CORE IN MOTION: A ZUMBA-BASED APPROACH TO ABDOMINAL STRENGTH USING BELLY BAND

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Abstract

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The study employed a quasi-experimental design with a pre-test and post-test to find out how belly bands combined with Zumba dance fitness improved the abdominal strength of women between the ages of 40 and over 60. The study included 25 purposively chosen participants from the MaharlikanCenter in Kalibo, Aklan, Western Visayas, Philippines. Timed sit-ups and plank holds were used to evaluate abdominal endurance. Additionally, a Tanita body composition scale was used to record baseline body composition data, such as visceral fat content, body mass index (BMI), and body weight in grams. Throughout the program, these metrics were used as a benchmark for assessing changes. Over the course of six weeks, 45-minute Zumba classes were held every week as part of the intervention. Throughout the sessions, participants wore a belly band to support core muscle activation during activity, improve posture awareness, and gently compress the abdomen. Results revealed a noticeable improvement in participants' abdominal endurance and postural alignment following the six-week program. These results indicate that the participants' core strength became stronger and their BMI values became lower after the Zumba with Belly Band sessions, and both improvements are statistically significant. This means that both participants with and without medication experienced comparable levels of improvement in core strength after the Zumba with Belly Band sessions. In addition, the findings show that there were no significant differences in BMI among the different age groups and between participants with and without medication. These findings suggest that Zumba, when complemented with the use of a belly band, offers a fun, safe, and low-impact exercise option that effectively supports core strengthening and promotes healthy aging among women.

Introduction:-

As women age, maintaining abdominal strength becomes increasingly essential for posture, balance, and functional movement. According to Ljubojevic, Jakovljevic, Bijelic et.al[1] women are thought to be less active than males, and middle-aged women are especially affected by sedentary lifestyles, which have an adverse effect on their general health. Prudente, Mezaiko, Silveira, & Nogueira[2]mentioned that middle-aged ladies can effectively reduce their stress levels by dancing to the beat of the music.Ljubojevic, Jakovljevic, Bijelic et.al[1] discussed that Zumba Fitness workout is a useful form of exercise for enhancing respiratory function in inactive women as well as lowering body parameters. Kolayiş, Çelik, & Narin[3]also stated that regular Zumba training enhanced women's strength, balance, and body composition, highlighting the benefits of this full-body workout. Ben Waer, et. al[4] highlighted the advantages of rhythmic exercise for aging populations by reporting that Zumba dancing enhanced functional performance among postmenopausal women and adolescents who want to improve their posture, joint mobility, muscular extensibility, and balance will benefit greatly from Zumba Fitness[5]. Further, students' resting and heart rate recovery were considerably enhanced by their involvement in the zumba dance exercise[6].

Allistia, et. al[7] said that both body fat thickness and body circumference can be reduced more effectively with zumba exercises, and body circumference can be decreased more effectively with zumba exercises. González-Cutre, Megías, Beltrán-Carrillo, Cervelló, & Spray[8]added that having fun while exercising boosts dedication and sustained engagement in physical activity. Therefore, combining Zumba with belly band support could help women's fitness strike a balance between enjoyment and functionality. The impact of waistbands on intra-abdominal pressure and respiratory mechanics was also investigated by Leahy et. al[9] who found that modest compression can improve muscular stabilization. Mixed-mode training is more effective than single-modality programs at increasing muscle endurance, according to [10]. In line with this, Leabeater, James, & Driller[11]discovered that compression during exercise increased sensory signals to the core muscles, which in turn improved performance and stability.Chavez[12] came to the conclusion that the transversus abdominis, the deep abdominal muscle in charge of spinal stabilization, is activated more when there is modest resistance around the waist during movement. Functional compression helps with posture correction, especially for older adults[13]. Barranco-Ruiz, and Villa-González[14] further stated that exercise interventions based on Zumba fitness combined with an additional muscle-strengthening workout based on bodyweight training exercises are effective strategies to improve the health-related physical fitness in sedentary women employees.

Regular Zumba, a fun, moderate-intensity dancing workout, can help middle-aged women feel better, build muscle strength, and increase their cardiovascular endurance through rhythmic cardio and core development. Because of the high adherence rates among postmenopausal women, this study is being examined to help menopause symptoms like hot flashes and tiredness.

Methods

Research Design

This research employed a quasi-experimental research design using model. The study examined the effect of a six-week Zumba program with belly band usage on abdominal strength among women aged 40 and above. This study employed a quasi-experimental research design, specifically a pre-test and post-test design, to investigate the effects of a 6-week Zumba with belly band usage on abdominal strength among women aged 40 and above. Quasi-experimental designs are often used when randomization or a control group is not feasible due to ethical, logistical, or practical constraints[15].The pre-test and post-test design is the most effective method to compare participant groups and gauge the extent of change brought about by treatments or interventions[16].

Sample

The study participants were women aged 40 to 60+ years who voluntarily enrolled in a community-based fitness program. To ensure safety, all met inclusion criteria by providing medical clearance for moderate-intensity physical activity. Ultimately, 25 participants successfully completed the full six-week intervention.

Procedures

Prior to the intervention, all preparation required to guarantee participant safety and study validity was carried out. The goal of the study, the different kinds of activities it included, and the potential advantages and disadvantages of participating were all explained to the participants at the outset. Before the study began, each participant provided written informed consent, and the confidentiality of all information gathered was guaranteed. The workout regimen, which emphasized low-impact but efficient motions, was thoughtfully created to accommodate women between the ages of 40 and over 60. Controlled hip motions, torso rotations, and balance-focused steps were all used in the Zumba routines to highlight core engagement. The design included a belly band to support the abdomen, promote good posture, and increase awareness of the core muscles when exercising. The exercise program and evaluation methods were examined and approved by trained Zumba instructors and fitness experts to guarantee content validity. Their suggestions were taken into consideration, and the necessary changes were made to make sure the routines were age-appropriate, safe, and in line with the goals of the study. A pre-test assessment was given to participants prior to the start of the intervention. Timed sit-ups and plank holds were used to evaluate abdominal strength. Additionally, a Tanita body composition scale was used to record baseline body composition data, such as body weight in grams, body mass index (BMI), and visceral fat level. Throughout the program, these metrics were used as a benchmark to assess changes.

The actual six-week Zumba intervention was carried out during the testing period. The participants participated in three 45-minute Zumba classes each week. Every session took place in a controlled and secure setting. Participants in each session executed Zumba routines that included steady core engagement with rhythmic dancing moves. For constant abdominal compression and support, the belly band was worn during each session. Under the researcher's supervision, certified Zumba instructors led the classes to guarantee participant safety and correct movement execution. Every session includes warm-up and cool-down exercises to help with muscle healing and injury prevention. Participants completed a mid-intervention assessment three weeks into the program. To track development and see changes during the intervention period, body weight, BMI, and visceral fat level were once more assessed using the Tanita scale.

A post-test evaluation that was identical to the pre-test was performed by participants at the conclusion of the six-week intervention. Timed sit-ups and plank holds were used to assess abdominal endurance once more in order to identify any gains brought about by the program. Using the Tanita body composition scale, final body composition measurements were also taken, including body weight, BMI, and visceral fat.

Statistical analysis

The data in this study were analyzed using descriptive statistics to summarize and describe the main features of the participants' responses and physical fitness measures. Measures such as frequency and percentage were used to show the distribution of participants according to their age and health status. Meanwhile, mean and standard deviation were applied to describe the participants' core strength and body mass index (BMI) before and after the Zumba with Belly Band program.

Test of Normality. Table 2 shows the test of normality for the study variables using the Shapiro–Wilk test. The results reveal that only the Core Strength (Pretest) had a significance value greater than 0.05, indicating that it was normally distributed. In contrast, the Core Strength (Posttest) and both the BMI (Pretest and Posttest) had significance values less than 0.05, which means these variables were not normally distributed. Since most of the data did not follow a normal distribution, the study used nonparametric tests such as the Wilcoxon Signed Rank Test, Mann–Whitney U Test, and Kruskal–Wallis Test for the inferential data analysis. The table below shows the test of normality using Shapiro-Wilk test.

Table 1. Test of Normality of the Variables Using Shapiro-Wilk Test.

	Shapiro-Wilk			
	Statistic	df	Sig.	Interpretation
Core Strength (Pretest)	.912	21	.061	Normal
Core Strength (Posttest)	.876	21	.012	Not Normal
BMI (Pretest)	.875	21	.012	Not Normal
BMI (Posttest)	.877	21	.013	Not Normal

Results

Table 2 presents the core strength and body mass index (BMI) of the participants before joining the Zumba using the belly band. The overall mean core strength of the participants was 6.98, with a standard deviation of 2.48, while the overall mean BMI was 24.08, with a standard deviation of 3.55. These values indicate that, on average, the participants had moderate core strength and a normal but slightly high BMI before the exercise intervention.

Core Strength. In terms of age, participants 51–60 years old had the lowest mean core strength (6.54), which means they performed better than the other groups since a lower mean score represents stronger core muscles. Participants 50 years old and below had a slightly higher mean of 7.20, while those above 60 years old had the highest mean (8.50), suggesting weaker core strength in the older group. The high variability in the scores of those above 60 (SD = 5.57) shows that their core performance was not uniform, with some individuals stronger and others weaker than the average.

When grouped by health status, participants without medication had a lower mean core strength (6.50) compared to those with medication (7.61). This suggests that participants who were not taking maintenance medicines may have had better muscular endurance or fewer health limitations affecting their performance.

Body Mass Index (BMI). The average values across all age groups were within the normal range, but older participants showed higher body mass. Those above 60 years old had the highest mean BMI (26.77), which is already classified as overweight. Participants 51–60 years old (23.67) and 50 years old and below (23.52) both had normal BMI levels. This pattern indicates that BMI tends to increase with age.

Considering health status, participants with medication had a slightly higher BMI (24.63) than those without medication (23.66), showing that individuals managing certain medical conditions generally had heavier body weight.

Table 2. Core strength and BMI of the participants before the Zumba using a belly band

	Core Strength		BMI	
	Mean	SD	Mean	SD
Age				
50 years old and below	7.20	1.96	23.52	2.40
51 – 60 years old	6.54	1.73	23.67	2.23
Above 60 years old	8.50	5.57	26.77	8.48
Health Status				
Without medication	6.50	2.17	23.66	2.97
With medication	7.61	2.84	24.63	4.33
Grand Mean	6.98	2.48	24.08	3.55

Table 3 presents the core strength and body mass index (BMI) of the participants after completing the Zumba using a belly band. The grand mean for core strength was 6.29 (SD = 2.55), while the grand mean for BMI was 22.94 (SD = 3.72). Compared with the pre-test results, both grand means decreased, indicating overall improvement. The reduction in the core strength mean suggests that participants developed better muscular endurance and stability, while the lower BMI mean reflects improved body composition and possible weight reduction after participating in the fitness sessions.

Core Strength. After the intervention, participants exhibited generally stronger core performance, as shown by the decrease in mean scores. Among the age groups, those 51–60 years old achieved the lowest mean score of 5.85 (SD = 1.82), indicating the best core strength. They were followed by those 50 years old and below, with a mean of 6.30 (SD = 1.48), while participants above 60 years old recorded the highest mean of 8.17 (SD = 5.84), indicating comparatively weaker core strength.

When grouped by health status, participants without medication showed better performance, with a mean core strength of 5.86 (SD = 2.24), compared to 6.83 (SD = 2.96) among those with medication.

Body Mass Index (BMI). The BMI results also revealed notable improvements after the Zumba with Belly Band program. The grand mean BMI of 22.94 (SD = 3.72) indicates that, on average, participants achieved a healthy weight range after the intervention. By age, participants 51–60 years old obtained the lowest BMI mean of 22.28 (SD = 2.49), followed closely by those 50 years old and below with 22.82 (SD = 2.43), both of which fall within the normal range. Participants above 60 years old recorded a mean BMI of 26.03 (SD = 8.48), which remains in the overweight range but is slightly lower than their pre-test value, showing some improvement.

In terms of health status, participants without medication had a mean BMI of 22.38 (SD = 3.14), while those with medication recorded 23.70 (SD = 4.45). These findings show that both groups experienced a decrease in BMI after the intervention, although those without medication attained a more favorable average weight status.

Table 3. Core strength and BMI of the participants after the Zumba using a belly band

	Core Strength		BMI	
	Mean	SD	Mean	SD
Age				
50 years old and below	6.30	1.48	22.82	2.43
51 – 60 years old	5.85	1.82	22.28	2.49
Above 60 years old	8.17	5.84	26.03	8.48
Health Status				
Without medication	5.86	2.24	22.38	3.14
With medication	6.83	2.96	23.70	4.45
Grand Mean	6.29	2.55	22.94	3.72

Table 4 shows the difference in the participants' core strength and body mass index (BMI) before and after participating in the Zumba using a belly band. The results reveal a significant improvement in both variables following the intervention.

For core strength, the mean score decreased from 6.98 before the program to 6.29 after the program. Because a lower mean indicates better core performance, this reduction suggests that participants developed stronger core muscles. The computed Z-value of -3.342 with a p-value of 0.001 is significant at the 0.05 level. Therefore, the null hypothesis is rejected, indicating a statistically significant difference in core strength before and after the Zumba with Belly Band sessions. This means that the participants' core endurance and muscle control improved after the exercise program.

For BMI, the mean value decreased from 24.08 before the program to 22.94 after the program. This shows that the participants' body weight or body composition improved after the intervention. The Z-value of -4.017 with a p-value of 0.000 is also significant at the 0.05 level. As a result, the null hypothesis is rejected, confirming a statistically significant reduction in BMI after the Zumba with Belly Band program.

These results indicate that the participants' core strength became stronger and their BMI values became lower after the Zumba with Belly Band sessions, and both improvements are statistically significant.

Table 4. Difference in the core strength and BMI of the participants before and after the Zumba using a belly band

	Mean	Z	p-value	Decision
Core Strength				
Before	6.98	-3.342*	0.001	Reject Ho
After	6.29			

BMI				
Before	24.08	-4.017*	0.000	Reject Ho
After	22.94			

Note: Legend: * -significant at 0.05 level

Table 5 presents the difference in the core strength of participants after the Zumba using a belly band when grouped according to age and health status. The results show that there were no significant differences in core strength among the different age groups and between participants with and without medication.

When grouped by age, participants aged 50 years old and below had a mean core strength of 6.30, those aged 51–60 years old had 5.85, and those above 60 years old recorded 8.17. The computed Z-value of 0.620 with a p-value of 0.733 indicates that the variation among these groups is not statistically significant. Thus, the null hypothesis is confirmed, meaning that improvements in core strength after the program were generally consistent across age groups.

For health status, participants without medication obtained a mean core strength of 5.86, while those with medication recorded 6.83. The Z-value of 0.000 and p-value of 1.000 indicate that there is no significant difference between the two groups. This means that both participants with and without medication experienced comparable levels of improvement in core strength after the Zumba with Belly Band sessions.

Table 5. Difference in the core strength of the participants after the Zumba using a belly band when grouped as to Age and Health Status

Core Strength	Mean	Z	p-value	Decision
Age				
50 years old and below	6.30	0.620	0.733	Confirm Ho
51 – 60 years old	5.85			
Above 60 years old	8.17			
Health Status				
Without medication	5.86	0.000	1.000	Confirm Ho
With medication	6.83			

Note: Legend: * -significant at 0.05 level

Table 6 presents the difference in the body mass index (BMI) of the participants after the Zumba using a belly band when grouped according to age and health status. The findings show that there were no significant differences in BMI among the different age groups and between participants with and without medication.

When grouped by age, participants 50 years old and below had a mean BMI of 22.82, those 51–60 years old had 22.28, and those above 60 years old recorded 26.03. The computed Z-value of 0.844 with a p-value of 0.656 indicates that the variation among these age groups was not statistically significant. Therefore, the null hypothesis is confirmed, meaning that changes in BMI after the program were generally similar across age groups.

In terms of health status, participants without medication had a mean BMI of 22.38, while those with medication had 23.70. The Z-value of -0.249 and p-value of 0.803 also indicate that there was no significant difference between the two groups. This suggests that both groups experienced comparable outcomes in BMI following the Zumba with Belly Band sessions.

Table 6. Difference in the BMI of the participants after the Zumba using a belly band when grouped as to Age and Health Status

BMI	Mean	Z	p-value	Decision
Age				
50 years old and below	22.82	0.844	0.656	Confirm Ho
51 – 60 years old	22.28			
Above 60 years old	26.03			

Health Status				
Without medication	22.38	-0.249	0.803	Confirm Ho
With medication	23.70			

Note: Legend: * -significant at 0.05 level

Discussion

The results show that before joining the Zumba with Belly Band program, participants generally had average core strength and a body mass index (BMI) within the normal but slightly high range. This indicates that the group had a fair level of physical fitness at baseline but still had room for improvement in both muscular endurance and weight management.

In terms of core strength, the pattern revealed that younger and middle-aged participants performed better than older adults. This observation aligns with the established understanding that muscle strength naturally declines with age due to sarcopenia, or the gradual loss of muscle mass and function. Sarcopenia reduces stability, posture, and balance, and is recognized as a major factor affecting mobility and independence among older individuals[17]. Participants who were not taking maintenance medications also demonstrated slightly better core strength than those who were. This may be explained by the fact that individuals with chronic illnesses or long-term medication use often experience limited physical activity and slower recovery, which can affect muscle performance[18].

With regard to BMI, older participants tended to have higher body mass compared to younger ones. This trend supports findings from national nutrition surveys in the Philippines showing that overweight and obesity prevalence increases with age, particularly among adults aged 40 and above, due to slower metabolism and reduced physical activity (Department of Science and Technology–Food and Nutrition Research Institute[19]. In addition, those taking maintenance medications had slightly higher BMI values than those who were not. Similar outcomes have been observed internationally, where long-term use of certain medications has been linked to gradual weight gain and changes in body composition[20]. The global pattern also mirrors local data, as noted in the Philippine Nutrition Facts & Figures report (DOST-FNRI[21] and the World Health Organization's[22] recent fact sheet on obesity and overweight.

These suggest that age and health condition play important roles in influencing both core strength and BMI. The participants' baseline results are consistent with broader evidence linking aging and health status to physical performance and weight regulation. Establishing this baseline is essential for evaluating how the Zumba with Belly Band program may enhance strength, reduce BMI, and promote better overall health outcomes among adults and older participants.

After the exercise program, participants improved both in terms of core strength and BMI. The overall averages (grand means) moved in the right direction, meaning better muscle endurance and healthier body weight. This suggests that the program was effective across all age and health status groups.

Participants' core strength improved, as indicated by the lower average scores post-intervention. This result aligns with research showing that resistance-based activity can improve core muscle function, even in older adults. For example, strength training in older adults has been shown to increase muscle strength and functional performance[23]. Also, programs that focus on core stability training have improved performance in older women[24]. These findings support the idea that adding a resistance component (like a belly band during Zumba) helps target and improve core muscles, which are vital for everyday movement, balance, and posture.

The average BMI of participants also moved towards healthier values. This is consistent with previous findings that dance-based fitness programs such as Zumba can lead to reductions in body weight and improvements in body composition[25 26]. The DOST-FNRI findings show that regular physical activity is linked with healthier weight status among Filipino adults. The WHO also emphasizes that being physically active supports maintaining a healthy weight and reducing the risk of overweight and obesity. Hence, the drop in BMI in this study implies that the exercise program likely helped participants manage or reduce excess body weight, which is important for long-term health.

The improved scores in core strength and the lowered BMI average indicate that the program was beneficial. While younger and healthier participants showed stronger responses, the improvements across all groups suggest the intervention is broadly effective.

Moreover, the differences in both core strength and BMI from before to after the Zumba with Belly Band program are statistically significant. The significant improvement in core strength supports the notion that a structured exercise program combining aerobic movements and resistance (via the belly band) can enhance trunk musculature and endurance. Literature on core-training interventions shows that targeted core exercises lead to improved performance on tasks involving trunk stability and functional movement[27]. Given that participants achieved better scores post-program, this suggests the intervention was effective in strengthening their "core", the muscles around the spine, pelvis, and abdomen that support posture and movement. The fact that the improvement reached statistical significance means we can be confident there was a real change in this group.

The significant reduction in BMI likewise shows that participants on average decreased their body mass relative to their height. This finding is consistent with previous research that dance-based fitness like Zumba can support weight and fat-loss or improved body composition[28]. For example, a systematic review found that Zumba interventions produced modest but positive effects on body weight and other body measurements[29]. The significant p-value here supports the interpretation that the program resulted in meaningful BMI change in this sample.

Since both core strength and BMI improved significantly, this suggests that the intervention may be a valuable approach for improving fitness and weight status in adult and older populations. Practically, this might mean that fitness programs designed for adults, especially in community or wellness settings, could incorporate dance-based, resistance-enhanced formats like Zumba with a belly band to yield measurable benefits.

Furthermore, after the program, there were no significant differences in core strength improvements when participants were grouped by age or health status. In other words, both younger and older participants, and those with and without medication, displayed similar gains in core strength.

The finding that core-strength improvement did not differ significantly across age groups aligns with research showing that adults of varying ages can respond positively to strength or functional training interventions. For example, in a study of maximal strength training, improvements were found across young, middle-aged, and older adults with no significant difference between age groups[30]. This suggests that even when baseline abilities differ by age, the trainability of core muscles remains broadly consistent across adult age ranges.

Similarly, the lack of difference by health status (medication vs. no medication) indicates that having medication or a health condition did not appear to limit the improvements in core strength in this setting. Recent reviews of physical-activity interventions in older adults show that structured exercise can enhance muscle strength and function in diverse groups, not only those without chronic conditions[31]. This supports the idea that well-designed exercise programs can be inclusive and effective across health statuses.

These suggest that core-strength improvements through an exercise program like this may be equally accessible regardless of age or medication status. This means that fitness interventions can be confidently offered to adult and older populations without worrying that older age or medication automatically means less benefit for core muscle performance. For practitioners or community fitness programs, this supports inclusive design: the same core-strength training approach may work across different sub-groups of adults.

In addition, there were no significant differences in the participants' body mass index (BMI) after the Zumba with Belly Band program when grouped according to age and health status. This means that all participants, regardless of age or whether they were taking medication, achieved similar improvements in their BMI after the intervention.

The lack of significant difference across age groups indicates that the Zumba with Belly Band program was effective for participants of all ages. This finding aligns with studies showing that adults of different age ranges can achieve similar improvements in body composition when they engage in consistent, moderate-intensity exercise programs. For example, Omelan, Wisniewska &Podstawski[28] found that dance-based fitness programs such as Zumba significantly improved BMI and fat mass among women aged 20 to 60 years. Similarly, Jayedi et al. (2024) reported that aerobic and resistance training can reduce body fat and BMI regardless of age, as long as the activity is performed regularly and supported by adequate energy expenditure.

These results suggest that age does not necessarily limit a person's ability to experience weight-related benefits from structured physical activity. The consistent improvements across age groups demonstrate that Zumba with Belly Band provides a type of physical exercise that is manageable and beneficial for both younger and older participants.

Likewise, the absence of significant differences between participants with and without medication indicates that the intervention had similar effects across health conditions. This is consistent with previous findings that physical activity can produce positive effects on body composition among individuals with chronic health conditions[32]. According to World Health Organization[22], even moderate forms of physical activity, when done consistently, can help regulate body weight and improve metabolic function regardless of health background.

Participants taking maintenance medications, such as for hypertension or diabetes, still showed improvement in BMI, suggesting that health conditions or medication use did not prevent them from benefiting from the exercise program. This finding supports the results of the Department of Science and Technology–Food and Nutrition Research Institute (DOST-FNRI, 2023), which emphasize the importance of regular physical activity for Filipino adults to maintain or reduce BMI and prevent overweight-related diseases.

The Zumba with Belly Band is a suitable and inclusive form of physical activity for adults and older individuals, regardless of age or health status. Because BMI improvements were similar across all groups, the program can be implemented widely without the need for separate modifications for different age brackets or health conditions. These results reinforce the value of community-based exercise programs that combine enjoyment, accessibility, and measurable health outcomes.

Conclusion

This study demonstrated that engaging in Zumba using a belly band can meaningfully enhance physical fitness by improving both core strength and body mass index (BMI) among adult and older participants. The overall improvements show that combining rhythmic aerobic movements with resistance training provides an effective and enjoyable way to strengthen muscles and manage body weight. These outcomes emphasize that dance-based fitness programs can serve not only as recreational activities but also as structured exercise interventions that contribute to better physical well-being. The findings further highlight that improvements in core strength and BMI occurred across different ages and health conditions, indicating that the program was inclusive and beneficial to a wide range of participants. Regardless of age or medication use, participants demonstrated comparable gains in physical fitness, reflecting the adaptability and accessibility of Zumba with Belly Band as a form of exercise. This supports the growing evidence that regular physical activity can positively influence muscle performance and weight control across diverse adult populations. Beyond the observed physical benefits, the study reinforces the importance of incorporating structured yet enjoyable exercise routines into daily life. The use of a belly band introduced resistance that made movements more effective in activating the core muscles, while the rhythmic and social nature of Zumba encouraged sustained participation. Such an approach is particularly valuable in promoting long-term engagement in physical activity, which is essential for maintaining functional strength and preventing weight-related health risks. The Zumba with Belly Band program offers a practical, inclusive, and evidence-based strategy for promoting health and fitness among adults and older individuals. It demonstrates that age and health status are not barriers to achieving meaningful physical improvements when engaging in consistent, moderate-intensity exercise. These findings contribute to the growing recognition of dance-based, resistance-enhanced fitness programs as viable community interventions for encouraging healthy, active lifestyles among Filipinos and other adult populations.

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