ORIGINAL ARTICLE

IMPACT OF PERCEIVED BARRIERS ON PARTICIPATION OF LEISURE TIME PHYSICAL ACTIVITY AMONG UNIVERSITY STUDENTS

GHULAM ISHAQ[1], RAFIA RAFIQUE[2]

[1]MS (Health Psychology), Ph.D. (Scholar), Lecturer Department of Psychology, Lahore Leads University.
[2]Post Doc (UK), PhD (PU) Associate Professor, Director, Institute of Applied Psychology University of the Punjab, Lahore

CORRESPONDENCE: GHULAM ISHAQ E-mail: gishaq786@yahoo.com

Submitted: April 22, 2019
Accepted: October 29, 2019

ABSTRACT

OBJECTIVE

To find the impact of perceived barriers in participation of leisure time physical activity.

STUDY DESIGN

The co-relational research design

PLACE AND DURATION OF THE STUDY

This study was conducted at Institute of Applied Psychology, University of The Punjab. This study took 6 month for completion.

SUBJECTS AND METHODS

Survey method was used to collect data for current study. The convenient sample of the present study (N = 300) taken from two universities i.e. University of the Punjab (Government University) and University of Management and Technology, Lahore (Private University). The sample comprised both female students (n= 158) and male students (n = 142) between the age range of 18-30 years with the M = 25.71 years and SD = 1.72. The students with any physical or psychological disability were excluded in the present study. 350 questionnaire booklets were distributed among participants out of which 316 were returned to the researcher with response rate of 90%. Sixteen questionnaires were discarded because of missing response and response set. Perceived barriers and leisure time physical questionnaire were used in this survey.

RESULTS

The perceived barriers (lack of time, lack of skills and lack of resources) negatively predicted leisure time physical activity which revealed that as perceived barriers (lack of time, lack of skills and lack of resources) increase the level of leisure time physical activity decrease.

CONCLUSION

This study also identified potential environmental and interpersonal barriers such as lack of time, resources and skills that prevent students from performing physical activity. These barriers will continue to prevent students from engaging in physical activity regardless of knowledge about its benefits. These findings provide useful information for future planning and implementation of physical activity interventions for students.

KEY WORDS

Perceived barriers, lack of time, skills, resources, physical activity

INTRODUCTION

Leisure time physical activity is considered as the footing of healthy lifestyles and is cited as a key stratagem for reducing the risk of chronic conditions and diseases including Coronary Heart Disease (CHD), Hypertension, Diabetes and Obesity[1]. Regular leisure time physical activity improves psychological or mental health. Benefits such as maintenance of ideal body weight, prevention of premature death and enhanced psychological well-being have been attributed to participation in regular leisure time physical activity[2].

During university years, most students become independent from their families and being to make decisions concerning dietary habits and exercise mostly for the first time[3]. This period, spanning from late adolescent to early or young adulthood, is crucial period when behaviors carried out into middle and late adulthood are formed. Furthermore, decisions made by the university students during this period often lead to the adoption of un-healthy practice that continues into middle and late adulthood. However, with behavior change promotion, healthy dietary habits and physical activity is possible during this stage[4]. Unfortunately, declining levels of leisure time physical activity are paramount at this time.

There are many factors that affect participation in physical activity. These included knowledge about leisure time physical activity. One variable, which account for physical activity levels is perceived barriers. Perceived barriers can negatively influence the participation in activity. Studies have shown the importance of perceived barriers when studying leisure time physical activity behavior in students: significant barriers that have been identified include time constraints, heavy assignment workloads and Lack of motivation[5] lack of social support due to living in hostel, lack of resources and lack of skills.These barriers have been classified in different ways. Based on previous findings, it was deemed appropriate to identify barriers hindering students from engaging in leisure time physical activity. Current study hypothesized following;

1. There is likely to be a negative relationship between perceived barriers (lack of time, energy, will power, skills and resources) and leisure time physical activity.
2. Perceived barriers (lack of time, energy, will power, skills and resources) are likely to predict the leisure time physical activity.

SUBJECTS AND METHODS

Participants

The convenient sample of the present study (N = 300) taken from two universities students i.e. University of the Punjab (Government University) and University of Management and Technology, Lahore (Private University). The sample comprised both female students (n= 158) and male students (n =

142) between the age range of 18-30 years with the *M* = 25.71 years and *SD* = 1.72. The students with any physical or psychological disability were excluded in the present study. 350 questionnaire booklets were distributed among participants out of which 316 were returned to the researcher with response rate of 90%. Sixteen questionnaires were discarded because of missing response and response set.

Instruments

The Barriers to Being Physically Active Quiz[6]. Physical activity barriers were assessed on this 21-item quiz containing seven major barriers including lack of time, social influence, lack of energy, lack of willpower, fear of injury, lack of skill and lack of resources. It has a 4-point scale ranging from 0 (very unlikely) to 3 (very likely). A score of 5 and above on a barrier is considered a significant barrier. The reliability for each subscale ranged from .70 to .91.

Godin Leisure Time Exercise Questionnaire[7]. Leisure time physical activity behavior was measured through this questionnaire that is valid, reliable and easy to use. The questionnaire requires the participant to recall their participation in leisure time physical activity for the past seven days. The instrument contains three open ended questions covering the frequency of mild (e.g. easy walking), moderate (e.g. fast walking) and strenuous (e.g. jogging) exercises completed during free time.

Procedure

The study was approved from the concerned board of studies. In order to collect the data, the proper permissions were taken from the concerned authority of Institute of Applied Psychology and from where data were collected. The students were individually contacted and then they were briefed about the objectives of the study by taking informed consent. They were ensured that their privacy and confidentiality were maintained after collection of data. Afterwards, scales were given to take responses of students. They were appreciated for their participation after taking response and in the end research participants were thanked for their valuable cooperation. All participants were treated in accordance with the APA code of ethics. The collected data were entered to SPSS in order to analyze

RESULTS

In the first step, reliability analysis of all measured was computed using Cronbach's alphas and descriptive statistics. In the second step, Pearson product moment co-relation was computed to assess the relationship between perceived barriers and leisure time physical activity. In step three, hierarchical regression through IBM Statistical Packages for the Social Sciences (SPSS) version 22 was employed to see the impact of perceived barriers on leisure time physical activity.

Table 1 showed mean and standard deviation of variables of the present study. It also depicted internal consistency index (alpha coefficient) for all scale used in this study. The results showed that all scales of the present study are internally consistent as alpha coefficients of all scales are above .70.

correlation findings highlighted that lack of time, lack of will power, lack of skills and lack of resources were weakly negatively co-related with leisure time physical activity.

Table 1
Descriptive Statistics and Psychometric Properties of Perceived Barriers and Leisure Time Physical Activity (N =300)

Variables	*K*	*M*	*SD*	Ranges		α
				Actual	Potential	
Perceived Barriers	15			0-45		
Lack of Time	3	10.57	3.90	0-15	4-14	.82
Lack of Energy	3	10.66	3.97	0-15	3-15	.85
Lack of Will Power	3	10.54	4.01	0-15	0-15	.81
Lack of Skills	3	10.79	4.16	0-15	1-15	.75
Lack of Resources	3	9.91	4.05	0-15	3-15	.73
Leisure Time Physical Activity	3	4	3.70	1-3	1-3	.71

Table 2
Inter Co-relation among Perceived Barrier and Leisure Time Physical Activity (N=300)

Variables	1	2	3	4	5	6
1.Lack of Time	-	.57***	.65***	.70***	-.19**	-.14*
2.Lack of Energy	-	.54***	.37***	.73***	-.22**	-.20***
3 Lack of Will Power	-	-	.42***	.26***	-.28***	-.29***
4Lack of Skills	-	-	-	.69***	-.30***	-.28***
5. Lack of Resources	-	-	-	-	.08	-.13***
6.Physical Activity	-	-	-	-	-	-

*P<.05, **p<-01, ***P<.001

Table 3
Hierarchical Multiple Regression Analysis for Covariates, Perceived Barriers and Perceived Behavior Control (N=300)

Variables	Leisure Time Physical Activity	
	R^2	B
Step I	.09*	
Gender		-.13
Age		.19*
Step II	.43***	
Lack of Willpower		.02
Lack of Energy		.06
Lack of Time		-.47***
Lack of Skills		-.41**
Lack of Resources		.36***
Total R^2	.52	

*Note: *p<.05, **P<.01, ***P<.001*

Skewness of the scales did not reveal substantial departure from symmetry and it was used to fulfill normal distribution assumption of parametric statistics used. Findings of regression analysis revealed that overall model explained 55% of variance in leisure time physical activity, *F* (9, 290) =4.27, *p*<.001 maintaining that following model predicted leisure time physical activity significantly. When demographic factors i.e. age and gender in the step I as control variables were added, the model explained 9% variance in leisure time physical activity, F (9, 290) = 4.28, *p*<.001. Age was seen related to the increase in the level of physical activity.

When predictor variables perceived barriers (lack of time, lack of skills, lack of resources, lack of will power and lack of energy) were added in Step II the model explained the 43% variance, F (10, 280) = 29.52, *p*<.00. Perceived barriers (lack of time, lack skills and lack of resources) predicted leisure time physical activity negatively maintaining that as perceived barriers (lack of time, lack skills and lack of resources) increased, the level of leisure time physical activity decreased.

DISCUSSION

It was hypothesized that perceived barriers (lack of time, lack of energy, lack of will power, lack of skills and lack of resources) were co-related to leisure time physical activity. Result showed that perceived barriers (lack of time, lack of energy, lack of will power, and lack of skills),significantly impacted the level of leisure time physical activity.

Perceived barriers (lack of time, lack of energy, lack of will power, lack of skills and lack of resources) had negative co-relation with leisure time physical activity. The current findings are consistent with previous studies that showed the relationship between perceived barriers and leisure time physical activity[5,8,9].

It was hypothesized that perceived barriers (lack of time, lack of energy, lack of will power, lack of skills and lack of resources) were likely to predict the leisure time physical activity. The findings showed that perceived barriers (lack of time, lack of energy, and lack of resources) except lack of will power, lack of skills were found to be significant predictors of leisure time physical activity. The current findings are consistent with previous studies[5].

CONCLUSION

Perceived barriers (lack of time, lack of energy, and lack of resources) except lack of will power, lack of skills were found to be significant predictors of leisure time physical activity.

REFERENCES

1. Staten RR, Miller K, Noland MP, Rayens MK. COLLEGE STUDENTS'PHYSICAL ACTIVITY: APPLICATION OF AN ECOLOGICAL PERSPECTIVE. American Journal of Health Studies. 2005 Jan 1;20(1/2):58.
2. Fischer DV, Bryant J. Effect of certified personal trainer services on stage of exercise behavior and exercise mediators in female college students. Journal of American College Health. 2008 Jan 1;56(4):369-76.
3. Wengreen HJ, Moncur C. Change in diet, physical activity, and body weight among young-adults during the transition from high school to college. Nutrition journal. 2009 Jul 22;8(1):32.
4. Melnyk B, Kelly S, Jacobson D, Arcoleo K, Shaibi G. Improving physical activity, mental health outcomes, and academic retention in college students with Freshman 5 to thrive: COPE/Healthy lifestyles. Journal of the American Association of Nurse Practitioners. 2014 Jun 1;26(6):314-22.
5. Greaney ML, Less FD, White AA, Dayton SF, Riebe D, Blissmer B, Shoff S, Walsh JR, Greene GW. College students' barriers and enablers for healthful weight management: a qualitative study. Journal of nutrition education and behavior. 2009 Aug 31;41(4):281-6.
6. Centers for Disease Control and Prevention. *Barriers to Being Physically Active Quiz*. ((1999).)Retrieved from http://www.cdc.gov/nccdphp/dnpa/physical/life/barries_quiz.pdf.
7. Godin G, Kok G. The theory of planned behavior: a review of its applications to health-related behaviors. American journal of health promotion. 1996 Nov;11(2):87-98.
8. Grubbs L, Carter J. The relationship of perceived benefits and barriers to reported exercise behaviors in college undergraduates. Family & Community Health. 2002 Jul 1;25(2):76-84.
9. Nelson MC, Kocos R, Lytle LA, Perry CL. Understanding the perceived determinants of weight-related behaviors in late adolescence: a qualitative analysis among college youth. Journal of nutrition education and behavior. 2009 Aug 31;41(4):287-92

Sr.	Author Name	Affiliation of Author	Contribution	Signature
1	Ghulam Ishaq	Ph.D (Scholar), Visiting Faculty Member, Institute of Applied Psychology University of the Punjab, Lahore	Major contribution to the conception, design of the reach and the acquisition, analysis and interpretation of data	
2	Dr. Rafia Rafique	Ph.D (UK), Assistant Professor, Coordinator (MS-Health Psychology), Institute of Applied Psychology University of the Punjab, Lahore	Interpretation of the results with the main author