



REVIEW ARTICLE

Integrating Tae-Bo as a Mind-Body Intervention for Enhancing Health Among Rural Black Women: A Narrative Review

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ABSTRACT

This narrative review explores the integration of Tae-Bo, a hybrid martial arts exercise, as a mind-body intervention aimed at improving health outcomes among rural Black women. Rural communities often face unique healthcare challenges, including limited access to fitness programs and health disparities. Black women in these areas are particularly vulnerable to chronic illnesses such as hypertension, diabetes, and obesity. Tae-Bo, which combines aerobic and anaerobic elements with self-defense techniques, offers a culturally relevant and accessible exercise option that can be adapted to various fitness levels. The review synthesizes findings from existing literature on the physical and mental health benefits of Tae-Bo, highlighting its potential to enhance cardiovascular health, strength, and psychological well-being. By examining case studies and empirical research, the article underscores the importance of culturally tailored fitness programs in promoting holistic health. Furthermore, the review addresses barriers to implementation and suggests strategies for community engagement and sustainable program development. The narrative concludes with recommendations for future research to further validate the efficacy of Tae-Bo in diverse rural settings and to explore its long-term health impacts.

Keywords: Tae-Bo, mind-body intervention, Black women, cardiovascular health, psychological well-being, community engagement.

Introduction

Health disparities remain a significant challenge in rural communities, particularly among Black women who experience pronounced barriers to accessing quality healthcare and fitness resources. These disparities manifest in elevated rates of chronic diseases such as hypertension, diabetes, and obesity, contributing to a cycle of poor health outcomes and limited quality of life. Addressing these issues requires a multifaceted approach that includes culturally relevant fitness interventions designed to meet the specific needs of this demographic^{1,2,3}.

Rural Black women face a unique set of health challenges driven by both socioeconomic and environmental factors⁴. Limited access to healthcare facilities, economic instability, and a lack of health education contribute to higher prevalence rates of chronic diseases⁵. According to the Centers for Disease Control and Prevention (CDC), rural areas often have higher rates of poverty and lower levels of education, which are directly linked to poorer health outcomes⁶. Moreover, the National Rural Health Association highlights that rural Black women are less likely to have access to preventive care services, which exacerbates the incidence and severity of chronic conditions⁷.

Culturally relevant fitness interventions are crucial in addressing these disparities⁸. Traditional fitness programs often fail to consider the cultural and logistical barriers that rural Black women face, such as cultural preferences for certain types of physical activity, the availability of facilities, and the social support necessary to sustain participation⁹. Research by Mathunjwa¹⁰ underscores the importance of designing health interventions that are tailored to the cultural and social contexts of the target population. Culturally relevant interventions are more likely to be accepted and adhered to, thereby enhancing their effectiveness.

Tae-Bo, a hybrid exercise program that blends elements of martial arts, boxing, and aerobics, offers a promising solution. Created by Billy Blanks in the 1990s, Tae-Bo has gained popularity for its dynamic workouts that improve cardiovascular

fitness, strength, and flexibility¹¹. Beyond its physical benefits, Tae-Bo also incorporates mind-body elements, promoting mental resilience and stress reduction. Its adaptability and engaging format make it a suitable option for diverse populations, including those in underserved rural areas¹².

The effectiveness of aerobic exercise programs, including Tae-Bo, in reducing cardiometabolic risk has been demonstrated in various studies. For instance, a 10-week aerobic exercise program was shown to significantly reduce cardiometabolic disease risk in overweight/obese female African university students³. Additionally, the implementation of a community-based mind-body physical activity program (including Tae-Bo) in rural Black overweight and obese women with risk factors for multimorbidity has been shown to improve health-related physical fitness¹². These findings suggest that such programs can be effective in rural settings and highlight the need for further research and implementation.

The purpose of this narrative review is to explore the potential of integrating Tae-Bo as a mind-body intervention to improve health outcomes among rural Black women. By synthesizing existing research and case studies, this review aims to highlight the physical and mental health benefits of Tae-Bo, address barriers to its implementation, and propose strategies for community engagement. This review also seeks to underscore the importance of culturally tailored fitness programs in addressing health disparities and promoting holistic well-being in rural communities.

This review will cover the following topics: the physical and mental health benefits of Tae-Bo, the unique health challenges faced by rural Black women, and the barriers to implementing fitness programs in these communities. It will also examine case studies and empirical research on Tae-Bo's effectiveness, discuss strategies for successful community engagement, and suggest directions for future research.

Integrating culturally relevant fitness interventions like Tae-Bo into rural health initiatives offers a viable strategy for mitigating health disparities among Black women. By tailoring programs to meet the specific needs and preferences of this population, we can foster greater participation and achieve better health outcomes. This narrative review aims to provide a comprehensive overview of the potential benefits and challenges of such interventions, paving the way for more effective health promotion strategies in rural communities.

Method of Narrative Review: Integrating Tae-Bo as a Mind-Body Intervention for Enhancing Health Among Rural Black Women

This narrative review focuses on the integration of Tae-Bo as a mind-body intervention for enhancing health among rural Black women in South Africa. Rural areas are defined as regions with low population density, limited infrastructure, and reduced access to healthcare services. For this review, rural is specified in the context of South Africa, where rural Black women face distinct health challenges due to socioeconomic disparities and healthcare access issues.

The inclusion criteria for literature were studies that addressed the health benefits of Tae-Bo, mind-body interventions, and physical health disparities among Black women. This review specifically considers Black women because they experience disproportionately high rates of chronic illnesses such as hypertension, diabetes, and obesity compared to their White counterparts in the same rural settings. Data shows significant statistical differences in health outcomes between these groups, underscoring the need for targeted interventions.

Literature Search Strategy

A comprehensive literature search was conducted using databases like PubMed, Scopus, and Google Scholar, with keywords such as "Tae-Bo," "rural health," "Black women," and "chronic illness

disparities." Tae-Bo was selected due to its cultural relevance, blending martial arts with aerobic exercises, which resonates with community interests and provides a versatile fitness option adaptable to various physical capabilities. The review included studies published from 2013 to May 2024, focusing on peer-reviewed articles, case studies, and empirical research. Future research directions are suggested to explore long-term impacts and broader applications of Tae-Bo in rural health promotion.

Health Challenges Faced by Rural Black Women

PREVALENCE OF CHRONIC DISEASES

Rural Black women experience disproportionately high rates of chronic diseases, including hypertension, diabetes, and obesity⁹. These conditions are prevalent due to a combination of genetic, lifestyle, and environmental factors. Research has shown that these women are more likely to suffer from these chronic illnesses compared to their urban counterparts, contributing to a lower quality of life and higher mortality rates^{13,12,14}.

SOCIOECONOMIC AND ENVIRONMENTAL FACTORS

Socioeconomic and environmental factors significantly contribute to health disparities among rural Black women⁹. Higher rates of poverty, lower educational attainment, and limited employment opportunities exacerbate these health issues. The CDC⁶ notes that socioeconomic status is closely linked to health outcomes, with lower income and education levels leading to increased risk of chronic diseases. Environmental factors such as limited access to healthy foods, safe recreational spaces, and exposure to environmental toxins further compound these disparities⁷.

ACCESS TO HEALTHCARE AND FITNESS RESOURCES

Access to healthcare and fitness resources is a critical issue for rural Black women. Rural areas often lack sufficient healthcare facilities, including primary care providers, specialists, and hospitals,

making it difficult for residents to receive timely and adequate care⁶. Additionally, there are fewer fitness resources available, such as gyms and recreational centers, which limits opportunities for physical activity. This lack of resources is compounded by transportation barriers and financial constraints, which prevent many from seeking regular medical care and engaging in health-promoting activities¹⁵.

Physical Health Benefits of Tae-Bo

CARDIOVASCULAR IMPROVEMENTS

Tae-Bo is renowned for its ability to significantly improve cardiovascular health. This high-intensity workout combines martial arts and aerobic exercise, leading to enhanced cardiovascular endurance and reduced risk of heart disease. Studies have shown that regular participation in Tae-Bo can lead to lower blood pressure, improved heart rate variability, and increased aerobic capacity. For example, Blanks¹¹ emphasized that the continuous, vigorous movements in Tae-Bo workouts help to strengthen the heart and improve overall cardiovascular fitness^{12,16}.

MUSCLE STRENGTH AND ENDURANCE

In addition to cardiovascular benefits, Tae-Bo is effective in building muscle strength and endurance. The combination of martial arts techniques and aerobic exercises targets multiple muscle groups, promoting increased muscle tone and strength. Tae-Bo routines include a variety of punches, kicks, and other movements that engage the core, upper body, and lower body muscles¹². This full-body engagement helps to enhance muscular endurance, allowing participants to perform physical activities for longer periods without fatigue¹¹. According to Mathunjwa et al¹², participants in a community-based Tae-Bo program showed significant improvements in muscular strength and endurance after several weeks of regular exercise.

FLEXIBILITY AND BALANCE

Tae-Bo also contributes to improved flexibility and balance. The dynamic movements involved in Tae-Bo, such as high kicks and rapid changes in direction, help to stretch and lengthen muscles,

increasing overall flexibility¹⁷. Enhanced flexibility can reduce the risk of injuries and improve the range of motion in joints. Additionally, the balance required to perform various Tae-Bo techniques helps to develop better body coordination and stability. Mathunjwa et al.¹² reported that participants experienced noticeable improvements in their balance and flexibility, which are critical components of physical fitness and overall health.

Mental Health Benefits of Tae-Bo

STRESS REDUCTION AND MOOD ENHANCEMENT

Tae-Bo is highly effective in reducing stress and enhancing mood. The vigorous physical activity involved in Tae-Bo triggers the release of endorphins, the body's natural mood elevators. This "runner's high" can lead to immediate improvements in mood and a reduction in feelings of stress and anxiety. Regular participation in Tae-Bo has been associated with decreased levels of cortisol, a stress hormone, further contributing to stress reduction^{18,19}. Blanks¹¹ noted that the high-energy nature of Tae-Bo helps participants release pent-up stress, leading to a sense of relaxation and well-being post-workout.

IMPROVEMENT IN MENTAL RESILIENCE AND SELF-ESTEEM

Engaging in Tae-Bo can significantly boost mental resilience and self-esteem. The challenges presented by Tae-Bo workouts, such as mastering new moves and pushing physical limits, help build mental toughness. Overcoming these challenges can increase participants' confidence and self-efficacy. Mathunjwa²⁰ highlighted that mind-body exercises like Tae-Bo can enhance mental resilience by teaching individuals to cope with physical and mental stressors effectively. Furthermore, the achievement of fitness goals and improvements in physical appearance through Tae-Bo can lead to heightened self-esteem and a more positive self-image¹².

SOCIAL SUPPORT AND COMMUNITY BUILDING THROUGH GROUP EXERCISE

Tae-Bo classes provide a platform for social interaction and community building, which are

crucial for mental health. Exercising in a group setting fosters a sense of camaraderie and belonging, which can alleviate feelings of loneliness and isolation. This social support network is particularly beneficial in rural areas where social interactions may be limited. Mathunjwa et al.¹² found that participants in community-based Tae-Bo programs reported increased social connections and support, which contributed to their overall mental well-being. The encouragement and motivation from peers and instructors in a group exercise environment can enhance adherence to the exercise program and promote a positive, inclusive atmosphere²¹.

Case Studies and Empirical Research

SUMMARY OF STUDIES ON TAE-BO'S EFFECTIVENESS

Numerous studies have examined the effectiveness of Tae-Bo as a fitness intervention, highlighting its benefits for physical and mental health. Blanks¹¹ conducted one of the earliest studies on Tae-Bo, demonstrating its efficacy in improving cardiovascular fitness, muscle strength, and flexibility. Subsequent research has supported these findings, with studies showing significant improvements in cardiovascular health, muscular endurance, and body composition among Tae-Bo participants¹². Moreover, Tae-Bo has been linked to reductions in stress, improvements in mood, and enhanced self-esteem, indicating its positive effects on mental well-being^{17,20}.

SPECIFIC CASE STUDIES INVOLVING RURAL BLACK WOMEN

Several case studies have focused on the implementation of Tae-Bo programs specifically for rural Black women, highlighting its relevance and effectiveness in this population. Mathunjwa et al.¹² conducted a community-based Tae-Bo program targeting overweight and obese rural Black women with risk factors for multimorbidity. The study found significant improvements in health-related physical fitness, including cardiovascular endurance and muscular strength, among participants. Moreover,

qualitative assessments revealed positive changes in mental well-being, social support, and self-perception¹⁷.

COMPARATIVE ANALYSIS WITH OTHER FITNESS INTERVENTIONS

While Tae-Bo has demonstrated significant benefits for rural Black women, comparative analyses with other fitness interventions are limited. However, studies comparing Tae-Bo with traditional aerobic exercise programs have shown similar or superior outcomes in terms of cardiovascular fitness, muscular strength, and psychological well-being¹². Tae-Bo's unique combination of martial arts, aerobics, and mind-body elements may offer distinct advantages over conventional exercise modalities, particularly in engaging and motivating participants from diverse backgrounds^{17,22}.

Barriers to Implementation

CULTURAL, LOGISTICAL, AND ECONOMIC CHALLENGES

Implementing Tae-Bo programs in rural communities faces various cultural, logistical, and economic challenges. Cultural preferences and beliefs regarding exercise may differ, requiring tailored approaches to engage participants effectively²³. Additionally, logistical challenges such as transportation barriers and limited access to fitness facilities can hinder program participation. Economic constraints may also pose challenges, as rural communities often have limited resources to fund fitness initiatives and purchase necessary equipment¹².

PERCEPTION AND ACCEPTANCE OF TAE-BO IN RURAL COMMUNITIES

Perception and acceptance of Tae-Bo in rural communities can impact program uptake and adherence. Some residents may be unfamiliar with Tae-Bo or perceive it as incompatible with their cultural norms and preferences. Addressing misconceptions and promoting the benefits of Tae-Bo through community outreach and education initiatives is essential for fostering acceptance and participation^{12,24}.

AVAILABILITY OF TRAINED INSTRUCTORS AND SUITABLE VENUES

A key barrier to implementing Tae-Bo programs in rural areas is the availability of trained instructors and suitable venues. Qualified Tae-Bo instructors may be scarce in rural communities, requiring investment in training and development programs¹². Additionally, finding suitable venues for Tae-Bo classes, such as community centers or schools, can be challenging in rural settings with limited infrastructure¹².

Strategies for Community Engagement and Program Development

APPROACHES TO INTRODUCING TAE-BO IN RURAL SETTINGS

Introducing Tae-Bo in rural settings requires culturally sensitive approaches that resonate with the community's values and preferences. Engaging local residents in the planning process and conducting needs assessments can help identify the most effective strategies for introducing Tae-Bo. Offering free or low-cost introductory sessions and hosting community events can generate interest and provide opportunities for residents to experience Tae-Bo firsthand. Additionally, partnering with trusted community members, such as church leaders or community organizers, can facilitate outreach efforts and build rapport^{16,12}.

COLLABORATION WITH LOCAL ORGANIZATIONS AND LEADERS

Collaborating with local organizations and leaders is essential for the success of Tae-Bo programs in rural communities. Partnering with community centers, schools, churches, and other organizations can provide access to facilities and resources needed to host Tae-Bo classes. Engaging local leaders and influencers can help garner support and endorsement for the program, increasing participation and visibility within the community. By leveraging existing networks and resources, Tae-Bo programs can reach a broader audience and foster sustainable partnerships^{12,25}.

SUSTAINING PARTICIPATION AND PROGRAM FUNDING

Sustaining participation and securing ongoing funding are critical for the long-term success of Tae-Bo programs in rural communities. Implementing strategies to maintain participant engagement, such as offering diverse class schedules, incorporating social activities, and providing incentives for attendance, can help sustain interest and motivation. Additionally, seeking funding from local government agencies, foundations, and private donors can provide financial support for program operations, instructor salaries, and equipment purchases. Developing fundraising initiatives and grant proposals can help secure funding sources to ensure the program's sustainability^{12,23}.

Future Research Directions

GAPS IN CURRENT RESEARCH ON TAE-BO AND HEALTH OUTCOMES

Despite the growing interest in Tae-Bo as a fitness intervention, there are several gaps in current research that warrant further investigation. Existing studies primarily focus on short-term outcomes, such as changes in cardiovascular fitness and muscular strength, with limited exploration of long-term health effects. Additionally, the majority of research has been conducted in urban or controlled settings, overlooking the unique challenges and opportunities present in rural communities. Future research should address these gaps by examining the sustained impact of Tae-Bo on overall health and well-being, particularly in rural populations^{12,26}.

NEED FOR LONG-TERM STUDIES AND LARGER SAMPLE SIZES

Long-term studies with larger sample sizes are needed to better understand the effects of Tae-Bo on health outcomes over time. Longitudinal research can provide valuable insights into the durability of benefits, potential risks, and factors influencing adherence to Tae-Bo programs. Furthermore, studies with larger and more diverse participant populations can enhance the generalizability of findings and facilitate subgroup

analyses to explore variations in response to Tae-Bo across different demographic and socioeconomic groups^{27,28,29,30}.

EXPLORATION OF ADDITIONAL HEALTH METRICS AND DIVERSE RURAL POPULATIONS

In addition to traditional health metrics such as cardiovascular fitness and muscular strength, future research should explore a broader range of health outcomes relevant to rural populations. This may include mental health indicators such as stress levels, mood, and quality of life, as well as measures of functional capacity and mobility. Moreover, there is a need to examine the effectiveness of Tae-Bo programs in diverse rural populations, considering factors such as ethnicity, age, and geographical location. By capturing a more comprehensive understanding of Tae-Bo's impact on health outcomes, researchers can inform the development of targeted interventions tailored to the specific needs of rural communities^{18,19}.

Conclusion

Tae-Bo holds great promise as a culturally relevant intervention for improving the health and well-being of rural Black women. Through its unique combination of cardiovascular exercise, strength training, and mind-body elements, Tae-Bo offers a holistic approach to fitness that addresses both physical and mental health needs. Research has demonstrated the effectiveness of Tae-Bo in enhancing cardiovascular fitness, muscular strength, and mood, particularly among underserved populations. Moreover, Tae-Bo fosters social connections and community support, contributing to a sense of belonging and empowerment.

The importance of culturally tailored interventions like Tae-Bo cannot be overstated. By acknowledging

and addressing the cultural, logistical, and economic barriers faced by rural communities, we can develop programs that resonate with participants and promote sustainable behaviour change. Culturally relevant interventions not only improve health outcomes but also foster a sense of pride and ownership within communities.

As we look to the future, it is imperative for researchers, practitioners, and policymakers to continue investing in the development and implementation of culturally tailored fitness programs. This includes conducting long-term studies with larger sample sizes, exploring additional health metrics, and engaging diverse rural populations in the research process. By working collaboratively and prioritizing the needs of underserved communities, we can create inclusive environments where all individuals have the opportunity to thrive.

Let us commit to advancing the field of community health through innovative approaches and steadfast advocacy for health equity. Together, we can build healthier, more resilient rural communities for generations to come.

Conflict of Interest:

None.

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References:

1. Chinn JJ, Martin IK, Redmond N. Health equity among Black women in the United States. *J Womens Health (Larchmt)*. 2021;30(2):212-219. doi:10.1089/jwh.2020.8868
2. Kalinowski J, Taylor JY, Spruill TM. Why are young Black women at high risk for cardiovascular disease? *Circulation*. 2019;139:1003-1004. doi:10.1161/CIRCULATIONAHA.118.038759
3. Mathunjwa ML, Semple SJ, du Preez C. A 10-week aerobic exercise program reduces cardiometabolic disease risk in overweight/obese female African university students. *Ethn Dis*. 2023;23(2):143-148. doi:10.18865/ed.23.2.143
4. Schultz WM, Kelli MH, Lisko JC, et al. Socioeconomic status and cardiovascular outcomes: challenges and interventions. *Circulation*. 2018;137(20): 2166-2178. doi:10.1161/CIRCULATIONAHA.117.029652
5. McMaughan DJ, Oloruntoba O, Smith ML. Socioeconomic status and access to healthcare: interrelated drivers for healthy aging. *Front Public Health*. 2020;8:231. doi:10.3389/fpubh.2020.00231
6. Centers for Disease Control and Prevention (CDC). Health disparities in rural women. CDC.gov. Published 2020.
7. National Rural Health Association. Addressing health disparities in rural America. Ruralhealthweb.org. Published 2021.
8. Joseph RP, Keller C, Affuso O, Ainsworth BE. Designing culturally relevant physical activity programs for African-American women: a framework for intervention development. *J Racial Ethn Health Disparities*. 2016;4(3):227-234. doi:10.1007/s40615-016-0240-1
9. Obi OC, Nnonyelu AC, Onobrakpeya A, Ogundele OJ. Benefits and barriers to physical activity among African women: a systematic review. *Sports Med Health Sci*. 2023;5(1):59-66. doi:10.1016/j.smhs.2022.12.001
10. Mathunjwa LS. Socioeconomic determinants of health disparities among rural Black women. *J Rural Health*. 2019;35(2):134-141. doi:10.1111/jrh.12312
11. Blanks B. *Tae-Bo: The Ultimate Total Body Workout*. New York, NY: Anchor Books; 1999.
12. Mathunjwa M, Shaw I, Moran J, et al. Implementation of a community-based mind-body (Tae-Bo) physical activity programme on health-related physical fitness in rural Black overweight and obese women with manifest risk factors for multimorbidity. *Int J Environ Res Public Health*. 2023;20(15):6463. doi:10.3390/ijerph20156463
13. Alick CL, Braxton D, Skinner H, et al. Rural African American women with severe obesity: a cross-sectional analysis of lifestyle behaviors and psychosocial characteristics. *Am J Health Promot*. 2023;37(8):1060-1069. doi:10.1177/08901171231190597
14. Evans LK. Rural Black women's thoughts about exercise. *Appl Nurs Res*. 2011;24(4):200-206. doi:10.1016/j.apnr.2010.03.004
15. Coombs NC, Campbell DG, Caringi J. A qualitative study of rural healthcare providers' views of social, cultural, and programmatic barriers to healthcare access. *BMC Health Serv Res*. 2022;22:438. doi:10.1186/s12913-022-07829-2
16. Milenković DA, Veselinović N. Effect of experimental Tae Bo training model for coordination development of young women. *Sport Sci*. 2010;3(2):57-60.
17. Turğut M, Metin SN. Effect of Tae-bo exercises implemented on sedentary women, on some physical and physiological parameters. *Rev Rom Educ Multidim*. 2019;11(4):278-287. doi:10.18662/rrem/169
18. Mahindru A, Patil P, Agrawal V. Role of physical activity on mental health and well-being: a review. *Cureus*. 2023;15(1). doi:10.7759/cureus.33475
19. Shaw I, Mathunjwa ML, Shaw BS. Physical activity and health promotion: a public health imperative. In: Greenberg P, ed. *Physical Activity and Health*. London, England: IntechOpen; 2023. doi:10.5772/intechopen.111927
20. Mathunjwa LS. Mind-body interventions and mental health outcomes: a focus on rural

- populations. *Health Psychol Rev.* 2020;14(3):265-280. doi:10.1080/17437199.2019.1698123
21. Martín-Rodríguez A, Gostian-Ropotin LA, Beltrán-Velasco AI, et al. Sporting mind: the interplay of physical activity and psychological health. *Sports (Basel).* 2024;12(1):37. doi:10.3390/sports12010037
22. Mathunjwa M, Semple S, du Preez C. The effect of a 10-week Tae-Bo intervention programme on physical fitness and health-related risk factors in overweight/obese females. *Br J Sports Med.* 2013;47(17). doi:10.1136/bjsports-2013-093073.13
23. Pelletier CA, Pousette A, Ward K, et al. Implementation of physical activity interventions in rural, remote, and northern communities: a scoping review. *Inquiry.* 2020;57:0046958020935662. doi:10.1177/0046958020935662
24. Roby AA EL. The effect of a Tae Bo exercise program on physical fitness and some kinesthetic perceptions for university level basketball players in Egypt. *World J Sport Sci.* 2010;3(2):107-112.
25. Preston JP, Barnes KER. Successful leadership in rural schools: cultivating collaboration. *Rural Educator.* 2018;38(1):1-10. doi:10.35608/ruraled.v38i1.231
26. Alhumaid W, Small SD, Kirkham AA, et al. A contemporary review of the effects of exercise training on cardiac structure and function and cardiovascular risk profile: insights from imaging. *Front Cardiovasc Med.* 2022;9:753652. doi:10.3389/fcvm.2022.753652
27. Pfisterer J, Rausch C, Wohlfarth D, et al. Effectiveness of physical-activity-based interventions targeting overweight and obesity among university students—a systematic review. *Int J Environ Res Public Health.* 2022;19(15):9427. doi:10.3390/ijerph19159427
28. Mustedanagić J, Jorgić B, Cicović B. Effects of Tae bo aerobic training program on the fitness abilities of young women. *Facta Univ Ser Phys Educ Sport.* 2014;12(1):41-49. <http://casopisi.junis.ni.ac.rs/index.php/FUPhysEdSport/article/view/245>
29. Nikić N, Milenković D. Effects of Tae Bo recreational exercise on strength and balance in women. *AGON Int J Sport Sci.* 2014;4(2):117-127. <https://dialnet.unirioja.es/servlet/articulo?codigo=6706929>
30. Pinckard K, Baskin KK, Stanford KI. Effects of exercise to improve cardiovascular health. *Front Cardiovasc Med.* 2019;6:69. doi:10.3389/fcvm.2019.00069
31. Ramadan AM, El-Ruby AERA. The effect of a proposed program of modified Tae Bo exercises on the level of some physical fitness, physiological and skillful elements of basketball players. *Assiut J Sport Sci Arts.* 2019;119(1):1-20. https://journals.ekb.eg/article_109123_e7ee1baf4b080678392bce2c6da11d42.pdf