IJFANS INTERNATIONAL JOURNAL OF FOOD AND NUTRITIONAL SCIENCES
ISSN PRINT 2319 1775 Online 2320 7876
 UGC CARE Listed (Group -I) Journal Volume 11, Iss 06, 2022

EXPLORING THE PREDICTORS OF PHYSICAL ACTIVITY AND HEALTH-PROMOTING LIFESTYLES IN URBAN AND RURAL AREAS

Dr. Mahesh kv,

Assistant professor and head, department of physical education, Sirsyed college Taliparamba,

kannur university, Kerala

ABSTRACT

Engagement in physical activity constitutes a fundamental component of a salutary lifestyle, and a considerable body of scientific inquiry has elucidated its myriad advantages. Consistent participation in exercise has been demonstrated to augment cardiovascular health, bolster psychological well-being, and facilitate efficient weight regulation. However, the attitude of urban and rural populations toward physical activity and healthy lifestyle may be different due to varying environmental, cultural, and socioeconomic factors. Higher population density, more health care accessibility, and infrastructure that supports more active lifestyles all usually make for urban areas where the opportunities for participation in exercise are greater. This study explores the perceptions and attitudes toward physical activity and healthy living among urban and rural populations, focusing on the factors influencing these attitudes. The investigation delineates the variances in perspectives regarding physical activity and health-enhancing lifestyles among inhabitants of urban and rural locales. Furthermore, the research explores the correlation between attitudes towards physical activity and health-promoting behaviors, evaluating the extent to which the living environment serves as a predictor of these attitudes and lifestyle decisions. The study elucidates the distinctions in viewpoints pertaining to physical exercise and health-promoting lifestyles among residents of urban and rural settings. Moreover, the inquiry investigates the relationship between perceptions of physical activity and health-enhancing behaviors, assessing the degree to which the residential environment functions as an indicator of these perceptions and lifestyle choices. Findings revealed significant differences between urban and rural participants in all aspects of attitudes toward physical activity. Variations were similarly noted in the physical activity subcategory of health-promoting lifestyles, alongside health responsibility and stress management dimensions. A significant and positive correlation was identified between individuals' attitudes toward physical activity and health-promoting lifestyle components. Furthermore, the physical activity s sub variable of the health-promoting lifestyle positively influenced attitudes toward physical activity. Additionally, the health responsibility sub variable impacted attitudes toward physical activity in areas such as social experience, health and fitness, risk-taking, thrill-seeking, Ascetic Experience and ascetic experience. Finally, the living environment was found to be a significant predictor of risk-taking, thrill-seeking, physical activity, spiritual growth, and interpersonal relationships.

INTRODUCTION

Physical activity should be regarded as a fundamental component of healthy living. The academic literature consistently demonstrates that sufficient engagement in exercise yields a plethora of health advantages, including the enhancement of cardiovascular health, the improvement of psychological well-being, the effective management of body weight, and the mitigation of the risk for chronic illnesses such as diabetes, hypertension, and certain malignancies (Bouchard et al., 2012). Consequently, the advocacy for physical activity constitutes a critical principle of health policy and public health initiatives globally; nevertheless, the degree of success in these efforts varies significantly across different populations. One factor that influences perceptions of physical activity and, in turn, participation levels is the residential environment, whether it be urban or rural. Comprehending how an individual's living environment shapes their attitude towards physical activity and other health-promoting behaviors is crucial for identifying effective starting points for targeted and ultimately fruitful interventions.

Health-enhancing lifestyles are characterized as actions that any individual may engage in to preserve or improve his or her health status. Consequently, this entails consistent physical activity, optimal nutrition, effective stress regulation, and the abstention from certain recognized detrimental behaviors (such as tobacco use or excessive alcohol intake) (Pender 2002). Health-promoting lifestyles feature largely in public health discussions as they represent proactive engagement in health care practices. In this case, an attitude towards physical activity is one of the most fundamental components determining the occurrence of such behaviours; indeed, positive attitudes towards physical activity and engagement in health-promoting behaviours are positively correlated (Schneider et al., 2018). However, in this case, the attitudes towards physical activity and health-promoting lifestyles seem to differ by region.

Urban and rural populations often have different environmental, cultural, and socioeconomic factors that affect their attitudes toward physical activity and health. Urban environments, distinguished by elevated population density, enhanced accessibility to healthcare services, superior infrastructure conducive to physical engagement (including fitness centers, parks, and recreational facilities), and

an abundance of health-related information, may cultivate more favorable dispositions toward physical activity (Sallis et al., 2009). On the contrary, rural environments, being not as populous often, might lack the access of fitness facilities to engage in an active lifestyle or fewer sidewalks compared to cities with more social and economic problems associated with exercising routinely (Duncan et al., 2009). Moreover, those who live in rural areas might have different cultural views about health and various aspects of life which might shape their health-promoting actions (Bell et al., 2012).

Rural and urban differences can also have an impact on other health-related practices and outlooks. Studies show that urban populations are more likely to exhibit health promoting activities because these resources and information are available to them (Dunton et al., 2009). But because education on health and opportunity for forced exercise are more limited, rural people are less likely to live actively (Li et al., 2018). Furthermore, individuals residing in rural areas often exhibit elevated prevalence rates of obesity and chronic health conditions, a phenomenon correlated with diminished levels of physical activity and suboptimal nutritional practices (Mokdad et al., 2003). This suggests that to uncover some possible gaps within the context of health promotion programs, there needs to be an assessment of the connection between exercise, its attitudes, and how lifestyle activities that promote health are behaviour patterns in both urban and rural areas.

A plethora of studies conducted in the past have provided essential revelations regarding physical activity participation and exercise related health behavior. For example, self-efficacy, or the belief one has about his or her abilities to engage in physical activity has been cited as one of the best predictors of physical activity (Bandura, 1997). A person's environment and social circles also play a crucial role in the formation of certain attitudes and behaviours. Residents in big cities tend to have more appropriate healthy social norms which support active living and exercise (Dunton et al., 2009). Alternatively, rural population suffers from a lack of this support, which explains the lower health-promoting activities at rural areas (Giles-Corti et al., 2012).

The health belief model proposes that people's engagement in health behaviours is shaped by their perception towards the risks and benefits of their health. Considering the possible variation of health problems in rural versus urban, these perceptions might be different (Becker, 1974). Conversely, Sallis et al. (2008) elucidate the ecological model of health behavior, emphasizing the synthesis of societal, interpersonal, community, and individual-level factors that exert influence on health-related behaviors. The diverse living environments serve as determinants, providing opportunities, resources, and limitations that are significant predictors of the extent of physical activity and health-promoting behaviors within those contexts.

In consideration of the context of urban and rural lifestyles, most certainly there is a gap not just in the perceptions towards exercising and healthy living within these two groups but as well in the aspects that are likely to shape these perceptions. This article attempts to fill this gap by testing the prediction value of the focusing area for health behaviour and contributes to the new understanding of wider environmental setting and health attitude. This would achieve fairness in public health by attempting to address the needs of the population in their particular socio-cultural environment in both urban and rural settings.

This research endeavors to examine the perceptions and attitudes concerning physical exercise and healthy lifestyles among individuals residing in urban and rural environments, with particular emphasis on the factors that influence these attitudes. This is another objective of the study association between the exercise and self-care activity promoting views of these two groups. On the other hand, rural populations may be less optimistic due to resource constraints coupled with excessive social and economic challenges. Developing focused public health initiatives that address the needs of both urban and rural populations requires an understanding of these distinctions and connections. While removing obstacles to physical activity and promoting healthier lifestyles through community-based interventions and improved access to resources may be necessary in rural areas, health promotion efforts in urban settings may need to focus on preserving and improving pre-existing health-promoting behaviours.

METHODOLOGY

Objectives of the study

The research investigates the disparities in attitudes regarding physical activity and health-promoting lifestyles among urban and rural populations. It examines the correlation between attitudes towards physical activity and the adoption of health-promoting lifestyles. Furthermore, it evaluates how the residential environment may serve as a predictor for attitudes towards physical activity and health-promoting lifestyles.

Participants

The sample comprised 610 (516 Urban, 94 Rural) students from Malabar region of Kerala. Age between 14 and 19 years.

Measures

ISSN PRINT 2319 1775 Online 2320 7876
 UGC CARE Listed (Group -I) Journal Volume 11, Iss 06, 2022

Attitudes Towards Physical Activity Scale (ATPAS): This measurement instrument comprised six distinct subscales, each meticulously crafted to evaluate various dimensions of attitudes. Each subscale encompassed between 9 to 10 statements, which respondents rated utilizing a five-point Likert scale that spanned from "strongly agree" to "strongly disagree." Affirmative statements were assigned scores ranging from 5 ("strongly agree") to 1 ("strongly disagree"), while negative statements underwent reverse scoring, with scores ranging from 1 ("strongly agree") to 5 ("strongly disagree"). The cumulative attitude score for each subscale varied from 9 to 45, with elevated scores indicative of a more favorable attitude.

The Health Promoting Lifestyle Profile II (HPLP-II), formulated by Walker SN, Sechrist KR, and Pender NJ (1987), comprises 52 items evaluated on a four-point Likert scale, with responses extending from 1 (Never) to 4 (Routinely). To derive an overall health-promoting lifestyle score, one computes the mean of an individual's responses across all 52 items. Furthermore, six subscale scores are derived by averaging the responses to the items contained within each subscale. The utilization of means, rather than sums, is advocated to preserve the 1 to 4 scale metric and facilitate meaningful comparisons of scores. The subscales incorporated within the profile are: Health Responsibility, Physical Activity, Nutrition, Spiritual Growth, Interpersonal Relations, and Stress Management.

Statistical Analysis

The statistical software SPSS version 26.0 was employed for the purpose of conducting data analysis in the present research. The statistical analysis includes 1) Descriptive statistics; 2) Pearson correlation coefficient; 3) Linear Regression

RESULT

Gender Differences

Independent sample t-test used to explore the Urban and Rural differences in attitudes towards physical activity and health-promoting lifestyle variables. The results are shown in Table 1.

Table 1: T-test of difference in Urban and Rural peoples in attitudes towards physical activity and health-promoting lifestyle variables.

	Locale	Paired Difference					t	df	Sig. (2 Tailed)
		Mean	Std. Devi	Std. Error Mean	95% Confidence interval of the difference				
					Lower	Upper			
SE	Urban	32.72	4.405	.194	1.46	3.40	4.94	608	.000
	Rural	30.29	4.320	.446					
HF	Urban	28.91	3.973	.175	1.829	3.597	6.026	608	.000
	Rural	26.20	4.231	.436					
RTE	Urban	29.23	3.791	.167	1.687	3.409	5.810	608	.000
	Rural	26.68	4.511	.465					
AEE	Urban	30.00	3.457	.152	1.773	3.325	6.450	608	.000
	Rural	27.45	3.876	.400					
C	Urban	29.52	3.769	.166	1.093	2.776	4.514	608	.000
	Rural	27.59	4.097	.423					
ASE	Urban	32.84	4.118	.181	1.318	3.147	4.795	608	.000
	Rural	30.61	4.336	.447					
HR	Urban	20.70	4.764	.210	.153	2.254	2.249	608	.025
	Rural	19.50	4.814	.497					
PA	Urban	20.60	4.634	.204	2.780	4.851	7.234	608	.000
	Rural	16.79	5.069	.523					
N	Urban	23.76	4.376	.193	488	1.425	962	608	336

	Rural	23.29	4.142	.427					
SG	Urban	27.58	3.700	.163	-.174	1.507	1.556	608	.120
	Rural	26.91	4.418	.456					
IR	Urban	28.34	3.932	.173	-1.417	.316	-1.248	608	.212
	Rural	28.89	3.944	.407					
SM	Urban	23.09	3.053	.134	.028	1.440	2.043	608	.041
	Rural	22.35	3.940	.406					

SE- Social Experience, **HF-** Health and Fitness, **RTE-** Risks, thrill and excitement, **AEE** -Aesthetic Experience, **C**- Catharsis, **ASE-** Ascetic Experience, **HR**- Health Responsibility, **SG**-Spiritual Growth, **PA**- Physical Activity, **N**-Nutrition, **SM**- Stress Management**, IR**-Interpersonal Relations.

In Table 1, there is a significant difference between Urban and Rural living peoples in all variables of Attitudes Towards Physical Activity also Physical Activity sub variable of Health Promoting Lifestyle ($p<0.01$). Health Responsibility and Stress Management ($p<0.05$). There were no significant differences between Urban and Rural living peoples in Nutrition, Spiritual Growth and Interpersonal Relations ($p > 0.05$). But the mean score difference shows that Urban peoples are slightly higher in Social Experience, Health and Fitness, Risks, thrill and excitement, Aesthetic Experience, Catharsis, Health Responsibility, Ascetic Experience, Spiritual Growth, Nutrition, Physical Activity, Stress Management. Rural peoples scored higher in Interpersonal Relations.

Correlation Analysis

The correlation coefficients of all the research variables in this study appear in Table 2.

Table 2: Correlation coefficients of the attitudes towards physical activity and health-promoting lifestyle variables.

	SE	**HF**	**RTE**	**AEE**	**C**	**ASE**	**HR**	**PA**	**N**	**SG**	**IR**	**SM**
SE	1											
HF	.819**	1										
RTE	.760**	.743**	1									
AEE	.752**	.758**	.729**	1								
C	.764**	.770**	.769**	.760**	1							
ASE	.835**	.779**	.780**	.758**	.793**	1						
HR	.121**	.124**	.062	.081*	.063	.093*	1					
PA	.259**	.297**	.206**	.250**	.209**	.209**	.562**	1				
N	.063	.040	.036	.045	.004	.024	.414**	.373**	1			
SG	.035	.004	.012	.053	.034	.051	.251**	.197**	.315**	1		
IR	.020	-.013	-.028	.005	-.013	.030	.176**	.119**	.405**	.580**	1	
SM	.063	.078	.035	.040	.029	.042	.352**	.414**	.364**	.552**	.388**	1

*p <.05 **p <.001.

A statistically significant and positive correlation was identified between attitudes towards physical activity and variables associated with a health-promoting lifestyle. This finding demonstrated that the sub-variables of Physical Activity within the Health Promoting Lifestyle exerted a favorable influence on attitudes towards physical activity at a significance level of $p < 0.01$. Furthermore, the sub-variables of Health Responsibility within the Health Promoting Lifestyle positively influenced the sub-variables of Attitudes Towards Physical Activity, namely Social Experience, Risks, Health and Fitness, Thrill and Excitement, Aesthetic Experience, and Ascetic Experience, at a significance level of $p < 0.01$, while no significant relationship was observed with Catharsis at $p < 0.05$. Additionally, no other variables related to attitudes towards physical activity and health-promoting lifestyle demonstrated a statistically significant relationship at the threshold of $p < 0.05$.

Regression Analysis

A linear regression analysis was conducted to ascertain whether the living area served as a significant predictor of various factors including Social Experience, Health and Fitness, Risks, Thrill and Excitement, Aesthetic Experience, Catharsis, Ascetic Experience, Health Responsibility, Nutrition, Interpersonal Relations, Spiritual Growth, Physical Activity, and Stress Management. As presented in Table 3, the findings revealed that the model accounted for 14% of the variance in depression ($R^2 = 0.14$, $F(12, 597) = 8.140$). Living area significantly predicted Risks, Thrill and Excitement ($B = -.139$, $t = -1.995$, $p = .046$), also living area significantly predicted Physical Activity ($B = -.282$, $t = -5.555$, $p = .00$), the Spiritual Growth ($B = -.108$, $t = -2.060$, $p = .04$) and Interpersonal Relation ($B = -.107$, $t = 2.171$, $p = .0.03$)

Table 3: Regression model of Cognitive reappraisal variable

Independence Variable	B	SE	Beta	t	P	VIF	Adjusted R^2
SE	.006	.007	.070	.864	.388	4.606	.123
HF	-.009	.007	-.100	-1.305	.193	4.056	
RTE	-.012	.006	-.139	-1.995	.046	3.351	
AEE	-.017	.007	-.170	-2.495	.013	3.234	
C	.011	.007	.118	1.611	.108	3.753	
ASE	.002	.007	.024	.299	.765	4.595	
HR	.005	.004	.071	1.473	.141	1.612	
PA	-.021	.004	-.282	-5.555	.000	1.794	
N	.002	.004	.029	.621	.535	1.480	
SG	-.010	.005	-.108	-2.060	.040	1.904	
IR	.010	.005	.107	2.171	.030	1.684	
SM	.003	.006	.027	.547	.584	1.735	

Dependent variables= living Area, **R**.375, **R2=**.141, (**Anova: F**=8.140 **p**=.000).

DISCUSSION

These results indicate that there are strong contrasts in attitudes between urban and rural populations towards engaging in physical activity. Earlier research has shown that most urban areas offer more access to recreational facilities, organized exercise programs, and places that can be conducive to physical activity. Consequently, rural populations tend to face barriers such as fewer facilities, longer distances, and varying cultural perspectives on physical activity (Bauman et al., 2012; Sallis et al., 2016). These environmental and cultural factors might add to the reason why these variations in attitude regarding physical activity occur between the two groups: the urban versus rural residents.

Other sub-variables associated with Physical Activity within the framework of Health Promoting Lifestyle, including Health Responsibility and Stress Management, exhibited significant variations between urban and rural populations. This concurs with research that found urban residents have better health awareness and participation in structured stress management activities than their rural counterparts, who may engage in lifestyle patterns that are physically demanding but not as structured around health responsibility (Trost et al., 2014). Such differences therefore necessitate a more targeted intervention in promoting physical activity and stress management in the varied living environment.

Moreover, the disposition toward engaging in physical activity exhibited a strong positive correlation with variables associated with a health-promoting lifestyle. This observation aligns with earlier research that suggests individuals who adhere to a healthy lifestyle—including balanced nutrition, routine medical examinations, and effective stress management—are likely to cultivate an appropriate attitude toward physical activity (Pender, 2011). This therefore indicates that an increase in Healthy life-style promotion can improve individual perception and engagement of physical activity.

The investigation further revealed that every sub-variable associated with physical activity within the framework of the Health Promoting Lifestyle exhibited affirmative effects on individuals' attitudes towards engaging in exercise. This would agree with a review suggesting that more frequent involvement in different physical activities strengthens the positive attitudes due to increased self-efficacy, enjoyment, and perceived benefits (Rhodes et al., 2017). Encouraging participation in various forms of physical activity, therefore, can be an appropriate approach to helping create positive attitudes toward exercise.

The Health Responsibility sub-variable within the framework of the Health Promoting Lifestyle has also exerted a beneficial influence on various attitude sub-variables, including Social Experience, Health and Fitness, Risks, Aesthetic Experience, Thrill and Excitement, and Ascetic Experience. Such results indicate that people who assume more responsibility for their health will have more diverse and enriching attitudes toward physical activity. This finding aligns with prior research indicating that elevated health consciousness is positively correlated with various forms of physical activity, driven by both intrinsic and extrinsic motivations (Deci & Ryan, 2000).

Last, the area of living predicted Attitudes toward Risks, Thrill and Excitement, Spiritual Growth, Physical Activity, and Interpersonal Relations. This implies that natural factors influence beliefs and involvement with exercise. As such, living in rural setups may increase opportunities for participation in high-risk, physically demanding exercise, which tends to impact beliefs about exercise on the basis of thrill and enjoyment (Dixon et al., 2014). Urban living may relate more to physical exercise for self-development, social, and formal purposes. Understanding these differences is critical to design location-specific health promotion initiatives that cater to the unique needs of urban and rural populations.

CONCLUSION

- Notable difference is seen between Urban and Rural living peoples in all variables of attitudes towards physical activity.
- Physical Activity sub variable of Health Promoting Lifestyle Health Responsibility and Stress Management had a difference in Urban and Rural living.
- A statistically significant and positive correlation was observed between individuals' attitudes towards physical activity and variables associated with a health-promoting lifestyle.
- The subcategories of Physical Activity within the framework of a Health Promoting Lifestyle exerted a favorable influence on individuals' attitudes regarding physical activity.
- The sub-variables of Health Responsibility within the framework of Health Promoting Lifestyle exhibited a favorable influence on the sub-variables associated with Attitudes towards physical activity; specifically, Social Experience, Risks, Health and Fitness, Thrill and Excitement, Aesthetic Experience, and Ascetic Experience.
- Living Area significantly predicted Risks, thrill and excitement, Physical Activity, Spiritual Growth and Interpersonal Relation.

REFERENCES

Ajzen, I. (1991). The theory of planned behavior. Organizational Behavior and Human Decision Processes, 50(2), 179-211.

Bauman, A. E., Reis, R. S., Sallis, J. F., Wells, J. C., Loos, R. J., & Martin, B. W. (2012). Correlates of physical activity: Why are some people physically active and others not? The Lancet, 380(9838), 258-271.

Berger, B. G., & Motl, R. W. (2000). Exercise and mood: A selective review and synthesis of research. Psychology of Sport and Exercise, 1(1), 47-72.

Biddle, S. J. H., et al. (2019). Physical activity and mental health in children and adolescents: An updated review. BMJ Sports Medicine, 53(10), 640-650.

Booth, M. L., et al. (2001). Urban–rural differences in physical activity, overweight, and obesity. Australian Journal of Public Health, 25(3), 273-278.

Brownson, R. C., et al. (2001). Environmental and policy determinants of physical activity in the United States. American Journal of Public Health, 91(12), 1995-2003.

Brymer, E., & Schweitzer, R. (2013). Extreme sports and positive psychology: The experience of fear and anxiety. Journal of Psychology of Sport and Exercise, 14(5), 566-573.

Carron, A. V., et al. (1996). Cohesion and performance in sport: A meta-analysis. Journal of Sport & Exercise Psychology, 18(2), 91-108.

Cleland, V., et al. (2015). A review of physical activity patterns and determinants among rural populations. Journal of Science and Medicine in Sport, 18(4), 393-399.

Csikszentmihalyi, M. (1990). Flow: The psychology of optimal experience. Harper & Row.

Dąbrowska-Galas, M., et al. (2022). Physical activity and health promotion. Journal of Public Health.

De Moor, M. H. M., et al. (2006). Regular exercise, anxiety, depression and personality: A population-based study. Preventive Medicine, 42(4), 273-279.

Deci, E. L., & Ryan, R. M. (2000). The "what" and "why" of goal pursuits: Human needs and the self-determination of behavior. Psychological Inquiry, 11(4), 227-268.

Dishman, R. K., et al. (2005). Physical activity epidemiology. Human Kinetics.

Dixon, M. A., Warner, S., & Bruening, J. (2014). More than just letting them play: Parental influence on women's lifetime sport involvement. Sociology of Sport Journal, 30(1), 1-21.

Eime, R. M., et al. (2013). A systematic review of the psychological and social benefits of participation in sport. International Journal of Behavioral Nutrition and Physical Activity, 10(1), 98.

Hosseini, M., et al. (2019). Exercise and mental well-being. Health Science Reports.

Jackson, S. A., et al. (2001). Flow in sports: The keys to optimal experiences and performances. Human Kinetics.

Kenyon, G. S. (1968). Six scales for assessing attitudes toward physical activity. Research Quarterly, 39(3), 566-574.

Kerr, J. H., & Mackenzie, S. H. (2012). Multiple motives for participating in adventure sports. Psychology of Sport and Exercise, 13(5), 649-657.

Mahmoodi, Z., et al. (2021). Spiritual well-being and health outcomes. Journal of Behavioral Medicine.

Mohammadizadeh, M., et al. (2018). Stress management strategies and health. International Journal of Public Health.

Pender, N. J. (2011). Health promotion in nursing practice. Pearson.

Pender, N. J., et al. (1990). Health Promotion Model: A theoretical perspective. Nursing Science Quarterly.

Rhodes, R. E., Janssen, I., Bredin, S. S., Warburton, D. E., & Bauman, A. (2017). Physical activity: Health impact, prevalence, correlates and interventions. Psychology & Health, 32(8), 942-975.

Rosenberg, D. E., et al. (2021). Nutrition and chronic disease prevention. American Journal of Clinical Nutrition.

Salehi, L., et al. (2020). Nutritional habits and lifestyle modification. Global Health Research.

Sallis, J. F., Cerin, E., Conway, T. L., Adams, M. A., Frank, L. D., Pratt, M., ... & Davey, R. (2016). Physical activity in relation to urban environments in 14 cities worldwide: A cross-sectional study. The Lancet, 387(10034), 2207-2217.

Sallis, J. F., et al. (2000). A review of correlates of physical activity. Medicine & Science in Sports & Exercise, 32(5), 963-975.

Seangpraw, K., et al. (2019). Social interactions and mental well-being. Journal of Aging Studies.

Trost, S. G., Owen, N., Bauman, A. E., Sallis, J. F., & Brown, W. (2014). Correlates of adults' participation in physical activity: Review and update. Medicine & Science in Sports & Exercise, 41(7), 1996-2001.

ISSN PRINT 2319 1775 Online 2320 7876
 UGC CARE Listed (Group -I) Journal Volume 11, Iss 06, 2022

Walker, S. N., et al. (1987). Development of the Health-Promoting Lifestyle Profile. Nursing Research.

Wei, C., et al. (2020). Health responsibility and preventive behaviors. Preventive Medicine Reports.