

UNIVERSITI PUTRA MALAYSIA

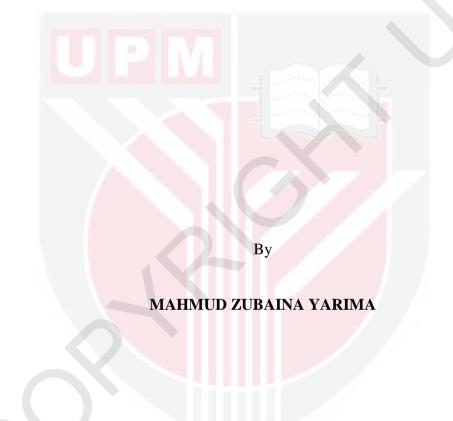
FACTORS INFLUENCING LEISURE PARTICIPATION AMONG FEMALE ACADEMICIANS IN A MALAYSIAN PUBLIC UNIVERSITY

MAHMUD ZUBAINA YARIMA

FPSK(M) 2016 31



FACTORS INFLUENCING LEISURE PARTICIPATION AMONG FEMALE ACADEMICIANS IN A MALAYSIAN PUBLIC UNIVERSITY



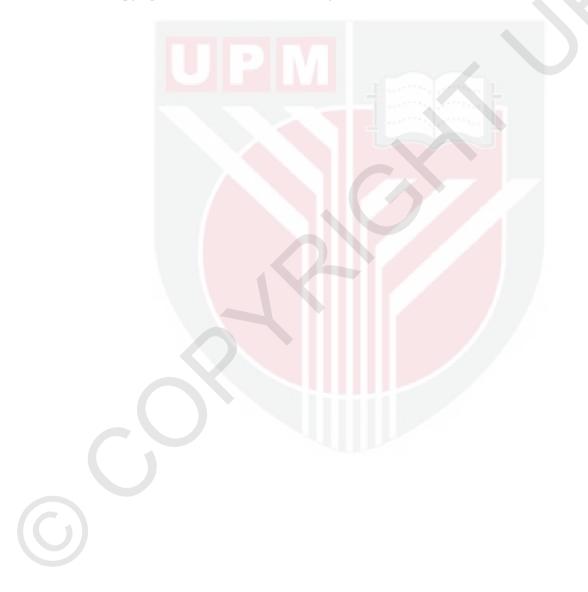
Thesis Submitted to the School of Graduate Studies, Universiti Putra Malaysia, in Fulfillment of the Requirements for the Degree of Master of Science

June 2016

COPYRIGHT

All material contained within the thesis, including without limitation text, logos, icons, photographs and all other art work, is copyright material of Universiti Putra Malaysia unless otherwise stated. Use may be made of any material contained within the thesis for non-commercial purpose from the copyright holder. Commercial use of material may only be made with the express, prior, written permission of Universiti Putra Malaysia.

Copyright © Universiti Putra Malaysia



Abstract of thesis presented to the Senate of Universiti Putra Malaysia in fulfilment of the requirement for the Degree of Master of Science

FACTORS INFLUENCING LEISURE PARTICIPATION AMONG FEMALE ACADEMICIANS IN A MALAYSIAN PUBLIC UNIVERSITY

By

MAHMUD ZUBAINA YARIMA

June 2016

Chairman : Halimatus Sakdiah Binti Minhat, DrPH Faculty : Medicine and Health Sciences

Introduction: Leisure participation is beneficial towards maintaining a healthy living. It can be gained not only from vigorous activities but also through performing passive activities.

Objective: The main objective of the study is to determine the factors influencing leisure participation among female academicians in Universiti Putra Malaysia (UPM), Serdang.

Methodology: A cross- sectional study was conducted among female academicians in UPM from December 2014 to March 2015, involving 654 respondents, selected using simple random sampling method. A self-administered questionnaire followed by e-mail was used as method of data collection. The questionnaire was validated and consisted of seven sections namely socio-demography factors, perceived social support from family members and friends and also perceived time constraints at home and work place. The measurement scales used were a 5-point likert (0 to 4) for accessibility to leisure related facilities at home and work place and nominal scales (Yes vs No) for health status and leisure participation questionnaire were measured using a 5-point likert scale (0 to 4). The analysis involved descriptive, bivariate (Independent T-test and correlation) and multivariate analyses (linear regression). The level of significance was set at 0.05

Results: The n activity was 28 old. Most of th (67.1%), senic

Results: The mean scores for physical activity were 4.17 ± 4.26 and non-physical activity was 28.93 ± 8.88 . The mean age of the respondents was 42.21 ± 8.55 years old. Most of the respondents were Malay (70.0%), Muslims (70.1%), married (67.1%), senior lecturers (42.4%), Malaysians citizen (95.6%), high perceived social support received from family members (68.8%) and friends (66.8%), high perceived time constraints at home (72%) and workplace (50.9%), had high access to leisure-related facilities either at home (60.0%) or workplace (85.2%) and did not have chronic illness (58.7%).

The total mean score for leisure participation in physical activities was 4.17 ± 4.26 and 28.93 ± 8.88 for non- physical activities. The top five activities with the highest mean score for physical activities were regular exercise (1.43 ± 1.27) , evening walk (0.90 ± 1.25) , jogging (0.48 ± 0.96) , playing golf (0.14 ± 0.50) and swimming (0.31 ± 0.71) . Meanwhile, the top five non-physical activities with the highest mean scores were browsing (2.96 ± 1.19) , watching television (2.82 ± 1.25) , listening to the radio (2.64 ± 1.42) , reading (2.63 ± 1.26) and cooking (1.97 ± 1.54)

However, the final model showed only age (B=-0.107, 95% CI: -0.164, - 0.051, p=0.001), accessibility leisure-related facility at home (B=1.030, 95% CI:-1.669, 0.392 P=0.002) and health status (B=1.550, 95% CI: - 2.184,-0.916, p=0.001) were the only significant predictors of leisure participation in physical activity. Whereas, age (B=-0.211, 95% CI:-0.342,-0.213, P=0.001) was the only significant predictor for leisure participation in non-physical activity. Unfortunately, both models revealed remarkably low Nigerkerk R^2 values of 15.8% and 2.8% respectively.

Conclusion: The results of this study indicate a considerably low level of leisure participation in physical activity as evidenced by the low mean score for each of the physical activities listed and also the total mean score as compared to non-physical activity. Age, health status and accessibility to leisure facilities at home were significantly predicting the participation of the respondents into physical activity during leisure, whereas non-physical activity was only significantly predicted by age. Relevant authorities should be acknowledged on the importance of providing leisure facilities in the residential area or in the neighbourhood such as gymnasium to enable them to participate in leisure activities.

Keyword: Leisure Participation, female academicians, UPM,

Abstrak tesis yang dikemukakan kepada Senat Universiti Putra Malaysia sebagai memenuhi keperluan untuk Ijazah Master Sains

FAKTOR YANG MEMPENGARUHI PENYERTAAN SENGGANG DALAM KALANGAN AHLI AKADEMIK WANITA DI UNIVERSITI PUTRA MALAYSIA, SERDANG

Oleh

MAHMUD ZUBAINA YARIMA

Jun 2016

Pengerusi: Halimatus Sakdiah Binti Minhat, DrPHFakulti: Sains Perubatan dan Kesihatan

Pengenalan: Penyertaan senggang bermanfaat bagi mengekalkan kehidupan yang sihat. Ia dapat dilakukan bukan sahaja melalui aktiviti lasak tetapi juga melalui aktiviti pasif.

Objektif: Objektif utama kajian ini adalah untuk mengenal pasti faktor-faktor yang mempengaruhi penyertaan senggang dalam kalangan ahli akademik wanita di Universiti Putra Malaysia (UPM), Serdang.

Metodologi: Satu kajian keratan rentas telah dilakukan terhadap ahli akademik wanita di UPM dari Disember 2014 hingga Mac 2015, melibatkan 654 responden, yang dipilih menggunakan kaedah persampelan rawak mudah. Soal selidik yang dijawab sendiri serta diikuti oleh emel digunakan sebagai kaedah pengumpulan data. Soal selidik yang telah disahkan mengandungi tujuh bahagian iaitu bahagian faktor sosiodemografi, anggapan sokongan sosial daripada anggota keluarga dan kawan-kawan serta anggapan kekangan masa di rumah dan di tempat kerja. Skala ukuran yang digunakan adalah Likert 5-mata (0 hingga 4) untuk aksesibiliti kemudahan senggang di rumah dan di tempat kerja serta skala nominal (Ya lwn Tidak) untuk soalan tentang keadaan kesihatan dan soal selidik bagi penyertaan senggang diukur menggunakan Likert 5-mata (0 hingga 4). Analisis yang terlibat adalah deskriptif, bivariat (Ujian-T bebas dan korelasi) dan multivariat (regresi linear). Tahap signifikan ditentukan pada 0.05

Dapatan kajian: Skor min untuk aktiviti fizikal adalah 4.17 ± 4.26 dan aktiviti bukan fizikal adalah 28.93 ± 8.88 . Umur min responden adalah 42.21 ± 8.55 tahun. Kebanyakan responden adalah berbangsa Melayu (70.0%), berkahwin (67.1%), pensyarah kanan (42.4%), warga negara Malaysia (95.6%), beragama Islam (70.1%) menganggap dapat sokongan tinggi daripada anggota keluarga (68.8%) dan kawan-kawan (66.8%), menganggap kekangan masa yang tinggi di rumah (72%) dan di tempat kerja (50.9%), dapat mengakses kemudahan yang berkaitan senggang



dengan tinggi sama ada di rumah (60.0%) atau di tempat kerja (85.2%) dan tidak menghidap penyakit kronik (58.7%).

Jumlah skor min bagi penyertaan senggang dalam aktiviti fizikal adalah 4.17 ± 4.26 dan 28.93 ± 8.88 untuk aktiviti bukan fizikal. Lima aktiviti fizikal teratas yang mempunyai skor min paling tinggi adalah senaman biasa (1.43 ± 1.27) , berjalan di waktu petang (0.90 ± 1.25) , berjoging (0.48 ± 0.96) , bermain golf (0.14 ± 0.50) dan berenang (0.31 ± 0.71) . Sementara itu, lima aktiviti bukan fizikal teratas yang mempunyai skor min paling tinggi adalah melihat-lihat komputer (2.96 ± 1.19) , menonton televisyen (2.82 ± 1.25) , mendengar radio (2.64 ± 1.42) , membaca (2.63 ± 1.26) dan memasak (1.97 ± 1.54)

Walau bagaimanapun, model terakhir menunjukkan hanya umur (B=-0.107, 95% CI: -0.164, -0.051, p=0.001), aksesibiliti kemudahan yang berkaitan senggang di rumah (B=1.030, 95% CI:-1.669, 0.392 P=0.002) dan keadaan kesihatan (B=1.550, 95% CI: -2.184,-0.916, p=0.001) yang menjadi peramal signifikan bagi penyertaan senggang aktiviti fizikal. Manakala umur (B=-0.211, 95% CI:-0.342,-0.213, P=0.001) adalah satu-satunya peramal yang signifikan bagi penyertaan senggang aktiviti bukan fizikal. Malangnya, kedua-dua model menunjukkan nilai Nigerkerk R² yang sangat rendah iaitu dengan masing-masing 15.8% dan 2.8%.

Kesimpulan: Hasil kajian ini menunjukkan dengan jelas penyertaan senggang yang rendah dalam aktiviti fizikal berdasarkan skor min yang rendah bagi setiap aktiviti fizikal yang disenaraikan dan jumlah skor min dibandingkan dengan aktiviti bukan fizikal. Umur, keadaan kesihatan dan aksesibiliti kepada kemudahan senggang di rumah menjadi peramal yang signifikan terhadap penyertaan responden dalam aktiviti fizikal pada waktu senggang, manakala umur satu-satunya peramal yang signifikan bagi aktiviti bukan fizikal. Pihak berkuasa yang terlibat perlu diberitahu pentingnya untuk menyediakan kemudahan senggang di kawasan perumahan atau di kawasan yang berhampiran seperti gimnasium bagi membolehkan mereka melibatkan diri dalam aktiviti senggang.

Kata kunci: Penyertaan senggang, ahli akademik wanita, UPM,

ACKNOWLEDGEMENTS

Indeed, all praise is due to Allah the lord of the Universe, Allah from who all knowledge, wisdom and intelligence come from. Have no doubt that it is his grace that has made it possible for me.

I would like to extend my deepest gratitude to my supervisor Dr Halimatus Sakdiah Binti Minhat for her patience, professional guidance and constructive criticism, helpful comments to improve the content of my thesis thank you ma. I am also grateful to my co-supervisor Dr Aidalina binti Mahmud for her ideas and positive contributions. I would like to acknowledge my sources of founding Tawaran Geran Universiti Putra Malaysia UPM/700-2/1/GP-IPS/2014/9433954 this study would not have been a reality without their assistance. I would also like to appreciate the efforts of all my lecturers for the invaluable knowledge they impacted on us. I wish to offer special thanks to all female academicians who took time off from their busy schedules to participate and made this study possible. I wish to express my gratitude to secretary of all the faculties in UPM Serdang for their time and assistant during the period of data collection. I am sincerely grateful to Health service management board Yola, Adamawa state for granting me the permission to undergo this programme.

I could like to express my gratitude to my family especially my husband, children and sibling also to those who contributed to the success of my study especially Dr, mal Abdulhamid Muhammad, Panmial Priscilla Damula, Dr Abdullahim, Mal, Audu likita family, Dr Usman Ismaila Zamfara family, Dr Muhammad Hassan family, Hajia Fatima Binta Adamu (Matan Baba), Dr Mustspha Agamalafiya, Dr Idris ajoge, Mal Ishak Hong family, Y.G.D'S, Family, wakili Hong family and Dr Santuraki's family. I am immensely grateful to my friends and mates numerous to mention who contribute in one way or the other in the course of this program. Finally to Hajia Zara Yusuf former head of department nursing science Zaria may her soul rest in perfect peace Ameen. This thesis was submitted to the senate of the Universiti Putra Malaysia and has been accepted as fulfillment of the requirement for the degree of Master of Science. The members of the supervisory committee were as follows:

Halimatus Sakdiah Binti Minhat, MBBS, MPH, DrPH

Associate Professor Faculty of Medicine and Health Sciences Universiti Putra Malaysia (Chairman)

Aidalina binti Mahmud, MBBS, MPH

Senior Lecturer (Medical) Faculty of Medicine and Health Sciences Universiti Putra Malalysia. (Member)

> **BUJANG KIM HUAT, PhD** Professor and dean School of Graduate Studies Universiti Putra Malaysia

Date:

Declaration by graduate student

I hereby confirm that:

- this thesis is my original work;
- quotations, illustrations and citations have been duly referenced;
- this thesis has not been submitted previously or concurrently for any other degree at any other institutions;
- intellectual property from the thesis and copyright of thesis are fully-owned by Universiti Putra Malaysia, as according to the Universiti Putra Malaysia (Research) Rules 2012;
- Written permission must be obtained from supervisor and the office of Deputy Vice- chancellor (Research and Innovation) before thesis is published (in the form of written, printed or in electronic form) including books, journals, modules, proceedings, popular writings, seminar papers, manuscripts, posters, reports lecture notes, learning modules or any other materials as stated in the in the Universiti Putra Malaysia (Research) Rules 2012;
- There is no plagiarism or data falsification/fabrication in the thesis, and scholarly integrity is upheld as according to the Universiti Putra Malaysia (Graduate Studies) Rules 2003(Revision 2012-2013) and the Universiti Putra Malaysia (Research) Rules 2012. Thesis has undergone plagiarism detection software.

Signature:	Date:

Name and Matric No: Mahmud Zubaina Yarima, GS37819

Declaration by Members of Supervisory Committee

This is to confirm that:

- the research conducted and the writing of this thesis was under our supervision;
- supervision responsibilities as stated in the Universiti Putra Malaysia (Graduate Studies) Rules 2003 (Revision 2012-2013) were adhered to.

Signature:	
Name of Chairman	
of Supervisory	Associate Professor
Committee:	Dr. Halimatus Sakdiah Binti Minhat
~	
Signature:	
Name of Member	
of Supervisory	
Committee:	Dr. Aidalina binti Mahmud

TABLE OF CONTENTS

APPRO DECL LIST (RAK OWLEDGEMENTS	i iii v vi viii xiii xiii xiv
СНАР	TER	
1	INTRODUCTION 1.1 Background of the study 1.2 Problem statement 1.3 Significance of the Study 1.4 Research Questions 1.5 Objectives of the Study 1.5.1 General Objective 1.5.2 Specific Objectives 1.6 Research hypotheses	1 1 2 4 5 5 5 5 5 5
2	 LITERATURE REVIEW 2.1 Introduction 2.2 Definitions 2.2.1 Leisure 2.2.2 Academicians 2.3 Categories of leisure activities 2.4 Leisure-related theories 2.4.1 Functionalism, structuralism and post-modernism 2.4.2 Theory of planned behaviour 2.4.3 Continuity theory 2.5 Benefit of leisure involvement participation 2.5.1 Quality of life 2.5.2 General well-being 2.5.3 Mental health 2.5.4 Economic benefit 2.6 Women and Leisure participation 2.6.1 Factors influencing the leisure participation of women 2.7 Conceptual framework	7 7 7 8 9 10 10 11 12 12 13 14 14 14 16 17 18 26
3	METHODOLOGY3.1Introduction3.2Study location3.3Study design3.4Study duration	29 29 29 30 30

Page

	3.5	Study population	30
	3.6	Sampling frame	30
	3.7	Sampling unit	30
	3.8	Sampling method	30
	3.9	Sampling population	30
	517	3.9.1 Inclusion criteria	30
		3.9.2 Exclusion criteria	30
	2 10		
	3.10	-	31
	3.11	5	32
		3.11.1 Section A: Socio-demography characteristics	32
		3.11.2 Section B: Perceived Social Support	32
		3.11.3 Section C: Time constraints (home and workplace)) 33
		3.11.4 Section D : Accessibility to leisure- related	d 33
		facilities (home and work place)	
		3.11.5 Section E: Health status	33
		3.11.6 Section F: Leisure participation	33
	312	Data collection	34
		Validity and reliability of study	34
	5.15		34 34
		3.13.1 Content validity	
		3.13.2 Face validity	34
		3.13.3 Reliability	34
		Data analysis	36
		Ethical approval	36
	3.16		36
		3.16.1 Dependent variable: Leisure participation	36
		3.16.2 Independent variables	36
4	RES	ULTS	39
	4.1	Introduction	39
	4.2	Response rate	39
	4.3	Test of Normality	39
	4.4	Descriptive analysis	40
	4.4		40
		4.4.1 Socio-demographic factors	
		4.4.2 Perceived social support and perceived time	e 41
		constraints	
		4.4.3 Accessibility to leisure-related facilities and Health	h 41
		status	
		4.4.4 Leisure participation	42
	4.5	Bivariate Analysis	44
		4.5.1 Physical activity	44
		4.5.2 Non-physical activity	47
	4.6	Multivariate analysis	49
		4.6.1 Predicting factors for leisure participation in	n 49
		physical activity among female academicians in	
		UPM	
		4.6.2 Non-physical activity	50
5	DISC	CUSSION	52
-	5.1	Introduction	52
		5.1.1 Response rate	52
		r	

	5.2	Characteristics of female academicians in Universiti Putra Malaysia	52
		5.2.1 The socio-demographic characteristics	52
		5.2.2 Patterns of leisure participation	59
	5.3	Predicting factors of leisure participation in physical activity among female academicians in UPM	60
		5.3.1 Age	61
		5.3.2 Health status	62
		5.3.3 Accessibility to leisure-related facilities at home	62
		5.3.4 Other factors associated with physical activity	63
	5.4	Predicting factors of leisure participation in non-physical activity among female academicians in UPM	65
		5.4.1 Age	66
		5.4.2 Other factors associated with non-physical activity	66
6	CON	CLUSION AND RECOMMENDATION	69
	6.1	Summary and Conclusion	69
	6.2	Strength and limitation of the study	69
		6.2.1 Strength of the study	69
		6.2.2 Limitations	69
	6.3	Recommendations	70
REFER	. –		71
APPEN			94
BIODA	TA OI	STUDENT	112
LIST C	F PUB	BLICATIONS	113

C

LIST OF TABLES

Tabl	le	Page
3.1	Sample size calculation according to different factors	32
3.2	Results of the Test re- test reliability $(N = 120)$	35
3.3	Results of the Kappa Agreement reliability test ($N = 120$)	35
3.4	Socio-demographic factors	37
4.1	Test of normality	39
4.2	Socio-demographic characteristics of the respondents ($N=654$)	40
4.3	Perceived social support and perceived time constraints to engage in leisure activity among respondents ($N = 654$)	41
4.4	The accessibility to leisure related facilities and health status among respondents	42
4.5	Distribution of leisure participation among respondents according to physical activity (N=654)	43
4.6	Distribution of leisure participation among respondents according to non-physical activity (N=654)	44
4.7	The correlation between age and years of services in physical activity	44
4.8	Association between socio-demography and leisure participation in physical	45
4.9	Association between perceived social supports, time constraints, accessibility to facilities, health status and leisure participation in physical activity ($N = 654$)	46
4.10	The correlation between age and years of service in non-physical	47
4.11	Association between socio-demography and leisure participation in non- physical activity ($N = 654$)	48
4.12	Association between perceived social supports, time constraints, accessibility to facilities health status and leisure participation in non- physical activity ($N=654$)	49
4.13	Multiple linear regressions showing the predictors of leisure participation in physical activity (N=654)	50
4.14	Multiple linear regressions showing the predictors of leisure participation non-physical activity (N=654)	51

LIST OF ABBREVIATIONS

1.5.0	
ABS	Australian Bureau of Statistics
MHM	Ministry of Health Malaysia
WHO	World Health Organization
RM	Malaysia Ringgit
LTPA	Leisure Time Physical Activity
ABU	Ahmadu Bello University
UPM	Universiti Putra Malaysia
USA	United State of American
SD	Standard Deviation
TPB	Theory of planned behaviour
SES	Socio- economic status
MDG	Millennium Development Goals
CVD	Cardio Vascular Disease
DF	Degree of Freedom
PAS	Physical Activity Score
NPAS	Non- Physical Activity Score
CI	Confidence Interval
M	Mean
X ²	Chi square
Р	Level Significant
Т	Independent test
UN	United nation
TV	Television
UD	Usman Danfidiyo University
PGDE	Post graduate diploma in education
	o or

CHAPTER 1

INTRODUCTION

1.1 Background of the study

Leisure is an important aspect of an individual's life, which involves conducting most desirable activities during the free time, which is commonly known as leisure time. Leisure time is a period of apparent freedom from formalized tasks. It is the time when an individual engages in worthwhile and productive activities that provide various benefits to the individual's health (Tseng . 2006;Vainio H, 2002). With the current economic factors, people tend to forget the idea of leisure as being part of their day-to-day activities (Taneja, 2013). Several studies have pointed out that "work-leisure conflict is an important factor that determines an employee's decision to continue working in their existing organization" Lie & Shani A.1991; Ford, et al. 2007;Slattery et al. (2008) which is commonly experienced by female employees. It arises as a result of improper allocation of workload and gender bias in an organization (Zhao, .& Rashid. 2010).

Various benefits and advantages have been reported in relation to leisure involvement. The positive effect not only affects the physical well-being but also the mental, social, moral, emotional and spiritual well-being (Tseng. 2006). According to a review by Faam et al. (2013), the data from 26 studies showed that people who are engaged in leisure activities have better health and fewer incidences of cardiovascular diseases (OR=0.73, 95%CI: 0.66-0.80, p<0.001), in which those who engaged in leisure were 0.73 times more protected against cardiovascular disease compared to otherwise. Apart from health benefits, leisure participation was also found to strengthen the relationship between family members, friends and the community in general; for example, family leisure provides an opportunity for the family to bond with each other, solve problems, and strengthen their relationship (Agate. 2009). According to Huff . (2003), an increase in communication has been reported among family members as a result of family leisure involvement. Furthermore, Agate. (2007) stated that family involvement in leisure has also been positively correlated with cohesion, family adaptability, and overall family functioning. Apart from family involvement, performing leisure with friends has also been proven to be beneficial. The involvement of friends in leisure acts as a social support, and decreases the sense of loneliness and isolation (Kleiber . 2002). A previous study by Iwasaki and co-researchers on the importance of friendship and leisure resources for stress coping has been addressed (Iwasaki. 2000). Community involvement in leisure brings about interaction, that is to say unity in the settings and among ethnic groups (Shinew et al.2004). The benefits of leisure can be gained not only from vigorous activities but also from performing inactive or passive activities, such as reading and watching television. Reading, for example, has been found to improve the cognitive function of aged people, and, thus, in some instances, improve their quality of life even informal social interaction has been found to affect the health of the aged (WHO, 2009). Leisure is an important domain of life regardless of gender, age, customs and social class (Minhat et al. 2014; Alayode et al. 2014). It is

also understood to be a way of refreshment, which an individual can partake during their free time in order to relieve their mind (Hu, Xiaoming, 2004). The leisure activities can range from sedentary to vigorous or passive to active activities. One of the commonest aspects of leisure being explored was involvement in physical activities.

Various factors are involved in structuring the pattern of individual leisure participation. These factors include time constraints, socio-demographic factors, health status and facilities (Arab-moghaddam & Henderson, 2006; Norman et al.2002; Stodolska & Shinew, 2010). Moreover, previous studies suggested that, the influence of personnel health status, lack of access to natural environment, lack of maintenance of park equipment, language problems and racial discrimination are factors that affect leisure participation (Ball, 2001; Stodolska & Shinew, 2010; Johnson et al. 2001). This study aims to determine the contributing factors towards leisure involvement among female academicians in Universiti Putra Malaysia (UPM).

1.2 Problem statement

Women are more likely to experience a greater burden to pursue leisure as a result of household responsibilities (Jacobs .2001). Working women are believed to experience a double burden, in which they have to commit themselves to domestic responsibilities and also to those in the workplace, which could jeopardize their leisure or free time. The burden that they experience not only increases their stress level, but also affects their health status Zuzanek & Veal, 2004; Chang, (2006) which could be reduced through leisure. However, women are restricted in their communities because of certain responsibilities in their social environment, such as culture, domestic and workplace commitments (Tsai & Chiug 2006). Women have limited leisure participation as a result of community norms, values, cultural or spiritual activities, societal roles and socio-economics (Apostolopoulos & Sonmez, S 2001).

The situation might be worse for women who are caregivers and also have to work at the same time, which is also known as the sandwich generation. The sandwich generation refers to women who are employees and also caregivers at the same time looking after children or their aged parents. In a review conducted by Schulz, R & Sherwood. (2008), it was reported that women caregivers experience a burden as a result of their socioeconomic status, lack of social support and health status. They are more likely to experience psychological distress, functional impairments and dementia (Razani et al. 2007), and also higher levels of depression and work-family conflict (Hammer, L. B., & Neal, 2008). Meanwhile, a study conducted by Schumache, (2012), reported that 63.0% of women believed that their caregiving task hindered their ability to pursue leisure, while only 12.0% of participants indicated that they protected their leisure time.

The increased number of women working outside home, created an increased strain on many women caregivers (Dautzenberg et al., 2000). Multiple role responsibilities have created the potential for strain on sandwich generation caregivers who have competing demands from the workplace and caregiving (Pierret, 2006). Research has suggested that once women occupy multiple caregiving roles, like family and work responsibilities, they experience more health related problems and stress (Neal, Chapman, Ingersoll-Dayton, & Emlen, 1993).

Low involvement of women in physical activity; less participation in PA it comes as a result of involvement in domestic and work place responsibilities (Kowal and Fortier 2007). Also, when women are advance in age (Lindstrom et al., 2010) they have less involvement in PA than the younger ones. Similarly, lack of time and amenities Azlan et al. (2010) contributed to the less participation in physical activities among women. Women who are mothers have less participation in physical activity compared to women who do not have children (Brown, Lee, Mishra, & Bauman, 2000). Low participation in leisure physical activity among women come as a result of lack of time, energy, socioeconomic status (SES), lack of social support (from partners, family, and friends) (Peter et al 2001).

Women prone to develop chronic diseases compared to men due to physical inability. Less involvement in physical activity among women can lead to development of chronic diseases (Muztagh and Hubert, 2004). Similarly, the study further emphasized that, women with less involvement in physical activity were potentially physically inactive often than men (P=<0.05) (Muztagh and Hubert, 2004). A study have showed low involvement in leisure physical activity especially among women leads to the development of chronic diseases such as depression and mental distress compared to men (Australian Bureau of Statistics, 1996).

On gender influence, how much time an individual spares for leisure while in the work place varies based gender. According to a previous study, men spend 5.8 hours, whereas women spend 5.1 hours a day in leisure activities (Bureau of Labor Statistics. 2012). Men continue to dominate leisure activities, especially in this era of high industrialization; women, however, pay more attention to the domestic affairs of their family (Monterrubio, 2009). Working women have less time for leisure -time physical activity compared to working men (Throne, 2000). Therefore, this study aims to study the contributing factors that could possibly constrain the female academician from actively being involved in leisure activities.

C

Previous studies such as Tel.2014, Sandikci et al 2013 and Biernat, Roguski 2005etc focuses on leisure activities among academicians. However, this study focus only on female academicians which will help to contribute to the growing literature on factors influencing leisure activities. The relationship in non-physical activity in some studies such as Kronenberg et al. 2000, Dimitri et al. 2004 and Bickham and Rich 2006 etc describe between individual variables such as watching TV, reading and listening to radio.These studies did not analysis the non-physical activity as a single entity. Therefore in this study non-physical activity as a whole was examined.

Association between physicla activity and time constraints has been examined in many studies which includes Nyaupane &Andereck.2008,Arab-Moghaddan & Henderson 2007 and Wen et al.2007 Howerver, this studies examined critically the association between time constraints at home and at work place instance of time constraints in general.

1.3 Significance of the Study

This study provides new knowledge and useful information related to factors that could possibly affect the leisure involvement of female academicians in UPM, Serdang. The findings can be utilized by other researchers as base line data in order to make comparable studies.

The benefit of this study on female academic staff is that, the information obtained can create awareness concerning the prevalence of leisure participation among working women, in general, and female academicians in particular. Moreover, it provides insight into the activities engaged by them, both physical and non-physical. This will encourage their participation in physical activities there by reducing their stress level and improving their concentration and health status.

To the university, the outcome of this research would provide information on the need to encourage female academic staff in physical activities, as this is found to boost the productivity of employees by meeting their physical and psychological needs which in turn reduces the rate of absenteeism, sick leaves and medical costs. Additionally, the findings could also provide relevant information to the university authorities on the need to provide adequate recreational and leisure facilities at workplace, such as gymnasium, table tennis, badminton and many others.

To human resources, leisure participation is a significant factor in employee performance. It increases the level of commitment, enhances bonding and improves employee wellbeing with a consequent positive effect on job satisfaction and increase productivity.

1.4 Research Questions

- 1. What are the patterns of leisure participation among the female academicians in UPM, Serdang?
- 2. What are the factors affecting the leisure participation of female academicians in UPM, Serdang?

1.5 Objectives of the Study

1.5.1 General Objective

To determine the factors influencing leisure participation among female academicians in UPM

1.5.2 Specific Objectives

1.5.2.1 To determine the mean score for physical activity and non-physical leisure activities.

1.5.2.2 To determine the distribution of respondents according to:

- a. Socio-demographic characteristics (age, marital status, years of service, country of origin, religion, academic position and ethnicity).
- b. Perceived social support received from family members and friends.
- c. Perceived time constraints at home and workplace.
- d. Accessibility to leisure-related facilities at home and workplace.
- e. Heath status.

1.5.2.3 To determine the association between level of leisure participation in physical

Activity and non-physical activity among female academicians and:

- a. Socio-demographic characteristics (age, marital status, years of service, country of origin, religion, academic position and ethnicity).
- b. Perceived social support received from family members and friends.
- c. Perceived time constraints at home and workplace.
- d. Accessibility to leisure-related facilities at home and workplace.
- e. Heath status.

1.5.2.4 To determine the predictive factors for leisure participation in

Physical activity and Non-physical activity among the female academicians in UPM

1.6 Research hypotheses

1. There is a significant relationship between leisure participation (Physical activity and Non-physical activity) and socio-demographic characteristics

(age, marital status, religion, years of service, and country of origin, academic position and ethnicity) among female academicians.

- 2. There is a significant relationship between leisure participation (physical activity and non-physical activity and perceived social support received from (family member and friends) and leisure participation among female academicians.
- 3. There is a significant relationship between time constraints (home and workplace) and leisure participation (Physical activity and Non-physical activity) among female academicians.
- 4. There is a significant relationship between accessibility to leisure-related facilities (home and workplace) and leisure participation (Physical activity and Non-physical activity) among female academicians.
- 5. There is a significant relationship between health status of the respondents and leisure participation (Physical activity and Non-physical activity) among female academicians.

REFERENCES

- Abd-latif, R., Nor, M. Omar-fauzee, (2011). Influence of Recreational Facilities among Adolescents towards Leisure Time Physical Activity(LTPA).*Environment-Behaviour Studies*, 2(5), 37–46.
- Abdul-Latif, R. A., Othman, N. I., Abdullah, N. M., Hamid, N. Tan, C. H. (2014). Attitude and Perceived Constraints Towards Physical Activity Among Gender in Alor Setar, Kedah. International Colloquium on Sports Science, Exercise, *Engineering and Technology*. 2 (7) 234-346.
- Ábrah ám, J., Velenczei, A., Szabo, A. (2015). Perceived Determinants of Well-Being and Enjoyment Level of Leisure Activities.
- Achour, M., Grine, F., Roslan, M., Nor, M. (2015). Work family conflict and coping strategies: Qualitative study of Muslim female academicians in Malaysia, 37–41.
- Ahmed M. Abdel-khalek, (2016). Religiosity , happiness , health , and psychopathology in a probability sample of Muslim adolescents, 46-76
- Ahsan, Yong, Abdullah, Shah Alam (2009). A Study of Job Stress on Job Satisfaction among University Staff in Malaysia : Empirical Study, 8(1), 121–131.
- Agger, B. (1991). Critical Theory, Post structuralism, Postmodernism: Their Sociological Relevance Vol. 17: 105-131 Annual Review of Sociology DOI: 10.1146/annurev.so.17.080191.000541
- Agahi, N., & Parker, M. G. (2005). Are today's older people more active than their redecessors? Participation in leisure-time activities in Sweden in 1992 and 2002. Ageing & Society, 25, 925–941.
- Agate, J. R., Zabriskie, R. B., Agate, S. T., Poff, R. (2009). Family leisure satisfaction and satisfaction with family life. *Journal of Leisure Research*, 41, 205–223.
- Agate, S.T. Zabriskie, R. B.(2007). Playing and Successful Families. An Examination of Family Religiosity, Family leisure and Family Functioning. Marriage and family *Review*, 42(2), ,51–75.
- Aghai N, Ahacic K, Parker M G , (2006). Continuity of Leisure Participation from Middle Age to Old Age the *Journals of Gerontology: Series B*, 61, (6) 340-346.
- Ajzen, I. (1991) The Theory of Planned Behavior. Organizational Behavior and Human Decision Processes, 50, 179–211.

- Ajzen, I., & Driver, B. L. (1992). Application of the theory of planned behavior to leisure choice. *Journal of Leisure Research*, 24 (3), 207–224.
- Ajzen, I., & Fishbein, M. (1980). Understanding attitudes and predicting social behavior. *Englewood Cliffs, NJ: Prentice Hall.*
- Akarolo-anthony, S. N., & Adebamowo, C. A. (2014). Prevalence and correlates of leisure-time physical activity among Nigerians, 14(1), 1–8.
- Akubue Felicia N. (2012). Gender and Leisure: a Sociological Perspective. America Journal of Sociological Research, 2(4), 52–57.
- Alayode, A. M., Babalola, A. J., Olufemi, O. (2014). Perceived Motives for Participation in Leisure-Time Physical Activity among Employees of Tertiary Institutions in Ondo State, Nigeria. Education & Human Development, 3(1), 559–571.
- Alexandris, K., Barkoukis, V., Tsorbatzoudis, H., & Grouios, G. (2003). A study of perceived constraints on a community-based physical activity program for the elderly in Greece. *Journal of Aging and Physical Activity*, 11(3), 305–318.
- Allied Dunbar National Fitness Survey (1992). Main findings. London: Sports Council and Health Education Authority.
- Amarya, S., Singh, K., & Sabharwal, M. (2015). Changes during aging and their association with malnutrition. *Journal of Clinical Gerontology and Geriatrics*, 6(3), 78–84.
- Aman, M. S. Mohd Sofian Omar F, Mawarni, M (2008). The Understanding of Meaning and Cultural Significance of Leisure, Recreation and Sport in Malaysia towards Capitalizing Human Resources. Global Business Management, 3(2), 129–135.
- American health Association, (2001). Benefits of physical activity for older Americans. *Retrieved from <u>http://www.heart.org/HEARTORG</u>*
- American Heritage® Dictionary of the English Language, Fifth Edition. Copyright © 2011 by Houghton Mifflin Harcourt Publishing Company. *Published by Houghton Mifflin Harcourt Publishing Company. All rights reserved.*
- Andraja Brajsa Z, Marina Merkas. (2011).Quality of Life and Leisure Activities; How do Leisure Activities Contribute to Subjective Well-Being. 100:81-91Journal Springer Science &Bussiness.
- Apostolopoulos, Y., & Sonmez, S. (2001). Working Producers, Leisured Consumers: Women's Experiences in Developing Regions. (Eds.) Women as Producers and Consumers of Tourism in Developing Regions, Connecticut: Praeger Publishersitle.

- Arab-moghaddam, N., & Henderson, K. A. (2006). Women's Leisure and Constraints to Participation : Iranian Perspectives. *Leisure Research*, 39(1), 109–126.
- Ariane L. Bedimo-Rung, Andrew J. Mowen, Deborah A. Cohen, M. (2005). The Significance of Parks to Physical Activity. *Preventive medicine* 28, 159–168.

Aristotle. (1998). Politics. (C. D. C. Reeve, Trans.). Indianapolis: Hackett.

- Armstrong, G. K., & Morgan, K. (1998). Stability and change in levels of habitual physical activity in later life. Age and Ageing, 27(3), 17–23.
- Atchley, R. C. (1989). A continuity theory of normal aging. *The Gerontologist, 29, 183–190*.
- Atchley, R. C. (1999b). Continuity theory, self, and social structure. In C. D. Ryff & V. W. Marshall (Eds.), The self and society in aging processes. *New York:* Springer., 94–121.
- Atchley, R. C.(1999a) Continuity and adaptation in aging: Creating positive experiences. Baltimore: *Johns Hopkins University Press*.
- Australian Bureau of Statistics (ABS) (2006). General Social Survey, cat. no. 9155.0, ABS Canberra.
- Ayesha R. (2007). The Level of Physical Activities amongst Elderly in a Community *JUMMEC 2007: 10(1)*.
- Ayin, I. A., Kumcagiz, H., Altinel, B. Caloglu, A. (2014). Turkish Female Academician Self-Esteem and Health Beliefs for Breast Cancer Screening. *Asian Pacific Journal of Cancer Prevention*, 15, 155–160.
- Azevedo, M. R., Araújo, C. L. P., Reichert, F. F., Siqueira, F. V., Silva, M. C., Hallal, P. C. (2007). Gender differences in leisure-time physical activity. *International Journal of Public Health*, 52(1), 8–15.
- Azlan Ahmad Kamal, Mohd. Syukran Abdul Khadir, F. W. Y. (2010). The perception and constraints towards recreational activity among female students. *Sport Management, Recreation & Tourism, 6, 62–75.*
- Azzopardi, A. E. (2000). European Youth Trends 2000 Vulnerable Youth: Perspectives on vulnerability in education, employment and leisure in Europe Strasbourg: *Council of Europe Publishing*.
- Baker, D. W., Parker, R. M., Williams, M. V, Clark, W. S. Nurss, J. (1997). The relationship of patient reading ability to self-reported health and use of health services. *American Journal of Public Health*, 87(6), 1027–30.

- Baker, D. W.& He, X. Z., (2005). Differences in leisure-time, household, and workrelated physical activity by race, ethnicity, and education. *Journal of General Internal Medicine*, 20, 259–266.
- Ball, K., A. Bauman, E.Leslie, N. Owen (2001). Perceived environmental aesthetics and convenience and company are associated with walking for exercise among Australian adults, 33(5),40-434.
- Bergstrom, M. J., Holmes, M. E., Pecchioni, L. (2000). Lay theories of successful aging after the death of a spouse: A network text analysis of bereavement advice. *Health Communication*, 12, 377–406.
- Bei, F. Porell (2000). Job Characteristics and Leisure Physical Activity. *journal of aging and health*, 12(4), 538–559.
- Bernaards, C.M., Jans, M.P., van denHeuvel, S.G., Hendriksen, I.J., Houtman, I.L., Bongers, P. M. (2006). Can strenuous leisure time physical activity prevent psychological complaints in a working population. Occupational. Environmental.Medicine., 63, 10–16.
- Biernat 1, Roguski (2005). Leisure activities of university college staff. *Biomedical Human Kinetics*, (1), 20 – 22.
- Bialeschki, M. D. (2005). Fear of violence: Contested constraints by women in outdoor recreation activities., 103–114.
- Biron JP, Brun H, I. H. (2008). Extent and sources of occupational stress in university staff. Journal of Prevention, Assessment and Rehabilitation, 30(4), 30(4): 511–522.
- Boles, M., Pelletier, B. Lynch, W. (2004). The relationship between health risks and work productivity. *Occupational and Environment Medicine*, 46(7), 737–745.
- Borodulin, K., Laatikainen, T., Lahti-koski, M. (2008). Association of Age and Education With Different Types of Leisure-Time Physical Activity Among 4437 Finnish Adults, 242–251.
- Boudreau, F., & Godin, G. (2014). Participation in Regular Leisure-Time Physical Activity Among Individuals with Type 2 Diabetes Not Meeting Canadian Guidelines: the Influence of Intention Perceived Behavioral Control and Moral Norm, 918–926.
- Brown, P. R., Brown, W. J., Miller, Y. D., VibekeHansen. (2010). Perceived Constraints and Social Support for Active Leisure Among Mothers With Young Children. *Journal of Leisure Sciences*, 23(3), 131–144.
- Brown, W., Lee, C., Mishra, G., & Bauman, A. (2000). Leisure time physical activity in Australianwomen:Relationshipwithwellbeingandsymptoms.ResearchQuarterlyforExerciseandSport, *3*(71), 206–216

- Blaud R, Kenyon A, L. R. (2006). Stress at work: A report prepared for the Work Foundations' principal partners. London. The Work Foundation 2006. Retrieved July2013,fromhttp://www.theworkfoundation.com/download publication/report/69_69_stress_at_work.pdf
- Bucksch J, S. W. (2006). Health-enhancing physical activity and the prevention of chronic diseases an epidemiological review. Soz *Praventive Med*, 51, 281–301.
- Bukov, A., Maas, I., Lampert, T. (2002). Social participation in very old age: Crosssectional and longitudinal findings from Base. Journal of Gerontology: *Psychological Sciences*, 57, 510–517.
- Bulta, M. K., Verschurena (2009). What influences participation in leisure activities of children and youth with physical disabilities? A systematic review, Research in Developmental Disabilities,, 32(5), 1521–1529.
- Bureau of Labor Statistics. (2012). A Employment and Earnings, Average Weekly Hours, Establishment Data: <u>ftp://ftp.bls.gov/pub/suppl/empsit.ceseeb2.txt</u>.
- Caldwell, L. L. (2005a). Leisure and health: Why is leisure therapeutic? British Journal of Guidance & Counselling, 33(1), 7–25.
- Caldwell, L. L. (2005b). Self-construal in context: A response to Walker, Deng, and Dieser. *Journal of Leisure Research*, 37(1), 106–116.
- Carlos Monteiro, A., Conde, W. L., Matsudo, S. M., Matsudo, V. R., Bonseñor, I. M., Lotufo, P. A. (2003). A descriptive epidemiology of leisure-time physical activity in Brazil, 1996 – 1997, 14(4), 1996–1997.
- Caspersen, C. J., Pereira, M. A., Curran, K. M. (2000). Changes in physical activity patterns in the United States, by sex and cross-sectional age. *Medicine & Science in Sports & Exercise*, 32, 1601–1609.
- Cassidy, T. (2010). relationship factors Leisure , coping and health : the role of social , family , school and peer, 37–41.
- Cerin, E. (2008). Recreational Facilities and Leisure-Time Physical Activity: An Analysis of Moderators and Self-Efficacy as a Mediator Recreational Facilities and Leisure-Time Physical Activity: An Analysis of Moderators and Self-Efficacy as a Mediator. *American Psychological Association*, 27(.2(Suppl.) S126–S135.
- Chad K E, Reeder BA, Harrison EL, Ashworth NL, Sheppard SM, Schultz SL, Bruner BG, Fisher KL, Lawson JA (2005). Profile of physical activity levels in community-dwelling older adults. *Medicine Sciences & Sports Exerc 2005*, 37:1774-84.
- Chang MI-HYE, (2006). Gender, Leisure and Time Constraint: Employed Men and Women's Experience. *Development And Society*, 35(1), 83-105.

- Chang, S. L., & Tsai, A. C. (2015). Gender differences in the longitudinal associations of depressive symptoms and leisure-time physical activity with cognitive decline in ≥57year-old Taiwanese. *Preventive Medicine*, 77, 1–6.
- Chandrasekar, K. (2011). Workplace environment and its impact on organisational performance in public sector organizations. *International Journal of Enterprise Computing and Business System*, 1(1), 1–20.
- Chatzisarantis, N. L. D., Hagger, M. S., Biddle, S. J. H. (2002). A meta-analytic review of the theories of reasoned action and planned behavior in physical activity: predictive validity and the contribution of additional variables. *Journal of Sport & Exercise Psychology*, 24, 3–32.
- Cheah, Y. K. (2011). Influence of socio-demographic factors on physical activity participation in a sample of adults in Penang, Malaysia. *Malaysian Journal of Nutrition 17(3), 385–91. Retrieved from* <u>http://www.ncbi.nlm.nih.gov/pubmed/22655460.</u>
- Cheah, Y.K., & Poh, B. K. (2014). The Determinants of Participation in Physical Activity in Malaysia. Osong Public Health And Research Perspectives, 5(1), 20–27.
- Chen, C., & Wu, C. (2009). How Motivations, Constraints, and Demographic Factors Predict Seniors 'Overseas Travel Propensity, 14(3), 301–312.
- Cheung, M. C., Ting, W., Chan, L. Y., Ho, K. S., Chan, W. M. (2009). Leisure participation and health-related quality of life of community dwelling elders in Hong Kong. Asian *Journal of Gerontology Geriatric*, *4*, 15–23.
- Chuku, C. D. (2008). Rite of passage as agents of socialisation. In B. Okaba (Ed.), Cultures and peoples of Nigeria. Yenagoa, Nigeria: *Ceecia Prints and Publications*, 125–137.
- Cisneros-Montemayor, A. & Sumaila, U. R. (2010). A global estimate of benefits from ecosystem-based marine recreation: potential impacts and implications for managemen. *Journal of Bioeconomics*, *12*, 245–268.
- Claudio N, R., Lippke, S., Maddock, J. E. (2009). Factorial invariance of the theory of planned behavior applied to physical activity across gender, age, and ethnic groups. *Psychology of Sport and Exercise*, *10*(2), *219–225*.
- Coakley, J. (2001).Sport in Society: Issues & Controversies. Singapore:McGraw-Hill International Edition.
- Craig, L., Mullan, K. ., Blaxland, M. (2010). Parenthood, policy and work-family time in Australia 1992- 2006. Work, Employment and Society, 24(1), 1–9.
- Crawford DW, Jackson EL, G. G. (1999). A Hierarchical Model of Leisure Constraints. Leisure Sciences, 13, 20-309.

- Crespo CJ, Keteyian SJ, Heath GW, S. C. (1996). Prevalence of leisure-time physical activity among US adults. Results from the Third National Health and Nutrition Examination Survey. Arch International Medicine., *156*, *93*–983.
- Crespo, C. J., Smit, E., Carter-pokras, O. Andersen, R. (2001). Acculturation and Leisure-Time Physical Inactivity in Mexican American Adults : Results From NHANES III, 1988 – 1994, 91(8), 1254–1257.
- Crespo, C.J., (2000) Encouraging physical activity in minorities. The Physician and Sports Medicine, 28, 36–51.
- Dan, S. P., & Nasir, M. T. (2008). Psycho-social Correlates of Physical Activity in Young Adolescents. 23rd Scientific Conference of the Nutrition Society of Malaysia Kuala Lumpur: Nutrition Society of Malaysia, 28.
- David S. Bickham, M. R. (2006). Television Viewing Associated With Social Isolation? Roles of Exposure Time, Viewing Context, and Violent, *Journal Pediatric*, 160(4), 387–392.
- Deborah B, Katie S, Nicky A, Janet Loweb, Louisa, Chris Bridlec, Bart Sheehand, S. E. L. (2015). Development of an exercise intervention to improve cognition in people with mild to moderate dementia: Dementia And Physical Activity 101,(2)126–134 (DAPA) Trial,. Registration ISRCTN32612072.
- Ding, D., Sallis, J. F., Hovell, M. F., Du, J., Zheng, M., He, H., Owen, N. (2011). Physical activity and sedentary behaviours among rural adults in Suixi, China: a cross-sectional study. *The International Journal of Behavioral Nutrition and Physical Activity*, 8(1), 37.
- Dimitri A. Christakis, Beth E. Ebel, Frederick P. Rivara, F. J. Z. (2004). Television, video, and computer game usage in children under 11 years of age,. *Journal of Pediatric*, 145(5), 625–656.
- Douglas, M.K., A.I. Meleis, C. E. and S. K. (1996). The work of auxiliary nurses in Mexico: Stressors, satisfiers, and coping strategies. International *Journal of Nursing Studies*, 33(5), 495–505.
- Dong, E., & Chick, G. (2012). Leisure Constraints in Six Chinese Cities. *Leisure Sciences*, *34*(5), 417–435.
- Duatzenberg, M. G. H., Diederiks, J. P. M., Philipsen, H., & Tan, F. E. S. (1995). Multigenerational caregiving and well-being: Distress on middle-aged daughters providing care assistance to elderly parents. Women & Health, 29(3), 57–74.
- Eather, N., Morgan, P. J., Lubans, D. R. (2013). Social support from teachers mediates physical activity behavior change in children participating in the Fit-4-Fun intervention. *International Journal of Behavioral Nutrition and Physical Activity*, 10(1), 1.

- Egenti, Maureen Ngozi Omoruyi, Prince F. E. O, F. (2011). Challenges of Women Participation in Pontinuing Higher Education Programme : *Implications for Adult Women Counselling and Education. Counselling*, 4(18), 130–143.
- Eid, F. (2004). Daunting hurdles slow career progress of Lebanese women", *Khaleej Times, available at: <u>www.khaleejtimes.co.ae/ktarchive/100502/editor.htm</u> (accessed May 2004).*
- Ertu ïk, A. (2007). Increasing organizational citizenship behaviors of Turkish academicians. *Journal of Managerial Psychology*, . *3*, 257–270.
- Ekici E, Utkualp N. (2007). Female teaching staff attitudes towards breast cancer. J Breast Hlth, 3, 136–9.
- Faam, B, Hosseipanah, F., Amouzegar, A., Ghanbarian, A., Asghari, G,&Azizi, F. (2013). Leisure- Time Physical Activity and Its Association with Metabolic Risk Factors in Iranian Adult Tehran Lipid and Glucose Study 2005-2008. *Preventing Chronic Disease*, 10(8), 36.
- Faber, M. (2007). Achieving nutritional impact with vitamin A-rich vegetable gardens. Proceedings of the Orange-fleshed Sweet Potato Symposium, Pretoria, 3 October, <u>www.mrc.ac.za/techncalpolcybriefs/sweet%20potato%20October%202007op</u> spsympproceedings%20Nutrition%20 Accessed.
- Fan, J. X., Kowaleski-Jones, L. Wen, M. (2013). Walking or dancing: patterns of physical activity by cross-sectional age among U.S. women. *Journal of Aging* and Health, 25(7), 1182–203.
- Farrell L & Shields MA (2002). Investigating the economic and demographic determinants of sporting participation in England. J Roy Statistical Society 165(2):335-348.
- Federal, Provincial and Territorial Advisory Committee on Population Health. Toward a Healthy Future: Second Report on the Health of Canadians. Ottawa: Health Canada, 1999.
- Fern ández, E., Manuz Gonzalez, B., Villegas Garc á, J. A. (2008). The utillity of the physical activity and of the suitable habits of nutrition as a mean to prevent obesity in children and teenagera. 25 (127), 333–35
- Fernandez-Ballesteros, R., Zamarron, M., Ruiz, M. (2001). The contribution of sociodemographic and psychosocial factors to life satisfaction. Ageing and Society, 21(1), 25–43.
- Fiona Brooks & Josetine Magnusson (2007). Physical Activity as Leisure: The Meaning of Physical Activity for the Health and Well-Being of Adolescent Women. *Health Care for Women International*, 28(1), 69–87.

- Fletcher, A. C., Nickerson, P., Wright, K. L. (2003). Structured Leisure Activities in Middle Childhood : Links to Well-Being. *Journal of Community Psychology*, 31(6), 641–659.
- Ford, M.T., Heinen, B.A., Langkamer, K. L. (2007).Work and family satisfaction and conflict: A meta-analysis cross-domain relations. *Journal of Applied Psychology*, 92(1), 57–80.
- Fullagar, S. (2008). Leisure Practices as Counter-Depressants: Emotion-Work and Emotion-Play within Women's Recovery from Depression. Leisure Sciences 35–52.
- Giles-corti, B.Donovan, (2002). Socioeconomic Status Differences in Recreational Physical Activity Levels and Real and Perceived Access to a Supportive Physical Environment 1, 611, 601–611.
- Goldfield, G. S., Harvey, A., Grattan, K. Adamo, K. B. (2012). Physical activity promotion in the preschool years: A critical period to intervene. *International Journal of Environmental Research and Public Health*, 9(4), 1325–1342.
- Gorr, M. B. (1988). social isolation and social support as correlates of television viewing motivation, 15(2), 135–158.
- Haase A, Andrew S, D.Phil., B., James F Sallis, Jane Wardle, (2004). Leisure-time physical activity in university students from 23 countries: associations with health beliefs, risk awareness, and national economic development, *39,182-190*.
- Hallal PC, Victora CG, Wells JC, L. R. (2003).Physical inactivity: prevalence and associated variables in Brazilian adults. *Medicine Sciences & Sports Exerc* 35: 1894–1900.
- Hammer, L. B., & Neal, M. B. (2008).Working sandwich-generation caregivers: Prevalence, characteristics and outcomes. *The Journal Psychologist-Manager*, 11(1), 93–112.
- Hammad A, Alshammari, Chair C, Karen, Laura H, (2012).Effects of Time Constraint on Second language reading comprehension a thesis Submitted in Partial Fulfillment of the Requirements for the master of arts degree in applied linguistics, presented on may 7, 2012, at southern illinois university carbondale.
- Han, J.-S., & .Patterson, I. (2007). An analysis of the influence that leisure experiences have on a person's mood state, health and well-being. Leisure Re-Search, 9, 328–351.
- Hanthy A, B. (2006). Television-viewing characteristics of adults: correlations to eating practices and overweight and health status,. *Preventive Chronic Disease.*, *3*(2), 38. Retrieved from PMC1563980

- Harwood, J. (1999). Age identification, social identity gratifications and Television Viewing. *Journal of Broadcasting & Electronic Media*, 43(1), 123–136.
- Hansen, V. (2010). Leisure Sciences : An Perceived Constraints and Social Support for Active Leisure Among Mothers With Young Children, 37–41.
- Haskell, W. L., Lee, I.-M., Pate, Powell, K. Blair, S. Franklin, B. Bauman, A. (2007). Physical activity and public health: updated recommendation for adults from the American College of Sports Medicine and the American Heart Association. *Circulation*, 116 (9), 1081–93.
- Hassmen, P., Koivula, N., Uutela, A. (2000). Physical exercise and psychological well-being: a population study in Finland. *Preventive. Medicine*, *30*, *17–25*.
- Hausenblas, H. A., Carron, A. V., Mack, D. E. (1997). Application of the theories of reasoned action and planned behavior to exercise behavior: a meta-analysis. *Journal of Sport & Exercise Psychology*, 19(1), 36–51.
- Heer, H. D. De, Wilkinson, A. V, Strong, L. L., Bondy, M. L., Koehly, L. M. (2012). Sitting time and health outcomes among Mexican origin adults: obesity as a mediator. *BMC Public Health*, 12(1), 1.
- Hejar Abdul Rahman, Nur Hazrina, Lim W. Hong (2007). Leisure Time Physical activities among Adult attendees at a primary Health care clinic. *Malaysia journal of medicine and health sciences*, 3 (2) 29-36.
- Henderson, K. A. (1994). Theory application and development in recreation, park, and leisure research. *Journal of Park and Recreation Administration*. 12 (1), 51–64.
- Henderson K.& Anisworth B. (2003). A synthesis of perceptions about Physical activity among older American and American Indian women. *American Journal of Public Health*, 93(2), 313–317.
- Henderson, K. A., Presley, J., Deborah, M. Henderson, K. A. (2004). Theory in Recreation and Leisure Research: Reflections from the Editors *Leisure Sciences: An Interdisciplinary Journal*, 26(4), 411–425.
- Houston, R. G., & Wilson, D. P. (2015). Income, leisure and proficiency: an economic study of football performance Income, leisure and pro ® ciency: an economic study of football performance, 4851(September).
- Hu, Xiaoming and Yu, C. (2004). The theory and practice of sports and recreation. Beijing, Higher, 35, 36–38.
- Hua, K. P., & Chiu, L. K. (2013). Multiculturism : Issues of Malaysian Female Sport Tourists ' In Event-Based Sport Tourism. Procedia - Social and Behavioral Sciences, 91, 270–287.

- Huff, C.Widmer, (2003). The influence of challenging outdoor recreation on parentadolescent communication. *Therapeutic Recreation Journal*, 37(1), 18–37.
- Hughes, J. P., McDowell, M. A., Brody, D. J. (2008). Leisure-time physical activity among US adults 60 or more years of age: results from NHANES 1999-2004. *Journal Physical Activity Health*, 5(3), 347–358.
- Huston SL, Evenson KR, Bors P, G. Z. (2003). Neighborhood environment, access to places for activity, and leisure-time physical activity in a diverse North Carolina population. Health Promotion, (18), 58–69.
- Huda, Rusli, L Naing1, Tengku1,(2004) a Study of Job strain and dissatisfaction among lecturers in the school of medical sciences Universiti Sains Malaysia. 35, 1
- Inoue S Ohya Y, Odagiri Y, Takamiya T, Ishil K, (2010). Association between perceived neighborhood environment and walking among adults in 4 cities in Japan. *Journal Epidemiology*, 20, 277–286.
- International Association for the Study of Obesity (2008). Retrieved fromhttp://www.iaso.org.
- Iwasaki Y, M. R. (2000). Hierarchical dimensions of leisure stress coping. *Leisure Sciences*, 22, 163–81.
- Iwasaki, Y. (2008). Pathways to meaning-making through leisure in global contexts. Journal of Leisure Research, 40, 231–249.
- Iwasaki, Y., Coyle, C., & Shank, J. (2010). Leisure as a context for active living, recovery, health, and life quality for persons with mental illness in a global context. *Health Promotion International*, 25, 483–494.
- Jacobs, J. A. Kathleen G (2001). Overworked Individuals or Explaining Trends in Work, Leisure and Family Time, 28(1), 40-63.
- Jamali, D., Sidani, Y., Safieddine, A. (2005). Constraints facing working women in Lebanon: an insider view. *Women In Management Review*, 20(8), 581–594.
- Jeffreey, H. (2002). Sport, Leisure and Culture in Twentieth-Century Britain, publish Basingstoke: Palgrave.2002 book.
- Jerome, G. J., Rohm, D., Dalcin, A., Charleston, J., Anthony, C., Hayes, J., Daumit, G. L. (2009). Physical activity levels of persons with mental illness attending psychiatric rehabilitation programs. Schizophrenia Research, *108 (1-3), 252–257.*
- Joe Verghese, Richard B. Lipton, Mindy J. Katz, Charles B. Hall, Carol A. Derby, Gail Kuslansky, Anne F. Ambrose, Martin Sliwinski, and Herman Buschke, (2003). Leisure Activities and the Risk of Dementia in the Elderly. *Journal of Medicine*, 2508–2516.

- Johns Hopkin (2006) White Paper on Memory Retrieved from www.hopkinsmemory.com
- Johnson, C. Y., Cordell, H. K., Bowker, J. M. (2001). Outdoor Recreation Constraints: An Examination of Race, Gender, and Rural Dwelling Southern Rural Sociology. Southern Rural Sociology, 17, (11) 1–133.
- Jones, L.W., Courneya, K.S., Fairey, A.S., Mackey, J. R. (2004). Effects of an oncologist's recommendation to exercise on self-reported exercise behavior in newly diagnosed breast cancer survivors: A single blind, randomized controlled trial. Annals of Behavioral Medicine, 28, 105–113.
- Jones, L.W., Courneya, K.S., Fairey, A.S., Mackey, J. R. (2005). Does the Theory of Planned Behavior mediate the effects of an oncologist's recommendation to exercise in newly diagnosed breast cancer survivors? Results from a randomized controlled trial. Health Psychology, 24, 189–197.
- Jonsdottir, I. H., Rödjer, L., Hadzibajramovic, E., Börjesson, M., Ahlborg, G. (2010). A prospective study of leisure-time physical activity and mental health in Swedish health care workers and social insurance. *Preventive Medicine*, 51 (5), 373–377.
- Juniu, S. (2000). The impact of immigration: leisure experience in the lives of South American immigrants. *Journal of Leisure Research*, 32, 358-381.
- Julian, Edd, D. A. P., Reed, J. A., Phillips, D. A., (2010). Relationships Between Physical Activity and the Proximity of Exercise Facilities and Home Exercise Equipment Used by Undergraduate University Students. Of American College Health, 53(6), 285–290.
- Kaczynski, A. T., & Henderson, K. A.(2007). Evidence about Parks and Recreation Environmental Correlates of Physical Activity : A Review of Evidence about Parks and Recreation. *Leisure Sciences*, 29 (4), 315–354.
- Karakaş, A. (2014). Lecturers 'Perceptions of their English Abilities and Language Use in English-Medium Universities. *International Journal on New Trends in Education and Their Implications ISSN 1309-6249*, 5(2), 114–125.
- Kang, J. W. (2013). Perceived Constraints on Sport Participation among Young Koreans in Australia. Social, Business, Psychological, 7 (5), 596–602.
- Kay, T. (2005). The voice of family influences on Muslim girls responses to sport LSA. *Leisure Research*, *32*, *358–381*.
- Kernerman. (2010). Random House Kernerman Webster's College Dictionary, © 2010 K Dictionaries Ltd. Copyright 2005, 1997, 1991 by Random House, Inc.

Kelly, J. R., & Freysinger, V. j. (2000). 21st Century Leisure. Allyn and Bacontle.

- Khan, M, Younis, Asif Jamil, Umar A, Khan, Uzma Kareem, G. I. (2012). Female Students Opinion about Women's Participation in Sports, 2(9), 275–283.
- Kim, H.-S. (2008). Effects of time-constraint in web-based reading on reading performance and reading speed. *English Language Teaching*, 20(2), 25–48.
- Kim, J. (2004). Summer reading and the ethnic achievement gap. Journal of Education for Students Placed at Risk (JESPAR), 9(2), 169–188.
- Kleiber, D.A.Hutchinson, (2002). Leisure as a resource transcending negative life Events. Self- protection, Self- regulation, and personal Transformation leisure science, 24, 219–235.
- Kok, M.O., Omar-Fauzee, M.S., Rosli, M. H. (2010). Relationship between Level of Physical Activity and Exercise Imagery among Klang Valley Citizens. World Academy of Science, Engineering and Technology 37, 712–716.
- Kouvonen A, Kivimaki M, Elovainio M, Virtanen M, Linna A, V. J. (2005). Job strain and leisure-time physical activity in female and male public sector employees. *Prev Med*, *41*, 532–539.
- Kouvonen; Vahtera; Oksanen; Pentti; Ari K P Väänänen;Heponiemi;Salo; Marianna Virtanen; Mika (2013). Chronic Workplace Stress and Insufficient Physical Activity. Occup Environ Med., .70(1), 38.
- Kowal, J., and M. S. F. (2007). Physical Activity Behavior Change in Middle-Aged and Older Women: The Role of Barriers and of Environmental Characteristics.". *Journal of Behavioural Medicine*, *30*, 233–242.
- Koprstanje, M. (2009). Re-visiting risk perception theory in the context of travel. e-Reviewer of Tourism Research, Retrieved January 2nd, 2011 from: *Tourism Research*, 7(4), 65–81. <u>http://list.rtps.tamu.edu/ertr/.</u>
- Kronenberg, F., Pereira, M. a., Schmitz, M. K., Arnett, D. K., Evenson, K. R., Crapo, R. (2000). Influence of leisure time physical activity and television watching on atherosclerosis risk factors in the NHLBI Family Heart Study. *Atherosclerosis*, 153(2), 433–443.
- Kumar, J. A., & Muniandy, B. (2012). The Influence of Demographic Profiles on Emotional Intelligence: A Study on Polytechnic Lecturers in Malaysia. International Online Journal of Educational Sciences, 4(1), 62–70.
- Lahti J, Laaksonen M, Lahelma E, R. O. (2010). The impact of physical activity on physical health functioning a prospective study among middle-aged employees. *Preventive Medicine*, 50(5-6), 246–250.
- Lee, D., & Palakurthi, R. (2011). Marketing strategy to increase exhibition attendance through controlling and eliminating leisure constraints, 0–25.

- Leitner, & Leitner, (2012). Leisure in Later Life. (J. J.Bannon & P. L.Bannon, Eds.) (4th ed). Sagmore.
- Leung, & Lee, (2005). Multiple determinants of life quality : the roles of Internet activities , use of new media , social support, and leisure activities, 22, 161–180.
- Lemeshow, S., Hosmer, D. W., Klar, J., Lwanga, S. K. (1990). Adequacy of sample size in health studies.
- Levinson, M., Halpern, O., Mahmud, Z., Chowdhury, Levinson, (2002). Food policy and applied nutrition program, (18).
- Lindström, M., & Sundquist, J. (2010). Immigration and Leisure- Time Physical Inactivity : A population-based study, 37–41.
- Lloyd KM, Auld CJ (2002). The role of leisure in determining quality of life: Issues of content and measurement. *Soc Indic Res*, 57 (1),43–71.
- Lovelace, K. J., Manz, C. C., Alves, J. C. (2007). Work stress and leadership development: The role of self-leadership, shared leadership, physical fitness and flow in managing demands and increasing job control, *17*, 374–387.
- Logerfo, L., Nichols, A., Chaplin, D. (2006). Gender Gaps in Math and Reading Gains During Elementary and High School by Race and Ethnicity.
- Lund, J., & Hovden, J. (2003). The influence of safety at work on safety at home and during leisure time, *41*, 739–757.
- Mahbob, N. S., Kamaruzzaman, S. N., Salleh, Sulaiman, (2011). A Correlation Studies of Indoor Environmental Quality (IEQ) Towards Productive Workplace, 6, 434–438.
- Markkul J., & Hyyppa, M. T. (2005). Leisure participation predicts survival: a population-based study in Finland, 21(1), 5–12.
- Martins Lopes, & Cristina X. (2013). Rank, job stress, psychological distress and physical activity among military personnel. *BMC Public Health*, 13–716.
- Markus B.T. Nyströma, Gregory Neelya, (2015). Treating Major Depression with Physical Activity: A Systematic Overview with Recommendations Cognitive Behaviour Therapy. 44 (4), 341–352.
- Marquez, D. X., & Mcauley, E. (2006). Social Cognitive Correlates of Leisure Time Physical Activity Among Latinos, 29(3).
- Martin L, Jan S (2001) Immigration and Leisure -Time Physical Inactivity :a Population- based study Ethnicity & Health 6,(2) 77-85.

- Mathews, E., Lakshmi, J. K., Ravindran, T. K. S., Pratt, M., Thankappan, K. R. (2015). Perceptions of barriers and facilitators in physical activity participation among women in Thiruvananthapuram City, India, 0 1–10.
- Mbuthia, S. W., Maingi, S. W. (2010). The influence of ethnicity on leisure pursuits and tourism behaviour of Somali immigrants in Leeuwarden. Netherlands, Hospitality Management and Tourism, 1(1), 1-11.
- Mcginnis, L. P., & Gentry, J. W. (2006). Getting Past the Red Tees : Constraints Women Face in Golf and Strategies to Help Them Stay. *Sport Management*, 24–30.
- Menec, V. H. (2003). The relation between everyday activities and successful aging: A 6-year longitudinal study. *Journal of Gerontology*, *58*(2), *74–82*.
- Minhat HS, Mohd Amin R, Shamsuddin K (2012). Late-Life Leisure Constraints Among Malaysian Elderly : A Qualitative Approach. *Malaysian Journal of Public Health Medicine*, 12(2), 24–30.
- Minhat HS, Rahmah MAb, Shamsuddin K. (2013). Continuity Theory of Ageing and Leisure Participation among Elderly Attending Selected Health Clinics in Selangor. *Medical journal Malaysia*, 12(2), 51–58.
- Minhat HS., Amin, R. M., Shamsuddin, K. (2014). Determinants of Leisure Participation among the Malay Ethnic Elderly in Malaysia. *Middle-East Journal of Scientific Research*, 21(9), 1442–1447.
- Minhat HS., Mohd Amin R2; Shamsuddin K,. (2014). Impact Of Gender on Leisure Participation: A Cross Sectional Study Among Elderly. *Public Health and Clinical Sciences*, 1(1), 36–48.
- Ministry of Health Malaysia (2008). The Third National Health and Morbidity Survey 2006 (NHMS III). Physical Activity. Institute for Public Health, National Institute of Health, Kuala Lumpur.
- Mkumbo, K. (2014). Prevalence of and Factors Associated with Work Stress in Academia in Tanzania, *3*(1), 1–11. http://doi.org/10.5430/ijhe.v3n1p1
- Mokhtarian, P. L. Ilian S,Susan L,H (2004). A Taxonomy Of Leisure Activities : The Role of ict By a Taxonomy Of Leisure Activities : The Role Of ICT.
- Monterrubio, C. J. (2009). Identity and sex: Concurrent aspects of gay tourism., 4(2), 155–168.
- Mota, J., & Esculcas, C. (2002). Leisure-time physical activity behavior: structured and unstructured choices according to sex, age, and level of physical activity. *International Journal of Behavioral Medicine*, 9(2), 111–121.

- Mukosolu, O., Ibrahim, F., Rampal, L., Ibrahim, N. (2015). Prevalence of Job stress and its Associated Factors among Universiti Putra Malaysia Staff. *Malaysian Journal of Medicine and Health Sciences*, 11(January), 27–38.
- Murtagh, K. N., & Hubert, H. B. (2004). Gender Differences in Physical Disability Among an Elderly Cohort, 94(8), 1406–1411.
- Naharuddin, N. M. (2013). Factors of Workplace Environment that Affect Employees Performance: A Case Study of Miyazu Malaysia. Independent Research and Studies, 2(2), 66–78.
- Nancy E. Hood, Natalie Colabianchi, Yvonne M. Terry-Mcelrath, Patrick M. O'Malley, Lloyd D. Johnston, P. (2014). Physical Activity Breaks and Facilities in US, 84(11), 697–705
- Nazuk, A. (2007). Modeling the Leisure Time Physical Activity in Islamabad, 246–252.
- Newman, D. B., Tay, L., Diener, E. (2014). Leisure and Subjective Well-Being : A Model of Psychological Mechanisms as Mediating Factors, 555–578.
- Neal, M. B., Chapman, N. J., Ingersoll-Dayton, B., & Emlen, A. C. (1993). Family Caregiver Applications Series, Volume 3: Balancing work and caregiving for children, adults, and elders. Thousand Oaks, CA: SAGE Publications, Inc.
- Nilsson, P. (2000). Sport and modernization In: Berg-gren, L. (Ed.) Leisure Cultures. *366–386*.
- Norazizan, & Aizan, (2007). Active ageing of older persons: the case for Malaysia. Seminar on the Social, Health and Economic Consequences of Population Ageing in the Context of Changing Families. Bangkokle.
- Norman A, Bellocco R, Vaida F, Wolk A. (2002) .Total physical activity in relation to age, body mass, health and other factors in a cohort of Swedish men. Int J Obes Relat Metab Disord, 26:670-5.
- Nummela, O., Sulander, T., Rahkonen, O. Uutela, A. (2008). Associations of selfrated health with different forms of leisure activities among ageing people. *International Journal of Public Health*, 53(5), 227–235.
- Nyaupane, G. P., & Andereck., K. L. (2008). Understanding Travel Constraints : Application and Extension of a Leisure Constraints Model. Of Travel Research, 46: 433.
- Öcal, K. (2014). Constraints on leisure time physical activity at a public. *Human* Science, 11(2).

- Oliveira, A., Lopes, C., Leon, A. Rostila, M., Griep, R. Werneck, G. L., Faerstein, E. (2011). Social support and leisure-time physical activity: longitudinal evidence from the Brazilian Pró-Saúde cohort study. *Behavioral Nutrition and Physical Activity*, *8*, *1–10*.
- Omar, A. and Davidson, M.J. (2008). Women in management in the Arab context. Education, Business and Society: Contemporary Middle Eastern Issues, 1(2), 107–123.
- Onge, J. Saint. (2008). Race/ethnic and Gender Differences in Social Support and Leisure Time Physical Activity, 1–6.
- Oxfortd English Dictionary online. (2004). Leisure Available at http://dictionary.oed.com (last accessed 21 July Oxford English.
- Paluska, S.A., Schwenk, T. L. (2000). Physical activity and mental health. Sports Med., 29, 167–180.
- Pan, S., Cameron, C., DesMeules, M., Morrison, H., Craig, C., Jiang, X. (2009). Individual, social, environmental, and physical environmental correlates with physical activity among Canadians: a cross-sectional study. *BMC Public Health*, 9(1), 21.
- Panagiota Balaska1, C. K. (2014). Promoting Sport Participation in Greece: Issues and Challenges. *Sport Management, Recreation & Tourism, 13, 63–84.*
- Parsa, P., Kandiah, M., Afiah, N., Zulkefli, M., Abdul, H. (2008). Knowledge and Behavior Regarding Breast Cancer Screening among Female Teachers in Selangor, Malaysia, 9, 221–228.
- Passmore, A. and French D. (2001). Development and administration of a measure to assess adolescents' participation in leisure activities. Adolescence, 36 (141), 67–75.
- Panatik , Azizah Rajab , Roziana Shaari, Ishak Mad Shah, H. A., Rahman . (2012).
 Impact of Work-related Stress on Well-being among Academician in Malaysian Research University, 30
- Peterson, K., & Stevens, J. (2013). Integrating the Scholarship of Practice into the Nurse Academician Portfolio. http://doi.org/10.5430/jnep.v3n11p84
- Physical Activity Guidelines Advisory Committee. (2008). Physical Activity Guidelines for Americans.Washington, DC: US Department' of Health and Human Services; 2008.
- Pierret, C. R. (2006). The "sandwich generation": Women caring for parents and children. Monthly Labour Review, 3-9.
- Pohb, Y. Kang, C. Bee, K. (2014). The Determinants of Participation in Physical Activity in Malaysia. Health and Research Perseption, *5(1)*, *25–27*.

- Porch, T. C., Bell, C. N., Bowie, J. V, Usher, T., Kelly, E. A., Laveist, T. (2015). The Role of Marital Status in Physical Activity Among African American and White Men.
- Porter, H., Iwasaki, Y., Shank, J. (2011). Conceptualizing meaning-making through leisure experiences. *Society and Leisure*, 33(2), 167–194.
- Powell, L. M., Slater, S., Chaloupka, F. J., Harper, D. (2006). Availability of Physical Activity–Related Facilities and Neighborhood Demographic and Socioeconomic Characteristics: A National Study. *American Journal of Public Health*, 96 (9), 1676–1680.
- Prochaska, J. J., Rodgers, M. W., Sallis, J. F. (2013). Association of Parent and Peer Support With Adolescent, *37–41*.
- Procidano k Heller. (1983). Measures of perceived social support from friends and from family: three validation studies. *Am J Community Psychology.*, 11.(1), 24.
- Putnam, R. D. (1993). The prosperous community: Social capital and public life. The American Prospect, 13, 35–42.
- Rani Thanacoody, P., Bartram, T., Barker, M., Jacobs, K. (2006). Career Progression Among Female Academics. Women in Management Review, 21(7), 536–553.
- Raisborough, J., & Bhatti, M. (2007). Women 's Leisure and Auto / Biography: Empowerment and Resistance in the Garden, 39 (3), 459–476.
- Razani, J., Kakos, B., Orieta-Barbalace, C., Casas, R., Lu, P., Alessi, C., Josephson, K. (2007). Predicting caregiver burden from daily functional abilities of patients with mild dementia. *Journal of the American Geriatrics Society*, 55 (9), 1415–1420.
- Rannveig Fanavoll, R. (2011) Association between work stress, physical exercise, and chronic shoulder/neck pain.
- Roberts, K. (1997). Why old questions are the right response to new challenges: The sociology of leisure in the 1990s. Loisir & Societe (Society and Leisure), 20(2,), 369–381.
- Rodriguez, A., La'tkova', P., Sun, Y.-Y. (2008). The relationship between leisure and life satisfaction: Application of activity and need theory. *Social Indicators Research*, 86, 163–175.
- Robyn A. Allen-De Boer, Kimber W. Malmgren, M. (2006). Reading Instruction for Youth with Emotional and Behavioral Disorders in a Juvenile Correctional Facility, *32*(1), 32, (1) 18–28.

- Rojek, C. (1997). Leisure Theory: Retrospect and Prospect. Society and Leisure, 20 (2), 383–400.
- Saimon, R., Choo, W. Y., Chang, K. H., Ng, J., Bulgiba, A. (2015). Physical Activity Among Adolescents in an East Malaysian Rural Indigenous Community: Exploring the Influence of Neighborhood Environmental Factors.
- Sarup, M. (1993). An Introductory Guide to Post-Structuralism and Postmodernism, 59–75.
- Santhapparaj, A. SolucisAlam, S. S. (2005). Job Satisfaction Among Academic Staff in Private Universities in Malaysia. *Journal of Social Sciences Publisher: Science*, 1(2).
- Sandikçi, M. B.Yaman, Çana (2013) Examining free time activities of academicians and its frequency (Bitlis ere University sample) IIB International Refereed Academic Social Sciences Journal, 9 43-60
- Sanchez-Villegas, A., Ara, I., Guillen-Grima, F., Bes-Rastrollo, M., Varo-Cenarruzabeitia, J.J., Martinez-Gonzalez, M. A. (2008). Physical activity, sedentary index, and mental disorders in the SUN cohort study. *Medicine*. *Science. Sports Exerc.*, 40, 827–834.
- Sandberg, C., Engström, K. G., Dellborg, M., Thilén, U., Wadell, Johansson, B. (2013). The level of physical exercise is associated with self-reported health status (EQ-5D) in adults with congenital heart disease. *European Journal of Preventive Cardiology*.
- Scarmeas, MD, G. Levy, MD, M.-X. Tang, PhD, J. Manly, and Y. Stern, P. (2001). Influence of leisure activity on the incidence of Alzheimer's Disease. Neurology, 57.
- Schulz, & Sherwood, (2008). Physical and mental health effects of family caregiving. *American Journal of Nursing*, 108 (9), 23–27.
- Schumache, L. (2012). The Leisure Journey for Sandwich Generation Caregivers. Journal, Therapeutic Recreation, 114, 52–59.
- Shaw, B. A., Liang, J., Krause, N., Gallant, M., McGeever, K. (2010). Age differences and social stratification in the long-term trajectories of leisuretime physical activity. *Journals of Gerontology—Series B Psychological Sciences and Social Sciences*, 65, 756-766.
- Shapiro, J., & Whitney, P. (1997). Factors Involved in the Leisure Reading of Upper Elementary School Students. *Reading Psychology*, *18*(4), 343–370.
- Shinew, K. J., Floyd, M. F., Parry, D. (2004). Understanding the relationship between race and leisure activities and constraints: Exploring an Alternative Framework. *Leisure Sciences*, 26 (2), 181–199.

- Sidani, Y. (2002). Management in Lebanon in Malcolm, W. (Ed.), International Encyclopedia of Business and Management, 2nd ed., Thomson Learning, Boston, MA, 3797–802.
- Siti Affira, K., Mohd Nasir, M. T., Hazizi, Kandiah, M. (2011). Socio-demographic and psychosocial factors associated with physical activity of working woman in Petaling Jaya, Malaysia. *Malaysian Journal of Nutrition*, *17*(3), 315–24.
- Silverstein, M. P. (2002). Leisure activities and quality of life among the oldest old in Sweden. Research on Aging, 24, 528–547.
- Slattery, J., Selvarajan, T. Anderson, J. (2008). Influences of New Employee Development Practices onTemporary Employee Role Stressors and Work-Related Attitudes of Temporary Employees.International. *Journal Of Human Resource Management*, 19(12), 2268–2293.
- Sor Tho NG, Tengku-aizan, H., Tey, N. P. (2010). Perceived Health Status and Daily Activity Participation of Older Malaysians. *Asia-Pacific Journal of Public Health 12 (10)*
- Stastistic finland (2005). Vapaa-aikatutkimus. [Leisure research], Suomen virallinen tilasto. Helsinki: Tilastokeskus. Retrieved from <u>http://www.stat.fi/til/vpa/2002/vpa_2002_200501-26_tie_001.html.</u>
- Stebbins, R. A. (2010). Addiction to Leisure Activities : Is It Possible? Leisure Reflection, (24), 19–22.
- Stodolska, M. (2000). Changes in leisure participation patterns after immigration. Leisure Sciences, 32, 39–63.
- Stodolska, M., & Shinew, K. J. (2010). Environmental constraints on leisure time physical activity among Latino urban residents. Qualitative Research in Sport and Exercise, 2(3), 313–335.
- Strain, L. A., Grabusic, Searle, Dunn, N. J. (2002). Continuing and ceasing leisure activities in later life: A longitudinal study. *The Gerontologist*, 42, 217–223.
- Sun, M. C., Azmutally, K. B. (2013). Leisure-time physical activity among university students in Mauritius. *Health Research*, 1(1), 1–8.
- Suriani I, Nor Afiah M, Zulkefli, Mohamad T Shaarin, NurFarzama Zainol Abidin, T. S. L. (2014). Predictors of Physical Activity Among, among Government Servants in Malaysia, *International Journal of Public Health and Clinical Sciences 1*(1), 80–87.
- Sylvester, C. (1992). Therapeutic recreation and the right to leisure. *Therapeutic Recreation Journal*, 26(2), 9–20.
- Taneja, S. (2013). Sustaining Work Schedules : Balancing Leisure and Work, Academy of Strategic Management journal 12(2), 113–123.

- Teh, L. C. L. & Sumaila, U. R. (2013). Contribution of marine fisheries to worldwide employment. Fish and Fisheries, *14*, 77-88, *14*, 77–88
- Tel, M. (2014). Surveying of the Leisure Time Activities of the Academicians Employed at the School of Physical Education and Sports (TURKEY EXAMPLE). Indian Journal of Fundamental and Applied Life Sciences ISSN: 2231-6345 (Online), 4(4), 2100–2111.
- Teychenne, M., Ball, K., Salmon, J. (2008). Physical activity and likelihood of depression in adults: A review. *Preventive Medicine*, 46(5), 397–411.
- Theodorakis, Y. (1994). Planned behavior, attitude strength, role identity, and the prediction of exercise behavior. *The Sport Psychologist*, *8*, 149–165.
- Throne, C. (2000). Men, women, and leisure time: Scondinavion evidence of gender inequality. Leisure Sciences, 22, 1 09–1 22.
- Tinsley, Howard E.A., Janise A. Hinson, Diane J. Tinsley, and Mary S. Holt (1993). Attributes of leisure and work experiences. *Journal of Counseling Psychology*, 40(4), 447–455.
- Trainor, S. Delfabbro, P., Anderson, S. Winefield, (2010). Leisure activities and adolescent psychological well-being, *Journal of Adolescence, Soc Psychiatry Psychiatr Epidemiol*, 47(7), 1023–1033.
- Trumbo, Schlicker, Yates, Poos, M. (2002). Dietary reference intakes for energy, carbohydrate, fiber, fat, fatty acids, cholesterol, protein and amino acids. J. Am. Diet. Assoc., 102(11), 1621–1630.
- Tsai, Chiung-tzu (2006). The influence of confucianism on women's leisure in Taiwan. Leisure Studies, 25 (4), 469–476.
- Tseng, T. A., & Chang, D. Y. (2006). The Relationships Between Leisure Behaviors and Life Satisfaction of Foreign Labors in Taiwan – the case of thai labors. Advances in Hospitality and Leisure (5).
- Toker, B. (2011). Burnout among University Academicians : an Empirical Study on the Universities of Turkey, *12*(1), 114–127.
- Tunku Ahmad, Zubairi, Ibrahim, M.B., Othman, J., Rahman, Rahman., Nordin, Nor, (2014). Assessment for learning practices and competency among malaysian university lecturers: a national study, Practitioner . *Research in Higher Education Journal*, 8(1), 14–31.
- United Nations (2006). Reducing vulnerability of the girl child in poor rural areas. <u>http://www.un.org/womenwatch/daw/egm/elim-disc-viol-girlchild/ObserverPapers/IFAD%20-%20Hartl.pdf Accessed 29 April 2007.</u>
- UNDP (2003). Human Development Report 2003: Building a Knowledge Society, United Nations Publications, New York, NY.

- United State Department of Health and Human Services.(2000). Health People 2010. Understanding and Improving Health. U.S. Government Printing Office, Washington D.C.
- Vainio H, B. F. I. (2002). Handbooks of cancer prevention: weight control and physical activity.
- Verghese, J., LeValley, A., Derby, (2006). Leisure activities and the risk of amnestic mild cognitive impairment in the elderly. *Neurology*, 66, 821–827.
- Walker, G. & Virden, (2005). Constraints on outdoor recreation, In E. L Jackson (Ed.), Constraints to leisure. State College, PA: Venture Publishingle, 201– 219.
- Wang, M., & Wong, (2014). Happiness and Leisure Across Countries : Evidence from International Survey Data, 85–118.
- Wang, Y. (2008). Tai Chi exercise and the improvement of mental and physical health among college students. *Medicine and Sport Science*, 52, , 135–145.
- Walseth, K., & Fasting, K. (2003). Islam's View on Physical Activity, 1, 45-60.
- Warner-Smith, P., & Brown, P. (2002). "The town dictates what I do": the leisure, health and wellbeing of women in a small Australian country town. Leisure Studies, 21(1).
- Wechsler H, Devereaux R, Davis M, C. J. (2000). Using the school environment to promote physical activity and healthy eating. *Preventive Medicine*, 2, 121–137.
- Wen CP, Wai JP, Tsai MK, Yang YC, Cheng TY, Lee MC, Chan HT, Tsao CK, Tsai. (2011). Minimum amount of physical activity for reduced mortality and extended life expectancy: a prospective cohort study. *Lancet*, 378(9798), 1244–1253.
- Wen, M., & Su, D. (2014). Correlates of Leisure-Time Physical Activity Participation Among Latino Children and Adolescents with Acanthosis Nigricans.
- Wendy J. Brown, Gita., Mishra, C. L. (2000). Leisure Time Physical Activity in Australian Women: Relationship with Well Being and Symptoms, Research Quarterly for Exercise and Sport, 71(3), 206–216.
- Wicker P, Breuer C, Pawlowski T (2009) Promoting sport for all to age-specific target groups: the impact of sport infrastructure. *European Sport Management Quarterly* 9(2):103–118.

- Wijndaele, K., Matton, L., Duvigneaud, N., Lefevre, J., De Bourdeaudhuij, I., Duquet, W. Philippaerts, (2007). Association between leisure time physical activity and stress, social support and coping: A cluster-analytical approach. *Psychology of Sport and Exercise*, 8(4), 425–440.
- Wilcox, Sara Cynthia Castro, Abby C King, Robyn Housemann, R. C. B. (2000). Determinants of leisure time physical activity in rural compared with urban older and ethnically diverse women in the United States. *Community Health* 54, 667–672.
- Wilson S, Bennett A, Bienias. (2002). Cognitive activity and incident AD in a population based sample of older persons. *Neurology*, 59:1910-4.
- Wise, L.A., Adams-Cambell, Palmer, Rosenberg, L. (2006). Leisure time physical activity in relation to depressive symptoms in the black women's health study. *Ann. Behav. Med.*, *32*, *384–392*.
- World Health Organization (2004). Global Strategy on Diet, Physical Activity and Health, (May).
- World Health Organization (2009). Behalf of the European Observatory on Health Systems and Policies.
- World health Organization, (2010). The Impact of Chronic Disease in Malaysia e. Retrieved from ww.who.int Accessed. 2010.
- Yang, K., Laffrey C, Alexa S, Eun-ok IM, kathleen M, kamiar, (2007). Leisure-time Physical Activity among Midlife Korean Immigrant Women in the US, 291– 298.
- Yin, L. H. (2008). The perceived leisure constraints of retired elderly people in Aldrich Bay. An honors project submitted in partial fulfillment of the requirement for the degree of bachelor of arts in physical education and recreation management (honours). Hong Kong Bapti.
- Zhang, H. Q., Qu, Mo, V. Tang, Y. (2004). A case study of Hong Kong residents ' outbound leisure travel. *Tourism Management*, 25, 267–273.
- Zhao, L., & Rashid, H. (2010). The Mediating Role of Work-Leisure Conflict On Job Stress and retention Of It Professionals. *Journal, Academy of Information* and Management ScienceS, 13(2), 25.
- Zuzanek, J. J. T. H., Veal, A. J. (2004). Work, leisure time-pressure and stress, Work and Leisure, 123–144.