

Perception of Trends about Physical Exercise

¹Muhammad Ayaz, ¹Asif Jamil, ¹Malik Amer Atta,
¹Jalil-ur-Rehman Baloch, ²Mehmood Shah and ³Muhammad Zubair

¹Institute of Education and Research, Gomal University, DI Khan, Pakistan

²Bahauddin Zakariya University, Multan, Pakistan

³Department of Economics Gomal University DI Khan, Pakistan

Abstract: Perception of trends regarding physical exercise was measured using structured interviews administered to 200 respondents classified into four groups' vis-à-vis doctors, lawyers, teachers and businessmen at Dera Ismail Khan District of Pakistan's NWFP. The perception of trends was divided into four categories namely health oriented trends, self appearance trends, light exercise trends, moderate to hard exercise trends and non exercise trends. There exists a mix of following a specific exercise trend among sampled community. Significant differences were observed among groups in respect of perceptions denoting "playing games to safeguard/ avert health problems", "force to engage in physical exercise due to shape in figure", "playing games that do not involve physical exertion", "play games that involve lots of physical exertion" and "control over diet to maintain fitness". The findings also discussed probable reasons for opting for non-exercise trends.

Key words: Physical exercise • Perceptions • Trends • Doctors • Lawyers • Teachers • Businessmen

INTRODUCTION

Exercise is an important ingredient and is one of the most prime contributors to overall health and well being of individuals [1] by promoting physical health and self esteem. Regular engagement in some sort of physical or non physical activities to maintain good health is the motive of many health promotional campaigns at national and international level [2]. The capacity of a routine physical exercise programme could lead to a reduced health related problems. For instance, moderate intensity walking is related with reducing risk of cardiovascular diseases [3]. The benefits of exercise, however, may be dependent on duration and vigorousness of the exercise or training programme opted [4] which lead to maximum oxygen intake which is a major determining factor in an aerobic exercise programme [5] for reduced health risks. Physical exercise may limit various physiological and psychological disorders. Nebcasorn *et al.* [29] evaluated that regular physical activity is associated with reduction of stress levels. Following different exercise programme may induce fitness, disease endurance, muscle strength, flexibility and balanced body composition [6]. Various exercise and non exercise activities plan related to meals, investigating calories, weighing at different intervals, light

to medium exercise activities at routine contributes towards weight loss [7,8] as well effectively reducing risks hypertension, diabetes, obesity and in few instance even cancer [2]. Besides weight loss, disease prevention, improved physical and mental health, exercise may also helps to improve life satisfaction, avoid fatigue at working places and improved quality of life [9, 10, and 11]. In order to explore how physical exercise play their role in different life embodiments, present study is formulated to explore perceptions regarding trend to different exercise and non-exercise trends.

METHODOLOGY

Present study was conducted in District Dera Ismail Khan of Pakistan's North West Frontier Province (NWFP) during spring, 2006 from 200 randomly selected respondents belonging to four categories namely doctors, lawyers, teachers and businessmen. The respondents attributed to each category were selected from lists constituted from their respective offices i.e. for doctors information was obtained from district head quarter hospital, teachers were selected on the basis of material provided by the district education office, bar council was an instrument for sampled lawyers whereas elected union

of businessmen provided list of businessmen in the area. Perceptions regarding four groups were divided into trends namely health oriented trends, self appearance trends, light exercise trends, moderate to hard exercise trends and non exercise trends. Ordinal scales were used utilizing five point Likert scale. Interview schedule was administered with face to face interaction. Data was analyzed using SPSS (Statistical Package for social scientists) version 11.

RESULTS AND DISCUSSION

Health Oriented Trends: Reference to health problems, regarding groups, statistically significant differences were observed with respect to health oriented trends denoting; engagement in health club activities and participation in playing games that is helpful in averting health hazards. However, following exercise with respect to its role in reducing stress level and participation in sports to lose weight were found statistically non-significant among study groups. Amongst sampled population groups, businessmen were significantly higher in their perception (74%) that health risks may be minimized in actively engaging in health club activities. Likewise, they were also significantly high in their perception that health hazards may be reduced by taking part in games (Table 1). Many researchers are in conformity to present study findings. Physical activity is a prime motive to reduce chronic health problems [12]. It has been established that physical activity is the major cause of mortality and chronic health conditions such as heart diseases, diabetes, cancer and obesity [13-16]. Physical Activity is

proved essential for the promotion of healthy weight [17]. The priorities to control weight promote increased use of exercise [18]. Exercise is also tended to reduce stress levels among study population. Various studies are corroborated with the present research. Regular exercise is very much instrumental in reducing feelings of tension, anxiety and anger [19]. The interest to follow exercise is paramount in averting most of health problems. Following exercise make an individual fit and toned entities are having significantly lower heart rate, lower blood pressure, faster heart rate recovery and fitness is an important puzzle for stress minimization [20]. Sports is an important ingredient besides enjoyment also render fitness [21]. Participation in sports has significantly affected directly or indirectly on the health by affecting parameters of decreasing smoking, psychological adversities and depression [22]. Sports is an important feature of leisure time activity among study respondents. Although opportunities to follow a specific sports activity are limited, yet, is also providing a space for sharing daily engagement among friends and Work colleagues. It is interesting to note that businessmen are significantly more engaged in health club activities and making them fit to avert risks. Joining a health club is financially loaded activity that may not be afforded by all segments of the population. Since Businessmen are financially active community and joining sports and health club may also serve then an opportunity to met new people to introduce themselves besides making them fit and active to undertake even graved business deals. Doctors and lawyers and teachers may be too busy to vacate time for

Table 1: Exercise trends among groups concerning health issues.

S.No	Health oriented trend statement	Groups	Percentage of Respondents					Significance (Kandall tau)
			Always	Often	Occasionally	Seldom	Never	
1.	Engagement in health club activities	Doctors	8	50	24	12	6	.0121*
		Lawyers	16	32	28	4	20	
		Teachers	22	32	12	24	10	
		Businessman	28	46	14	6	6	
2.	Exercise to relieving stress levels	Doctors	4	10	4	10	72	ns
		Lawyers	2	6	26	0	66	
		Teachers	4	4	6	18	68	
		Businessman	0	8	14	4	74	
3.	Playing games to safeguard/ avert health problems	Doctors	22	30	22	12	14	0.106*
		Lawyers	22	24	16	14	24	
		Teachers	8	22	26	20	24	
		Businessman	34	24	14	10	18	
4.	Participation in sports activities to control my weight	Doctors	16	34	24	18	8	ns
		Lawyers	22	28	32	8	10	
		Teachers	10	30	24	18	18	
		Businessman	38	34	14	8	6	

* Showing significance at 5% level while "ns" showing non-significance using Kendalls tau test.

Table 2: Exercise trends among groups concerning Self Appearance

S.No	Self appearance trend statement	Groups	Percentage of Respondents					Significance (Kandall tau)
			Always	Often	Occasionally	Seldom	Never	
1.	Exercise for maintaining fitness	Doctors	36	38	22	4	0	ns
		Lawyers	64	20	8	0	8	
		Teachers	42	32	14	10	2	
		Businessman	60	26	12	2	0	
2.	Force to engage in physical exercise due to shape in figure	Doctors	16	40	20	22	2	.14*
		Lawyers	24	32	22	12	10	
		Teachers	28	28	16	20	8	
		Businessman	40	38	10	6	6	
3.	Participation in sports to maintain outlook	Doctors	24	24	16	14	22	ns
		Lawyers	26	30	6	4	34	
		Teachers	24	28	14	12	22	
		Businessman	30	36	8	8	18	

* Showing significance at 5% level while “ns” showing non-significance using Kendalls tau test.

Table 3: Trends among groups concerning light exercise

S.No	Light exercise trend statement	Groups	Percentage of Respondents					Significance (Kandall tau)
			Always	Often	Occasionally	Seldom	Never	
1.	Morning walk	Doctors	42	36	14	8	0	ns
		Lawyers	66	14	6	0	4	
		Teachers	50	22	6	18	4	
		Businessman	57	22	16	6	2	
2.	Light walk after meal	Doctors	28	22	30	8	12	ns
		Lawyers	48	24	8	16	4	
		Teachers	32	24	14	18	12	
		Businessman	48	32	10	16	0	
3.	Going else where short distances by foot	Doctors	18	34	28	8	12	ns
		Lawyers	44	20	16	12	8	
		Teachers	32	28	14	18	8	
		Businessman	40	26	14	12	8	
4.	Playing games that do not involve physical exertion	Doctors	6	14	12	18	50	.032*
		Lawyers	12	18	8	16	46	
		Teachers	18	22	14	10	36	
		Businessman	24	16	12	4	44	

* Showing significance at 5% level while “ns” showing non-significance using Kendalls tau test.

joining sports and health club activities. It is also interesting to note that groups, though, do not differ significantly regarding exercise reducing stress levels yet signify the same for noting. It is may be because the religion that is playing the role in stress reductio perspective. Since all the respondents were Muslims, the prime meditative factors in all walks of life are the teachings of Islam.

Self Appearance Exercise Trends: The results pertaining to exercise trend and self appearance are presented in Table 2. When comparisons were made across groups, non-significant differences were observed where exercise is meant for maintaining fitness as well as outlook;

however, to remain in shape and maintaining body figure, exercise appeared as an activity that may be a driving force in compelling respondents to follow an exercise schedule. Businessmen (78%) are statistically taking leading role in believing that maintenance of body shape is correlated with physical activity (Table 2). Maintenance of poor or attractive body shape is a motivating factor of following exercise for physical fitness [23]. The significantly higher perceptions of business to get in shape perhaps related to their aspect of raising their business which involve meeting people and selling products and services that may also concerned with pleasing outlook. The findings of O’Dea *et al.*, 1996 are in agreement with this reason suggesting that there is an

Table 4: Trends among groups concerning moderate to hard exercise trends

S.No	Moderate to hard trend statement	Groups	Percentage of Respondents					Significance (Kandall tau)
			Always	Often	Occasionally	Seldom	Never	
1.	I go to river for swimming	Doctors	8	16	12	22	42	ns
		Lawyers	8	16	24	8	44	
		Teachers	8	12	8	14	58	
		Businessman	18	28	12	10	32	
2.	Doing vigorous exercise for burning calories fast	Doctors	24	44	16	8	8	ns
		Lawyers	30	40	12	14	4	
		Teachers	24	20	26	14	16	
		Businessman	40	34	12	2	12	
3.	Play games that involve lots of physical exertion	Doctors	42	28	6	10	14	.052*
		Lawyers	40	30	14	4	12	
		Teachers	16	42	8	22	12	
		Businessman	32	28	12	12	16	

* Showing significance at 5% level while “ns” showing non-significance using Kendalls tau test.

Table 5: Non exercise trends among groups showing fitness without exercise

S.No	Non exercise trend statement	Groups	Percentage of Respondents					Significance (Kandall tau)
			Always	Often	Occasionally	Seldom	Never	
1.	Eating less	Doctors	24	46	26	8	0	ns
		Lawyers	52	24	12	16	4	
		Teachers	24	34	20	24	10	
		Businessman	34	32	16	16	10	
2.	Control over diet to maintain fitness	Doctors	16	34	22	32	10	0.139*
		Lawyers	32	34	18	24	2	
		Teachers	18	30	18	52	6	
		Businessman	42	38	8	12	6	
3.	Low intake of fatty foods	Doctors	36	52	2	4	8	ns
		Lawyers	56	18	6	20	10	
		Teachers	32	22	16	44	8	
		Businessman	40	24	14	22	10	

1. Showing significance at 5% level while “ns” showing non-significance using Kendalls tau test

increasing trend among men to be physically fit may be due targets of marketing campaigns. Moreover attractive body figure is the outcome of following a comprehensive exercise and diet plan. Thinner and smart body figure is the desire for every individual male or female [24] and perhaps this desire is a motivating factor to engage in exercise activities.

Trends to Adopt Light Exercise: Exercises that involve minimum of physical output were regarded as light exercises and study population were examined to study the trend to follow light exercise among respondents as well as groups. Among, light exercise trends, participation in games that do not involve physical exertion were significantly perceived by study groups. Teachers and businessmen are at par in their perception, while

engagement in games and light exercise events by revealing (40%) for both groups. For rest of light exercise activities, morning walk, light walk after meal and going short distance on foot were equally perceived by sampled respondents (Table 3). Light exercise, though, do very little to avert serious health risks, yet, they are very useful for a notion to do nothing. It is also tested that light exercise activities even tend to induce muscle amino acid release making an impression on daily life activity and may have an effect to counter chronic heart failure [25]. People who are not always fond of engaging in vigorous exercise tend to follow light exercise activities and also to follow their passion and interest. Moreover, in study area people often gather to discuss daily matters at various junctions (friends’ house, common place at a street or village named

¹Chowk is a common assembly points at a mutually agreed place in a street in a street or village usually at entrance point

*chowk*¹ etc) and there playing games like snooker, chess, playing cards etc is a regular feature. These games, though, are not meant for moderate exercise, yet, can come under the head of low exertion games besides maintaining a relationship and mental satisfaction.

Moderate to Hard Exercise Trends: While studying moderate to hard exercise trends in present study, activities mentioned were based on classification adopted from Ainsworth *et al.*, [26]. The respondents were explored for their perceptions regarding swimming, vigorous exercise and sports that involve lots of exertion. These include brisk walking, swimming, running, jumping and playing (cricket, volleyball, table tennis, badminton, football etc.) games [26]. There is an agreement that participation in exercise that demand strength and fitness is decreased as compared to participation in sports that is equally hard and tough [27]. The study groups differ significantly with respect to involvement in games that do not involve physical exertion. Doctors and lawyers are at par, however, in respect to this perception.

Non Exercise Trends: It has been known that where there are fewer opportunities to exercise for specific objectives and where there is less self motivation to opt for measures termed a physical exertion; people tend to adopt measures that alternatively help them to get on the desired aims. When data were analyzed among study groups with respect to maintain fitness and health, all groups equally believe that less food and lower intake of fully food are helpful to keep check on health and fitness. However, businessmen were significantly higher in their perception than Teachers, Lawyers and Doctors that fitness may be an out come of centrally diet (80%) [Table 5].

Dwyer *et al.*, [28] have identified a number of factors that may be preventive in performing physical activity such as time constraints, involvement in tedious jobs requiring long working hours, engagement with peers, friends, parents and teachers, safety and cost concerns. The notion of safety concern is very much recent prevalent factor. The fighting terrorism and government plans to root out terrorism and commitment, though in way is an effective long term strategy to make the entire area and the country a safer place, yet, the operation does not free from dangers. The suicide attacks and target killing has prevented people to even go outside for a recreation and buy things after office hours. The traders also get their businesses wind up as soon as the sun sets. Under present circumstances where on one hand there are very few opportunities like gyms or play grounds to go

after a healthy exercise plan, also accompanied with health safety concerns. That may a compelling factor for people to look after alternative measures for staying healthy. Diet control is an important factor to stay healthy out of following a vigorous physical exercise plan. There are numerous products in the market that claim to reduce wait and extra fat ranging from tablets to tummy wearing belts. They also offer and have examples of reducing weight but most of the community being low income is not always buy those products. However, following a proper diet plan or eating a low fat diet is very helpful in shedding extra weight. Diet, though, is very helpful in weight loss but may also have hazards to regaining weight once treatment finishes.

REFERENCES

1. Bear, M., 1996. Exercise, Physical Appearance and Self-Esteem in Adolescence. National Eating Disorder Information Centre, Toronto.
2. Pate, R.R., M. Pratt and S.N. Blair, 1995. Physical activity and public health: a recommendation from centers for disease control and prevention and the American college of sports medicine. *Journal of American Medical Association*, 273: 402-407.
3. Manson, J.E., P. Greenland and A.Z. LaCroix, 2002. Walking compared with vigorous exercise for the prevention of cardiovascular events in women. *N. Engl. J. Med.*, 347: 716-25.
4. Lee, I.M., H.D. Sesso, Y. Oguma and R.S. Jr. Paffenbarger, 2003. Relative intensity of physical activity and risk of coronary heart disease. *Circulation*, 107: 1110-1116.
5. Myers, J., M. Prakash, V. Froelicher, D. Do, S. Partington and E. Atwood, Exercise capacity and mortality among men referred for exercise testing. *N. Engl. J. Med.*, 346: 793-801. [Abstract/FreeFullText].
6. Thomas, D.F., M.I. Paul and T.R. Walton, 2000. Fit and Well: Core concepts and labs in physical fitness and wellness. Mayfield Publishing Company, California.
7. Kruger, J., H.M. Blanck and C. Gillespie, 2006. Dietry and Physical behaviours among adults successful at weight loss maintenance. *Int. J. Behav. Nutr. Phys. Act.*, 3(1): 17-19.
8. Elley, R., E. Bagrie and B. Arroll, 2006. Do snacks of exercise lower blood pressure? A randomised crossover trial. *N. Z. Med. J.*, 2: 119(1235): U1996.

9. Corbin, C.B. and R.P. Pangrazi, 1996. What you need to know about surgeon's general report on physical activity and health. *Physical Activity and Fitness Research Digest*, 2(996): 1.
10. Corbin, C.B. and R. Lindsey, 1997. "Concept of Fitness and Wellness". Brown and Benchmark Publishers, London.
11. McGinnis, J.M. and P.R. Lee, 2000. Health people 2000 at Mid Decade. *J. American Med. Association*, 273: 1123.
12. Ayaz, M., U. Ali and M. Zubair, 0000. Awareness of Physical exercise among doctors, Lawyers, teachers and businessmen in Dera Ismail Khan District of Pakistan's NWFP.
13. Lee and Skerrett, 2001. I.M. Lee and P.J. Skerrett, Physical activity and all-cause mortality: what is the dose-response relation?, *Med. Sci. Sports Exerc.*, 33: S459-S471.
14. Kohl, 2001. H.W. Kohl III, Physical activity and cardiovascular disease: evidence for a dose response, *Med. Sci. Sports Exercise*, 33: S472-S483.
15. Thune and Furberg, 2001. I. Thune and A.S. Furberg, Physical activity and cancer risk: dose-response and cancer, all sites and site-specific, *Med. Sci. Sports Exercise*, 33: S530-S550.
16. Chakravarthy, *et al.*, 2002. M.V. Chakravarthy, M.J. Joyner and F.W. Booth, An obligation for primary care physicians to prescribe physical activity to sedentary patients to reduce the risk of chronic health conditions, *Mayo Clin. Proc.*, 77: 165-173.
17. Richard, L.M.D., Deborah, A. Galuska, E.F. Janet, R.B. Charlene and K. Laura, 2005. *Journal of Adolescent Health*, 36(4): 320-326.
18. Burgeson, C.R., F.E. Janet, G.A. Deborah, K. Laura, and R. Richard, 2005. Weight management goals and use of exercise for weight control among U.S. high school students, 1991-2001, *Journal of Adolescent Health*, 36(4): 320-326.
19. Gauvin and J.C. Spence, 1996. Physical activity and psychological well-being: knowledge base, current issues and caveats, *Nutr. Rev.*, 54: S53-S65.
20. Forcier, K., L.R. Stroud, G.D. Papandonatos, B. Hitsman, M. Reiches, J. Krishnamoorthy and R. Niaura, 2006. Links between Physical Fitness and Cardiovascular Reactivity and Recovery to Psychological Stressors: A Meta-Analysis, *Health Psychology*, 25(6): 723-739.
21. Andrews, G.J., A.C. Sparkes and M.I.I. Sudwell, 2005. Towards a geography of fitness: an ethnographic case study of the gym in British bodybuilding culture. *Social Sci. Med.*, 60(4): 877-891.
22. Isabel, B., G.M. Marisa, P. Yolanda and P. Diana, 2003. Testing direct and indirect effects of sports participation on perceived health in Spanish adolescents between 15 and 18 years of age. *Journal of Adolescence*, 26(6): 717-730
23. Dolderman, D., L. Penelope, M. Kelly and W. Carol, 2005. The impact of positive and negative fitness exemplars on motivation. *Basic and Applied Social Psychology*, 27(1): 1-13.
24. Schulerpetra, B., 2004. broxon-hutchersonamanda; philippsteven f.; ryanstuart; isosaarirobert m.; robinsondestini. Body-shape perceptions in older adults and motivations for exercise. *Perceptual and motor skills* issn0031-5125 codenpmosaz source / source, 98(2): 1251-1260. [10 page(s) (article)].
25. Roberto, A.M.D., O.M.D. Cristina, D. Maurizia, I. Paolo, G. Alessandra, M.D.P. Arcidiaco, S. Viglio, F. Boschi, M. Verri and E. Pasini, 2005. Increased skeletal muscle amino acid release with light exercise in deconditioned patients with heart failure. *J. Am. Coll. Cardiol.*, 45: 158-160.
26. Ainsworth, B.E., W.L. Haskell, A.S. Leon, D.R. Jacobs, H.J. Montoye, J.F. Sallis and R.S. Paffenbarger, 1993. Compendium of physical activities: classification of energy costs of human physical activities. *Med. Sci. Sports and Exercise*, 25(1): 71-80.
27. Stamatakis, E., Ulf Ekelund and J.W. Nicholas, 2007. Temporal trends in physical activity in England: The Health Survey for England 1991 to 2004. *Preventive Medicine*.
28. Dwyer, J.J.M., K.R. Allison, E.R. Goldenberg, A.J. Fein, K.K. Yoshida and M.A. Boutilier, 2006. Adolescent Girls' Perceived Barriers to Participation in Physical Activity. *Adolescence*, 41(161): 75-89.
29. Chanudda Nabkasorn, C., N. Miyail, A. Sootmongkol, S. Junprasert, H. Yamamoto, M. Arita and K. Miyashita, 2006. Effects of physical exercise on depression, neuroendocrine stress hormones and physiological fitness in adolescent females with depressive symptoms. *The European Journal of Public Health*, 16(2): 179-184.