nor disagree = 3, agree = 4, strongly agree = 5. The e-questionnaire was deployed for two weeks after which the returned responses were 27 or 67.5%. Through a statistical software (SPSS 17), Pearson correlation analyses were executed to determine the correlation between the variables, sports participation and performance evaluation. Prior to this, an internal reliability analysis was also conducted to assess the consistency of the items in the instrument. One of the most commonly used is Cronbach's alpha, which is based on "the average correlation of items within a test if

the items are standardized” [6] [24] [3]. The reliability coefficient was 0.734, that is, there is an acceptably high internal consistency. Essentially, this means that respondents who tended to select high scores for one item also tended to select high scores for the others; similarly, respondents who selected low scores for one item tended to select low scores for the other items [5] [17]. Thus, knowing the score for one item would enable one to predict with some accuracy the possible scores for the other 13 items.

V. RESULTS

The sample size was 200 UiTM staff of which the returned response was 190 or 95%. The respondents’ consisted of 63.7% male and 36.3% female (TABLE I). For the age brackets, the highest number of the respondents (56.3%) were between 25-35 years of age followed by 20% of those between 36-45 years.

TABLE I. DEMOGRAPHIC PROFILES OF RESPONDENTS

	Respondents’ Profiles	Frequency	(%)
Gender	Male	121	63.7
	Female	69	36.3
Age	18-24 years	21	11.1
	25-35 years	107	56.3
	36-45 years	38	20.0
	> 46 years	24	12.6
Work Division	Academic	32	16.8
	Administration	158	83.2
Perf. Eval.	0-79	7	3.7
	80-85	74	38.9
	86-90	72	37.9
	91-100	37	19.5
Marital Status	Single	59	31.1
	Married	127	66.8
	Divorced	4	2.1

The need to identify the work division of the employees who participated in sports showed that 16.8% were academicians while 83.2% were administrative staff. Next, the respondents were asked to identify their performance evaluation marks obtained the previous year where 38.9% obtained between 80 to 85 marks, 37.9% obtained between 86 to 90 marks, 19.5% were in the excellent range of 91-100 and only 3.7% were given below 79 marks. Finally, the marital status of the respondents showed that 127 are married, 59 are still single while four respondents are divorced. Thereon, a bivariate correlation was undertaken between performance evaluation and employees who participated in sports (TABLE II). It was hypothesized that a positive relationship would exist between these two variables and this is rightly evidenced where $r = .049$. The results of the correlation indicated that higher sports participation is associated with higher performance

evaluation and there is statistically significant evidence to indicate this where $p < .05$ ($p=.498$). The discussion on this outcome will be expanded in the next section.

TABLE II. CORRELATIONS

		Performance Evaluation Marks	Participation
Performance Evaluation Marks	Pearson Correlation	1	.049
	Sig. (2-tailed)		.498
	N	190	190
Participation	Pearson Correlation	.049	1
	Sig. (2-tailed)	.498	
	N	190	190

VI. DISCUSSION, CONCLUSION AND RECOMMENDATION

From the previous section, the results indicated more male employees are involved compared to their female peers. The discrepancy of 27.4% could be due to personal reasons where married female employees are bound by the cultural obligations. Another obvious discrepancy (66.4%) is in the number of academic staff who participated in sports versus the administrative employees. Could it be that the academicians are too busy to be physically active? This is shown in the performance evaluation marks where 74 respondents have performed well at work but could be more consistently productive if they are physically fit. As for the marital status of respondents, 66.8% are married and this high percentage accounts for the high participation in sports compared to those who are still unattached. This is a good indication that married employees are more aware of health benefits through participating in sports and the opportunity to network socially. Thus, it can be concluded that employees who participate in sports would have a better performance evaluation score and this outcome is supported in studies by O’Reilly [25], Braddock [2], Wattles and Harris [36], and Shepard [31] where there were significant positive and strong relationships between sports participation and employee performance. This study should be an eye-opener for UiTM’s top management to consider having more physical activities for the staff. In fact, it is recommended that the university makes it a mandate that staff must be involved in at least one exercise program as the benefits of a fit and healthy employee affects other stakeholders.

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