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Effects of Social Support on the Participation of Women in Use of Urban Bike

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Abstract: This study investigated the effect of social support and demographic factors on the participation of Iranian women in the use of city bicycles. This study method is a cross sectional survey. Samples in this study were 230 women, age range 18 to 37 years from Iran Aligoodarz city, were selected randomly as a cluster from seven districts. Research tools involved standardized sport participation questionnaire, (r=0.82) respectively. The T-test, one way ANOVA and multiple classes' analysis tests used to data analysis. The results showed that participation of women in the urban cycling is less than one hour per week. There was a significant relationship between social support and participation of women in the use of bicycles in Aligoodarz urban ($P<0.01$). But participation of women in sport, has a significant effect on variables such as education, income, family and friends sport parcicipaton ($P<0.01$). The results showed that social support, will explain 38 percent of the sports participation variables. The results suggest the participation of women in physical activity was very low. Education and social support from family and friends is an important factor affecting women's participation in sport. One of the best ways to increase social support for women is to raise their level of participation in use of bike in town.

Key words: Social support · Sports participation · Use of bicycles in urban areas · Women

INTRODUCTION

It is generally accepted that physical activity confers benefits to psychosocial health, functional ability and general quality of life [1] and has been proven to reduce the risk of coronary heart disease [2] and some cancers [3]. Here, physical activity refers to 'any bodily movement produced by skeletal muscles those results in energy expenditure' [4].

Conditions associated with physical inactivity include obesity, hypertension, diabetes, back pain, poor joint mobility and psychosocial problems [5-7]. Physical inactivity is a major public health challenge in the developed world and is recognized as a global epidemic [8]. Within the United States, the rate of childhood obesity is expected to reach 40% in the next two decades [9] and Type 2 diabetes is expected to affect 300 million people worldwide within the same time [10].

The UK government has set a target for '70% of the population to be reasonably active (for example 30 minutes of moderate exercise five times a week) by 2020' [11]. This target could be described as ambitious; only 37% of men and 24% of women in the United Kingdom currently meet this benchmark [12]. The Health Survey for England (HSE) [13] found that the number of physically inactive people (less than one occasion of 30-min activity per week) was increasing and that this trend was consistent for both genders and across all age groups [14]. Conventionally, sport and forms of physical activity such as aerobics, running or gym work have been the focus of efforts to increase population activity levels. The HSE measure includes activities, such as gardening and housework, which are not traditionally considered as physical activity. Sport England found that in the 10-year period between 1987 and 1996 participation in traditional types of sport and physical activity stagnated or fell in all groups other than the 60-to 69-year old age group. This trend was socially patterned by gender, socio-economic status, social class and ethnicity [15]. There are many broad influences upon physical activity behavior including intra-personal, social, environmental factors and these determinants vary across the life course.

Ambitious national targets and increased funding of community sport and physical activity projects (such as the Sports Hub in Regent's Park, London) [16] show that sport and physical activity is gaining social, political and

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health policy importance. The increased interest in physical activity is welcome, but the trend data hints that current interventions to promote sport and physical activity are inadequate. Further, it questions whether the evidence base supporting physical activity policy provides an adequate understanding of the reasons for participation or non-participation in physical activity.

Historically, research into determinants of sport and physical activity participation has tended to adopt quantitative methods, which undertake cross-sectional surveys of pre-determined questions on individual's knowledge, attitudes and beliefs about sport and physical activity. For example, the HSE [17] asks adults about activity in five domains: activity at work, activity at home (e.g. housework, gardening, does it yourself maintenance (DIY)), walks of =15 min and sports and exercise activities. Large studies such as these can successfully assess the direction and strength of trends in participation but are unable to explain how children and adults adopt, maintain or cease to participate in sport and physical activity throughout their lives.

Inequality of opportunities to achieve of women's sport participation has been proved. Early (late nineteenth century) to today, the position of women in sports, even in conditions of equality in other conditions, has lower Position than men. Progression of women access to exercise is not linear and the story of this involvement (women in the urban cycling), is an indicator of the status of gender relations at one point in time in the determined society [18].

In people with a disability, there is a shift from disability prevention to prevention of secondary conditions. This is emphasized in the report Healthy People 2010, which contains a separate chapter on improving health of persons with disabilities that includes specific goals and objectives for increasing physical activity and fitness. In the disabled population, optimizing physical activity may be even more important than in the general population, as disabilities commonly cause a cycle of deconditioning, in which physical functioning deteriorates, leading to further reduction in physical activity levels. Furthermore, regular physical activity, sports participation and active recreation are important for disease prevention and the maintenance of functional independence, aerobic capacity, participation, social integration and life satisfaction [19].

Several barriers for engaging in sport activities have been recognized in people with a variety of disabilities, i.e. lack of transportation and accessible facilities, lack of equipment suited to their needs, lack of knowledge of where to obtain a programme, inability to perform physical activities, lack of time, money and social support, as well as poor self-efficacy and motivation [20-22]. With the increased emphasis on healthy lifestyles, there is a strong need to understand physical activity of various subgroups of the disabled population. Furthermore, in the context of physical activity promotion, insight into modifiable determinants is warranted, since these can be targeted in interventions.

Myelomeningocele (MMC) is a common neural tube defect with an incidence of 1:1000 live births. MMC is often associated with paralysis and loss of sensation in the lower limbs, incontinence and hydrocephalus. Many persons with MMC now survive into adulthood, which raises the importance of a healthy lifestyle in this population. Previous research showed that adolescents and young adults with MMC have an inactive lifestyle compared with their able-bodied peers [23].

These studies have investigated daily physical activity by assessing total energy expenditure or total duration of dynamic activities (e.g. walking, cycling, wheelchair-driving, general non-cyclic movement); however, they did not specifically describe sports participation. Sports and exercise can be seen as a subcategory of physical activity, which is planned, structured and repetitive [24]. Sports-related physical activities can easily be provided through rehabilitation services and could increase physical activity behaviour in persons with MMC. Furthermore, par ticipating in sports may be important to improve their fitness, which was low in many [25].

The contents mentioned in this article and the women sport participation is considerable index in the development of a country, identifying the affective factors in women’s sport participation are very important and vital subject. The aim of this study is to investigate the effect of social support on women's participation in physical activity.

MATERIALS AND METHODS

The study was a cross sectional survey. Samples in this study are 230 women, age range 18 to 37 years in the city of Aligoodarz that selected randomly via clusters method. Firstly sample randomly selected of 12 devision and seven districts as a sample of the Aligoodarz city then in every neighborhood, according to Morgan table in 35 persons were selected randomly. After collecting the questionnaires, 230 questionnaires were found suitable for analysis. Coefficient alpha of this questionnaire was 0.82 [26].

Measurement of Social Support: In this survey, specific questionnaire used for measurement of social support that its validity and reliability was assessed in previous studies. This measure consists of eight variables that include: support for parents, siblings (brothers and sisters), spouse, friends, teachers and teachers, sports coaches and radio and television. Any of these variables were evaluated. All variables related to social support in questionnaire were evaluated based on Likert value range 5 (Very High, High, Medium, Low, Very Low).

Statistical Methods: Test of normality using Q-Q Plot (83 / 1) were determined. For data analysis, (SPSS software version 16) and one-way ANOVA test, t test, Multiple Classification Analysis, Post Hoc Multiple Comparisons and Scheffe tests was used. Homogeneity of variance test by levene test (P =0.19, F=1.6) was confirmed. Excel software was used for drawing of diagrams. Alpha less than 0.05 is considered as the significant level.

RESULTS

Social support for women's participation in the urban cycling, has a significant impact on their participation rates (P<0.01, F=5.412). The results show that there are significant differences among women with high levels of social support (P=0.004) and medium (P=0.037), with women with low social support. We can infer that the average of women sport participation in levels of social support, not the same. The sport of women's participation in moderate and high levels of social support, were not significantly different from each other (P=0.323). The results showed that social support with other variables, explained 38% of the dependent variable changes.

Table 1: Statistical indexes related to duration and amount of samples sport participation in each week

	Statistical indexes				
Score	duration and amount	percent	Median	Mode	Average
1	Nothing	16.2	2	2	2.64
2	Less than 1 h	38.5			
3	1 h-less than 3 h	26.9			
4	3 h-less than 5 h	9.2			
5	5 h-less than 7 h	2.3			
6	Over than 7 h	6.9			

Table 2: Statistical results for relationship between social-population variables with samples participation in use of cycle

Variables	Percent	Mean	Statistics	Sig	
age	18-24	39.2	2.61	$F_{(3,300)}$=2.188	0.093
	25-30	24.6	3.00		
	31-35	19.2	2.72		
	35-37	16.9	2.09		
Marity situation	Married	79.2	2.67	$T_{(3,3)}$=0.532	0.595
	single	20.8	2.52		
Education	elementary	11.5	1.87	$F_{(4,299)}$=5.033	0.001
	High school	18.5	2.75		
	Diploma	37.7	2.31		
	Senior	13.8	3.05		
	Junior	18.5	3.38		
Income	Less than 300	13.8	2.44	$F_{(3,300)}$=6.475	0.001
	301-400	32.3	2.31		
	401-600	46.2	2.67		
	Over than 600	7.7	4.2		
Family sport participation	No	29.4	2.11	$T_{(3,3)}$=3.087	0.002
	yes	70.6	3.07		
Friends sport participation	No	30.7	1.97	$F_{(3,300)}$=4.364	0.001
	yes	69.3	3.00		

Table 3: One way ANOVA test results for women social support and their sport participation in using urban cycling

			Test			
Groups	Percent	Mean	Change source	Variance (MS)	F	Sig
Less social support	17	1.91	Between groups	8.718	5.412	0.006
Medium social support	59	2.67	Within groups	1.611		
High social support	24	3.06	Total			

Table 4: The Scheffe test results for precise comparing of women sport participation with different social support

social support	Groups	Mean Difference	df	Sig
Less social support	Medium social support	-0.7662	0.3068	0.037
	high social support	-1.1554	0.3538	0.004
Medium social support	high social support	-0.3892	0.2699	0.323

Table 5: Effect of social support on sport participation with controlling the other variables

Statistics variables	Beta1	Beta2	Beta3	Beta4	Beta5	Beta6	Eta
Social support	0.350	0.370	0.387	0.429	0.250	0.103	0.350
Age	0.096	0.105	0.104	0.908	0.147	0.071	
Education	0.175	0.192	0.144	0.196	0.186		
Income	0.196	0.272	0.264	0.110			
Family sport participation	0.393	0.340	0.444				
Friends sport participation	0.341	0.398					
R2	0.380						
Sig	0.001						
F	8.87	0.412	2.063	2.27	15.46	13.47	

DISCUSSION

The present study found some evidence that persons who participated in sports had more active lifestyles than those who did not, regardless of gender and ambulatory status. Sports participation contributed to 16% of the total daily physical activity in persons who participated in sports. This is an important contribution to total physical activity behaviour because apparently, non-participants do not seem to compensate with other physical activities, such as household and occupational. In addition, those who participated in sports reported that they also spent more time on non-exercise-related walking or wheeling. Objective measurements of physical activity with the AM pointed in the same direction, i.e. persons who participated in sports spent on average 12 min more on dynamic activities, but it was not significantly different. In addition, there was a substantial difference in the total duration of physical activity measured with both instruments; the AM registeredan average duration of 84 min/day, whereas the PASIPD reported 285 min/day. Both measures have limitations, which may have contributed to the discrepancy in results. Questionnaires are prone to overestimation of physical activity levels due to social desirability and recall difficulties [27-29].

Furthermore, objective measurements with the AM covered 2 consecutive weekdays, whereas the self-reported PASIPD was a 7 day-recall, also including weekend-days. Although in this study the measurement days overlapped, the PASIPD covered a period more representative for usual physical activity patterns and probably recorded usual activities that may be missed by the AM, especially at the weekend. Moreover, both instruments measure somewhat different aspects of physical activity. The AM measures mobility-related activities, whereas the PASIPD includes several physical activity domains, i.e. leisure, house-hold and occupational activities, of which not all are necessarily mobility-related and therefore not detected with the AM. We therefore consider both measures to be complementary using the PASIPD to describe the contribution of specific activity domains to total physical activity behavior [30-32].

In the context of promoting physical activity behaviour, modifiable environmental and personal determinants are the most interesting targets in interventions. In able-bodied adults, the association between social support and physical activity behaviours is inconclusive. However, the present results support the view that social support is important for adolescents and young adults with MMC to participate in sports.

This study did not include other environmental influences; exercise maintenance was not significantly associated with environmental barriers, whereas motivational barriers and self efficacy were. In contrast, other studies reported lack of transportation and accessibility facilities to be important barriers to exercise [33].

Future studies should provide insights into the role of such environmental barriers to sports participation and physical activity in general in persons with MMC. In line with the results of Kinne and co-workers, In addition, sports participation was associated with perceived physical appearance and tended to be associated with global self-worth. Due to the cross-sectional study design, it is unclear whether persons with higher athletic competence, perceived physical appearance and global self-worth are more likely to participate in sports or whether participating in sports results in higher perceived competence for these aspects.

With the exception of the walking and cycling action plan, there appears to be little reference to empirical research on reasons for and barriers to participation in physical activity in government policy. The Department for Culture, Media and Sports (DCMS) acknowledge this gap in knowledge in their 'Game Plan' document:… throughout the sport and physical activity sector the quality and availability of data on facilities, participation, long term trends, behavioural and other factors is very poor. Our review has found some evidence of relevance to policy makers about why children and adults do or do not participate in sport and physical activity. Despite this there appears to be little reference to large population surveys and no reference to qualitative research in policy documents [34-36].

Similar findings to those presented in this review have been observed in studies conducted in other countries. A qualitative study of participation in physical activity in Australia found similar motivating factors such as fun, enjoyment and socializing with friends and similar barriers including time constraints and negative pressure from peers. Unless more recognition is paid to these factors it is no surprise that the effectiveness of current individual approaches to promote physical activity will remain short term and modest. Ongoing research for physical activity in the United Kingdom needs to develop theoretical frameworks to underpin health promotion interventions, programs and campaigns that draw on the existing evidence.

Little is known about the reasons why people do and do not participate in physical activity and the relationship between their levels of participation and different stages in their lives. A number of the papers reviewed found that significant shifts in the life course have implications for participation in physical activity. A mix of quantitative and qualitative methods could build an evidence base to understand changes to sport and physical activity at critical transitional phases during childhood, adolescence and adult life. This review provides a starting point for new work [37-39].

REFERENCES

1. Rimmer, J.H., B. Riley, E. Wang, A. Rauworth and J. Jurkowski, 2004. Physical activity participation among persons with disabilities: barriers and facilitators. Am J. Prev. Med., 26: 419-425.
2. Ellis, R., M. Kosma, B.J. Cardinal, J.J. Bauer and J.A. McCubbin, 2007. Physical activity beliefs and behaviour of adults with physical disabilities. Disabil Rehabil, 29: 1221-1227.
3. Verhoef, M., H.A. Barf, M.W. Post, F.W. van Asbeck, R.H. Gooskens and A.J Prevo, 2004. Secondary impairments in young adults with spina bifida. Dev Med. Child Neurol., 46: 420-427.
4. Bandini, L.G., D.A. Schoeller, N.K. Fukagawa, L.J. Wykes and W.H. Dietz, 1991. Body composition and energy expenditure in adolescents with cerebral palsy or myelodysplasia. Pediatr Res., 29: 70-77.
5. Buffart, L.M., M.E. Roebroeck, M. Rol, H.J. Stam and R.J. van den Berg-Emons, 2008. Triad of physical activity, aerobic fitness and obesity in ado-lescents and young adults with myelomeningocele. J. Rehabil Med., 40: 70-75.
6. Phillips, B.A., S.K. Lo and F.L. Mastaglia, 2000. Muscle force measured using "break" testing witha hand-held myometer in normal subjects aged 20 to 69 years. Arch Phys. Med. Rehabil, 81: 653-661. Centraal Bureau voor de Statistiek. Jeugd 2003, cijfers en feiten [Youth 2003, numbers and facts]. Voorburg/Heerlen: Centraal Bureau voor de Statistiek; 2003 (in Dutch).
7. van der Ploeg, H.P., K.R. Streppel, A.J. van der Beek, L.H. van der Woude, M.M. Vollenbroek-Hutten, W.H. van Harten, *et al.* 2007. Successfully improving physical activity behavior after rehabilitation. Am. J. Health Promot., 21: 153-159.
8. Barf, H.A., M. Verhoef, A. Jennekens-Schinkel, M.W. Post, R.H. Gooskens and A.J. Prevo, 2003. Cognitive status of young adults with spina bifida. Dev. Med. Child Neurol, 45: 813-820.

9. Roebroeck, M.E., L. Hempenius, B. van Baalen, J.G. Hendriksen, H.J. van den Berg-Emons and H.J. Stam, 2006. Cognitive functioning of adolescents and young adults with meningomyelocele and level of everyday physical activity. Disabil Rehabil, 28: 1237-1242.
10. Prochaska, J.J., M.W. Rodgers and J.F. Sallis, 2002. Association of parent and peer support with adolescent physical activity. Res. Q. Exerc Sport, 73: 206-210.
11. Wu, S.K. and T. Williams, 2001. Factors influencing sport participation among athletes with spinal cord injury. Med. Sci. Sports Exerc., 33: 177-182.
12. Sallis, J.F. and B.E. Saelens, 2000. Assessment of physical activity by self-report: status, limitations and future directions. Res Q Exerc Sport, 71: S1-S14.
13. Dallmeijer, A.J., M.T. Hopman, H.H. van As and L.H. van der Woude, 1996. Physical capacity and physical strain in persons with tetraplegia; the role of sport activity. Spinal Cord, 3: 729-735.
14. Bruinings, A .L., H.J. van den Berg-Emons, L.M. Buffart, H.C. van der Heijden-Maessen, M.E. Roebroeck and H.J. Stam, 2007. Energy cost and physical strain of daily activities in adolescents and young adults with myelomeningocele. Dev. Med. Child Neurol., 49: 672-677.
15. Anderssen, N. and B. Wold, 1992. Parental and peer influences on leisure-time physical activity in young adolescents. Research Quarterly for Exercise Sport, 63(4): 341-348.
16. Coleman, D. and S.E. Iso-Ahola, 1993. Leisure and health: the role of social support and self-determination. Journal of Leisure Research, pp: 25.
17. Cousins, S.O., 1995. Social support for exercise among elderly women in Canada. Health Promotion International, 10(4): 273-282.
18. Erickson, B.H. and K. Miata, 2005. Macro and micro gender structure: gender stratification and social network in Japan and Canada. Institute for the Global Issues March.
19. Gray, A., 1995. Computer for social sciences, national center for development studies, Australian University Publisher.
20. King, A., S. Blair, D. Bild and R. Dishman, 1999. Determinant of physical activity and interventions in adults. Medicine and Science in Sports and Exercise, 24: s221-s223.
21. Shinyeol, K., 2007. The effects of socioeconomic status social support and acculturation on the mental and physical health among Korean American older adults in Chicago metropolitan area dissertation for PhD. Available online at: http://www. Wordcatlibraries.org/
22. Wellman, B., 1992. Which type of ties and network provide what kinds social support? Advance in group processes, 9: 207-235.
23. Wilhjalmsson, R. and T. Thorlindsson, 2005. The integrative and physiological effects of sport participation: Astudy of adolescents. Sociological Quarterly, 33(4): 637-647.
24. Medical Officer, 2004. At Least Five a Week: Evidence on the Impact of Physical Activity and Its Relationship to Health: A Report from the Chief Medical Officer. London*:* Department of Health, pp: 9.
25. Kopelman, P.G., 2000. Obesity as a medical problem. Nature, 404: 635-43. Medline10.
26. Zimmet, P., 2003. The burden of type 2 diabetes: are we doing enough? Diabetes Metab., 29: 9-18. 11.
27. Department of Culture Media and Sports Strategy Unit, 2002. Game Plan: A Strategy for Delivering Government's Sport and Physical Activity Objectives. London: Cabinet Office, pp: 12.
28. Allender, S., V. Peto, P. Scarborough, *et al.* 2006. Coronary Heart Disease Statistics. London: British Heart Foundation, pp: 13.
29. Joint Health Surveys Unit, 2004. Health Survey for England 1998. London: HMSO, pp: 14.
30. Petersen, S., V. Peto and M. Rayner, 2004. Coronary Heart Disease Statistics. London*:* British Heart Foundation, pp: 15.
31. Sport England, 2003. Driving up Participation in Sport-the Social Context, the Trends, the Prospects and the Challenges. London: Sport England, pp: 16.
32. The Royal Parks, The Hub: The New Pavilion. Available at: http://www.royalparks.gov.uk/press/ current/press_release_52.cfm. Accessed: 3 November 2005.17.
33. Holm, K., S. Li, N. Spector, *et al.,* 2001. Obesity in adults and children: a call for action. J. Adv Nurs., 36: 266-9.
34. Thomas, J.R., J.K. Nelson and S.J. Silverman, 2005. Research Methods in Physical Activity. 5th edn. Champaign, IL*:* Human Kinetics, pp: 19.
35. Dixon-Woods, M. and R. Fitzpatrick, 2001. Qualitative research in systematic reviews has established a place for itself. Br Med. J., 323: 765-6. FREE Full Text 20.

36. Thomas, J.R. and J.K. Nelson, 1996. Research Methods in Physical Activity. 3rd edn. Champaign, IL: Human Kinetics, pp: 21.
37. MacPhail, A., T. Gorley and D. Kirk, 2003. Young people's socialisation into sport: a case study of an athletics club. Sport Educ. Soc., 8: 251-67. CrossRef 22.
38. Mulvihill, C., K. Rivers and P. Aggleton, 2000. Physical Activity 'At Our Time': Qualitative Research among Young People Aged 5 to 15 Years and Parents. London: Health Education Authority, pp: 23.
39. Bostock, L., 2001. Pathways of disadvantage? Walking as a mode of transport among low income mothers. Health Soc. Care Community, 9: 11-8.