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Correlation of leisure time physical activity and burnout among non-clinical young adults

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Abstract

Background/Rationale: In this research, the researchers aimed to know the participation of leisure-time physical[SS1] activity and the presence of burnout from work engagement among non-clinical young adults and how both of these variables correlate to one another.
Objective: The objective of this study was to determine the relationship between leisure-time physical activity and burnout among non-clinical young adults.
Methods:
Research Design: The researchers conducted a correlational study design.
Research Locale: The study was conducted in a private university in the Philippines.
Research Respondents: The study involved non-clinical young adults.
Methodology: The researchers collected data through questionnaires specifically Godin Leisure-Time Physical Activity Questionnaire and Oldenburg Burnout Inventory.
Results: Leisure-time physical activity and burnout has no significant correlation to one another.
Conclusion: There is a negative correlation between leisure-time physical activity and burnout among non-clinical young adults.
Keywords: Leisure-Time Physical Activity, Burnout, Faculty, Occupational therapy, Physical therapy.

Introduction and Rationale

For a long time, burnout has been perceived as an occupational hazard for various people-oriented professions, such as human services, education, and health care. The therapeutic or service relationships that such providers develop with recipients require an ongoing and intense level of personal, emotional contact. Although such relationships can be rewarding and engaging, they can also be quite stressful.

Burnout, a serious and relentless type of weariness that happens after a significant stretch of work pressure, has become a common phenomenon in the present associations. Early conceptualizations of burnout define burnout as a syndrome of emotional exhaustion, depersonalization, and reduced sense of personal accomplishment, that can happen among people who do individuals work, or the like. Since then, the concept has been broadened from people work to all kinds of occupations. Burnout thus mainly refers to feelings of mental and physical exhaustion (i.e., extreme levels of fatigue), low mood, and lack of energy.

High levels of burnout are associated with substantial losses for employees' health and well-being. Employees with burnout show diminished self-viability levels, rest inadequately, show diminished intellectual working, have decreased work capacity, and are at higher danger for creating cardiovascular ailments. Given the high prevalence of burnout and its negative outcomes, it is significant to examine potential approaches to reduce it.

Various pathways have been proposed to explain the relationship between physical activity and burnout; yet, the underlying mechanisms are still uncertain. A combination of psychological and physiological mechanisms may be responsible for the hypothesized positive effects. It has been proposed that regular physical activity facilitates psychological detachment from work, and in this way reduces the risk of prolonged stress responses such as burnout. As respect to physiological components, it has been proposed that methods for normal physical movement is better ready to deal with mental pressure (i.e., the cardiovascular wellness hypothesis). This may result in faster bodily recovery after stress exposure, thus reducing the risk of burnout. Exercise may also induce changes in several neurotransmitters and neuromodulators, resulting in better mood and increased energy.

Literature Review

Leisure as a concept has been defined and examined in several ways from time immemorial. Tokarski (2003) states, leisure is where people develop their lifestyles, find their routine for everyday life and work for elements of self-realization. Leisure viewed this way is no longer time after work, or recreation for work, but rather, an independent and central part of life. Related to today's world, leisure is defined as ―the existence of lifestyles which include motivation, behavior, and experiences towards wellness and health and leads at least to individual well-being (Tokarski, 2003). Emenike (1988) also conceptualized leisure as a life-style. Leisure is freedom from occupation, employment or engagement.

In summary, leisure can be conceived as part of free time used for recreational pursuits at one 's own free will and choice for intrinsic rewards and experience which enables optimum personal self-actualization and satisfaction but also contributes towards a happy community life. Therefore, leisure is a state of mind which allows individuals to get involved in socially acceptable, but individually satisfaction pursuits.

Leisure-Time Physical Activity

Physical activity which is characterized as a movement including the utilization of body muscles prompting use of energy, incorporates dynamic entertainment (e.g. casual play, dance, sport and exercise) dynamic transportation (e.g. strolling, cycling running) and activity during paid or homegrown work (e.g. mowing, dish washing) (Caspersen et al., 1985; Ross, 2001). Leisure-time physical activity (LTPA) connects the participation in physical activity through the promotion of active forms of leisure (Ross, 2001). Physical activity is being seen world-wide as one significant avenue to attain quality of life, good health and well-being.

The Dunedin multidisciplinary survey (Reeder et al., 1991) and the life in New Zealand survey (Wilson et al., 1993) as well as an Australian survey (Australian Bureau of statistics, 1997; 1998) observed higher levels of male participation in LTPA and vigorous activity respectively. Several studies on LTPA have indicated positive relation between leisure satisfaction, leisure attitudes and leisure participation. For example, Ragheb (1980) found that the greater the degree of leisure satisfaction and the more positive the leisure attitude, the higher the frequency of participation in leisure activities. Positive association was also found between leisure satisfaction and leisure participation of older people (Ragheb & Griffith, 1982). Furthermore, Iso-Ahola (1997) indicated that LTPA is positively related to mental health of 15 individuals. Participation in LTPA was found to affect mental health of people by improving their cognitive functioning, reducing depression and anxiety and producing good moods and improving self-esteem and self-concept.

Physical Activity Theories

Physical activity is a factor that directly affects a person ‘s well-being and health. Vuori (1998) proposed that high and moderate levels of physical activity are connected to lower mortality rates, hold benefits for individuals since they go through advantageous physiological and mental changes when they are physically active. Marshall (2004) reported that individuals who partake in working environment physical activity programs appear to have less absenteeism, and regularly have higher job satisfaction and have less occupation stress. Physical activity is considered to be an important part of a healthy lifestyle (Pate et al., 1995), and can be done in different contexts and divided into occupational and leisure-time physical activity.

The work place can be a stressful environment and employees with high levels of emotional stress are generally at greater risk of colds, flu and other illnesses. Participation in these types of physical activity is a great way of relieving occupational stress as it results in an increased production and release of serotonin into the bloodstream which is responsible for the good mood experienced after activity (Warburton et al., 2006). Different dimensions of physical activity can be expressed by the frequency, intensity, duration and type of activity (Bouchard et al.,2006).

Studies exist about the fact that not only does burnout come out in consequence with career conditions but it can be seen as a result of failure to accomplish goals and expectations in those who have such obsessive characteristics as perfectionism and elaborativity. Those studies indicate that relations with other people, motivation, excessive work, the person’s ability to comply with stress are related to burnout (Koç & Topaloğlu, 2010). Organizationally, it appears through such problems as going to work late and leaving early, leaving the job, getting easement reports, barrenness in novelties, contributional criticism, productivity and extreme enterprises in job (Aktuğ et al., 2006).

Contrastingly, being physically active at work and outside of the workplace and in leisure time, is important and effective in preventing the occurrence of negative

emotional reactions such as depression, fear, anxiety, stress and a very important factor in coping with job stress and burnout are analyzed. Attention to physical exercise and maintaining a base of physical fitness is one of the ways that sports science researchers deal with stress and job burnout and subsequent analysis of the adjustment is recommended.

Theoretical Framework

The Model of Human Occupation (MOHO) was first developed in the 1980s by Gary Kielhofner. Since then, other occupational therapists have also been involved in its development, revision and refinement of the concepts. MOHO is an occupation-focused framework that aims to explain aspects of engaging in occupations and how illness and disability related problems arise and said to be client-centered, evidence based and holistic in nature. This model perceives the human being as a system and describes it using systems theories. According to the dynamic systems theory interaction between the human as a system, the task and the environment result in occupational behaviour. Occupational performance results in health, well-being, development and change, therefore making it dynamic.

Volition

Volition constitutes self-knowledge or common sense that is gained through experience and dispositions. Dispositions refer to the cognitive/ emotional orientation towards occupations, such as enjoyment, value, feelings of competence and others. Volition encompasses values, interests and personal causation.

Values are about the beliefs, commitments and significance that people attach to occupations and they are likely to engage in those that they deem as important. Values create a strong disposition to perform according to standards set by context.

Interests relates to perceptions, feelings and emotions associated with pleasure and satisfaction. Therefore, the person would choose to engage in an occupation that he/she finds satisfying and enjoyable. Interests are generated from positive experiences or can be based on the anticipation of enjoyment attached to engagement.

Personal causation refers to the perceived present and potential effectiveness to act on the world with regards to mental and physical capabilities. This knowledge about own capabilities is dynamic and continuously unfolds to the individual.

Habituation

Actions are organized into patterns of behavior that become routines. Integration into our temporal, social, physical and cultural environments is through these patterns of behaviour. Habituation comprises of habits and roles, which are often resistant to change. Habits are automatic learned ways in which we respond and perform in familiar situations. For habits to develop actions have to be repeated to be able to establish a pattern and there has to be consistency in the environment. Habits operate at a subconscious level and they influence a wide range of behaviour patterns.

Roles

MOHO states that we behave and act in learned ways that are associated with a social identity or status. Our actions are embedded in our social roles or are performed in full or partial fulfilment of a social role. Roles influence our interactions with others, the

style, manner and content as well as the role related tasks that form daily routine. Habits regulate routine actions and behaviour within a role. The interwoven nature of habits and roles is evident in daily life and in turn, routine behaviour is organized.

Performance Capacity

This is the ability to perform an act, based on the status of one's mental and physical capabilities, as well as lived experiences. Capabilities include the musculoskeletal, cardiopulmonary, neurological and other physiological systems that enable action. The capabilities are objectively assessed and the experiences are subjective and they shape performance.

Historically and from the perspective of the dominant Euro-Canadian culture, productivity and efforts towards ensuring that people have opportunities to engage in the economy have received greater attention than the understanding and valuing of time spent on leisure (Reid, 1995). The implication that productivity is somehow more valuable than leisure does not acknowledge differences in values and leisure opportunities among people, which may be identified by age, geography, gender, and ethnicity (Freysinger, 1995; Henderson & Rannells, 1988; Raval, 1989; Raymore, 1995). Leisure's status and occupational therapy's previously individualistic focus have limited the profession's conceptual development of leisure. Occupational therapists can strengthen the conceptual development of leisure in the interdisciplinary arena by merging research and practice that focus on occupation.

This study is anchored on the phenomenon of Ann Wilcock's theory entitled the Occupational Perspective of Health (OPH), also known as the framework of Doing-Being-Becoming. It describes the theme of "doing", "being", and "becoming" in occupational therapy practice.

In this framework, "Doing" refers to occupation and occupational performance of an individual, which is essential for the individual to interact with others and develop own identity, and to create and shape the society.

"Being" refers to being true to self, that people are required to spend time thinking and reflecting themselves. This helps an individual describes and sustains the own roles.

"Becoming" means how people redefine their values and rethink their priorities to prepare transformation of their new roles. This concept of becoming may change continuously overtime, reflective of how a person sees his or her future. In addition, there are three aspects of becoming, which include: becoming, becoming competent, and becoming a social being. All the three of becoming aspects hold the potential for growth and self-actualization of the individual. The synthesis of doing, being, and becoming is integral to health and well-being of the individual who can achieve health through engaging in meaningful occupations. (Wilcock, 2006)

The fourth construct, "belonging," is the phase that has the most developmental impact for long-term health and wellness. A sense of belonging is described as 'being part of, a member of, a constituent of, associated with, included in something, feeling right, and fitting in" (Wilcock & Hocking, 2015)

Active engagement in occupations within contexts that adolescents participate in provide opportunities for social, educational, and cultural inclusion. Through the process of doing, being, and becoming an occupational individual, the adolescent is motivated and empowered through the selection of occupations they want to perform

and belonging to the social communities they prefer. (O'Brien et al, 2015) Persons experience a sense of health and well-being when their psychological, sleep, mental, and social needs are filled. Occupational imbalance is a state that occurs when people's engagement in occupations fail to meet their physical, social or rest needs. There is insufficient time for their own occupational interests and growth and the meeting of expectations of family, social, and community commitments. (Case-Smith et al, 2015)

Within the OT practice framework, prevention is an intervention approach. Prevention is said to address clients with or without a disability who are at risk for occupational performance problems and is meant to prevent the occurrence or evolution of barriers to performance in context. Interventions (prevention) may be directed at client, context, or activity variables" (AOTA, 2002)

The primary focus of this study is primary prevention. It is directed towards relatively healthy individuals who may have a potential risk of developing a disease or disorder. The sources of these risks could be genetic, socioeconomically driven, age-related, ecologically influenced, politically organized, or occupational factors related to imbalance, deprivation or alienation. Regardless of the cause, primary prevention acknowledges the potential of a future health problem and provides an intervention to minimize, delay or avoid onset.

The theoretical model chosen to investigate the behavioral aspects of LTPA was the theory of planned behavior. According to this theory, a specific observable behavior is hypothesized to depend on the individual's intention to do it. A person's intention to engage in the behavior of interest depends on his or her attitude to the behavior, the expectation of others who think he or she should practice the behavior (subjective norm), and his or her degree of perceived ease or difficulty of performing the behavior (perceived control). The theory of planned behavior can therefore be used to predict a behavioral outcome after assessing the strength of the constructs of perceived control and intention.

The previous statements have been used in the literature to examine exercise behavior to establish areas for interventions designed to promote increased physical activity and hopefully healthier people. Unfortunately, the relationships among intention, its determinants, and behavior have not yielded necessary relational strengths worthy of compiling interventional guidelines or seriously addressing the independent variables principally targeted for promoting the greatest change of the behavioral outcome (Trost, Saunders, & Ward, 2002). In this instance, the goal is to promote physical-activity adherence and yield the desired health related benefits of exercise.

Research Objectives

General objective: The objective of this study was to determine the correlation between leisure-time physical activity and burnout among non-clinical young adults.

Significance of the Study

The benefactors of the study are as follows:

Future Researchers. This study will allow the future researchers to contribute towards the growing body of occupational therapy literature in leisure and burnout.

Occupational Therapists. This will benefit OTs who intend to address the burnout rate of faculty members and its relationship with leisure-time physical activity.

Scope and Limitations of the Study

The study was conducted in a private university in the Philippines and addressed non-clinical young adults. The study focused on leisure-time physical activities and how this variable correlates with burnout among the faculty members.

The study was limited only to full time occupational and physical therapy faculty in the private university. Moreover, the basis of the study was only limited to a small quantity of population.

Materials and Methods

Research Design

The researchers conducted a correlational study design, which was the most appropriate since the study aimed to know the relationship between leisure time physical activity to burnout among non-clinical young adults and whether these set of variables are correlated to one another or not.

Research Respondents

This study involved non-clinical young adults of a private university in the Philippines.

Inclusion Criteria
- Full time faculty in the said university
- Graduate of BSOT and BSPT

Exclusion Criteria
- Part time faculty
- Diagnosed with cardiovascular conditions
- Diagnosed with mental health conditions

Power Analysis and Sample Size Determination
The researchers used convenience sampling due to time constraint.

Sampling Frame
The subjects for this study were obtained from the non-clinical young adults of a private university, and from the researcher's description on the subjects.

Sampling Design
Simple random sampling was used in this study wherein the researchers selected a group of subjects that met the inclusion criteria of this study which are the non-clinical young adults that participates in leisure-time physical activities.

Materials and Equipment

The researchers used the Godin-Shephard Leisure-Time Physical Activity Questionnaire and Oldenburg Burnout inventory.

Godin-Shephard Leisure-Time Physical Activity Questionnaire is a self-report assessment tool used to evaluate the leisure-time physical activity of an individual. The leisure-time physical activity score is expressed in units and can be computed in two steps. First, weekly frequencies of strenuous, moderate, and mild activities are multiplied by nine, five, and three respectively; these three latter values correspond to MET value categories of the activities listed. Then the total weekly leisure activity score is computed in arbitrary units by summing the products of the separate components as shown in the following formula: Weekly leisure-time activity score = (9 x strenuous) + (5 x moderate) + (3 x mild).

Oldenburg Burnout Inventory is a 16-item survey with positively and negatively framed items that covers 2 areas: exhaustion (physical, cognitive, and affective aspects) and disengagement from work (negative attitudes toward work objects, work content, or work in general).1 There are multiple questions for each of these subscales and responses are in the form of a 4-point Likert scale from strongly agree (1) to strongly disagree (4).

Study Plan and Data Collection

The researchers submitted a transmittal letter to the dean of the college and asked for an approval in conducting research in their department. Once approved, the gathering of the respondents that fit the inclusion criteria then followed. The researchers then evaluated and administered the Godin Shephard Leisure-Time Physical Activity Questionnaire and Oldenburg Burnout Inventory to obtain significant information related to the study and collected all the data gathered once the respondents completed the questionnaires. After the data collection and gathering process, analysis and interpretation of data then followed to determine the relationship between leisure-time physical activity to burnout among non-clinical young adults of the said university.

Data Processing and Analysis

The data gathered and collected were utilized by descriptive correlational and inferential statistics. The analyses used information from the assessment tool that were used; frequency and simple percentage were computed to be the basis to search for patterns.

Results and Discussion

Leisure

The results show that there are more active (23 participants) than moderately active (6 participants) faculty members. Based from the degree program of the faculty members, there are more physical therapists than occupational therapists faculty members who have partaken in the study.

Physical therapists engage more in physical exercises as an integral part of their line of job thus being able to participate more in physical activities and being more active.

Burnout

Basing from the results shown, for the disengagement items, majority have agreed to find new aspects of their work and none answered strongly disagree. Majority have

agreed that their burnout happens more and more often that they talk about their work in a negative way and three of them have strongly disagreed. Majority have agreed that lately, they tend to think less at work and do their job almost mechanically and none of them have answered strongly agree. Majority have agreed and strongly agreed that they find their work to be a positive challenge while none of them have strongly disagreed. Majority of them have agreed that over time, one can become disconnected from their type of work and 3 of them have strongly disagreed. Majority of them have agreed that sometimes they feel sickened by their work tasks and none of them have strongly disagreed. Majority of them have strongly disagreed that their work is the only type of work that they can imagine themselves doing and two of them have strongly agreed. Majority of them have agreed that they feel more and more engaged in their work and only one of them have strongly agreed.

For the exhaustion items, majority of them have disagreed that there are days when they feel tired before they arrive at work and only one of them have strongly agreed. Majority of them have also disagreed that after their work, they tend to need more time than in the past in order to relax and feel better and only one of them have strongly agreed. Most of them have agreed that they can tolerate the pressure of their work very well and one of them have strongly disagreed. Most of them have agreed that during their work, they often feel emotionally drained and four of them have strongly agreed. Majority of them have agreed that after working, they have enough energy for their leisure activities and three of them have strongly agreed. Majority of them have disagreed that after their work, they usually feel worn out and weary and four of them have strongly agreed. Majority of them have agreed that usually, they can manage the amount of their work well and none of them have strongly disagreed. Majority of them have disagreed that when they work, they usually feel energized and only one of them have strongly agreed.

Correlation Between Leisure and Burnout Variables

The results show that there is no significant correlation between physical activity and burnout, Pearson r= -0.34, p=0.07. The results were similar to a systemic review study conducted by Naczenski L.

According to Naczenski L., (2017), burnout constitutes serious risk to sustainable health of employees of today's organizations. Accordingly, interventions that reduce burnout are needed. Their study hypothesized that regular physical activity may constitute an instrument that may be used for the reduction of burnout. Therefore, their study systematically reviewed longitudinal and intervention studies that investigated the strength of the relationship between physical activity and burnout. Ten studies, four longitudinal and six intervention studies, were identified. The consistency of the evidence for a negative relationship between physical activity and the key component of burnout (i.e., exhaustion) in longitudinal studies was moderate, while the consistency of this evidence in intervention studies was strong. Moreover, for intervention studies, their study have found limited evidence for a positive relationship between physical activity and professional efficacy, and inconsistent evidence for a negative relationship between physical activity and cynicism.

Conclusion

In conclusion, leisure-time physical activity and burnout has no significant correlation. Thus, an active faculty member and a moderately active faculty member has experienced burnout regardless of physical activity status.

Recommendations

The researchers recommend to expand the study using a larger population such as occupational and physical therapy faculty members from different universities to obtain a more accurate mean values, identify outliers that could skew the data in a smaller sample and provide a smaller margin of error.

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Tables

Figure 1. Schematic Diagram of the Study

INPUT	PROCESS	OUTPUT

To utilize Godin Leisure-Time Physical Activity Questionnaire and Oldenburg Burnout Inventory	To administer the questionnaires to the SWU PHINMA Occupational and Physical Therapy faculty	To gather the results of how leisure time physical activity correlates with burnout among SWU PHINMA Occupational and Physical Therapy faculty

Figure 2. Correlation Between Leisure-Time Physical Activity and Burnout Results

Correlations

			Physical_Activity	Burnout
Spearman's rho	Physical_Activity	Correlation Coefficient	1.000	-.338
		Sig. (2-tailed)	.	.073
		N	29	29
	Burnout	Correlation Coefficient	-.338	1.000
		Sig. (2-tailed)	.073	.
		N	29	29

Figure 3. Leisure Results

Between-Subjects Factors

		Value Label	N
Physical_Activity	2	Moderately Active	6
	3	Active	23

Figure 4. Burnout Results

	1	2	3	4
Disengagement items	Strongly Agree	Agree	Disagree	Strongly Disagree
Q1. I always find new and interesting aspects in my work.	10	14	5	0
Q3. It happens more and more often that I talk about my work in a negative way. (R)	5	15	6	3
Q6. Lately, I tend to think less at work and do my job almost mechanically. (R)	0	14	13	2
Q7. I find my work to be a positive challenge.	13	13	3	0
Q9. Over time, one can become disconnected from this type of work. (R)	3	12	11	3
Q11. Sometimes I feel sickened by my work tasks. (R)	3	14	10	2
Q13. This is the only type of work that I can imagine myself doing.	2	4	10	13
Q15. I feel more and more engaged in my work.	8	14	6	1
Exhaustion items				
Q2. There are days when I feel tired before I arrive at work. (R)	1	4	19	5
Q4. After work, I tend to need more time than in the past in order to relax and feel better. (R)	1	9	10	9
Q5. I can tolerate the pressure of my work very well.	7	17	4	1
Q8. During my work, I often feel emotionally drained. (R)	4	14	6	5
Q10. After working, I have enough energy for my leisure activities.	3	16	7	3
Q12. After my work, I usually feel worn out and weary. (R)	4	8	15	2
Q14. Usually, I can manage the amount of my work well.	8	17	4	0
Q16. When I work, I usually feel energized. (R)	1	10	14	4