HEALTH ORIENTATION AND HEALTH PROMOTING BEHAVIORS IN WOMEN

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ABSTRACT

Objective: To investigate health orientation dimensions as predicting factors of health promoting behaviors in women.

Methodology: Correlational research design was used in this study. Sample was 200 women, with age range of 25 to 45 years selected by purposive sampling method. Health Orientation Scale (HOS) and Health-Promoting Life style Profile-II (HPLP-II) were used for the measurement of health orientation dimensions and participant's active involvement in health promoting behaviors respectively.

Results: Hierarchical regression analysis provided following significant findings: (a) motivation for healthiness positively predicted health responsibility (β= .24); (b) health esteem-confidence and motivation for healthiness positively predicted (β= .16, β= .28) physical activity; (c) motivation to avoid unhealthiness predicted spiritual growth positively (β= .27) while health anxiety predicted it negatively(β= -.26); (d) personal health consciousness positively predicted interpersonal relationship (β= .30); (e) health esteem-confidence, motivation to avoid unhealthiness and motivation for healthiness positively predicted stress management (β= .29, β=.30, β= .21) in overall sample.

Conclusion: Motivation for healthiness and to avoid unhealthiness were the most efficient predictors of four health promoting behaviors out of ten domains in HPLP-II including health responsibility, physical activity, spiritual growth and stress management among women.

Key Words: Health orientation, Health promoting behaviors, Women

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INTRODUCTION

Promoting healthy lifestyle in women, who are the keystones of a society, enables the achievement of healthy generations. Breast cancer, osteoporosis, heart disease, depression and autoimmune diseases among women are associated with health behaviors like physical activity, weight management, sleep pattern, nutrition, thought patterns and stress management or a combination of these behaviors may involve. Thus women's health risk can be reduced by adopting various health promoting behaviors and by maintaining a healthy lifestyle[1].

It has been observed that health behaviors come about in distinctive clusters[2]. These behaviors need to be studied at length in relation to health related psychological factors like different dimensions of health orientation. As health orientation has been defined as an attitude, cognition and behavior[3,4], so women with optimum level of health orientation are supposed to be motivated to vigorously participate in their health preferences[3,5]. Thus it is important to understand that at what extent women are disposed to acquire responsibility for their own health[6]. Keeping that in view it has become imperative to study psychological factors that can contribute to better and healthy lifestyle which facilitate the health promotion in women[7].

Health Orientation is a category of psychological factors that motivate an individual to take on healthy approach, behaviors and beliefs thus to maintain a healthy life style and to engage in health promoting behaviors[6,8]. It is largely defined as following separate psychological tendencies related to health: personal health consciousness (an individual's high inclination towards his physical health[9]); health image concern (an individual's concern and level of awareness of the observable expression which his or her health makes on others[10]); health anxiety (the tendency to be anxious and panicky about one's own bodily health and fitness[10,11]); health-esteem and confidence (an individual's

global tendency to optimistically assess and to feel positive about one's physical health condition[12]); motivation to avoid unhealthiness (an individual's motivation to stay away from a state of unhealthiness[13]); motivation for healthiness (aimed at provocation to get involved in precautionary and protective health behaviors[6]); health internal control (an individual's belief that his health is in his control and surely is an outcome of his own actions and behaviors[14,15]); health external control (describes external health locus of control as factors other than the self are accountable for one's health[14]); health expectations (an inclination to expect that an individual's health will be tremendous and constructive in the upcoming time); and health status (an individual's belief about himself that he is in good physical health[16]).

Correspondingly health promoting behaviors are behaviors commenced by people to enhance or maintain physical as well as psychological health and activities useful for preventing and detecting diseases[17,18]. Health-promoting behaviors are further described into subsequent categories[19] as health responsibility (a sense of responsibility and accountability for an individual's own health[15]); nutrition (nutritious and healthy diet provides energy and enhance mood, boost fertility, make pregnancy easier as well as ease menopausal symptoms in women[20,21]); physical activity (described as a sort of movements that requires energy expenditure from body[22]); physical inactivity (categorized worldwide as the most leading cause of mortality (6% of deaths globally[23]); interpersonal relationship (involves sense of intimacy and looseness achieved by communicating meaningful relationships with significant others[24, 25]); lack of intimacy and belongingness (come up with deprivation and ailing outcome[26]); spiritual growth (it is designating the relationship with real world, meaning in life and our own attitude towards and with particular goals in life not only encompasses the religiosity[27] but also maximizing one's potential[28]); stress management (stress makes a person more vulnerable to disease, most of the time it exacerbate any preexisting chronic illnesses like heart disease, ulcers and common infections and stress management technique allows people to handle it in a more positive and effective way[29]).

Literature provide explanations for these factors such as Dutta et al[30] studied health orientation as a predictor of exercising and concluded that individual's likelihood of engaging in physical activity is relatively associated with his or her core sense of health orientation. Similarly Stephenson-Hunter[31] studied health locus of control and a number of health behaviors. Her findings proved that chance locus of control mediated the relationship between socioeconomics and health lifestyles. However Wurtele et al[32] reported that individuals who valued more to their health reported their participation in a larger number of health promoting behaviors as compared to those who valued their health less.

Correspondingly Steptoe et al[33] found people with internal locus of control more likely to engage in health-related behaviors than chance locus of control group. On the other hand, Kyeong-Yae et al[34] gave considerable findings for perceived health status and self-efficacy. Duffy's[35] investigation revealed that older individuals with internal locus of control and high self-esteem reported practicing more health behaviors. Similarly Speake et al[36] reported that health locus of control and perceived health status were significant predictor of healthy lifestyles.

Hence main objectives of the study were to discover what kind of role health orientation dimensions play to explain and predict specifically women's involvement in health promoting behaviors and maintaining a healthy lifestyle. In the light of literature reviews following hypotheses were formulated regarding different dimensions of study variables: 1) Health orientation dimensions are likely to predict health responsibility in women; 2) Health orientation dimensions are likely to predict physical activity in women; 3) Health orientation dimensions are likely to predict nutrition in women; 4) Health orientation dimensions are likely to predict spiritual growth in women; 5) Health orientation dimensions are likely to predict interpersonal relations in women; and 6) Health orientation dimensions are likely to predict stress management in women.

METHODOLOGY

Study sample comprised of 200, women with age range 25 to 45 years. Age range was strictly outlined to avoid potential confounding regarding age related health behaviors. Sample size was justified by the software formula. Purposive sampling strategy was used to select research participants. Inclusion criteria were: teachers and housewives with only 16 years of education; and married and single females from both working and non-working groups. Females currently suffering from any chronic or terminal illness; and divorced or widowed were not included in the study. A demographic information sheet developed by the researchers was used to assess age in years, job status (working/non-working), marital, educational and health status and family system (joint/nuclear).

Health Orientation Scale (HOS) as multidimensional inventory16 was used to measure health orientation dimensions. It consists of ten subscales with five items in each factor. For each of the 50 items a 5-point Likert scale was used. Snell et al[16] reported adequate alpha coefficient of internal consistency for the subscales as 0.82, 0.92, 0.82, 0.82, 0.78, 0.88, 0.84, 0.69, 0.79, and 0.78 respectively.

The original validated English version of the HPLP II

is a 52-item scale measures health-promoting behavior on six subscales; its five subscales consist of 9 items and only one consists of 8 items. Respondents rated the frequency with which they practice each of the 52 behaviors on a four-point Likert scale. The alpha coefficient of internal consistency reported for the total scale was .943 and alpha coefficients for the subscales ranged from 0.793 to 0.87219.

After sorting departmental and scale authors' permission to make use of scales, data was collected from different towns, societies and colonies in Lahore. Participants were initially briefed about the purpose of the study and they were informed that their participation is voluntary. They were also assured that no breach of confidentiality will take place. Explanation was given on how to complete the questionnaire and any ambiguities were clarified. The Statistical Package for Social Sciences (SPSS) version 20.0 was used for data analysis. In a series of Regression analyses demographic variables were entered in the 1st block as controlling variables while health orientation dimensions were entered in 2nd block.

RESULTS

Demographic data is reported in Table.1.Mean age of the participants was 29.78 ±5.51. Descriptive analysis of the variables and Pearson product-moment correlation was performed as preliminary analyses and statitistical assumptions were ensured .There values are shown in Table 2.

Results in Table 3 showed that for health responsibility, 27% variance was explained by overall model. Demographic variables in block 1 explained 3% variance in health responsibility, F (4, 195), 1.51, p =.20. Since findings revealed that women living in joint family system have better health responsibility than women living in nuclear family system. Similarly non working women showed better health responsibility than working women. However health orientation in block 2 explained 24% variance in health responsibility, F (14, 185), 4.83, p <.05. Block motivation for healthiness positively predicted the criterion variable in women.

Results in Table 3 also showed that for physical activity 27% variance was explained by the overall model. Demographic variables in block 1 explained 8% variance in physical activity F (4, 195), 3.88, p <.05. Findings revealed that non-working women showed better physical activity as compared to working women. On the other hand health orientation dimensions in block 2 explained 19% variance in physical activity in women, F (14, 185), 4.72, p <.05. In this block health esteem and confidence and motivation for healthiness positively predicted the criterion variable.

Our results showed that for nutrition 27% variance was explained by the overall model. Demographic variables in block 1 explained 7% variance in nutrition F (4, 195), 3.42, p <.05. Findings prove that women living in joint family system have better nutrition intake as compare to women living in nuclear family system. Health orientation dimensions in block 2 explained 20% variance in nutrition in women, F (14, 185), 4.88, p <.05. In this block among health orientation dimensions, no significant predictor was found (Table 3).

Results for spiritual growth in Table 3 showed that 35.4% variance was explained by overall model. Demographic variables in block 1 explained 3% variance in spiritual growth F (4, 195), 1.47, p =.21. In this block, family system was the only significant predictor of spiritual growth in women. Results confirmed that women living in joint family system have high spiritual growth than women living in nuclear family system. Health orientation dimensions in block 2 explained 31% variance in spiritual growth in women, F (10, 185), 7.24, p <.05. In this block among health orientation dimensions, motivation to avoid unhealthiness was positively while health anxiety was negatively predicting spiritual growth.

Results in Table 3 for interpersonal relations also showed that 19% variance was explained by overall model. Demographic variables in block 1 explained 5% variance in interpersonal relations F (4, 195), 2.51, p <.05. In this block, joint family system was the only significant predictor of interpersonal relations in women. Findings revealed that women living in joint family system have better interpersonal relations as compared to women living in nuclear family system. On the other hand, health orientation dimensions in block 2 explained 24% variance in interpersonal relations in women, F (14, 185), 5.40, p <.05. In this block only personal health consciousness was positively predicting interpersonal relations.

However results for the stress management in Table 3 showed that 44.2% variance was explained by overall model. Demographic variables in block 1 explained 5% variance in stress management F (4, 195), 2.72, p <.05. In this block family system and working status of women were significant predictors of stress management. Results gave us an idea that women living in joint family system have better stress management as compared to women living in nuclear family system.

Similarly non-working women have better stress management than working women. Thus health orientation dimensions in block 2 explained 39% variance in stress management in women, F (14, 185), 10.47, p <.05. In this block among health orientation dimensions health esteem and confidence, motivation to avoid unhealthiness and motivation for healthiness were positively predicting stress management in the overall sample.

Table 1: Demographic characteristics of the sample (n=200)

Variables		Frequency	Percentage
Marital Status	Married	100	50
	Unmarried/Single	100	50
Job Status	Working (Teachers)	100	50
	Non-working (House Wives)	100	50
Family System	Joint	92	54
	Nuclear	108	46

Table 2: Descriptives and correlations among health orientation and health promoting behaviors (n=200)

Variables	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	M	SD
Personal Health Consciousness	.40	.39	.36	.45	.52	.42	.13	.08	.09	.29	.19	.38	.38	.44	.40	13.78	4.28
Health Image Concern	---	.61	.39	.38	.45	.41	.08	.08	.15	.33	.25	.29	.29	.28	.28	11.38	5.31
Health Anxiety	---	---	.30	.39	.41	.38	.23	.09	.05	.35	.26	.29	.13	.23	.27	11.71	5.18
Health Esteem Confidence	---	---	---	.39	.49	.29	.27	.26	.46	.29	.31	.34	.37	.26	.47	11.87	3.34
Motivation to avoid Unhealthiness	---	---	---	---	.66	.50	.19	.17	.31	.39	.3	.37	.47	.38	.52	12.69	4.85
Motivation for Healthiness	---	---	---	---	---	.47	.25	.24	.9	.44	.40	.43	.48	.40	.51	13.56	4.63
Health Internal Control	---	---	---	---	---	---	.08	.13	.22	.36	.25	.31	.35	.34	.33	12.91	4.85
Health External Control	---	---	---	---	---	---	---	.17	.30	.12	.11	.14	.13	.18	.22	11.16	4.32
Health Expectations	---	---	---	---	---	---	---	---	.32	.02	.07	.10	.19	.09	.12	12.68	4.37
Health Status	---	---	---	---	---	---	---	---	---	.17	.21	.16	.24	.18	.20	10.92	4.28
Health Responsibility	---	---	---	---	---	---	---	---	---	---	.60	.61	.40	.51	.61	34.00	20.77
Physical Activity	---	---	---	---	---	---	---	---	---	---	---	.51	.34	.31	.59	32.00	16.30
Nutrition	---	---	---	---	---	---	---	---	---	---	---	---	.52	.49	.59	33.00	22.11
Spiritual Growth	---	---	---	---	---	---	---	---	---	---	---	---	---	.59	.61	36.00	26.57
Interpersonal Relations	---	---	---	---	---	---	---	---	---	---	---	---	---	---	.56	62.00	26.42
Stress Management	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	32.00	20.90

Table 3: Summary of hierarchical regression analyses for variables predicting health promoting behaviors in women (n=200)

Variables	Health Responsibility		Physical Activity		Nutrition		Spiritual Growth		Interpersonal Relations		Stress Management	
	Block 1	Block 2	Block 1	Block 2	Block 1	Block 2	Block 1	Block 2	Block 1	Block 2	Block 1	Block 2
	β	β	β	β	β	β	β	β	β	β	β	β
Age	.08	.01	.08	.02	.15	.07	.10	-.01	.13	.05	.05	-.07
Family System	.14*	.06	.13	.05	.21*	.14*	.15*	.12*	.16*	.12	.18*	.11
Marital Status	.00	-.04	-.02	-.05	-.00	-.04	-.00	-.08	.04	-.03	-.04	-.12
Job Status	-.08*	.02	-.25*	-.23*	-.11	-.08	-.02	.05	-.00	.10	-.17*	-.09
Personal Health Consciousness	-.02		-.13		.14		.15		.30*		.09	
Health Image Concern	.03		.04		.04		.12		.06		-.03	
Health Anxiety	.13		.04		.00		-.26*		-.07		-.10	
Health Esteem and Confidence	.07		.16*		.15		.10		-.03		.29*	
Motivation to Avoid Unhealthiness	.08		.15		.05		.27*		.14		.30*	
Motivation for Healthiness	.24*		.28*		.09		.14		.06		.21*	
Health Internal Control	.14		.05		.07		.09		.10		.07	
Health External Control	-.01		-.06		.01		.07		.12		.11	
Health Expectations	-.11		-.06		-.02		.07		-.01		-.01	
Health Status	.00		-.05		-.05		.00		.06		-.17	
ΔR2	.03	.24*	.08*	.19*	.07*	.20*	.03	.31*	.05*	.24*	.05*	.39*

Note: *p <.05, Marital status (single=0, married=1), Family system (nuclear =0, joint=1), job status (non-working=0, working=1)

DISCUSSION

Literature provides evidence for our study findings as motivation for healthiness has been found to be positively associated with health responsibility[37]; while health esteem and confidence and motivation for healthiness positively predicted physical activity in women. It means attitudes-appraisal and judgment underlying one's health and self can predict the future intentions and behaviors in accordance with or representation of these cognitions[38]. Incorporating that individual with elevated general self-esteem might view his or her health in a positive way and engage in health behavior like physical activity. Thus, motivation has major role in all kind of health promoting behaviors whether it is taking responsibility of one's own health related actions or participation in any type of moderate or vigorous physical activity. Motivation always works like a steering factor in health promotion.

Further findings revealed that motivation to avoid unhealthiness positively while health anxiety negatively predicts spiritual growth in women[39]. Motivation for healthiness as a predictor of spiritual growth can be explained as individual who strive to be healthy may also attain a state of peace, harmony and high level of psychological wellbeing. Peaceful state of mind is a core of healthy lifestyle.

In this study, personal health consciousness predicted better interpersonal relationship in women. Possibly if a woman is highly conscious about her health she must take steps to maintain it by engaging in healthy behaviors and in return achieve a healthy status which definitely have a positive impact on her relationship with her family and significant others.

Results also showed that health esteem and confidence, motivation to avoid unhealthiness and motivation for healthiness positively predicted stress man-

agement in women. None of the health orientation dimension was a significant predictor of nutrition in women.

Several explanations were found from previous literature that motivation significantly contributes to active participation in stress reduction behaviors[16, 40].

CONCLUSION

Motivation for healthiness and to avoid unhealthiness were the most efficient predictors of four health promoting behaviors out of ten domains in HPLP-II among women including health responsibility, physical activity, spiritual growth and stress management. While other health orientation dimensions also encompassed important contributions in predicting remaining domains in HPLP-II.

LIMITATIONS

Some other important variables like self efficacy and social support that can notably be related to health promoting behaviors can be added in future research. It is suggested that working women from different professions should also be added to increase the scope of the study. Nevertheless, it was more than an exploratory research and all these findings were an attempt to fill gaps in the existing literature by providing better explanation about possible predictors of health promoting behaviors in women.

IMPLICATIONS

The study provide evidence for the clinical utility of health related psychological tendencies in planning campaigns for females' active participation in health promoting behaviors. However future research needs to take an account of some more demographic variables, such as gender and ethnicity to evaluate their relationship with health promoting behaviors and can also be considered as mediating factors.

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CONTRIBUTORS

NA conceived the idea, planned the study and drafted the manuscript. SQ helped acquisition of data, did statistical analysis and critically revised the manuscript. All authors contributed significantly to the submitted manuscript.