

Perceived Environmental Attributes Of Employees' Physical Activity and Work-Life Balance

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ABSTRACT

The study determined the perceptions on the environmental attributes such as accessibility of facilities, opportunities for activity, weather conditions, safety, and aesthetic attributes, level of physical activity engagement and work-life balance of local government employees of Calamba, Misamis Occidental during the last quarter of the calendar year 2022. The quantitative correlational method of research was used with the questionnaire checklist as the main data gathering tool. The study was conducted in Calamba, Misamis Occidental, Philippines with the participation of 150 local government unit employees. The five-point Likert scale was used in the analysis of the extent of environmental attributes and physical activities. The data analyses tools were weighted average mean and the Spearman rho correlation.

There are environmental attributes which may facilitate physical activity engagement of employees like accessibility of facilities, opportunities for activity, weather condition, safety and aesthetic attributes. These finding may be benchmarked for policy changes focusing on environmental innovations which could promote improvement of physical activities and eventually achieve very healthy work-life balance among employees.

KEYWORDS: *Perceive Environmental Attributes, Employees, Physical Activities, Work-Life Balance*

INTRODUCTION

Physical activity is one of the best things people can do to improve their health. It is vital for healthy aging and can reduce the burden of chronic diseases and prevent early death.

Active people generally live longer and are at less risk for serious health problems like heart diseases, type 2 diabetes, obesity, and some cancers. For people with chronic diseases, physical activity can help manage these conditions and complications. The Active People, Healthy Nation [1] cited that physical activities benefits adults by lowering risk of high blood pressure, risk of stroke, improving aerobic fitness, mental health, cognitive function, reducing arthritis and preventing weight gain.

Regular physical activity is strongly associated with better physical and psychological health outcomes, and the promotion of physical activity is one of the high public health priority (Active People, Healthy Nation) [1]. However, the individual's physical activities engagement may be improved or hampered due to some factors like environmental attributes. These attributes could be facilities, weather conditions, and safety. To develop relevant policies and effective intervention,

it is imperative to determine the factors that can be changed to influence physical activities engagement. This study examined the extent of environment factors relating the physical activities engagement of the employees of the local government unit of the municipality of Calamba, province of Misamis Occidental, Philippines during the calendar year 2022.

Statement of the Problem

What are the perceptions of the participants on the environmental attributes such as accessibility of facilities, opportunities for activity, weather conditions, safety, and aesthetic attributes?

What is the level of physical activity engagement of the participants?

What is the level of work-life balance of the participants?

Is there a significant relationship between the participants perceptions of environmental attributes and their physical activity?

Is there a significant relationship between the participants physical activity and their work-life balance?

METHODS

The quantitative correlational method of research was used with the questionnaire checklist as the main data gathering tool. The study was conducted in Calamba, Misamis Occidental, Philippines with the participation of 150 local government unit employees. The study was conducted during the last quarter of the calendar year 2022. The five-point Likert scale was used in the analysis of the extent of environmental attributes and physical activities. The data analyses tools were weighted average mean and the Spearman rho correlation.

RESULTS AND DISCUSSIONS

Table 1 refers to the responses of the participants when asked about their perceptions on some environmental attributes contributing to physical activities engagement.

The participants agreed that they were aware of the facilities available for physical activities which are nearby their respective areas. This is reflected in the weighted average mean of 3.21 which is interpreted as “agreed.” Generally, the respondents could say that there is accessibility of facilities in their respective areas.

There are also opportunities for physical activities where the participants generally agreed of their presence such as sideways for walking and open spaces or areas which allow physical activities. The availability of, and access to, cycleways, footpaths, were found to be associated with physical activity (Booth, et al.) [2]; Stahl, et al. [3]; Troped, et al. [4]. Evidence appears to be accumulating for the importance of accessibility of facilities as an important factor related to physical activity.

The participants were noted to have agreed that weather conditions in some instances could attribute to their physical activities. Two studies (Booth, et al.) [2] and (Stahl, et al.) [3] have reported that most activity was found to occur in the summer months and that this could vary by the particular activity and the individual.

Generally, the participants agreed that aesthetic attributes or characteristics could encouraged physical activities especially if they are surrounded with friendly and encouraging neighborhood, pleasant environment and with friendly people.

Safety would seem to be applicable only to outdoor activities. A significant association was found between perceived safety from crime and physical activity behavior by the Centers for Disease Control and Prevention (Troped, et al.) [4].

Table 1. *Environmental Attributes to Participants' Physical Activities*

Statements	WAM	Description
Accessibility of Facilities		
1. There are exercises equipment available at home such as exercise bike or exercise video.	2.67	Fairly Agree
2. There is access to facilities that maybe used for physical activities such as recreation center, fitness center, cycle path or park.	2.85	Fairly Agree
3. There is awareness of facilities available for physical activities.	4.03	Agree
4. There is adequate available facilities in the neighborhood or at home.	3.28	Agree
Overall Mean	3.21	Agree
Opportunities for Activity		
1. There are sidewalks which can be route for walking and running.	4.32	Strongly Agree
2. There are areas nearby which offer opportunities for physical activities.	4.55	Strongly Agree
3. There are equipment at home.	2.72	Fairly Agree
Overall Mean	3.86	Agree
Weather Condition		
1. There is good weather condition that encourages physical activities.	4.33	Strongly Agree
2. There are indoor facilities available for physical activities.	3.07	Fairly Agree
Overall Mean	3.70	Agree
Safety		
1. Footpaths are safe.	3.77	Agree
2. It is safe to walk or jog alone	3.69	Agree
3. There are safe places to exercise.	3.88	Agree
Overall Mean	3.78	Adequate
Aesthetic attributes		
1. There is a friendly neighborhood.	3.42	Agree
2. There is a pleasant home environment.	3.39	Fairly Agree
3. Local area is attractive.	3.90	Agree
4. There is an enjoyable scenery.	3.75	Agree
Overall Mean	3.62	Agree

Legend:	4.21 – 5.00	Strongly Agree (SA)	3.41 – 4.20	Agree (A)
	2.61 – 3.40	Fairly Agree (FA)	1.81 – 2.60	Disagree (D)
	1.00 – 1.80	Strongly Disagree (SD)		

The physical activities always done by the participants was hiking as shown in the weighted average mean of 4.31. This was closely followed by physical activities like brisk walking, jogging, running, stretching, and climbing stairs. Sometimes done by the participants included aerobics, dancing and push-ups. Generally, a considerable number of physical activities were hardly or rarely done by most of the participants which clearly implies that lack of prioritizing mobility and physical exercises as well as maintaining a sedentary lifestyle.

The National Institute on Aging [5] emphasized that exercise and physical activity are good for just about everyone, including older adults. Often, inactivity is more to blame than age when older people lose the ability to do things on their own. Lack of physical activity also can lead to more visits to the doctor, more hospitalizations, and more use of medicines for a variety of illnesses.

Walking, bicycling and dancing are endurance activities which increase breathing, get the heart pumping, and boost chemicals in the body that may improve mood (National Institute on Aging) [5].

Table 2. *Physical Activity of the Participants*

Statements	WAM	Description
1. Brisk walking	4.11	Often
2. Jogging	3.89	Often
3. Aerobics	2.53	Sometimes
4. Cycling or biking	1.85	Rarely
5. Diving	1.99	Rarely
6. Hiking	4.31	Always
7. Running	3.60	Often
8. Stretching	4.12	Often
9. Swimming	1.90	Rarely
10. Wood chopping	1.99	Rarely
11. Yoga	2.10	Rarely
12. Badminton	2.03	Rarely
13. Climbing stairs	3.84	Often
14. Cutting grass	1.88	Rarely
15. Dancing	2.10	Rarely
16. Push-ups	2.62	Sometimes
17. Sit-ups	2.78	Sometimes
18. Skipping rope	1.55	Never
19. Squats	2.00	Rarely
20. Track and field	1.75	Never
Overall Mean	2.65	Sometimes

Legend:	4.21 – 5.00	Always (A)	3.41 – 4.20	Often (O)
	2.61 – 3.40	Sometimes (S)	1.81 – 2.60	Rarely (R)
	1.00 – 1.80	Never (N)		

Work-life balance is necessary for job satisfaction according to all generations and work schedules have a direct and frequent impact on well-being according to a new interesting research called “State of the Hourly Worker” report published by Shiftboard partnered with Kwantum Analytics (Behbarhani) [6].

The below table revealed that most of the participants have generally average work-life balance. This is evident in the overall mean of 3.02 which is denoted as “average”. Although, there were activities that the participants were considered to have healthy work-life balance especially on the activities like: “I browse messages after I leave the workplace;” and “I am happy with my plan for getting the work done.” These clearly show that the participants have set priorities on their work like getting their work done before shifting to communication such as browsing messages.

It can also be noticed from the participants’ responses that they have average work-life balance insofar as technology adaptation, customer satisfaction and expectations, as well as meeting deadlines which they considered as just blended with their personal goals or activities.

The findings imply the need for the participants to enhance their work-life balance from the average level to healthy and even very healthy work-life balance. Although, as Lockwood [7] noted, societal pressures for equal labor opportunities and conditions, shifts in organizations, attitudes towards roles have place work-life balance into challenging conditions. Thus, work-life balance should encompasses not only work and family life but work-life balance since personal lives are not limited to familial needs (Lockwood) [7]. Fujiwara [8] added that keeping regular work hours, avoiding overtime, exercising regularly can lead to maintaining a healthier work-life balance. Morris and Madsen [9] argue that for successful work-life integration, people should consider identifying, addressing and supporting role, relationship, responsibilities demands in various life domains.

Table 3. *Work-Life Balance of the Participants*

Statements	WAM	Description
1. I am fulfilled with the ongoing work hours I have.	3.21	Average
2. I stay at work longer than required.	2.55	Average
3. I offload a portion of my undertakings to another colleague at work.	3.07	Average
4. I miss an individual occasion given at work.	2.68	Average
5. I bring work back home.	2.63	Average
6. I browse messages after I leave the workplace.	3.44	Healthy
7. I am happy with my plan for getting work done.	3.82	Healthy
8. I focus on my occupation over my own life.	2.75	Average
9. I focus on my family over my work.	3.10	Average
10. I want to rest and invest energy with my family.	3.02	Average
11. The use of technology in my workplace have increased	2.88	Average

enthusiasm in my work.		
12. I feel that meeting tight deadlines is necessary for efficient performance.	2.93	Average
13. Higher expectations from our customers have set benchmarks to achieve our goals.	3.07	Average
14. The shorter expected response times for communication have strengthened our relationship with co-employees.	3.18	Average
Overall Mean	3.02	Average

Legend: 4.21 – 5.00 Very Healthy (VH) 3.41 – 4.20 Healthy (H)
 2.61 – 3.40 Average (A) 1.81 – 2.60 Less Healthy (LH)
 1.00 – 1.80 Least Healthy (LeH)

Table 4. Tests for Significant Relationship Between the Environmental Attributes and Physical Activities

Variables	Spearman rho value	t-value of r	p-value	Decision
• Accessibility of Facilities and Physical Activities	0.48	6.66	0.00	Significant
• Opportunities for activity and Physical activity	0.39	5.15	0.00	Significant
• Weather condition and Physical activity	0.51	7.21	0.00	Significant
• Safety and Physical activity	0.37	4.84	0.00	Significant
• Aesthetic attribute and Physical activity	0.32	4.11	0.00	Significant

The Spearman rho correlation was utilized to conduct the tests of inference using SPSS. As revealed the Spearman rho correlation coefficients are all significant. Hence, the environmental attributes of accessibility of facilities, opportunities for activity, weather condition, safety, and aesthetic attribute are significantly related to the participants' physical activity.

The Frontiers in Public Health [10] noted that physical activity is one of the most undervalued interventions to improve public health. The availability of accessible facilities and services according to Frontiers in Public Health [10] has been identified as a critical factor influencing physical activity levels among various populations, which is especially important for older adults.

In addition, Lee et al. [11] concluded that the accessibility of sports facilities is associated with physical activity. Hence, it is crucial to consider the accessibility of sports facilities when promoting an environment conducive to physical activity or designing programs for enhancing physical activity. Tucker and Gilliland [12] concluded that levels of physical activity vary with seasonality, and the ensuing effect of poor or extreme weather has been identified as a barrier to participation in physical activity among various populations. Belanger, et al. [13] noted that declines in physical activity during adolescence may be partly explained by declines during winter. Increasing opportunities for physical activity during poor weather, in particular during winter, may mitigate declines in physical activity during adolescence.

Table 5. Tests for Significant Relationship Between the Physical Activity and Work-Life Balance

Variables	Spearman rho value	t-value of r	p-value	Decision
• Physical Activities and Work-Life Balance	0.38	5.00	0.00	Significant

The Spearman rho correlation was utilized to test the significant relationship between the physical activity of the participants and their work-life balance. The test resulted to the Spearman rho coefficient of 0.38 which is significant at the 0.00 probability value. This denotes that there is a significant relationship between the physical activity of the participants and their work-life balance. Calderwood [14] strengthened the above finding when they noted that prior to end-of-workday physical activity yields greater levels of end-of-workday vigor, a boundary-spanning resource that in turn provides the energetic bandwidth to simultaneously achieve work-related and non-work-related goals during the postwork period, ultimately enhancing daily satisfaction with work-life balance (Calderwood, et al., 2021).

CONCLUSIONS AND RECOMMENDATIONS

There are environmental attributes which may facilitate physical activity engagement of employees like accessibility of facilities, opportunities for activity, weather condition, safety and aesthetic attributes. These finding may be benchmarked for policy changes focusing on environmental innovations which could promote improvement of physical activities and eventually achieve very healthy work-life balance among employees.

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