

SENSE OF WELLBEING AMONG FEMALES WITH AND WITHOUT RECREATIONAL ACTIVITIES

Original Research

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ABSTRACT

Background: Women often experience barriers to engaging in recreational activities due to the heavy burden of household responsibilities. This lack of participation negatively influences their physical health, psychological well-being, and self-esteem. Considering the rising concerns regarding women's mental health and the role of lifestyle choices, the present study was conducted to assess the impact of recreational activities on flourishing, physical self-concept, and overall well-being in comparison to women solely engaged in household chores.

Objective: The objective of this study was to evaluate the association between well-being and engagement in recreational activities among women.

Methods: This observational cross-sectional study included 424 women, divided equally into two groups: 212 performing only household chores and 212 engaged in recreational activities such as gym workouts, jogging, swimming, or sports. Data were collected using the Physical Self-Perception Profile (PSPP) competence and importance scales, along with the Flourishing Scale. A Likert scale graded responses from strongly disagree to strongly agree. Statistical analysis was performed using SPSS version 23.0. Cross-tabulation compared well-being variables between groups, and independent sample t-tests determined mean differences, with statistical significance set at $p < 0.01$.

Results: Women participating in recreational activities reported higher confidence in physical conditioning and fitness (mean 3.56 ± 1.05) compared to those engaged in household chores (mean 2.97 ± 1.20). Self-perception of stamina and fitness was also higher among the recreational group (mean 3.48 ± 1.11) than the household group (mean 2.95 ± 1.23). Regarding psychological well-being, the recreational activity group achieved a significantly greater flourishing score (mean 44.98 ± 8.85) compared to the household group (mean 41.56 ± 11.61 , $p = 0.001$).

Conclusion: The findings suggest that recreational activities positively influence women's self-esteem, optimism, body image perception, and psychological well-being. Encouraging women to allocate time for physical and leisure activities may serve as an effective strategy to improve their quality of life and social participation.

Keywords: Body Image, Flourishing, Optimism, Self-Esteem, Self-Perception, Social Relations, Well-Being.

INTRODUCTION

Despite the well-documented health advantages of physical activity, a considerable proportion of women remain physically inactive (1). Evidence indicates that low self-esteem and diminished self-concept are common barriers in this population, yet structured exercise interventions have shown potential in improving these psychological outcomes, with studies demonstrating benefits of approaches such as Pilates and core stabilization on function and wellbeing (2). Flourishing, defined as an optimal state of emotional, psychological, and social well-being, is a multidimensional construct that reflects resilience, growth, and positive functioning (3). Participation in sports and physical activity has been linked with flourishing by promoting positive emotions, life satisfaction, and overall health across different age groups (4). Psychological well-being is strongly interconnected with physical well-being. Regular exercise not only enhances performance and social engagement but also improves self-competence, body image, and self-esteem (5,6). Women frequently pursue physical activity as a means of self-empowerment, health improvement, and socialization, highlighting its broader impact beyond physical fitness (7). Studies confirm that active participation in sports contributes to improved self-concept, body image, and flourishing experiences, whereas sedentary lifestyles often correlate with psychological distress, disease risk, and reduced social participation (8,9).

Body image, in particular, represents a critical determinant of psychological health during adolescence and adulthood. Positive body image fosters satisfaction and happiness, whereas dissatisfaction is widespread among females and is linked to adverse emotional outcomes (10,11). Physical activity has been consistently associated with enhanced self-concept and body satisfaction, although findings remain mixed due to the influence of mediating variables (12–14). Recent research emphasizes that physical activity simultaneously strengthens body image and self-concept, which in turn contributes to higher flourishing and life satisfaction (15,16). Standardized tools such as the Physical Self-Perception Profile (PSPP) and the Flourishing Scale offer validated measures to assess perceived physical competence and psychological well-being (17,18). These instruments help in understanding the intricate relationship between physical activity, body image, and flourishing among women. Given that sedentary women are at greater risk of chronic conditions such as diabetes, hypertension, cardiovascular disease, and depression, there is an urgent need to investigate how structured physical activity can serve as a protective factor for health and psychological resilience (19). Therefore, this study was designed to determine the perception of well-being among women engaged in gym-based physical activities compared with those involved only in household tasks. It further aimed to evaluate the impact of exercise on their physical, social, and psychological well-being, daily functioning, and disease risk. By doing so, this research sought to provide meaningful insights into the role of physical activity in fostering healthier and more active lifestyles among women.

METHODS

This study was designed as an observational cross-sectional investigation conducted in Karachi over a duration of three months following the approval of the synopsis. Data were collected from five districts of Karachi, namely North Nazimabad, Gulistan-e-Johar, Karsaz, Numaish, and P.E.C.H.S., through the distribution of questionnaires to participants residing in households as well as women attending gyms, parks, and sports clubs. The sample size was calculated using the OpenEpi Version 3 open-source calculator, based on a population size of 1,000,000, hypothesized frequency of $50\% \pm 4$, and a confidence interval of 95%. The required sample size was 423, which was rounded to 424 to facilitate equal distribution between the two study groups. Group one consisted of 212 women performing only household work, while Group two comprised 212 women engaged in recreational physical activities in addition to household responsibilities. A non-probability convenient sampling technique was employed for participant recruitment. Eligibility criteria were strictly applied to ensure the appropriateness of the sample. Women between the ages of 25 and 50 years who were involved either in household work or in recreational activities such as gym-based exercise, sports, or outdoor fitness were included. Those with musculoskeletal or neurological diseases, psychological disorders, recent surgical procedures, or a history of trauma were excluded. Female students were also excluded to minimize variability related to academic or transitional life stressors. Three instruments were employed to collect data. The Flourishing Scale, an eight-item measure of self-perceived success in domains such as self-esteem, optimism, purpose, and relationships, provided a global well-being score ranging from 8 to 56, with higher scores reflecting greater psychological well-being. The Physical Self-Perception Profile (PSPP), Revised Competence and Importance Scales, was used to assess four subdomains of physical self-concept: body attractiveness, sport competence, physical strength, and physical conditioning. The PSPP

also included an importance scale that allowed participants to rate the perceived significance of each domain. Responses were graded using a structured Likert scale, with the competence and flourishing scales ranging from 1 (strongly disagree) to 5 (strongly agree), while the importance scale ranged from 1 (not important) to 4 (very important).

The data collection procedure involved supervised questionnaire administration. For Group one, the research team visited homes, where participants completed the forms under guidance to ensure clarity. For Group two, questionnaires were distributed in recreational settings, including gyms, parks, and clubs, where participants were similarly supervised. This ensured completeness and minimized response bias. Ethical considerations were strictly observed. The study was conducted in accordance with the ethical guidelines of the University of Lahore, and formal approval was obtained from the institutional ethics review committee. Written informed consent was obtained from all participants prior to data collection. Participation was voluntary, anonymity was maintained, and confidentiality of personal information was preserved. Data were securely stored, with hard copies kept under lock and key and electronic records password-protected. Participants were informed about the objectives of the study, the absence of risks, and their right to withdraw at any stage without penalty. Data were analyzed using SPSS version 23.0. Descriptive statistics were used to summarize demographic and outcome variables. Cross-tabulation was applied to compare well-being measures across the two groups. Independent sample t-tests were performed to determine mean differences and standard deviations between the groups. Statistical significance was defined as a p-value of less than 0.01. Results were presented in tabular and graphical formats, including bar charts, to illustrate key findings.

RESULTS

A total of 424 women participated in the study, with 212 respondents in the household chores group and 212 in the recreational activity group. The age distribution revealed that in the household group, 50.9% were aged 25–35 years, 21.7% were aged 36–45 years, and 27.4% were aged 46–55 years. In comparison, the recreational activity group had 63.7% participants in the 25–35 years age range, 22.2% between 36–45 years, and 14.2% between 46–55 years. Marital status analysis showed that 48.6% of the household group were unmarried and 51.4% married, whereas 63.2% of the recreational activity group were unmarried and 36.8% married. Results from the Physical Self-Perception Profile (PSPP) competence scale indicated clear differences between groups. In terms of confidence in sports competence, 37.4% of women in the household group agreed or strongly agreed compared with 56.6% of those engaged in recreational activities. Regarding confidence in physical conditioning and fitness, 35.4% of the household group agreed or strongly agreed compared with 56.1% of the recreational activity group. Stamina and fitness perception also differed, with 34.4% of household respondents agreeing or strongly agreeing, compared to 53.7% in the recreational group. For body attractiveness, 42.9% of the household group agreed or strongly agreed, compared to 58.4% of the recreational activity group. Confidence in physical strength showed a similar trend, with 42.9% of the household group agreeing or strongly agreeing, whereas 60.8% of the recreational activity group reported the same.

The PSPP importance scale highlighted differences in value placed on physical attributes. Among household participants, 62.3% considered confidence in sports participation as important or very important, compared with 72.2% in the recreational activity group. Similarly, 61.8% of household participants valued stamina and fitness as important or very important, while 76.5% of recreationally active women reported the same. Regarding physical conditioning, 59.4% of household respondents rated it as important or very important, compared with 75.0% of the recreational group. For body attractiveness, 62.3% of household participants considered it important or very important, compared with 70.8% among the recreational group. Group statistical analysis confirmed higher mean scores for the recreational activity group across multiple dimensions. Confidence in physical conditioning and fitness had a mean of 3.56 (SD 1.05) in the recreational group compared to 2.97 (SD 1.20) in the household group. Perceived stamina and fitness was higher among recreational participants (mean 3.48, SD 1.11) than household participants (mean 2.95, SD 1.23). The importance of body attractiveness was also rated higher by the recreational group (mean 2.84, SD 1.05) than the household group (mean 2.67, SD 1.09). The Flourishing Scale further demonstrated significantly better psychological well-being among recreationally active women. The recreational activity group achieved a mean flourishing score of 44.98 (SD 8.85), compared with 41.56 (SD 11.61) in the household group. Independent t-test results confirmed that this difference was statistically significant ($p = 0.001$).

Table 1: Comparison of Confidence in Sports Activities and Physical Conditioning Among Women Performing Household Chores and Recreational Activities (n = 424)

What kind of physical activity are you involved in?	I am confident in taking part in sports activities, compared to other people.	Total		I am very confident about my level of physical conditioning and fitness compared to other people.	Total	
		Strongly Disagree	Disagree		Neutral	Agree
Household Chores (only)	Count = 23Expected Count = 15.0% within activity = 10.8%% within statement = 76.7%	Count = 59Expected = 43.5% = 27.8%% = 67.8%	=	Count = 58Expected = 27.4%% = 50.4%	=	Count = 46Expected = 61.5% = 21.7%% = 37.4%
Recreational Activity	Count = 7Expected Count = 15.0% within activity = 3.3%% within statement = 23.3%	Count = 28Expected = 43.5% = 13.2%% = 32.2%	=	Count = 57Expected = 26.9%% = 49.6%	=	Count = 77Expected = 61.5% = 36.3%% = 62.6%
Total	Count = 30Expected = 30.0% within activity = 7.1%% within statement = 100.0%	Count = 87Expected = 87.0% = 20.5%% = 100.0%	=	Count = 115Expected = 27.1%% = 100.0%	=	Count = 123Expected = 123.0% = 29.0%% = 100.0%

Table 2: Comparison of Perceived Stamina, Fitness, and Body Attractiveness Among Women Performing Household Chores and Recreational Activities (n = 424)

What kind of physical activity are you involved in?	I usually have a high level of stamina and fitness.	Total		I have an attractive body compared to other people.	Total	
		Strongly Disagree	Disagree		Neutral	Agree
Household Chores (only)	Count = 27Expected Count = 18.0% within activity = 12.7%% within statement = 75.0%	Count = 56Expected = 45.5% = 26.4%% = 61.5%	=	Count = 56Expected = 55.0% = 26.4%% = 50.9%	=	Count = 46Expected = 59.5% = 21.7%% = 38.7%
Recreational Activity	Count = 9Expected Count = 18.0% within activity = 4.2%% within statement = 25.0%	Count = 35Expected = 45.5% = 16.5%% = 38.5%	=	Count = 54Expected = 55.0% = 25.5%% = 49.1%	=	Count = 73Expected = 59.5% = 34.4%% = 61.3%
Total	Count = 36Expected = 36.0% within activity = 8.5%% within statement = 100.0%	Count = 91Expected = 91.0% = 21.5%% = 100.0%	=	Count = 110Expected = 110.0% = 25.9%% = 100.0%	=	Count = 119Expected = 119.0% = 28.1%% = 100.0%

Table 3: Comparison of Perceived Physical Strength and Importance of Confidence in Sports Participation Among Women Performing Household Chores and Recreational Activities (n = 424)

What kind of physical activity are you involved in?	I am confident when it comes to my physical strength	Total		How important is it to you to feel confident, compared to other people, in taking part in sports activities?	Total	
		Strongly Disagree	Disagree		Neutral	Agree
Household Chores (only)	Count = 26 Expected Count = 17.0% within activity = 12.3% within statement = 76.5%	Count = 40 Expected Count = 34.0% = 18.9% = 58.8%	=	Count = 55 Expected = 51.0% = 25.9% = 53.9%	=	Count = 67 Expected = 72.0% = 31.6% = 46.5%
Recreational Activity	Count = 8 Expected Count = 17.0% within activity = 3.8% within statement = 23.5%	Count = 28 Expected Count = 34.0% = 13.2% = 41.2%	=	Count = 47 Expected = 51.0% = 22.2% = 46.1%	=	Count = 77 Expected = 72.0% = 36.3% = 53.5%
Total	Count = 34 Expected = 34.0% within activity = 8.0% within statement = 100.0%	Count = 68 Expected = 68.0% = 16.0% = 100.0%	=	Count = 102 Expected = 102.0% = 24.1% = 100.0%	=	Count = 144 Expected = 144.0% = 34.0% = 100.0%

Table 4: Comparison of Perceived Importance of Stamina, Fitness, and Body Attractiveness Among Women Performing Household Chores and Recreational Activities (n = 424)

What kind of physical activity are you involved in?	How important is it to you to have a high level of stamina and fitness?	Total		How important is it that you have an attractive body compared to other people?	Total	
		Not Important	Neutral		Important	Very Important
Household Chores (only)	Count = 45 Expected Count = 35.5% within activity = 21.2% within statement = 63.4%	Count = 36 Expected Count = 30.0% = 17.0% = 60.0%	=	Count = 87 Expected = 92.0% = 41.0% = 47.3%	=	Count = 44 Expected = 54.5% = 20.8% = 40.4%
Recreational Activity	Count = 26 Expected Count = 35.5% within activity = 12.3% within statement = 36.6%	Count = 24 Expected Count = 30.0% = 11.3% = 40.0%	=	Count = 97 Expected = 92.0% = 45.8% = 52.7%	=	Count = 65 Expected = 54.5% = 30.7% = 59.6%
Total	Count = 71 Expected = 71.0% within activity = 16.7% within statement = 100.0%	Count = 60 Expected = 60.0% = 14.2% = 100.0%	=	Count = 184 Expected = 184.0% = 43.4% = 100.0%	=	Count = 109 Expected = 109.0% = 25.7% = 100.0%

Table 5: Group Statistics of Physical Self-Perceptions and Importance of Body Attractiveness Among Women Performing Household Chores and Recreational Activities (n = 424)

Group Statistics					
	What kind of physical activity are you involved in?	N	Mean	Std. Deviation	Std. Error Mean
I am very confident about my level of physical conditioning and fitness compared to other people.	Household Chores (only)	212	2.97	1.202	.083
	Involvement in Recreational Activity	212	3.56	1.058	.073
I usually have a high level of stamina and fitness.	Household Chores (only)	212	2.95	1.227	.084
	Involvement in Recreational Activity	212	3.48	1.108	.076
How important is it that you have an attractive body compared to other people?	Household Chores (only)	212	2.67	1.094	.075
	Involvement in Recreational Activity	212	2.84	1.050	.072

Table 6: Comparison of Flourishing Scale Scores Between Women Performing Household Chores and Recreational Activities (n = 424)

Group Statistics										
		What kind of physical activity are you involved in?	N		Mean		Std. Deviation		Std. Error Mean	
Flourishing Scale Total Score		Household Chores (only)	212		41.56		11.613		.798	
		Involvement in Recreational Activity	212		44.98		8.854		.608	
Independent Samples Test										
		Levene's Test for Equality of Variances		t-test for Equality of Means						
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
Flourishing Scale Total Score	Equal variances assumed	16.553	.000	-3.414	422	.001	-3.425	1.003	-5.396	-1.453
	Equal variances not assumed			-3.414	394.354	.001	-3.425	1.003	-5.396	-1.453

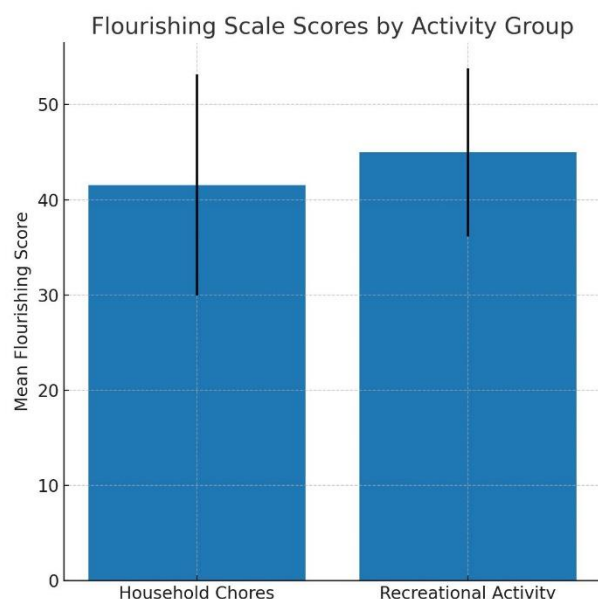


Figure 1 Flourishing Scale Scores by Activity Group

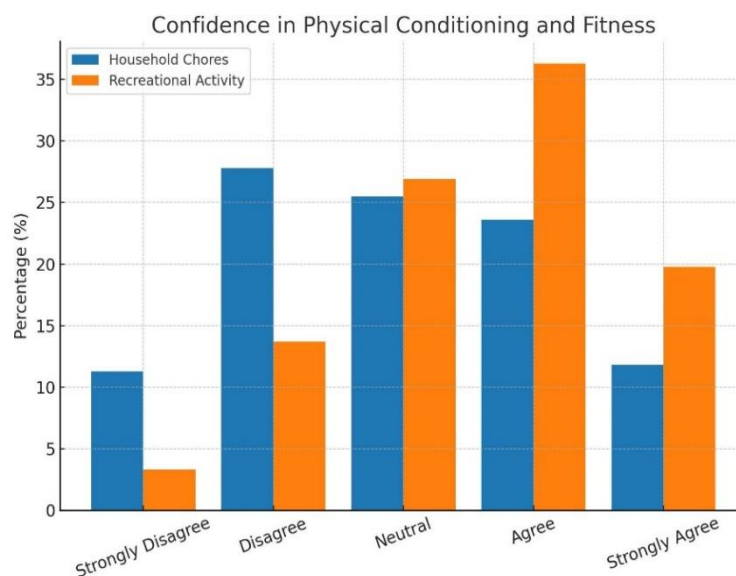


Figure 2 Confidence in Physical Conditioning and Fitness

DISCUSSION

The findings of this study demonstrated that women who engaged in recreational activities such as gym exercise, swimming, jogging, or other sports reported significantly higher levels of flourishing, optimism, self-esteem, and social connectedness compared to those who were solely involved in household work. The results confirmed the hypothesis that recreational activity is positively associated with physical self-concept, psychological well-being, and overall life satisfaction. Women in the recreational activity group consistently reported higher confidence in their physical conditioning, stamina, body attractiveness, and strength, highlighting the direct influence of active lifestyles on both physical and psychological domains of health. These results align with existing literature where regular participation in physical activity was shown to reduce stress, increase happiness, and enhance life satisfaction in adult women (19). Studies conducted in various populations also reported inverse associations between physical inactivity and depression, reinforcing the protective role of exercise against psychological distress (20). Furthermore, evidence suggested that consistent participation in recreational activities fosters resilience, optimism, and better perception of body image, supporting the current study's outcomes (21). The implications of these findings are considerable. Recreational activities not only promote psychological flourishing but also enhance physical self-perceptions, which in turn influence self-confidence and social relationships. Women who actively participated in recreational activities valued their health and appearance more positively and exhibited greater satisfaction in social interactions. The study underlines the importance of leisure-time physical activity as a determinant of women's mental well-being and quality of life, especially in settings where domestic responsibilities often restrict women's opportunities for self-care (22).

A notable strength of this research lies in its use of validated tools, including the Flourishing Scale and the Physical Self-Perception Profile, which provided robust measures for psychological well-being and self-concept. The supervised administration of questionnaires minimized response bias and ensured accurate data collection. Additionally, the inclusion of women from multiple districts across Karachi enhanced the generalizability of the findings within the local context. However, certain limitations should be acknowledged. The cross-sectional design restricts the ability to establish causal relationships between recreational activity and psychological outcomes. The use of convenience sampling may have introduced selection bias, potentially limiting representativeness. Furthermore, the study did not incorporate other influential variables such as socio-economic status, education level, dietary habits, or comorbid conditions, which could have provided a more comprehensive understanding of the determinants of flourishing. The absence of objective measures, such as caloric expenditure or disease risk profiling, also limited the scope of the conclusions. The small number of sports facilities in certain areas and restrictions in data collection at some gyms further constrained the sample diversity. Future research should employ longitudinal or interventional designs to establish causal pathways between recreational activity and flourishing outcomes. Incorporating

physiological measures alongside self-reported psychological scales would strengthen the evidence base. Expanding the scope to include diverse socio-economic and cultural backgrounds could further illuminate the barriers and facilitators of recreational activity among women. Additionally, future investigations should explore targeted interventions to promote participation in physical activity among women with heavy household workloads, thereby addressing one of the key challenges identified in this study (23,24). In summary, this research highlighted the significant association between recreational activity and women's psychological flourishing, physical self-concept, and social well-being. While limitations exist, the findings underscore the necessity of integrating recreational opportunities into women's daily routines to improve their overall health outcomes. These results strengthen the argument for public health initiatives that encourage and facilitate women's engagement in leisure-time physical activity as a means to enhance both physical and mental well-being.

CONCLUSION

This study concluded that women who engaged in recreational activities such as sports, swimming, jogging, or other leisure-time pursuits experienced greater self-esteem, optimism, and positive self-perception of body image compared to those involved solely in household chores. Participation in recreational activities was shown to foster psychological well-being, social connectedness, and a healthier outlook on life, highlighting its role as a protective factor for both mental and physical health. In contrast, women limited to household work demonstrated reduced self-esteem and lower levels of enthusiasm towards daily life. These findings emphasize the importance of encouraging women to dedicate time to recreational activities as a means of promoting their overall well-being and improving quality of life.

AUTHOR CONTRIBUTION

Author	Contribution
Hiba M. Ahmed*	Substantial Contribution to study design, analysis, acquisition of Data Manuscript Writing Has given Final Approval of the version to be published
Hifza Khan	Substantial Contribution to study design, acquisition and interpretation of Data Critical Review and Manuscript Writing Has given Final Approval of the version to be published
Hina Ahmed	Substantial Contribution to acquisition and interpretation of Data Has given Final Approval of the version to be published
Huda Wasti	Contributed to Data Collection and Analysis Has given Final Approval of the version to be published
Huzaiifa Asif	Contributed to Data Collection and Analysis Has given Final Approval of the version to be published
Ghousia Shahid	Substantial Contribution to study design and Data Analysis Has given Final Approval of the version to be published

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