



Line Dance Phenomenon on Heart Rate of Elderly 40-60 Years Old Through TikTok Media

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Abstract

This study aimed to explore the use of TikTok social media as a supportive tool in understanding the motivations of older adults aged 40-60 years that influence heart rate during line dance exercise. A total of 40 respondents were involved in this study, consisting of 75% women and 25% men. The research method used was qualitative with a survey approach, through a Google Form shared via WhatsApp. Data collection was carried out for two consecutive days at Sanggar Kenanga and Lapangan Saburai, Lampung. The research instrument included five main indicators of elderly participation in line dance exercises. The results showed that 70% of the elderly were familiar with line dancing as a form of physical activity. However, 75% of them admitted to having difficulty following the rhythm of the music while dancing. On the social side, 70% of the elderly invited others to participate, and 80% felt the physical benefits of this activity. Interestingly, 75% of older adults actively seek movement guidance through videos on TikTok. The average motivation of older adults to participate in line dancing was recorded at 74%, categorized as "often". These findings confirm that TikTok can be an effective medium to promote physical activities that support physical and social health for older adults.

How to Cite

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INTRODUCTION

Line dance can be distinguished from regular dance. The difference is that line dance is a sport that is done individually / in groups and uses music as a step or choreography. Every movement is not arbitrary. If you do one wrong movement, it can affect the next movement and hinder yourself and the line dance team (Imam, 2021). Line Dance is also a physical activity that combines collectivity and artistry, embodying deep cultural connotations, as an art form. Line dance is deeply rooted in cultural heritage derived from traditional folk dances with movements, music and rhythms that reflect unique ethnic cultures (Youngmi, 2021). With line dance, women can expand their range of social activities, resulting in positive reinforcement such as further involvement in the community, charity, participation in national sporting events, self-expression, and self-development (Nadasen, 2008).

The population aged 60 years and over, known as the elderly, is increasing rapidly as the average lifespan increases. By 2050, the World Health Organization (WHO) anticipates that there will be twice as many older people (Suyoso, 2023). Increasing life expectancy is not always accompanied by an equal improvement in health quality, as the aging process is the main cause of various age-related diseases, including degenerative neurological disorders such as dementia (Li et al., 2021). Elderly is the last stage of the human life cycle, which will certainly experience changes both physically and increase by around 30-40 million people (Syahrudin, 2020). Humans who are elderly because of their age experience biological, physical, social changes. These changes have an influence on all aspects of life, including their health, especially heart rate as they get older, physical activities such as exercise or emotional conditions with excessive levels of stress, will not increase heart rate. Exercise is a wonderful natural remedy for hypertension, reducing fat that clogs blood vessels, reducing hypertension, and making the heart's blood vessels and coronary arteries larger and wider compared to people who do not exercise (Hardianti, 2020).

The use of social media has become very popular in society because it is easy to use and has many features offered to enhance the beauty or uniqueness of the desired content (Afifah, 2021). Among the various existing social media, TikTok is one of the most widely used social media by Indonesians. This fact is supported by Databoks data which shows that the total number of TikTok account holders or app users in Indonesia

reached 109.9 million as of January 2023, making Indonesia the second largest country in the world in terms of the number of users of the TikTok app. It has become the country The country is just behind America (Saragi, 2023). The line dance phenomenon has become a popular form of physical activity among the public, especially among the elderly. This activity offers not only physical, but also social and emotional benefits, which are very important for the mental health of the elderly. With social media platforms such as TikTok, line dancing is increasingly accessible and practiced by a wide range of people, including older adults (Novita et al., 2023).

In its ranking TikTok has more than 700 million fans with the size of adolescents ranging in age from 13-18 years, in 2020 the TikTok application has been ranked 7th as the most popular social media in the world. TikTok as a short video-based application allows users to find a variety of creative content, including dance tutorials that are interesting and easy to follow (Zulaikha, 2022). Through TikTok older adults can learn various line dance moves in a fun way, which in turn can increase their motivation to move. On the other hand, increased physical activity such as line dancing can have a significant effect on the heart health of older adults. Promoting enjoyable and quality participation in sport and active recreation from an early age is crucial, as it is a known predictor of an active lifestyle and an indicator of better health later in life (Rismayanthi, 2012). Research shows that aerobic activity can help improve heart rate, blood circulation, and overall cardiovascular health. Digital marketing itself is a term that was first used in the 1990s and in the 2000s and 2010s, digital marketing became more sophisticated as an effective method to create long-term relationships with customers (Krisdanu, 2023). Therefore, it is important to explore how line dancing promoted through TikTok can affect the heart rate of the elderly, as well as how social media can be an effective tool in facilitating beneficial physical activity for this age group (Lestari, 2022).

The core problem of this research lies in the heart rate of the elderly aged 40-60 years, which is decreasing and unstable. Moreover, at that age they are not familiar with gymnastic movements, especially line dance gymnastics. Line dance is one of the most popular gymnastics at all ages for those who know it, line dance gymnastics movements can be a fun exercise of choice to increase or stabilize the heart rate of the elderly. However, in Indonesia, especially in Lampung province, there are still very few elderly

people who take part in line dance classes both in gymnastics studios and general community gymnastics. One of the main challenges for the elderly in following line dance exercises is the level of difficulty in mastering line dance steps. Motor skills, memory, and flexibility of the elderly body tend to decrease with age. Along with the development of technology and people's interest in social media, platforms such as TikTok have begun to be used as a means to introduce types of exercise, including line dance, many elderly people are interested in trying line dance after seeing video tutorials on TikTok. Therefore, it is necessary to optimally promote the use of digital platforms as a medium for education and promotion of lines for the elderly. This approach not only addresses the challenge of introducing line dance movements, but also opens up a great opportunity to raise awareness of the importance of maintaining heart health in a convenient and modern way. Further research is needed to understand the extent of the effectiveness of social media, particularly TikTok, in helping older adults learn to line dance, as well as how it affects their heart health. In addition, it is important to review the potential benefits and risks of learning line dance through digital media for older adults, so that more effective and appropriate methods can be developed to increase their participation in physical activities that are beneficial to their health.

Based on these findings, this study seeks to analyze the phenomenon of line dancing among the elderly through TikTok media. This research is expected to provide insight into the potential of line dance as an effective and engaging exercise method for the elderly, as well as the role of social media in promoting active lifestyles among the elderly population.

METHODS

This study uses primary data. The data was obtained by researchers using a survey method where researchers distributed questionnaires to respondents directly and through a google form online questionnaire (Islamy, Yuliastuti and Lathifah, 2021).

Taking into account the utilization of TikTok media as a means of exercise and motivation to exercise, this study focuses on line dance activities on changes in heart rate in the elderly aged 40-60 years. This study explores how the participation of the elderly in performing line dance movements guided through TikTok can help the cardiovascular health of the elderly, especially in improving heart fitness and controlling heart rate automatically.

This line dance activity was conducted in Lampung, with the main locations at Sanggar Kenanga and Lapangan Saburai. The study was conducted for 2 days, duration for 60 minutes. The elderly followed the movement instructions from the TikTok video that had been selected and adjusted to the elderly's ability. The elderly also monitored their pulse rate before, during, and after the activity.

Primary data collection techniques were obtained from a questionnaire consisting of 25 questions and statements. The questionnaire contained statements related to the introduction of line dance, movements in line dance, motivation in line dance, health effects of line dance and marketing of line dance sports on TikTok. These questions and statements with answer options use a Likert scale of 1-4 (never - very often), the data that has been obtained is analyzed descriptively (Danar et al., 2021). The questionnaire data processing technique begins by calculating the frequency of respondents who choose SS, S, J, and TP on each positive and negative statement. For the results of research data processing, researchers do things as follows:

At this stage, the researcher will check the completeness of filling out the questionnaire so that there are no errors.

At this stage, the researcher will calculate each question and statement in the questionnaire using a Likert scale according to the results of the respondent's answers. The Likert scale put forward by Riduan (Mardianto, Abdul Azis and Amelia, 2022) is as follows **Table 1**.

Table 1. Likert Scale

Category	Statement
SS	4
S	3
J	2
TP	1

At this stage, researchers will process data into descriptions and frequencies to analyze the data that will be used as conclusions (Agustin, 2020). Meanwhile, to determine the criteria based on each indicator with the interpretation criteria found by Mardianto (Mardianto, 2022).

Table 2. Elderly Respondent Criteria

Presentasi	Category
76-100%	Very often
51-75%	often
26-50%	Rarely
0-25%	Never

Analysis of the efficiency of line dance on the heart rate of the elderly is based on the calculation of 4 scores, which include the criteria very often (SS) with a score of 4, often (S) with a score of 3, rarely (J) with a score of 2 and never (TP) with a score of 1. The formula used to calculate the efficiency value is as follows: (Sevtia et al., 2022),

$$(\text{sum of the scores from the assessment}) / (\text{maximum number of scores}) \times 100\%$$

RESULTS AND DISCUSSION

Based on the results of this study using primary data. The data was obtained using a survey method which distributed questionnaires to the elderly aged 40-60 years from Sangar Kenanga and Lapangan Enggal in Bandar Lampung, then calculated the score of each research subject. The line dance intervention was carried out for 2 specific days with the aim of increasing the skills, participation, and motivation of the elderly in line dance exercises. The program used TikTok as a medium of learning and interaction, giving older adults access to line dance tutorial videos and challenges.

During the intervention, older adults were instructed to follow carefully planned movements, ranging from the most basic to more complex levels. To facilitate analysis of progress, older adults' engagement was also monitored through video uploads on TikTok with a dedicated hashtag (Zulaikha, 2022).

The results of the line dance exercise research obtained as many as 40 respondents, namely the elderly aged 40-60 years. As many as 75% of respondents were female and 25% of respondents were male (**Figure 1**).

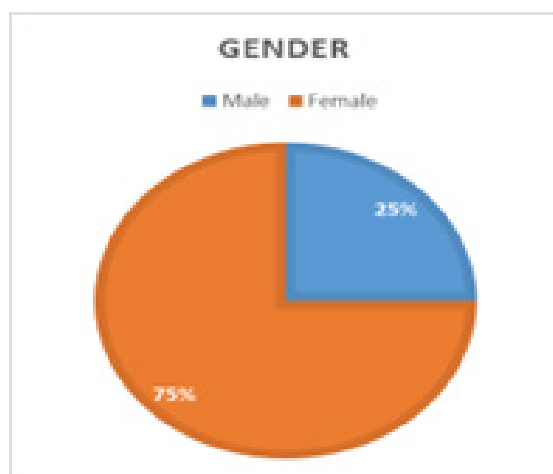


Figure 1. Percentage of Gender



Figure 2. Teknokrat Gymnastics Team

(<https://vt.tiktok.com/ZSh637LGF/>)

Table 3. Results of Elderly Response Questionnaire Processing

Indicator	% Score (P)	Score Category
Introduction to Line Dance	70	often
Line Dance Moves	75	often
Motivasi dalam Line Dance	70	often
Health to Line Dance	80	very often
Marketing about Line Dance on TikTok	75	often
Maen	74	often

From the **Table 3** above is a questionnaire given to respondents to collect research data. It can be seen that the results of this study obtained high results can be seen in the questionnaire of the 5 indicators given to respondents.

Based on the results of the survey, it is known that 70% of the elderly stated that they had participated in line dance activities, which was categorized as “often” for this physical activity. However, 75% of the elderly also reported that they often have difficulty following the rhythm of the music when doing line dance movements, which can be an indicator of the need for a more adaptive or interactive learning approach, this indicator is categorized as “often”. Socially, 70% of older adults have invited others to join them in line dancing, and in addition, 80% of older adults stated that they often feel positive health benefits from line dancing, especially in terms of physical and emotional fitness. In terms of access to

information and training, this indicator falls into the “very often” category. Meanwhile, 75% of the elderly routinely search for line dance videos through the TikTok application, which shows a high interest in digital media as a source of reference and a means of learning, this indicator falls into the “often” category. When averaged, all of these indicators show that the level of engagement and interest in line dance through TikTok is at 74%, the percentage is categorized as the “often” category, which reflects the great potential of this activity as a means of adaptive, fun and inclusive sports for the elderly.

The **Figure 2** above shows the choreography in line dance that can be understood and followed by the elderly so that the movements have a flow of steps that do not collide with other steps. Therefore, line dancing not only moves the body but also makes you feel relaxed while exercising with music. In addition, line dancing itself reduces the number of calories burned, the number of calories burned in one exercise session is 450 calories, which can last for an hour and a half (Imam, 2021).

In addition, the study found that guided line dancing on TikTok has several advantages: it is easily accessible, the exercise time can be customized, and it makes people more motivated by social interaction and popular trends (Dimas, 2024). Older people who frequently participated in line dancing reported better stamina, better body balance, and better mood. TikTok also helped some people learn moves and got them involved with the wider community (Kania, 2023).

However, the study also found problems, such as limitations in following the moves due to physical factors, a lack of understanding about the use of TikTok by older people, and the need for supervision or guidance from health professionals on how to perform physical activities safely (Hasiholan, 2020).

Overall, this study suggests that line dancing, introduced by TikTok, can be an effective physical activity alternative for older adults, with key benefits on improving pulse rate, cardiovascular health and emotional well-being. This study suggests the development of more inclusive and welcoming digital line dance programs to increase older people's participation in fun physical activity.

CONCLUSION

This study used a survey method to collect data from 40 participants aged 40-60 years from Sangar Kenanga and Lapangan Enggal in Bandar

Lampung. The intervention aimed to increase participation, engagement and motivation in line dancing. The program used TikTok as a medium for learning and interaction, providing video tutorials and line dance techniques. Line dancing has several benefits, such as being easy to learn, suitable for different ages, and motivates people through social interaction and popular trends. However, this study also addressed issues such as fear of using TikTok, lack of knowledge about using TikTok, and the need for health education on how to do physical activity. This research recommends developing more inclusive and dynamic line dance programs to increase participation in physical activity.

REFERENCES

- Affiah, M. (2021). Peran Akun Instagram @kebunrefugiamagetan Sebagai Media Promosi Dalam Meningkatkan Minat Pengunjung Wisata Kebun Refugia Magetan. *Etheses.lainponorogo.Ac.Id*, 5–24.
- Agustin, N. A., Kanom, & Darmawan, R. N. (2020). Jurnal Inovasi Penelitian. *Jurnal Inovasi Penelitian*, 1(3), 1–4.
- Daniar Setyo Rini, Ade Suryanda, & Eka Putri Azrai. (2021). Peningkatan Persepsi Guru IPA Terhadap Penggunaan Pendekatan Gamification pada Kegiatan dan Evaluasi Pembelajaran. *Jurnal SOLMA*, 10(1), 32–41. <https://doi.org/10.22236/solma.v10i1.597>
- Dimas Rizky Febriansyah, D. (2024) 'PEMANFAATAN TIKTOK PADA KALANGAN LANSIA DI KELURAHAN SEKAR JAYA KABUPATEN OGAN KOMERING ULU', *Jurnal Komunikasi, sisoal, dan ilmu politik*, 7482, pp. 90–98. Available at: <https://doi.org/http://jurnal.kolibi.org/index.php/retorika/article/view/1898>.
- Hardianti, S. (2020) 'Pengaruh Senam Aerobic Terhadap Penurunan Tekanan Darah Pada Ibu-Ibu Pkk Kelurahan Buakana Kecamatan Rappocini Kota Makassar', *Naskah Publikasi, Universitas Negeri Makassar*, 8(9), p. 18.
- Hasiholan, T.P., Pratami, R. and Wahid, U. (2020) 'Pemanfaatan Media Sosial Tik Tok Sebagai Media Kampanye Gerakan Cuci Tangan Di Indonesia Untuk Mencegah Covid-19', *Communiverse : Jurnal Ilmu Komunikasi*, 5(2), pp. 70–80. Available at: <https://doi.org/10.36341/cmv.v5i2.1278>.
- Imam, A. A. (2021). Perancangan Informasi Manfaat Line Dance Bagi Kesehatan Melalui Media Video. <http://elibrary.unikom.ac.id/id/eprint/5931>
- Islamy, A., Yulastuti, W. and Lathifah, Q.A.Y. (2021) 'Pendampingan Penanaman Apotek Hidup Sebagai Upaya Pemenuhan Kebutuhan Keluarga di Masa Pandemi Covid-19', 10(02), pp.

- 406–413.
- Kania, D. (2023) Pelatihan Instruktur Line Dance Tingkat Dasar, scribd.com. Available at: <https://www.scribd.com/presentation/676648587/Pelatihan-Instruktur-Line-Dance-Tingkat-Dasar-PPT>.
- Krisdanu, C. A., & Kiranastari Asoka Sumantri. (2023). TikTok sebagai Media Pemasaran Digital di Indonesia. *Jurnal Lensa Mutiara Komunikasi*, 7(2), 24–36. <https://doi.org/10.51544/jlmk.v7i2.4173>
- Lestari, Y. elisa. (2022). Pemanfaatan Aplikasi Tiktok Sebagai Media Promosi Produk Kecantikan Wardah. *J-Sikom*, 3(2), 81–93. <https://doi.org/10.36085/jsikom.v3i2.4135>
- Li, Z., Zhang, Z., Ren, Y., Wang, Y., Fang, J., Yue, H., Ma, S., & Guan, F. (2021). Aging and age-related diseases: from mechanisms to therapeutic strategies. *Biogerontology*, 22(2), 165–187. <https://doi.org/10.1007/s10522-021-09910-5>
- Mardianto, Y., Abdul Azis, L., & Amelia, R. (2022). Menganalisis Respon Siswa Terhadap Pembelajaran Materi Perbandingan Dan Skala Menggunakan Pendekatan Kontekstual. *Jurnal Pembelajaran Matematika Inovatif*, 5(5), 1313–1322. <https://doi.org/10.22460/jpmi.v5i5.1313-1322>
- Nadasen, K. (2008). Life Without Line Dancing and the Other Activities Would be Too Dreadful to Imagine: An Increase in Social Activity for Older Women. *Journal of Women & Aging*, 20(3–4), 392–342. <https://doi.org/https://doi.org/10.1080/08952840801985060>
- Novita, D. et al. (2023) 'Penggunaan Media Sosial TikTok Sebagai Media Promosi Pemasaran Dalam Bisnis Online', *Jurnal Minfo Polgan*, 12(2), pp. 2543–2550. Available at: <https://doi.org/10.33395/jmp.v12i2.13312>
- Rismayanthi. (2012). Rekognisi Pendidikan, Olahraga, dan Kesehatan di Masa Endemi Covid-19. In 2022. https://www.google.co.id/books/edition/Rekognisi_Pendidikan_Olahraga_dan_Keseha/Y551EAAAQBAJ?hl=id&gbpv=0
- Saragi, H. (2023). Sosains jurnal sosial dan sains. *Jurnal Sosial Dan Sains*, 3(2), 148–167. <https://doi.org/https://doi.org/10.59188/jurnalso-sains.v3i6.815>
- Sevtia, A. F., Taufik, M., & Doyan, A. (2022). Pengembangan Media Pembelajaran Fisika Berbasis Google Sites untuk Meningkatkan Kemampuan Penguasaan Konsep dan Berpikir Kritis Peserta Didik SMA. *Jurnal Ilmiah Profesi Pendidikan*, 7(3), 1167–1173. <https://doi.org/10.29303/jipp.v7i3.743>
- Suyoso, Q. A. (2023). Sistem Monitoring Detak Jantung Dan Elektromiografi Pada Lansia. 11(1), 425–433. <https://repositori.telkomuniversity.ac.id/home/catalog/id/201664/slug/sistem-monitoring-detak-jantung-dan-elektromiografi-pada-lansia.html%0A/home/catalog/id/201664/slug/sistem-monitoring-detak-jantung-dan-elektromiografi-pada-lansia.html>
- Syahrudin, S. (2020). Kebugaran Jasmani Bagi Lansia Saat Pandemi Covid-19. *JUARA : Jurnal Olahraga*, 5(2), 232–239. <https://doi.org/10.33222/juara.v5i2.943>
- Youngmi, J. O. (2021). Motivasi and Meaning of the Elderly Women's Line Dance Experience. *Jurnal of Digital Convergence*, Vol. 19(2), 471–479. <https://doi.org/https://doi.org/10.14400/JDC.2021.19.2.471>
- Zulaikha, I. 'Ainaya, & Khotimah, K. (2022). Penerapan Digital Content #CiptakanKebaikan sebagai Bentuk Promosi pada Platform Tiktok. *Jurnal Lensa Mutiara Komunikasi*, 6(1), 1–13. <https://doi.org/10.51544/jlmk.v6i1.2844>