Achieving Quality of Life through Stages of Change in Physical Activity

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Abstract

The aim of the study was to achieve Quality of Life through stages of change in physical activity. One hundred fifty-four subjects both male and female were selected from Delhi population ranging from 22-55 years. In the present study, three stages of physical activity namely Precontemplation, Preparation and Maintenance were selected. The results showed significant relationship of Quality of Life Inventory and all areas of life within Maintenance Stage as compared to other stages at significant level of 0.01.

KEYWORDS: Health, Self-Esteem, Goals & Values, Money, Work, Play, Learning, Creativity, Helping, Love, Friends, Children, Relatives, Home, Neighbourhood, Community, Quality of Life, Precontemplation Stage, Preparation Stage, Maintenance Stage, Stages of Change.

INTRODUCTION

Everyone knows very well the value of physical activity. Physical activity refers to any movement of the body that results in energy expenditure above that of resting level (Caspersen, Powell & Christenson, 1985). Current guidelines recommend that adults accumulate 30 minutes (and children 60 minutes) of moderate-intensity physical activity (equivalent to brisk walking) on most days of the week (Mutrie & Faulkner). Researchers suggested 20 to 40 minutes of exercise is helpful to generate the psychological benefits (e.g., Berger & Owen, 1983, 1988; Pierce et al., 1993; Steptoe & Bolton, 1988). Between 40 to 60 minutes of exercise may result in additional psychological advantages (Glasser, 1976; Mandell, 1979).

Regular physical activity reduces depression and anxiety, enhances the speed and accuracy of work, improves our self-concepts, promotes fitness and leads to better cardiovascular functioning. It also prevents weight gain with ageing. In the short term, it increases positive moods and in the long-term it leads to greater happiness (Argyle, 2001; Sarafino, 2002).

The stages of change in physical activity (Marcus, 1992) describe the different phases of human behavior. In the pre- contemplation, individuals have no intention of changing their behavior in the foreseeable future. In the contemplation stage, they have some intention. In the preparation stage, they make a commitment to change their behaviour in the very near future. In the action stage, they are actively involved in changing their behavior and if they sustain the change for long enough, that is maintenance stage.

Physical activity promotes the health whether it is physical health or mental health. In 1946, World Health Organization (WHO) defined health in terms of not merely the absence of disease, but also as a state of complete physical, mental and social well-being (WHO, 1946).

Quality of Life has been defined by the World Health Organization as an individual's perception of their position in life in the context of the culture and value systems in which they live and in relation to their goals, expectations, standards and concerns. It is a broad ranging concept incorporating in a complex way the person's physical health, psychological state, level of independence, social relationships, personal beliefs and their relationship to salient features of the environment (WHOQOL, 1997).

This definition reflects the view that quality of life refers to a subjective evaluation, which is embedded in a cultural, social and environmental context. As such, quality of life cannot be simply equated with the terms "health status", "life style", "life satisfaction", "mental state", or "well-being". Rather, it is a multidimensional concept incorporating the individual's perception of these and other aspects of life.

Quality of life is personal satisfaction or dissatisfaction with the cultural or intellectual conditions under which you lives. It covers a variety of domains including health status, capacity to carry out activities of daily living, work role status, availability of opportunities to pursue recreational interests, social functioning in friendships and relationships access to health care resources, standard of living and general well-being.

The Quality of Life Inventory (QOLI) is favorably reviewed positive psychology test of happiness, contentment, meaning in life and overall fulfillment. It is a test of positive functioning and not the test of disorders, symptoms and or diseases. It measures your satisfaction with life or your success in fulfilling your most cherished needs, goals and needs. It measures overall happiness or satisfaction in the 16 areas of life that have been found to contribute to overall happiness in cultures around the world (Frisch, 1998; Frisch et al., 2005; Frisch, Cornell, Villanueva, and Retzlaff, 1992). The QOLI is a research-supported outcome measure of positive mental health and functioning. The QOLI assess your overall level of satisfaction, meaning, fulfillment or life list success compared to those of a nationwide sample of healthy, functioning individuals aged 17 or older. It identifies which areas of your life contribute to overall happiness and which areas detract from your contentment and meaning in life.

The QOLI provides information that will help you a personal growth program aimed at greater meaning, satisfaction and fulfillment in life. Fifty to eighty percent of your overall happiness or satisfaction is composed of the 16 areas of life measured by QOLI (Frisch et al., 1992; Miller and Frisch, 2009). If you can boost your fulfillment in unhappy areas of life, then your level of overall satisfaction, meaning and contentment will also increase. One way to start the process is to identify your lifetime goals for each area of life that is important to you. QOLI has been worldwide used tool. There may be differences in satisfaction, happiness and cultural difference which may influence Quality of Life among population. Delhi being centre of political & economical activities in the countries, people came from different corners of the country and with different values of life.

METHOD

Participants

A total of one hundred and fifty-four subjects, both male and female following different lifestyle were selected by snowball sampling: exercised regularly and those

who did not exercise. The age of the subjects were ranging from 22-55 years in this study. The Quality of Life Inventory by Frisch was used to identify 16 areas of life which determine happiness and unhappiness in life.

Criterion Measure

Quality of life Inventory is a favourably reviewed positive psychology test of happiness, contentment, meaning in life, and overall fulfilment. It is a research-supported outcome measure of positive mental health and functioning. With 32 items, the QOLI is brief and takes only 5 minutes. It assesses overall satisfaction as well as happiness in 16 areas of life. The cronbach's Alpha for reliability and index of reliability for validity of Quality of Life are .75 and .85 respectively (Sharma, Tiwari and Tyagi, 2012).

Procedure

The scholar has established the reliability by computing the Inter-Item relationship. For the purpose of establishing the reliability the questionnaire was administered to one hundred fifty-four subjects (male & female). Only one trial was taken and the data was collected from the subjects. The SPSS (16) statistical package was used to analyze the data.

RESULTS AND DISCUSSION

The descriptive statistics of stages of physical activity with Quality of Life is presented in table-1. The correlation was established by computing product moment correlation. The findings are shown in table-2.

Table-1: Descriptive Statistics of 3 Stages of Physical Activity with Quality of Life

	Precontemplation N=44		Preparation N=26		Maintenance N=84	
	Mean	S. D.	Mean	S. D.	Mean	S. D.
Health	2.09	2.88	3.31	2.60	3.39	2.65
Self-Esteem	2.91	2.34	3.77	1.66	3.36	2.00
Goals and Values	2.32	1.90	2.96	2.09	3.23	1.93
Money	2.34	2.54	2.50	1.94	1.92	2.03
Work	2.59	2.45	3.42	2.16	2.67	2.71
Play	1.75	2.23	2.96	2.25	2.26	2.35
Learning	2.77	2.09	2.65	2.45	2.81	2.00
Creativity	2.02	2.03	2.42	1.94	2.08	2.22
Helping	2.84	1.58	3.122	1.56	2.99	2.21
Love	3.07	2.21	3.65	1.98	2.83	2.55
Friends	2.48	2.24	3.50	1.92	3.33	2.49
Children	3.43	3.02	3.38	2.93	3.15	2.55
Relatives	2.34	2.02	2.85	1.76	2.99	1.95
Home	3.57	2.66	4.15	2.63	3.98	2.22
Neighbourhood	1.98	2.07	1.92	1.57	1.98	2.16
Community	1.73	1.82	2.08	1.55	1.68	1.92
Quality of Life Inventory (QOLI)	40.25	16.74	48.65	16.10	44.44	19.53

Table 1 shows the descriptive statistics of stages of physical activity with Quality of Life. On Precontemplation Stage, mean and S.D. of Quality of Life's variables were ranging from 1.73 to 3.57 ± 1.58 to 3.02 respectively.

In Preparation Stage, mean and S.D. of Quality of Life's variables were ranging from 1.92 to 4.15 ± 1.55 to 2.93 respectively. In Maintenance Stage, mean and Standard Deviation of Quality of Life's variables were ranging from 1.68 to 3.98 ± 1.92 to 2.65 respectively.

The mean and Standard Deviation of Quality of Life in Precontemplation Stage was 40.25± 16.74 respectively. The mean and Standard Deviation of Quality of Life in Preparation Stage was 48.65 ± 16.10 respectively. The mean and Standard Deviation of Quality of Life in Maintenance Stage was 44.44 ± 19.53 respectively.

Table-2: Inter Relationship between Sub-Scales of Quality of Life Inventory among Different Stages of Physical Activity

		Health	Self-Esteem	Goals and	Money	Work	Play	Learning	Creativity	Helping	Love	Friends	Children	Relatives	Home	Neighbourhood	Community	QOLI
Health	P C		.11	.14	.11	.12	.28	.00	.04	-.10	-.05	-.11	.09	-.23	.15	-.32'	.09	.23
	P	1	-.06	.19	.40'	.08	.23	.24	.30	-.10	.46'	.18	.17	-.19	.24	.07	.05	.47'
	M		.29"	.36"	.17	.22'	.39"	.40"	.33"	.34"	.01	.20	.04	.26'	.13	.20	.22'	.53"
Self-Esteem	P C			.40	.18	.27	.21	.03	.00	.20	-.04	.07	.16	-.18	.28	.24	.15	.42"
	P		1	-.17	.14	.31	.34	-.34	.16	.34	.18	.29	-.06	.18	.00	.13	.26	.28
	M			.29"	.27'	.24'	.29"	.46"	.42"	.19	.10	.27'	.01	.05	.12	-.02	.08	.46"
Goals & Values	P C				.26	.44	.44	.34	.29	.20	.17	.17	.17	.24	.28	.21	.34'	.67"
	P			1	.26	-.30	.01	.31	.14	.21	-.04	.33	.46'	.19	.09	.37	.03	.41'
	M				.2	.3	.3	.5	.2	.43	.1	.2	.1	.4	.2	.1	.3	.60

		0	7"	3"	2"	8"	"	5	3'	2	2"	3'	9	1"	"
Money	**PC**		.49	.33	.11	.22	.08	.22	.03	.14	.18	.09	.30	.32'	.55"
	P	1	.01	.53"	.37	.42'	.13	.16	.21	.33	.29	.33	.31	.17	.67"
	M		.28"	.21	.36"	.32"	.01	.21	.15	.34"	.15	.12	.41"	.34"	.51"
Work	**PC**			.44	.30	.26	.37'	.15	-.04	.30'	.44"	.10	.21	.32'	.69"
	P		1	.46'	.10	.28	.21	.47'	-.01	-.19	.01	-.03	.03	.10	.31
	M			.30"	.38"	.42"	.25'	.27	.32"	.24'	.18	.01	.05	.39"	.58"
Play	**PC**				.39	.36	.09	-.11	-.20	.17	.15	-.04	.19	-.02	.50"
	P			1	.22	.43	.61''	.50"	.47'	.34	.37	.37	.10	.16	.79"
	M				.43"	.55"	.41"	.32"	.21	.10	.09	.18	.19	.20	.60"
Learning	**PC**					.30	.00	.15	.15	.08	.49"	.22	.33'	.12	.52
	P				1	.55"	.16	.06	.25	.06	-.06	.40'	-.02	.04	.47'
	M					.44"	.43"	.38"	.31"	.17	.24'	.05	.18	.22'	.68"

Creativity	**P C**									.19	.17	-.01	.20	.41"	-.10	.22	.05	.46"
	P								1	.47'	.28	.12	.15	.09	.48'	-.13	.03	.64"
	M									.46"	.34"	.41"	.17	.23'	.12	.25'	.15	.68"
Helping	**P C**										.35'	.19	.25	.16	.06	.11	.10	.39"
	P									1	.44'	.38	.26	.40'	.18	.04	.31	.61"
	M										30"	.28"	.15	.36"	.03	.32"	.26'	.60''
Love	**P C**											.43"	.17	.48"	.24	.10	.20	.47"
	P										1	-.08	.29	-.06	-.08	.03	.40'	.51"
	M											.29"	.38"	.32"	.18	.23'	.24'	.55"
Friends	**P C**												-.12	.15	.48"	.04	.09	.30'
	P											1	.16	.44'	.45'	.07	-.03	.54"
	M												.15	.23'	-.0	.24'	.26'	.53"

																	1				
Children	**PC**																	.21	.04	.05	-.02	.43"
	P																1	.25	-.00	.20	.14	.49'
	M																	.31"	.16	.37"	.31"	.47"
Relatives	**PC**																		.15	.39"	.15	.53"
	P																	1	.23	.44	.25	.45'
	M																		.17	.42"	.36"	.53"
Home	**PC**																			.05	.22	.45"
	P																		1	-.11	-.44'	.45'
	M																			.02	.26'	.31"
Neighbourhood	**PC**																				.49"	.44"
	P																			1	.50'	.34
	M																				.54"	.51"
Communit	**P**																					.45

y	C																		”
	P																	1	.31
	M																		.58 ”
Quality of Life Inventory (QOLI)	P C																		
	P																		1
	M																		

*. Correlation is significant at the 0.05 level (2-tailed).

**. Correlation is significant at the 0.01 level (2-tailed).

Table 2 determines the Inter-relationship between Quality of Life and its sub-scales among different Stages of Physical Activity. It shows significance relationship at .01 and .05 level. There are 16 areas of life in Quality of Life Inventory. The first area of life is Health which was correlated to other areas ranging from -.32 to .28 in Precontemplation Stage, -.19 to .46 in Preparation Stage and .01 to .40 in Maintenance Stage. The Self-Esteem was correlated in Precontemplation, Preparation and Maintenance Stage at -.18 to .40, -.34 to.34 and -.02 to .46 respectively. Money is also one of the areas of life which was correlated to other areas ranging from .03 to .49, .01 to .53 and .01 to .41 in Precontemplation, Preparation and Maintenance Stage respectively. Work is also important area of life which was correlated -.04 to .44, -.19 to .47 and .01 to .42 in Precontemplation, Preparation and Maintenance Stage respectively. Play was correlated to other areas ranging from -.20 to .44, .10 to .61 and .09 to .55 in Precontemplation, Preparation and Maintenance Stage respectively. Learning was correlated to other areas at .00 to .49, -.06 to .55 and .05 to .44 in Precontemplation, Preparation and Maintenance Stage respectively. Creativity was correlated with other areas significantly at -.10 to .41, -.13 to .48 and .12 to .46 in Precontemplation, Preparation and Maintenance Stage respectively. Helping was correlated at .06 to .35 in Precontemplation Stage, .04 to .44 in Preparation Stage and .03 to .36 in Maintenance Stage. The correlation of Love with other areas were ranging from .10 to .48, -.08 to.40 and .18 to .38 in Precontemplation, Preparation and Maintenance Stage respectively. Friends was correlated -.12 to .48, -.03 to .45 and -.01 to .26 in Precontemplation, Preparation and Maintenance Stage respectively. Children are important aspect of area of life which correlation was ranging from -.02 to .21, -.00 to .25 and .16 to .37 in Precontemplation, Preparation and Maintenance Stage respectively. Relatives were correlated with others .15 to .39 in Precontemplation, .23 to .44 in Preparation and .17 to .42 Maintenance Stage. Home also related to the other areas which was ranging from .05 to .22, -.11 to .44 and .02 to .26 in Precontemplation, Preparation and Maintenance Stage respectively. Neighbourhood was correlated to community at .49, .50 and .54 in Precontemplation, Preparation and Maintenance Stage respectively.

Quality of Life Inventory (QOLI) was correlated to Health, Self-Esteem, Goals & Values, Money, Work, Play, Learning, Creativity, Helping, Love, Friends, Children, Relatives, Home, Neighbourhood and Community at .23,.42,.67,.55,.69,.50,.52,.46,.39,.47,.30,.43,.53,.45,.44 and .45 respectively in Precontemplation Stage.

QOLI was correlated at .47,.28,.41, .67,.31, .79, .47, .64, .61, .51,.54, .49, .45, .45, .34, .31 to Health, Self-Esteem, Goals & Values, Money, Work, Play, Learning, Creativity, Helping, Love, Friends, Children, Relatives, Home, Neighbourhood and Community respectively in Preparation Stage. It is also significantly correlated to Health, Self-Esteem, Goals & Values, Money, Work, Play, Learning, Creativity, Helping, Love, Friends, Children, Relatives, Home, Neighbourhood and Community at .53, .46, .60, .51, .58, .60, .68, .68, .60, .55, .53, .47, .53, .31, .51 and .58 respectively.

Conclusion

1. Psychological attributes such as Self-Esteem and Goals & Values is positively correlated to all areas of life.
2. Variables such as Money and Work which are economical in nature help to enhance overall Quality of Life and are also positively correlated.
3. Social variables are essential aspect for an individual to become important in society such as Love, Friends, Relatives, Home, Neighbourhood and Community to all areas of life.
4. Engaging in the physical activity for longer duration may bring about desirable changes in the overall Quality of Life as out of 16 areas 10 areas have shown correlation in maintenance stage.

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