IMPACT OF PUBLIC PARKS ON HUMAN LIFE: A CASE STUDY

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Public parks provide opportunities to enrich the quality of life for person of all ages and abilities. Parks are the key contributor to the aesthetic and physical quality of the surroundings. In the present study health, social, personal and environmental benefits associated with parks were evaluated. In total 200 respondents belonging to different age, profession, education, income and age group were interviewed. 70% of the respondents were strongly agreed that parks have potential contribution to improve the health status and psychological wellbeing of the parks visitors and 7% were uncertain about it. Similarly 83% of the respondents agreed that parks enhance the beauty of the city. 86% of the respondents showed that plant reduce the air pollution by purifying our environment. Data recorded on heath benefits showed that 60 % of the visitors feel relaxed and reduce mental stress and tension. 68 % of the visitors agreed that by visiting parks concentration on thinking is increased. Similarly data related to social benefits showed that 52 % of the parks visitors find opportunity to talking with people and improve the living standard.
Keywords: Green spaces, health benefits, social benefits

INTRODUCTION

Public parks are natural buffers to sustain the urban environment as they contribute positively in providing quality of life to city dwellers as they are important for aesthetic gratification. There are environmental, social, personal, and health benefits for the community living in dense populated areas are associated with parka. Parks improve the socio-economic conditions of urban communities and also improve the quality of their physical surroundings (Younis *et al.* 2008). Therefore, urban green spaces are increasingly recognized as an important factor in meeting the needs of a healthy, sustainable urban society. Urban parks have been recognized for the social functions that fulfils, in terms of meeting places and areas for entertainment, recreation and relaxation, and its amenity value including contribution to quality of life, aesthetic enjoyment, a meeting of security and freedom from urban noise and pollution. A strong relationship exists between poor environmental quality and health (Ridder, 2001; Relf, 2008). Social benefits of urban open spaces include: the maintenance of social ties through the distribution of parks produce and provision of food for feasts; the recreational and physical exercise value; and the educational importance to urban dwellers and their children, who often have limited knowledge of appreciation of agriculture and its culturally important plants (Thaman, 1987). The

contributions of urban green spaces to community health and well-being can be through improvements in ambient environmental quality, more opportunity for healthy lifestyles, and opportunities to come in contact with nature (Takano *et al.*, 2002). It is need of the time to conserve nature in order to sustain the natural ecosystem for the wellbeing of the city dwellers because landscaped areas can also be a source of satisfaction, whether or not one participates in their maintenance. The knowledge that one can enjoy such an area is in itself a source of satisfaction. This issue is particularly important when satisfaction is assessed in term of usage. The study about role of urban parks for human being was conducted by various scientist including Jackson (2003), Chang (2004), Midden and Barnicle (2004), Grahn (1994) and Iamtrakul (2005).

In Pakistan, there are many social problems including poverty, unemployment and less earning to feed the whole family members that cause negative effects on the social, psychological and health of human being. As that human have strong emotional responses to living organisms and to natural and human-modified environments. The objective of present study was to determine the effect of parks for human welfare and to determine the needs of the community to provide relaxation and peace in their lives as affected by their contact with nature.

MATERIAL AND METHODS

Study Area: Guttwala and Canal Park located in Faisalabad, Pakistan were selected for present survey to collect the required information. These parks were selected for conducting research due to the highest possibilities for meeting maximum social groups. The total sample size was 200 respondents having distribution of 100 respondents from Guttwala Park (Shiekhpura Road, Faisalabad) and 100 from Canal Park (Samundri Road, Faisalabad).

Data Collection: The data were collected with the help of interview schedule. An interview schedule was developed in English version to get the required information through a combination of open ended and closed ended question detailed information on structural format of park visitors. The data was collected in regular intervals and each interview took 15 to 20 minutes. Questionnaire main topics related to personal information, reasons to visit the parks, community contribution in the development of parks and opinion questions. For pre-testing five respondents were interviewed. After pre-testing some questions were reshaped, reconstructed and modified to enhance the workability of the tool. The interviews were scheduled according to the availability of the respondents. Respondents were contacted at the threshold level and both male and female respondents were interviewed from different age groups. Interviews were scheduled in the evenings from 3:00 to 6:00 pm and 7.00 to 9.00 am in morning. The best efforts were made to create a friendly atmosphere between interviewer and the respondent.

Data analysis: The data was arranged for analysis and SPSS (Statistical package for social sciences) program version-15 was used. Required cross tables were formed for analysis of research data. Then using these cross tables, pie charts, tables, bar charts was constructed, and possible graphical presentation was done to meet the demand of research objectives. Chi square test was applied on the data for significance of difference between the numbers of observed responses with those that could be expected to occur by chance. Chi square test was used because there was non-parametric population and there were nominal variables in the data. For the estimation of frequency distribution of the various responses from the respondents simple percentages were calculated by the following formula. P=F/N*100 (P=Percentage, F=Absolute Frequency, N=Total No. of cases. In the present study the following respondent categories were: Age- A.15 to 30 years, B. 31 to 45 years, C. 46 years or above, Income: Rs.1000 to Rs.10000, Rs.11000 to Rs.20000, Rs.21000 to Rs.30000, Rs.31000 to Rs.40000, Rs.41000 plus, Education : A. Illiterate, B. Up to Matric, C. F.A/F.Sc to B.A/ B.Sc, Profession: A. Students, B. House wife, C. Teacher, D. Businessmen, E. Employee, F. Labor, G. Jobless, Gender A. Male and B. Female.

RESULTS AND DISCUSSION

Results of present study were helpful to establish a relation between community and public parks. It was noted that there were variations in responses among the visitors whoever the results with respect to gender distribution showed that 92 % of the park visitors were males, while 8% the park visitors were females. In Guttwala park, 85% were males and remaining 15% were females while in Canal park majority of park visitors were males and female participation was negligible. 58 % of the park visitors were in the age of 15 to 30 years, and 24% were in the age of 31 to 45 years, and 18 % were in the age of above 46 years. In Guttwala park majority of the park visitors i.e. 56 % were in the age of 15 to 30 years, and 25% were in the age of 31 to 45 years, and 19% were in the age of 46 years and above. While in Canal Park major portion of park visitors i.e. 61% were in the age of 15 to 30 years, and 23% were in the age of 31 to 45 years and 19% were in the age of 46 years and above (Table 1). 59 % of the visitors interviewed were married while 41 % were single and 60% having income 1000-10,000/month. 55% of respondents liked to spend 1-2 hours in the parks and when reasons for visiting parks were explored, it was found that 32% respondents visit park for walking, while other reasons for visiting were jogging 30 %, children wish 15%, exercise 6% and 10% respondents came for outing purposes (Table 1). Respondents were asked to share their purpose of visit to parks. Results showed that they exchange views with friends and entertainment was the main reason which was given by people having 32% contribution. In response to the question about enjoyment associated with parks while visiting the parks, purpose of asking of this question was to develop an understanding on people enjoyments associated with their visits to the parks and based on this information to establish some relationship with enjoyment feature needed in the parks. Data revealed that major proportion of park

Table 1. Distribution of Respondents with respect to different Categories

Category	Sub Category	%age	Category	Sub Category	%age
Sex	Male	92	Income	1000-10000 Rs.	60
	Female	8		10000-20000 Rs.	21
Age	15-30 Years	58		21000-30000 Rs.	8
	31-45 Years	24		31000-40000 Rs.	4
	> 46 Years	18		>41000 Rs.	7
Profession	Labour	16	Time Spent	0-1 Hour	28
	Farmer	2		1-2 Hours	55
	Govt. Employ	16		2-3 Hours	15
	Private Employ	43		>3 Hours	2
	Business man	15	Reason of Visit	Walk	32
	Student	8	to Park	Jogging	30
Education	M. A/ M. Sc	14		Exercise	6
	F. A/B. A/B. Sc	31		Children Wish	15
	Matric	26		Outing	10
	Illiterate	29		Others	30
Marital Status	Married	59			
	Single	41			

Source (Primary data collected during the year 2006-07)

visitors i.e. 35 % were enjoying the greenery, 25% were enjoying through feeling calmness, 15.5% were releasing relief tension, 7.0% were enjoying walking on grass, 1.5% were enjoying the symmetrical designs, 1.5% were enjoying the flowers and 15.5 % were enjoying hardscapes in parks. A comparison of both parks with respect to the enjoyment reveals that enjoying greenery was top priority among the visitors of Guttwala park and others such as entertainment was enjoying the top priority among Canal park. Greenery was the most perceived enjoyment reported by the majority of visitors, which reflects towards the need of space required for vegetation and inflect it is an important role and value of plants in their life. Manaker (1987) reported that greenery is aesthetically pleasing because green is a color of peace and serenity.

Social Benefits: Comparison of community benefits associated with Public Park showed that 52% of the park visitors were strongly agree and 28% were agreed that by visiting parks they get the opportunity of talking to people consisting of while 6% were uncertain, and 14% were disagreed (Fig. 1). Data reveals that majority of park visitors in Guttwala park (52%) of park visitors were strongly agreed that parks provide the opportunity of talking to people and while 20% were agreed with the idea. On the other hand 10% were uncertain, and 18% of park visitors were disagreed. While in Canal park majority of park visitor's comprising of 52% of park visitors were strongly agreed, 36% were agreed, 2% were uncertain, and 9% were disagreed that parks

provide the opportunity to talk people. These results correlate with the findings of MacEachern (1990). Public opinion about parks showed that parks improve the living standard and social interaction of people. Results of the comparison among two parks with respect to improve the living standard of people reveals that majority of park visitors in Guttwala park i.e. 57% of park visitors were strongly agreed that parks improve the living standard of people, 43% were agreed. While in Canal Park majority of park visitor's i.e. 43% of park visitors were strongly agreed, 57% were agreed that parks improve the living standard of people. Kuo (2003) also reported the same results about social interaction. Public opinion about parks that parks help in making friends Showed that 42% of the park visitors were strongly agreed that parks help in making friends, 30% were agreed, 7% were uncertain, and 21% were disagreed that parks help in making friends (Fig. 2). MacEachern (1990) showed similar results. Data related to Public opinion about parks that increase aesthetic sense of people showed that 46% of the park visitors were strongly agreed that by visiting parks increase aesthetic sense of people, 33% were agreed, 17% were uncertain, 3% were disagreed and 1% were strongly disagreed that parks increase the aesthetic sense of people. This is according to the findings of Ridder (2001).

Personal Benefits: Public opinion that parks help in spending good time indicated that 68% of park visitors were strongly agreed that by visiting parks respondents

spend good time and 32% were agreed that by visiting parks respondents spend good time. These results were also achieved by Robinson (1992). Data shows that 40% of the park visitors were strongly agreed that by visiting parks people concentrate on thinking, 44% were agreed and 16% were uncertain that by visiting parks people concentrate on thinking (Fig. 3). Results also revealed that that 30% of the park visitors were strongly agreed that parks improve the quality of life, 35% were agreed and 17% were uncertain and 8% were disagreed that parks improve the quality of life (Fig. 4). These results are confirmatory to Ridder (2001). Younis, *et al* 2008, reported green spaces provide an opportunity for outing for city residents where they spend some time in tension free environment.

Health Benefits: Public opinion about parks that parks provide fresh air to community showed that 69% of the park visitors were strongly agreed that parks provide fresh air to the community, 31% was agreed. Different horticulture therapist like, Strigsdotter (2005) and Yamane and Adachi, 2008 found that patients recovered earlier while working with plants. Data related to health benefits showed that 70% of the park visitors were strongly agreed that parks improve the health of people, 23% were agreed and 7% were uncertain that parks improve the health of people (Fig. 5). These results are conformed by Sherer (2003) who reported that parks helped to improve the health of people when they visit green spaces. Results also showed that 57% of the park visitors were strongly

agreed that parks provide the mental satisfaction, 37% was agreed and 6% were uncertain that parks provide the mental satisfaction of people. Sherer (2003) also concluded that parks improve the mental satisfaction of people, whereas, Younis, *et al* (2008), reported plants as complementary medicine which can be used as a treatment to excite and develop individual cognitively, socially, psychological and physically.

Environmental Benefits: Public opinion that parks enhance beauty showed that 83% of the park visitors were strongly agreed that parks enhance beauty in urban areas, 17% were agreed. Comparison among two parks with respect to control the pollution in urban areas reveal that majority of park visitors in Guttwala park i.e.86% of park visitors were strongly agreed that parks control the pollution in urban areas, 14% were agreed. While in Canal Park majority of park visitor's i.e.54% of park visitors were strongly agreed and 40% were agreed and 6% were uncertain that parks control the environmental pollution (Fig. 6). Our results are confirmed by (Khan et al 2005) who reported that trees and shrubs had controlled the environmental pollution. Data revealed that that majority of park visitors in Guttwala park i.e.90% of park visitors were strongly agreed that parks clean the air in urban areas and 10% were agreed. While in Canal Park majority of park visitor's i.e.67% of park visitors were strongly agreed, 18 % were agreed and 15% were uncertain that parks clean the air in urban environment. Walter and Hamilton (1993) reported that greenery through plants help in providing clean air to the community.
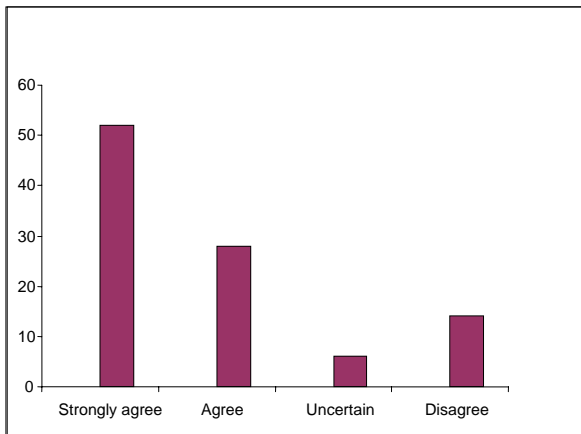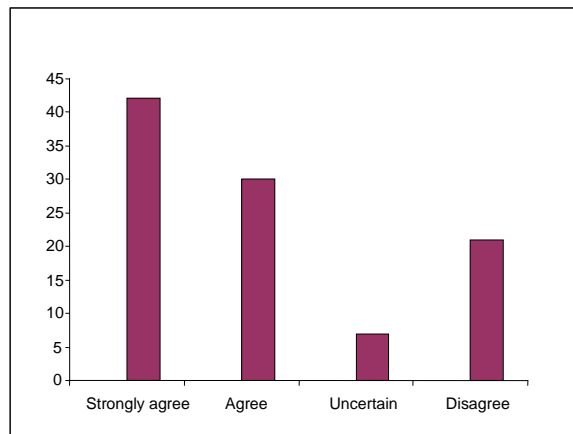

Figure 1. Opportunity for talking to people
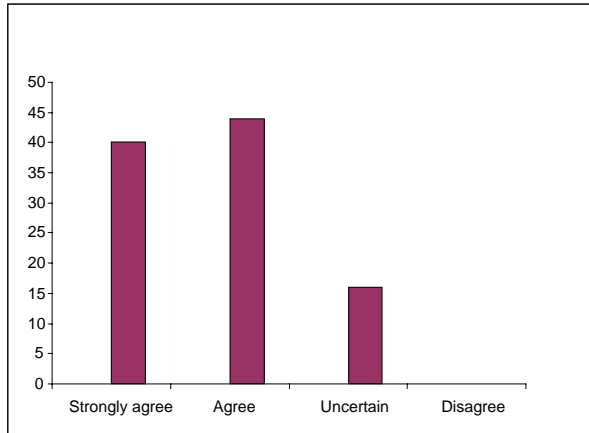

Figure 2. Opportunity to make friends

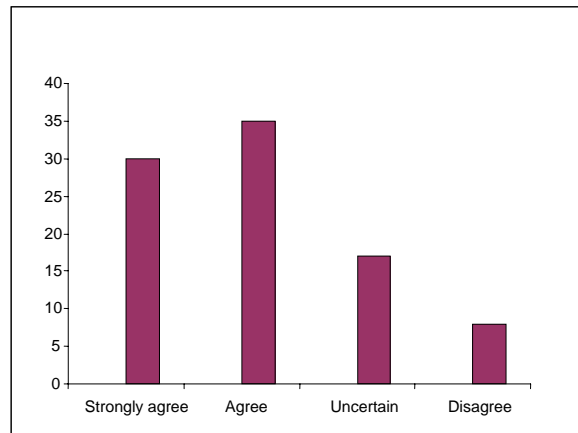**Figure 3. Opportunity to concentrate on thinking**

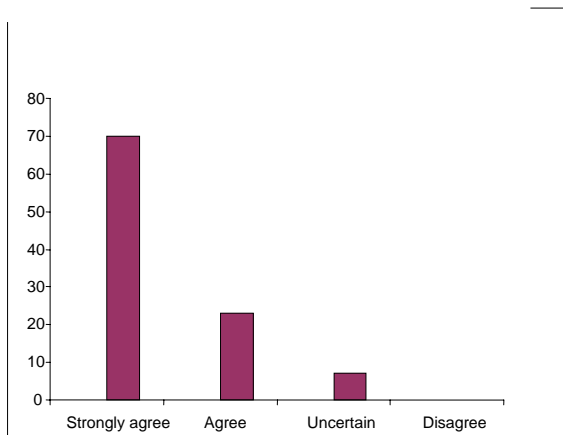**Figure 4. Opportunity to improve quality of life**

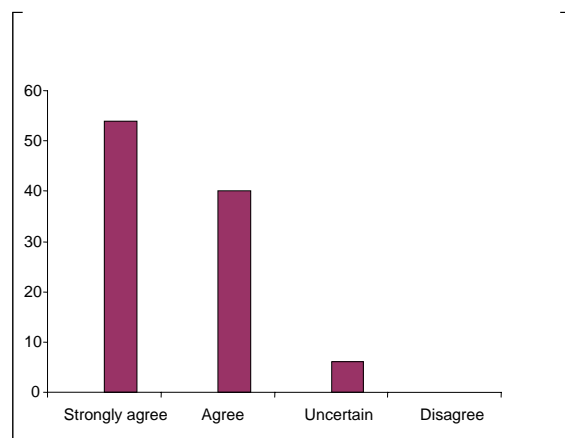
Figure 5. Health benefits of parks

Figure 6. Reduction of air pollution by parks

CONCLUSION

Parks in urban areas are natural buffers for the stabilization of urban ecosystem. Therefore, a careful planning is required to get maximum benefits from parks and urban green spaces. Plants having dense shade should incorporate in parks to get some relief from scorching heat in summer. Number of flowering plants should be increased to attract birds and butterflies which will ultimately increase diversity. Weak and fragile trees should not be planted as they require more maintenance. It is also need of time to clearly define a well understood and interconnected planning and management regime of parks and to assign clearly the responsibilities and accountabilities at all levels.

There is need to emphasize on the importance of parks in the minds of community, so they may lead their peaceful lives.

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