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Perceived Benefits of Physical Activity on Wellness among Female Lecturers in Bayero University (BUK), Kano, Nigeria

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Abstract. This study investigated the perceived benefits of physical activity on wellness among female lecturers at Bayero University Kano, Nigeria, with specific focus on psychological and physical wellness dimensions. Two null hypotheses were formulated to guide the investigation. A cross-sectional research design was employed to collect data from 197 female lecturers at Bayero University Kano using an availability sampling procedure. The research instrument was a self-developed questionnaire specifically designed to assess perceived benefits of physical activity and wellness outcomes, which underwent validation by experts from the Department of Health Education at Bayero University Kano for face and content validity, and demonstrated satisfactory reliability with a coefficient of 0.77 using the split-half method. Data analysis utilized descriptive statistics including percentages and frequency counts for demographic characteristics, while inferential statistics employed Pearson Product-Moment Correlation to test the hypotheses at 0.05 level of significance. The results demonstrated a moderately positive and statistically significant relationship between perceived benefits of physical activity and psychological wellness, with a correlation coefficient of r equals 0.532 and p-value less than 0.01, accounting for approximately 28.3 percent of the variance in psychological wellness. Similarly, findings revealed a moderate, positive, and statistically significant relationship between perceived benefits of physical activity and physical wellness, with r equals 0.476 and p-value less than 0.01, explaining approximately 22.6 percent of the variance in physical wellness. The study concluded that perceived benefits of physical activity constitute powerful predictors of wellness outcomes among female lecturers at Bayero University Kano, operating through cognitive and behavioral mechanisms that reinforce continued participation in exercise activities. Based on these significant findings, it recommended that the development and implementation of comprehensive wellness programs specifically designed for female lecturers, establishment of accessible fitness facilities on campus with flexible operating hours, creation of supportive institutional policies that encourage physical activity integration into the workday, organization of group-based physical activities to foster social support networks, and collaboration between health education departments and university administration to conduct regular health screenings and personalized fitness assessments.

Keywords: Perceived benefits, Physical activity, Wellness, Psychological wellness, Physical wellness, Female lecturers.

1. Introduction

Engaging in regular physical activity is widely recognized for its positive impact on overall wellness, particularly among female lecturers who often face demanding schedules and high levels of occupational stress. Physical activity has been shown to improve mental health by reducing symptoms of anxiety and depression, which are common in high-stress professions (Penedo & Dahn, 2005). Additionally, regular exercise contributes to enhanced physical health, including improved cardiovascular

function, better weight management, and increased energy levels, all of which can positively influence occupational performance and personal well-being (Warburton, Nicol, & Bredin, 2006). For female lecturers, these benefits may translate into increased resilience and a greater capacity to manage work-related pressures effectively.

Moreover, perceived benefits of physical activity extend beyond physiological improvements to foster a sense of self-efficacy and improved mood, which are crucial components of wellness. Engaging in exercise can boost self-esteem and promote a positive body image, fostering greater confidence both professionally and personally (Fox, 1997). The social aspects of physical activity, such as participating in group exercises or sports, can also enhance social support networks, contributing to emotional well-being. Overall, the perceived benefits of physical activity among female lecturers underscore its importance as a strategy for promoting holistic wellness, aiding in the management of occupational stress, and improving quality of life.

Engaging in physical activity has been shown to significantly enhance the psychological wellness of female lecturers by reducing stress, anxiety, and symptoms of depression, which are prevalent in high-demand academic environments (Sharma & Madaan, 2006). Regular exercise promotes the release of endorphins and other neurochemical changes that improve mood and foster a sense of well-being (McAuley et al., 2000). For female lecturers, these psychological benefits can translate into increased resilience, better coping strategies, and improved overall mental health, ultimately contributing to greater job satisfaction and personal fulfillment. The perceived mental health benefits of physical activity thereby serve as a vital component in maintaining psychological wellness amidst the challenges associated with academic responsibilities.

Physical activity plays a crucial role in enhancing the physical wellness of female lecturers by improving cardiovascular health, increasing muscular strength, and promoting better body weight regulation (Warburton, Nicol, & Bredin, 2006). Regular engagement in exercise helps prevent chronic diseases such as hypertension, diabetes, and obesity, which are common health concerns among sedentary populations (Blair et al., 1995). For female lecturers, who often experience prolonged periods of sitting and work-related stress, maintaining an active lifestyle can lead to increased energy levels, improved posture, and overall physical resilience. These benefits collectively contribute to better health outcomes, enabling female educators to perform their professional duties effectively while also enhancing their quality of life through sustained physical wellness.

1.1 Hypotheses

Null hypothesis (H_{01}):
There is no significant relationship between perceived benefits of physical activity and the psychological wellness of female lecturers at Bayero University, Kano.
Null hypothesis (H_{02}):
Female lecturers' perceived benefits of physical activity do not significantly influence their physical wellness levels.

2. Research Methodology

This study adopted cross sectional research design. The population is the total population of female lecturers in Bayero University Kano, Kano State. Availability sample procedure was used to administered the questionnaire. The instrument used for data collection was researcher self-developed questionnaire named Perceived benefits of physical activity on wellness among female lecturers. The questionnaire was validated by experts in department of Health Education, Bayero University Kano, for face and content validity. Split half was used to determine the reliability of the questionnaire, and the reliability index was 0.77. Percentage and frequency counts was used to describe the demographic characteristics while Pearson Product Moment Correlation (PPMC) was used to test the formulated hypotheses at 0.05 level of significance.

3. Results

Table 1: Demographic Characteristics
(N = 197)

Variable	Category	Frequency (n)	Percentage (%)
Age (years)	25–34	38	19.3
	35–44	76	38.6
	45–54	58	29.4
	55 and above	25	12.7
Academic Qualification	Bachelor's Degree (B.Sc./B.Ed.)	27	13.7
	Master's Degree (M.Sc./M.Ed.)	94	47.7
	Doctorate (Ph.D.)	76	38.6
Years of Service	1–5 years	42	21.3
	6–10 years	63	32.0
	11–15 years	54	27.4
	Above 15 years	38	19.3
Monthly Income (₦)	Below ₦200,000	23	11.7
	₦200,000–₦299,999	61	31.0
	₦300,000–₦399,999	72	36.5
	₦400,000 and above	41	20.8
Total		197	100.0

Table 2: Pearson Product–Moment Correlation (PPMC) Between Perceived Benefits of Physical Activity and Psychological Wellness
(N = 197)

Variables	N	Mean	SD	r	p-value	Decision
Perceived Benefits of Physical Activity	197	3.84	0.62			
Psychological Wellness	197	3.67	0.58	r = 0.532	p = 0.000	Reject H_0

The Pearson correlation analysis revealed a moderately positive and statistically significant relationship between perceived benefits of physical activity and psychological wellness among female lecturers at Bayero University, Kano, $r(195) = 0.532$, $p < .01$. This suggests that lecturers who reported greater perceived benefits of engaging in physical activity also tended to report higher levels of psychological wellness. Since the calculated *p*-value (0.000) is less than the 0.05 significance level, the null hypothesis (H_{01}) is rejected. Therefore, there is a significant positive relationship between perceived benefits of physical activity and psychological wellness among the respondents. $r^2 = 0.283$ (28.3%) indicates a large effect size. This means that approximately 28.3% of the variance in psychological wellness among female lecturers can be explained by their perceived benefits of physical activity, a substantial and practically meaningful relationship.

Table 3: Pearson Product–Moment Correlation (PPMC) Between Perceived Benefits of Physical Activity and Physical Wellness (N = 197)

Variables	N	Mean	SD	r	p-value	Decision
Perceived Benefits of Physical Activity	197	3.84	0.62			
Physical Wellness	197	3.75	0.59	r = 0.476	p = 0.000	Reject H_{02}

The Pearson correlation result showed a moderate, positive, and statistically significant relationship between perceived benefits of physical activity and physical wellness among female lecturers at Bayero University, Kano, $r(195) = 0.476$, $p < .01$. This implies that lecturers who perceived greater benefits from physical activity reported better levels of physical wellness. Since the obtained *p*-value (0.000) is less than the 0.05 level of significance, the null hypothesis (H_{02}) is rejected. Therefore, there is a significant positive relationship between perceived benefits of physical activity and physical wellness among female lecturers in BUK. To assess the strength of the relationship: $r^2 = (0.476)^2 = 0.226$, which means that approximately 22.6% of the variance in physical wellness can be explained by perceived benefits of physical activity.

4. Discussions

There is significant relationship between perceived benefits of physical activity and the psychological wellness of female lecturers at Bayero University, Kano.

Research consistently demonstrates a significant positive relationship between the perceived benefits of physical activity and psychological wellness among female academics, including lecturers. According to Warburton and Bredin (2017), individuals who recognize the mental health benefits of exercise are more likely to experience reduced anxiety, depression, and stress levels. Female lecturers, who often face unique occupational stressors including work-life balance challenges, administrative burdens, and gender-based workplace pressures, can particularly benefit from regular physical activity (Kinman and Wray, 2013). Studies by Hogan, Catalino, Mata, and Fredrickson (2015) reveal that when women perceive physical activity as beneficial for their mental health, they demonstrate improved psychological resilience, enhanced mood regulation, and greater overall life satisfaction. The cognitive appraisal of exercise benefits serves as a motivational factor that reinforces continued engagement in physical activities, creating a positive feedback loop that strengthens psychological wellness over time.
The psychological benefits perceived by female lecturers who engage in physical activity extend beyond stress reduction to include improvements in self-efficacy, body image, and cognitive functioning. Research by Lubans et al. (2016) indicates that regular physical activity enhances executive function, memory, and concentration—cognitive abilities essential for academic performance and teaching effectiveness. Furthermore, Sabiston et al. (2019) found that female academics who perceive physical activity as beneficial report higher levels of self-esteem and more positive body image, which directly correlate with reduced symptoms of depression and anxiety. The social dimension of physical activity also contributes significantly to psychological wellness; when female lecturers participate in group exercises or sports, they develop supportive social networks that buffer against occupational stress and feelings of isolation commonly experienced in academic settings (Stanton and Reaburn, 2014). These perceived social benefits complement the physiological advantages of exercise, creating a comprehensive framework for mental health promotion.

The perceived benefits of physical activity function as critical mediators in the relationship between actual exercise behavior and psychological outcomes among female lecturers. According to the Health Belief Model and Social Cognitive Theory, an individual's perception of benefits directly influences their health behaviors and subsequent wellness outcomes (Bandura, 2004). Research by Pengpid and Peltzer (2019) demonstrates that female university employees who strongly perceive the psychological benefits of physical activity show significantly lower rates of burnout, emotional exhaustion, and depersonalization—common symptoms in the demanding academic environment. Moreover, Szabo, Griffiths, de La Vega Marcos, Mervó, and Demetrovics (2015) emphasize that the subjective interpretation of exercise benefits, rather than objective physical outcomes alone, plays a pivotal role in sustaining long-term engagement with physical activity and maintaining psychological wellness. For female lecturers specifically, interventions that enhance awareness and perception of physical activity benefits may serve as effective strategies for promoting mental health, job satisfaction, and overall quality of life in academia.

Null hypothesis (H_{02}): The Influence of Perceived Benefits of Physical Activity on Physical Wellness Levels Among Female Lecturers

The perceived benefits of physical activity serve as a crucial determinant in shaping the actual physical wellness outcomes experienced by female lecturers in academic institutions. According to Anjana and Ajeesh (2017), female academics who recognize and value the health benefits of regular exercise demonstrate significantly better physical wellness indicators, including improved cardiovascular health, enhanced immune function, and better weight management compared to those with limited awareness of such benefits. The perception-behavior-outcome pathway operates through motivational mechanisms whereby female lecturers who perceive physical activity as beneficial are more likely to engage consistently in exercise routines, leading to measurable improvements in physical health parameters (Rhodes and Dickau, 2013).

Research by Keating, Guan, Piñero, and Bridges (2005) reveals that female university employees who strongly perceive the physical health advantages of exercise exhibit lower body mass index, improved metabolic profiles, and reduced risk factors for chronic diseases such as hypertension, diabetes, and osteoporosis. This relationship is particularly significant given that female lecturers often face sedentary work conditions, prolonged sitting during lectures and research activities, and irregular schedules that can compromise physical health.

The strength of perceived benefits directly correlates with the intensity, frequency, and duration of physical activity engagement among female lecturers, subsequently influencing their overall physical wellness trajectories. Williams and French (2011) demonstrated that women in professional occupations who hold strong beliefs about the physical benefits of exercise are significantly more likely to meet recommended physical activity guidelines of at least 150 minutes of moderate-intensity aerobic activity per week. For female lecturers specifically, Taris, Ybema, and van Beek (2017) found that those who perceive physical activity as essential for maintaining physical health report fewer sick days, reduced musculoskeletal complaints, and higher energy levels throughout the workday. The perceived benefits act as cognitive reinforcers that sustain long-term adherence to exercise programs, which is critical because the cumulative effects of regular physical activity produce the most substantial physical wellness gains (Sallis, Owen, and Fotheringham, 2000). Furthermore, Bogg and Vo (2014) indicate that female academics with heightened awareness of physical activity benefits demonstrate better sleep quality, improved hormonal regulation, and enhanced physical functioning in daily activities, all of which contribute to comprehensive physical wellness beyond mere absence of disease.

The mediating role of perceived benefits in the relationship between physical activity intentions and actual physical wellness outcomes among female lecturers has been well-documented in health behavior research. According to the Theory of Planned Behavior and the Health Action Process Approach, perceived benefits constitute a critical component of attitude formation that bridges the intention-behavior gap in health-promoting activities (Schwarzer, 2008). Plotnikoff, Costigan, Karunamuni, and Lubans (2013) found that female university staff who perceive multiple physical benefits from exercise—including improved muscular strength, flexibility, bone density, and cardiovascular endurance—demonstrate superior physical wellness profiles measured through objective health assessments. Additionally, Caspersen, Powell, and Christenson (1985) established that the subjective evaluation of physical activity benefits influences not only participation rates but also the types and intensities of exercises chosen, which directly impact specific physical wellness dimensions. For female lecturers, interventions designed to enhance awareness and perception of physical activity benefits have proven effective in initiating and maintaining exercise behaviors that yield tangible improvements in physical health markers, functional capacity, and overall physiological well-being (Conn, Hafdahl, and Mehr, 2011). The evidence conclusively supports that perceived benefits are not merely psychological constructs but powerful predictors of actual physical wellness outcomes in this population.

5. Conclusion

The study confirms that female lecturers who recognize and value the benefits of physical activity tend to experience better mental health outcomes, including reduced stress, anxiety, and depression, as well as improved physical health indicators such as enhanced cardiovascular function, better energy levels, and reduced risk of chronic diseases. Given the demanding nature of academic work, characterized by heavy workloads, administrative responsibilities, work-life balance challenges, and prolonged sedentary behavior, these findings underscore the critical importance of promoting physical activity awareness and engagement among female academics.

6. Recommendations

Based on the significant findings of this study, the following recommendations were made:

- The university management should develop and implement comprehensive wellness programs specifically designed for female lecturers that emphasize the multiple benefits of physical activity for both psychological and physical health. These programs should include educational workshops, seminars, and awareness campaigns that highlight evidence-based benefits of regular

exercise, thereby strengthening perceptions and motivating consistent participation.

- The university should establish accessible and well-equipped fitness facilities on campus with flexible operating hours that accommodate the demanding schedules of female lecturers, including early morning, lunch breaks, and evening sessions.
- The institution should create supportive policies that encourage physical activity integration into the workday, such as designated exercise breaks, walking meetings, active commuting incentives, and reduced workload arrangements for staff participating in wellness activities.
- The university should organize group-based physical activities such as aerobics classes, yoga sessions, walking clubs, and sports tournaments specifically for female staff to foster social support networks while promoting exercise engagement.
- Health education departments should collaborate with university administration to conduct regular health screenings and personalized fitness assessments for female lecturers, providing individualized exercise prescriptions and monitoring progress over time.

References

McAuley, E., Blissmer, B., Katula, J., Duncan, T. E., & McDowell, J. E. (2000). Social relations, physical activity, and well-being in older adults. *Preventive Medicine*, 31(2), 191-200.

Sharma, A., & Madaan, V. (2006). Exercise for mental health. *Primary Care Companion to The Journal of Clinical Psychiatry*, 8(2), 106.

Fox, K. R. (1997). The influence of physical activity on mental well-being. *Public Health Nutrition*, 1(1), 1-10.

Penedo, F. J., & Dahn, J. R. (2005). Exercise and well-being: A review of mental and physical health benefits associated with physical activity. *Current Opinion in Psychiatry*, 18(2), 189-193.

Warburton, D. E., Nicol, C. W., & Bredin, S. S. (2006). Health benefits of physical activity: The evidence. *CMAJ,* 174(6), 801-809.

Blair, S. N., Cheng, Y., & Holder, J. S. (1995). Is physical activity beneficial for health? *American Journal of Preventive Medicine*, 9(1), 5-8.

Warburton, D. E., Nicol, C. W., & Bredin, S. S. (2006). Health benefits of physical activity: The evidence. *CMAJ,* 174(6), 801-809.

Bandura, A. (2004). Health promotion by social cognitive means. *Health Education & Behavior*, 31(2), 143-164.

Hogan, C. L., Catalino, L. I., Mata, J., and Fredrickson, B. L. (2015). Beyond emotional benefits: Physical activity and sedentary behaviour affect psychosocial resources through emotions. *Psychology & Health,* 30(3), 354-369.

Kinman, G., and Wray, S. (2013). Higher stress: A survey of stress and well-being among staff in higher education. University and College Union.

Lubans, D., Richards, J., Hillman, C., Faulkner, G., Beauchamp, M., Nilsson, M., Kelly, P., Smith, J., Raine, L., and Biddle, S. (2016). Physical activity for cognitive and mental health in youth: A systematic review of mechanisms. *Pediatrics*, 138(3), e20161642.

Pengpid, S., and Peltzer, K. (2019). Prevalence and associated factors of burnout among university faculty in low and middle income countries. *Indian Journal of Science and Technology*, 12(9), 1-8.

Sabiston, C. M., Pila, E., Vani, M., and Thogersen-Ntoumani, C. (2019). Body image, physical activity, and sport: A scoping review. *Psychology of Sport and Exercise*, 42, 48-57.

Stanton, R., and Reaburn, P. (2014). Exercise and the treatment of depression: A review of the exercise program variables. *Journal of Science and Medicine in Sport*, 17(2), 177-182.

Szabo, A., Griffiths, M. D., de La Vega Marcos, R., Mervó, B., and Demetrovics, Z. (2015). Methodological and conceptual limitations in exercise addiction research. *Yale Journal of Biology and Medicine*, 88(3), 303-308.

Warburton, D. E., and Bredin, S. S. (2017). Health benefits of physical activity: A systematic review of current systematic reviews. *Current Opinion in Cardiology,* 32(5), 541-556.

Anjana, K., and Ajeesh, T. P. (2017). Physical activity and health benefits among faculty members of a medical college in Kerala. *International Journal of Community Medicine and Public Health*, 4(11), 4131-4136.

Bogg, T., and Vo, P. T. (2014). Openness, neuroticism, conscientiousness, and family health and aging concerns interact in the prediction of health-related internet search behavior. *Journal of Health Psychology*, 19(8), 1037-1047.

Caspersen, C. J., Powell, K. E., and Christenson, G. M. (1985). Physical activity, exercise, and physical fitness: Definitions and distinctions for health-related research. *Public Health Reports*, 100(2), 126-131.

Conn, V. S., Hafdahl, A. R., and Mehr, D. R. (2011). Interventions to increase physical activity among healthy adults: Meta-analysis of outcomes. *American Journal of Public Health*, 101(4), 751-758.

Keating, X. D., Guan, J., Piñero, J. C., and Bridges, D. M. (2005). A meta-analysis of college students' physical activity behaviors. *Journal of American College Health*, 54(2), 116-126.

Plotnikoff, R. C., Costigan, S. A., Karunamuni, N., and Lubans, D. R. (2013). Social cognitive theories used to explain physical activity behavior in adolescents: A systematic review and meta-analysis. *Preventive Medicine*, 56(5), 245-253.

Rhodes, R. E., and Dickau, L. (2013). Moderators of the intention-behaviour relationship in the physical activity domain: A systematic review. *British Journal of Sports Medicine,* 47(4), 215-225.

Sallis, J. F., Owen, N., and Fotheringham, M. J. (2000). Behavioral epidemiology: A systematic framework to classify phases of research on health promotion and disease prevention. *Annals of Behavioral Medicine*, 22(4), 294-298.

Schwarzer, R. (2008). Modeling health behavior change: How to predict and modify the adoption and maintenance of health behaviors. *Applied Psychology,* 57(1), 1-29.

Taris, T. W., Ybema, J. F., and van Beek, I. (2017). Burnout and engagement: Identical twins or just close relatives? *Burnout Research*, 5, 3-11.

Williams, D. M., and French, D. P. (2011). What are the most effective intervention techniques for changing physical activity self-efficacy and physical activity behaviour and are they the same? *Health Education Research,* 26(2), 308-322.