



Article

Dancing toward Well-Being: Effects on Mood and Well-Being of a 12-Week Flamenco Dance Workshop in Women Aged 60–80 Years

José M. León-Rubio ^{1,*} , Carmen Rivera-Rodríguez ¹, Jose M. León-Pérez ^{1,*} , Carlos Sepúlveda ² and Francisco J. Cantero-Sánchez ¹

¹ Carmides Research Group, Universidad de Sevilla, 41018 Sevilla, Spain; karmn_29194@hotmail.com (C.R.-R.); fcantero@us.es (F.J.C.-S.)

² Autoestima Flamenca Association, 41004 Sevilla, Spain; eacarlitos@yahoo.es

* Correspondence: jmleon@us.es (J.M.L.-R.); leonperez@us.es (J.M.L.-P.)

Abstract: The objective of this study was to examine the effect of a flamenco dance program on the mood and subjective well-being of 34 self-selected women from the community, aged between 62 and 79 years. The mean age was 70.11 (SD = 5.13). Participants voluntarily enrolled in a 12-week flamenco dance workshop conducted by the Autoestima Flamenca Association, with one two-hour session per week. Every two weeks, mood measurements (sadness, anxiety, anger and joy) were taken, and subjective well-being assessments were conducted before and after each session. It was found that the participants' overall mood and subjective well-being improved significantly following the intervention. These improvements were observed at both the individual and group levels. Overall, our findings suggest that participation in a free 12-week flamenco dance program had a positive impact on mood and subjective well-being in this segment of the population.

Keywords: flamenco dance; mood; subjective well-being; self-esteem; social dance; older women; cultural identity



Citation: León-Rubio, J.M.; Rivera-Rodríguez, C.; León-Pérez, J.M.; Sepúlveda, C.; Cantero-Sánchez, F.J. Dancing toward Well-Being: Effects on Mood and Well-Being of a 12-Week Flamenco Dance Workshop in Women Aged 60–80 Years. *Women* **2023**, *3*, 457–470. <https://doi.org/10.3390/women3040035>

Academic Editors: Li Yang, Rosa Legood, Fei Ma and Mary V. Seeman

Received: 14 June 2023

Revised: 9 September 2023

Accepted: 13 September 2023

Published: 22 September 2023



Copyright: © 2023 by the authors. Licensee MDPI, Basel, Switzerland. This article is an open access article distributed under the terms and conditions of the Creative Commons Attribution (CC BY) license (<https://creativecommons.org/licenses/by/4.0/>).

1. Introduction

Increasing life expectancy and an aging population make caring for the elderly an increasingly important issue [1]. With the growing feminization of old age, the challenges associated with elderly care are particularly pronounced for women. For instance, in Spain in 2021, the elderly population was predominantly female, exceeding men by 30.9% [2].

Mental health and overall well-being have emerged among the many concerns surrounding this demographic group. Globally, mental illnesses account for most of the disease burden and are among the biggest determinants of well-being [3]. In Spain, anxiety disorder and depression disorder affect 6.7% and 4.1% of the population, respectively. The prevalence of anxiety and depressive disorders is higher in women, with 8.8% for anxiety disorders and 5.9% for depressive disorders, respectively, compared to men at 4.5% and 2.3% [4,5]. The prevalence of both disorders increases with age, with a combined prevalence of 19% in the 56–75-year age group and 28% in those over 75 years of age [6]. Both disorders are usually associated with feelings of loneliness and social isolation in these age groups, which negatively affect their quality of life [7]. As a result of these data, it is urgent to address the mental health and well-being of older women, particularly in contexts of loneliness and social isolation.

The situation is even more problematic when we consider that the prevalence of these mental health problems is correlated with education and income levels. People with low incomes or educational levels, a common situation in the older adult population, are more likely to experience mental health difficulties such as depression and anxiety. Moreover,

they frequently face more difficulties accessing health services than those with higher incomes or educational backgrounds [8].

The entire European Union has historically not given adequate attention to mental health [8]. Spain has not yet implemented the reforms proposed more than two decades ago [9], highlighting the fact that only around 60 percent of public health centers provide mental health care [5]. Due to these difficulties and a lack of services, as well as the high cost of mental health care in Spain and the European Union [6,10,11] and the expensive use of psychotropic drugs to treat mental disorders [12], finding more sustainable solutions is essential.

Despite this scenario, mental health has been increasingly recognized as being crucial to all segments of the population in recent decades. Indeed, mental health care needs increased after the COVID-19 pandemic, intensifying interest in effectively addressing mental health difficulties [8]. Considering these changes, it is imperative to seek effective solutions to address mental health difficulties [8,13] and to support initiatives that can contribute to the promotion of health and well-being, including those that are sensitive to the cultural context in which they are implemented [14].

In the face of this complex scenario, it is necessary to adopt a multidimensional and integrative approach that not only addresses clinical aspects of mental health but also promotes an active and healthy lifestyle, social inclusion and cultural participation. A possible avenue for this would be non-pharmacological interventions based on physical activity and artistic expression, which are emerging as a promising strategy to improve mental health and well-being, particularly for older women. Indeed, despite the physical, social and cultural barriers that can hinder the participation of these women in programs to promote physical activity [15–17], these not only improve fitness but also have a positive impact on cognitive functioning, reduce feelings of loneliness and enhance social interaction and inclusion, thus helping to prevent mental health problems and promote well-being [18–21].

Achieving the above-mentioned benefits requires the adoption of and adherence to physical and artistic-oriented programs, which depend on three key conditions [22]: (a) that the exercise or physical activity is social and enjoyable; (b) that it is adapted to the person's abilities; and (c) that it leverages group support to motivate participants to undertake other actions in favor of their health. These characteristics are typical of dance-based programs, which, in this context, emerge as an attractive strategy. Beyond improving physical functioning and mobility control [23–26], dance enhances cognitive functioning and neuroplasticity [20,27–29], and it promotes social interaction and inclusion and cultural socialization [30–32]. Drawing from the tradition of dance therapy for emotional issues, we decided to investigate flamenco in older women due to its focus on the expression and management of emotions [33,34]. This dance not only promotes health and well-being but also contributes to healthy aging [35]. Moreover, flamenco improves aerobic conditions, flexibility, balance and strength in menopausal women, standing out over other programs in adherence and cost-effectiveness for preventing age-related issues [36–39] and reinforcing other healthy habits [40].

However, there is a need for more research to specifically explore the effect of flamenco on the subjective well-being of older women. Although there is a large body of research showing the benefits of dance in general for preserving well-being and quality of life in old age [41–45], the potential of the flamenco dance has not yet been fully explored.

Therefore, the purpose of this study is to explore the potential of flamenco to improve the mood and subjective well-being of women over 60 who voluntarily enrolled in a free program, primarily motivated by personal interest and enjoyment and not for medical or therapeutic reasons. Based on the existing literature, we hypothesize that participation in the flamenco dance program will result in mood improvements and an increase in subjective well-being.

2. Results

2.1. Evaluation of Mood Measurement Consistency Using Measures Pretest

To determine the reliability of the Mood Rating Scale (MRS), we exclusively used pretest measures (as a multiple baseline approach), thereby avoiding the potential influence of the flamenco dance program on participants' mood. A two-factor mixed-effects model was applied, in which the first factor represents the subjects (the older women), and the second factor represents the multiple pretest measurements taken for each subject. This technique, the intraclass correlation coefficient (ICC), is widely accepted for assessing the consistency of repeated measurements on the same subject over time [46,47].

When considering the average measures in the pre-intervention period, the following high intraclass correlation coefficients (ICCs) were obtained: for sadness, an ICC of 0.788; for anxiety, an ICC of 0.769; for anger, an ICC of 0.789; and for joy, an ICC of 0.735. These values support the reliability and stability of mood measurements, providing a solid foundation for their use in future analyses and evaluations.

2.2. Effects on Mood States

To evaluate the effects of the flamenco dance workshop on mood throughout the sessions, a repeated measures analysis of variance was conducted with the within-subjects factors of Session (with six levels corresponding to the six sessions) and Measure (with two levels: Pre and Post). Table 1 displays the mean values and standard deviations (in parentheses) for each mood state across the six evaluated sessions.

Table 1. Means and standard deviations (in parentheses) of mood states per session.

Sessions	Sadness		Anxiety		Anger		Joy	
	Pre	Post	Pre	Post	Pre	Post	Pre	Post
1	15.79 (7.19)	4.35 (5.17)	17.53 (7.91)	5.03 (4.02)	9.05 (7.18)	2.67 (2.53)	15.32 (5.65)	33.88 (4.46)
2	15.26 (6.74)	4.91 (4.38)	17.29 (7.02)	5.44 (4.36)	12.14 (8.30)	3.58 (3.90)	15.85 (5.90)	30.67 (4.67)
3	15.70 (8.61)	4.20 (3.75)	18.44 (6.58)	4.94 (3.65)	12.64 (7.51)	3.26 (2.73)	15.88 (4.85)	31.23 (4.29)
4	16.88 (6.41)	3.65(2.42)	16.29 (6.66)	4.29 (2.78)	14.20 (6.63)	3.23 (2.42)	15.52 (4.61)	31.47 (2.68)
5	17.44 (6.20)	3.70 (2.43)	16.47 (5.72)	4.67 (1.19)	14.05 (5.81)	4.11 (2.48)	16.08 (4.04)	31.67 (4.36)
6	14.73 (5.76)	4.15 (4.15)	15.38 (4.37)	4.00 (2.86)	13.17 (6.26)	3.88 (3.28)	14.85 (4.43)	29.44 (3.13)

2.2.1. Sadness

The descriptive data revealed that the average level of sadness before the intervention ranged from 14.71 to 17.44, with standard deviations of 5.76 and 6.20, respectively. On the other hand, the average level of sadness after the intervention was in the range of 3.65 to 4.91, with respective standard deviations of 2.42 and 4.38 (see Table 1).

Mauchly's sphericity test revealed that the Session factor ($\chi^2 (14) = 23.366; p = 0.055$) met the assumption of sphericity, as the *p*-value exceeds the critical threshold of 0.05. Similarly, the interaction between the Session factor and the Measure factor also met the assumption of sphericity ($\chi^2 (14) = 18.505; p = 0.186$), as the *p*-value is greater than 0.05.

In the tests of the within-subjects effects, the following was observed:

- The Session factor did not have a statistically significant effect on sadness ($F (5, 165) = 0.378, p > 0.05, \eta^2 = 0.011$), suggesting that differences in sadness levels did not vary significantly between sessions.
- The Measure factor had a highly significant effect on sadness ($F (1, 33) = 277.738, p < 0.001, \eta^2 = 0.894$), indicating a significant decrease in sadness levels after the intervention.
- No significant interaction was found between the Session and Measure factors ($F (5, 165) = 2.094, p > 0.05, \eta^2 = 0.060$), suggesting that the effect of the intervention on sadness levels did not vary significantly across different sessions.

In summary, these results suggest that the intervention was effective in reducing sadness levels. Although no significant differences were found between sessions or in the interaction between Session and Measure, the main result shows a significant decrease in sadness levels after the intervention. Therefore, it can be concluded that the intervention was effective in reducing sadness in the context of this study.

2.2.2. Anxiety

The descriptive data revealed that the average level of anxiety before the intervention ranged from 15.38 to 18.44, with standard deviations of 4.37 and 6.58, respectively. After the intervention, the average level of anxiety ranged from 4.00 to 5.44, with respective standard deviations of 2.86 and 4.36 (see Table 1).

The results indicate a violation of the assumption of sphericity for both the Session factor ($\chi^2(14) = 29.206$; $p = 0.010$) and the interaction between Session and Pre-/Post-Measure ($\chi^2(14) = 30.028$; $p = 0.008$). As such, Greenhouse–Geisser corrections were applied in the analyses of the within-subjects effects to adjust the degrees of freedom.

In the corrected within-subjects effects tests, the Session factor did not have a significant effect on anxiety ($F(3.996) = 1.831$, $p = 0.127$, $\eta^2 = 0.053$). However, the Pre-/Post-Measure had a significant effect ($F(1) = 295.665$, $p < 0.001$, $\eta^2 = 0.900$), suggesting a significant impact of the intervention on participants' anxiety. Regarding the interaction between the Session factor and the Pre-/Post-Measure, no significant effect was found ($F(3.776) = 0.710$, $p = 0.579$, $\eta^2 = 0.021$).

It is important to note that the violation of the assumption of sphericity in the Session factor and its interaction with the Pre-/Post-Measure recommends that the differences in the variance of the differences are significant, so inferences made from the results of the analysis of variance (ANOVA) may not be accurate. Therefore, conclusions based on these results should be interpreted with caution.

2.2.3. Anger

The descriptive data revealed that the average level of anger before the intervention ranged from 9.05 to 14.20, with standard deviations of 7.18 and 6.63, respectively. After the intervention, the average level of anger ranged from 2.67 to 4.11, with a respective standard deviation of 2.53 and 2.48 (see Table 1).

Regarding Mauchly's sphericity test, the results indicate that the assumption of sphericity was met for both the Session factor ($\chi^2(14) = 14.308$; $p = 0.428$) and the interaction between Session and Pre-/Post-Measure ($\chi^2(14) = 12.586$; $p = 0.561$).

In the within-subjects effects tests, the Session factor had a significant effect on anger ($F(5) = 3.836$, $p = 0.003$, $\eta^2 = 0.104$). Furthermore, the Pre-/Post-Measure also had a significant effect ($F(1) = 203.348$, $p < 0.001$, $\eta^2 = 0.860$), suggesting a substantial impact of the intervention on participants' anger. Finally, a significant interaction effect was found between the Session factor and the Pre-/Post-Measure ($F(5) = 3.169$, $p = 0.009$, $\eta^2 = 0.088$), indicating that the effect of the intervention varied depending on the session.

In summary, the intervention appears to have had a significant effect on reducing anger levels, and this effect seems to have varied depending on the session.

2.2.4. Joy

The results indicate that the average level of joy before the intervention ranged from 14.85 to 16.08, with respective standard deviations of 4.43 and 4.04. On the other hand, the average level of joy after the intervention ranged from 29.44 to 33.88, with standard deviations of 3.13 and 4.46, respectively (see Table 1).

The results of Mauchly's sphericity test indicate that both the Session factor ($\chi^2(14) = 14.967$, $p = 0.382$) and the interaction between Session and the Measure factor ($\chi^2(14) = 19.389$, $p = 0.152$) met the assumption of sphericity.

The within-subjects effects tests revealed a significant effect of the Session factor on joy ($F(5, 165) = 2.295$, $p = 0.048$, $\eta^2 = 0.065$) and a significant effect of the Measure factor

($F(1, 33) = 539.423, p < 0.001, \eta^2 = 0.942$) but no significant effect of the interaction between the two factors ($F(5, 165) = 1.770, p = 0.122, \eta^2 = 0.051$).

In summary, the results indicate that both the Session factor and the Measure factor have a significant effect on the measurement of joy. The Measure factor appears to be more influential, and the interaction between the two factors does not show a significant effect on joy. These findings suggest the importance of considering these factors in the study of the experience of joy, which may have implications for interventions aimed at improving emotional well-being.

2.3. Subjective Well-Being

2.3.1. Reliability of the WHO-5 Subjective Well-Being Index and Correlations with Mood Scores

The pretest of the WHO-5 Subjective Well-Being Index showed a Cronbach's alpha coefficient of 0.76, indicating that its items were moderately correlated with each other and that the test had an acceptable level of internal consistency [48].

Average correlations were obtained between the pretest scores of the WHO-5 well-being index and the six pretest measures of each mood state measured by the MRS (that is, 204 pairings). The results revealed a non-significant negative correlation with sadness ($r = -0.1335; p > 0.05$), a non-significant positive correlation with anxiety ($r = 0.103; p > 0.05$) and with anger ($r = 0.052; p > 0.05$) and a significant average correlation, of a positive nature but weak, with joy ($r = 0.240; p < 0.02$). These results suggest that there is a statistically significant relationship between joy and overall well-being, although the strength of the relationship is relatively low.

The same procedure was followed with the post-test measures of subjective well-being and mood states, but in this case, none of the average correlations were statistically significant. The obtained values were sadness ($r = -0.065, p > 0.05$), anxiety ($r = 0.09, p > 0.05$), anger ($r = 0.086, p > 0.05$) and joy ($r = 0.139, p > 0.05$).

2.3.2. Effects on the Subjective Well-Being Index

A significant increase in average scores was observed after the flamenco dance program. Before the program, the average score was 52.35 (SD = 12.23), and it increased to 72.35 (SD = 10.85) afterward. Due to the lack of a normality assumption, the Wilcoxon signed-rank test was utilized, which found a test statistic of 483.5. The standardized test statistic was 4.622 ($p = 0.0001$). This indicates that there is a statistically significant difference in well-being scores before and after the flamenco dance program.

Analyzing the intervention's impact on subjective well-being, 76.5% of participants ($n = 26$) achieved a Clinically Significant Change (CSC), defined as an increase of 10 points or more [48,49]. Using a binomial test, the null hypothesis of equal probability for CSC (Yes) and (No) categories was rejected, with a test statistic of 26,000 and an asymptotic significance of $p = 0.004$. The estimated success rate for CSC (Yes) was 0.765 (CI 95%: 0.588–0.893). These findings are significant for our study.

Taking a score equal to or less than 50 as indicative of a risk of depression [50], it was found that, before the intervention, 58.8% of participants ($n = 20$) did not present indicators of depression, whereas 41.2% ($n = 14$) did. However, after the intervention, the results changed significantly: 91.2% ($n = 31$) of participants no longer showed indicators of depression, and only 8.8% ($n = 3$) did. This significant change was confirmed by the McNemar change test for related samples ($\chi^2 = 6.667, df = 1, p = 0.007$). These results indicate that the intervention was effective in reducing the indicators of depression among the participants.

2.4. Individual Differences

No significant association was found between age and mood state measures or subjective well-being, both before and after the flamenco dance program, nor was there any association with the Clinically Significant Change (CSC) measures and depression screening.

Regarding the education level with two tiers (basic education and medium/higher education), only a moderate positive correlation was found with the state of sadness, both before and after the second session, with respective Rho values of 0.492 ($p = 0.003$) and 0.363 ($p = 0.041$). Education level also does not seem to influence the CSC or the depression screening measured before exposure to the flamenco dance program.

Kruskal–Wallis tests were conducted to determine if there were differences between the categories of the marital status variable in the different mood state and subjective wellbeing measures. Initially, statistically significant differences were found in the anxiety mood state measured before the flamenco dance program, in the second ($H = 7.145$, $df = 2$, $p = 0.028$) and third session ($H = 6.738$, $df = 2$, $p = 0.034$). However, in both cases, after applying the Bonferroni correction, the differences between pairs of categories no longer reached the threshold of adjusted significance. This suggests that the differences found in these comparisons might have been due to chance. On the other hand, we also found no results indicating that this variable influenced the CSC measure and depression screening before exposure to the program.

2.5. Summary

Regarding the analysis of mood states, significant effects were observed for sadness, anxiety, anger and joy. The intervention had a significant impact on reducing sadness levels, with no significant variation across different sessions. For anxiety, the intervention significantly decreased anxiety levels, whereas session effects were not significant. The intervention also led to a significant decrease in anger levels, with variations observed across different sessions. Last, the intervention significantly increased joy levels, with session effects being significant as well.

Furthermore, the flamenco dance program had a significant positive effect on subjective well-being scores. Over 75% of participants experienced substantial increases in their well-being, surpassing 10% of the total score criterion. Indeed, there was a significant decrease in the proportion of participants at risk of depression, demonstrating a beneficial effect of the program on psychological well-being.

In addition, a post hoc power analysis for a repeated measures ANOVA was conducted using G*Power (version 3.1.9.6; Kiel University, Kiel, Germany), based on an estimated medium effect size ($f = 0.25$) and a total sample size of 34, with six repeated measurements. The correlation among repeated measures was estimated at 0.6. The results show that the alpha error probability was 0.015, leading to a power ($1 - \beta$ error probability) of 0.9835, suggesting that the study was adequately powered to detect a medium-sized effect.

3. Discussion

This study explored the potential of the flamenco dance as a health and well-being promotion tool to improve mood in women over 60 years of age. The data obtained confirmed that participation in a 12-week flamenco dance program led to notable improvements in mood and an increase in subjective well-being.

The significant improvement in the four moods (sadness, anxiety, anger and joy) measured by the MRS after the program is encouraging. These results align with previous research that has identified dance as an effective tool for improving both objective and subjective health indicators [28] and for promoting well-being and joy [31,32,45]. Dance has been shown to have a beneficial impact on health-related quality of life, including self-perception of mood and emotion [41,42,44], and it is an effective way to promote mental health in older individuals [43].

Flamenco, with its emphasis on rhythm, expression and connection, may offer additional mental health benefits beyond those associated with physical activity [18–22]. As an expressive form of dance, flamenco has the potential to foster emotional expression, social interaction and cultural connection, which might contribute to the observed improvements in mood [33–35].

We observed fluctuations in mood between sessions, which could indicate the presence of factors or individual differences that affect participants' responses beyond the flamenco dance program. In this regard, age, marital status and educational level are variables that might influence how participants perceive and respond to the program's demands. However, in this case, none of these variables had a significant effect on the results. Therefore, future research should investigate other potential variables or individual factors that might influence responses to the flamenco dance program. These could include cultural background, previous dance experiences and physical activity levels before the program, among others.

The increase in subjective well-being after the flamenco dance program aligns with previous research highlighting the positive impact of dance interventions on overall well-being in older adults [45]. This increase could be attributed to aspects of the program such as physical activity, social interaction and learning new skills [22].

It is essential to consider the limitations of this study. The results might not be generalizable due to the specific characteristics of the sample and the nature of the program. The small sample size might limit the accuracy and statistical power of the findings. Future research should confirm these findings in larger samples and explore potential mechanisms underlying the observed benefits of flamenco.

In conclusion, this study provides preliminary evidence supporting the use of the flamenco dance as a health and well-being promotion tool in older women. The practical implications are broad, and health professionals and policymakers might consider including culturally significant dance programs in public health strategies to promote mental health and well-being in older individuals.

4. Materials and Methods

A quasi-experimental single-group design was used as a pretest–posttest assessment of subjective well-being with pre–post repeated measures of emotional states (i.e., mood). The study included 34 women over 60 years of age who voluntarily enrolled in a 12-week flamenco workshop with two sessions per week, each lasting two hours, and who had not previously participated in this type of workshop (these being the inclusion criteria).

These workshops are free of charge, as they are subsidized by the City Council of Seville (Local Administration). The bases and contents of these workshops can be consulted at the following web address: <https://www.autoestimaflamenca.es/contenidos/> (accessed on 20 May 2023). In Table 2, we provide a detailed breakdown of each session of the flamenco dance workshop. In it, one can find information on the topics covered, the teaching methods employed, the learning goals and the resources required. The table provides an overview of how each session unfolded and the key skills and concepts being taught.

Table 2. Planning and execution of flamenco workshop sessions.

No.	Topic	Pedagogical Methods	Learning Goals	Resources
1	Introduction to flamenco, its history and the culture of Andalusia	Group discussion	Understand the history of flamenco and the culture of Andalusia	PowerPoint presentation, flamenco videos
2	Basic flamenco steps	Demonstration, guided practice	Learn the basic flamenco steps	Mirrors, flamenco music
3	Footwork (<i>Zapateado</i>) and group dynamics	“Blind Guide” game, guided practice	Learn the zapateado and promote collaboration and teamwork	Flamenco shoes, flamenco music
4	Arm and hand movements (<i>Braceo</i> and <i>Floreo</i>) in flamenco	Demonstration, guided practice	Improve coordination and expression through <i>braceo</i> and <i>floreo</i>	Mirrors, flamenco music

Table 2. Cont.

No.	Topic	Pedagogical Methods	Learning Goals	Resources
5	Flamenco rhythm and rhythm games	“Call and Response” game	Understand and practice the flamenco rhythm	Percussion instruments, flamenco music
6	Turns (<i>Vueltas</i>) and marking steps (<i>Marcajes</i>) in flamenco	Demonstration, guided practice	Learn how to perform <i>vueltas</i> and <i>marcajes</i>	Mirrors, flamenco music
7	Hand claps and finger snaps (<i>Pitos</i> and <i>Palmas</i>) and advanced rhythm game	“Call and Response” game, guided practice	Improve rhythm skills and learn <i>pitos</i> and <i>palmas</i>	Percussion instruments, flamenco music
8	Posture and balance in flamenco	Demonstration, guided practice	Learn the importance of posture and balance in flamenco	Mirrors, flamenco music
9	Interpretation of emotional expression through dance	Demonstration, guided practice, reflection	Learn to convey emotions through dance	Mirrors, flamenco music
10	Practice flamenco with live music and group reflection	Guided practice, feedback and reflection	Perform a dance with live music and reflect on the learning	Live musicians, space for group reflection
11	Preparation for the final presentation	Guided practice, feedback and reflection	Prepare for the final presentation	Mirrors, flamenco music
12	Final presentation and closure of the workshop	Presentation, feedback and reflection	Perform a flamenco dance and reflect on the workshop	Space for presentation, flamenco music

Importantly, although each session has its own specific focus and goals, they are all guided by a set of pedagogical methods that we have consistently employed in all workshops. These methods include group dynamics, games, demonstrations, guided practice, feedback, reflection and differentiated teaching. A detailed description of these methods can be found in Appendix A.

In addition, regardless of the session, participants learned and practiced several specific flamenco dance techniques. These included *zapateado*, *floreos*, *braceo*, *vueltas*, *marcajes*, *pitos* and *palmas*, as well as posture, balance and emotional expression. A more in-depth explanation of these techniques can be found in Appendix B.

Before the start of the workshop, we held a meeting with the group, explained the objective of the study and collected their informed consent to participate in it, always guaranteeing compliance with European and Spanish regulations on personal data protection [51,52] and the ethical principles established in the Belmont Report [53].

All participants agreed to voluntarily participate. Their main sociodemographic characteristics are set in Table 3. It is worth noting that no withdrawals or dropouts occurred throughout the study.

Table 3. Sociodemographic characteristics of women participants.

Variables	Statistics	Values
Age	Mean	70.12
	S.D.	5.13
	Min.	62
	Max.	79

Table 3. Cont.

Variables	Statistics	Values	
	Categories	Frequency	Percentage
Marital Status	Married	17	50
	Single	3	8.8
	Widow	13	38.2
	Divorced	1	2.9
Education	Elementary	28	82.4
	Secondary	4	11.8
	Higher	2	5.9
Work	No	32	94.1
	Yes	2	5.9

The measures of the dependent variables were taken as follows: Subjective well-being was measured before the start of the first workshop session and one month after it ended. On the other hand, mood was measured before and after even-numbered sessions. Therefore, six pretest measures and six posttest measures were obtained. For this, the instruments described below were used.

To assess mood, the MRS [47] was used, which is an instrument designed to measure transient mood in different situations. This scale consists of 16 items, each represented by an 11-point Likert-type graphic scale, ranging from “nothing” (0) to “a lot” (10).

The MRS was initially developed with university students but has also been applied and validated in other populations, both non-clinical (for example, adults from the general population) and clinical (for example, adult patients with major depressive disorder, adult patients with persecution delusions and patients with anxiety disorders).

The 16 items of the MRS are formulated with a similar structure, starting with the phrase “I feel” followed by an adjective representing a specific mood state (for example, “I feel sad” and “I feel cheerful”). These adjectives define four subscales that assess states of anxiety, anger-hostility, sadness-depression and joy. Each subscale is composed of four items, and all items within each subscale are formulated in the same direction.

In summary, the MRS is an instrument that allows for the evaluation of transient mood states in different contexts using an 11-point Likert-type graphic scale and four subscales that cover anxiety, anger-hostility, sadness-depression and joy states of mood. Its goal is to provide an accurate and concise measure of mood at a given time.

Regarding its reliability, the MRS has shown good reliability; specifically, in a multi-sample analysis, it found average internal consistency reliability coefficients of 0.88 for the sadness-depression subscale, 0.92 for the anxiety subscale, 0.93 for the anger-hostility subscale and 0.92 for the joy subscale. Additionally, it has shown a good factorial structure.

To measure subjective well-being, the WHO Well-Being Index [48,49] was used, which is widely employed to assess the effects of treatments [50] and is considered a fundamental dimension of the mental health construct, which WHO itself defines as “a state of well-being in which the individual realizes his or her own abilities, can cope with the normal stresses of life, can work productively and fruitfully, and is able to make a contribution to his or her community” [54] (p. XVIII).

This instrument consists of five items referring to how often the person being evaluated has felt good and satisfied.

5. Conclusions

Participation in a 12-week flamenco dance program produced marked improvements in mood in women over 60 years of age. Our results are consistent with those of previous research highlighting dance as an effective tool for improving mood and well-being. Different mood states, such as sadness, anxiety, anger and joy, showed varying degrees of improvement. Although our study focused on healthy older women, the benefits of such a program suggest potential applicability to older individuals with mental health problems,

including both women and men. Further studies with diverse participants, including those with mental health problems, are recommended.

Author Contributions: Conceptualization: J.M.L.-R. and C.R.-R.; methodology: J.M.L.-R.; intervention design: C.S.; formal analysis: J.M.L.-R.; investigation: C.R.-R.; resources: C.R.-R.; data curation: J.M.L.-R.; writing—original draft preparation: J.M.L.-R.; writing—review and editing: J.M.L.-P., F.J.C.-S., C.R.-R. and C.S.; validation: F.J.C.-S.; supervision: J.M.L.-R.; project administration: C.R.-R.; funding acquisition: C.S. and J.M.L.-P. All authors have read and agreed to the published version of the manuscript.

Funding: This research was funded by the Junta de Andalucía under Research Group Incentive SEJ-458 (2019/SEJ-458), and the enrollment fees for the participants in the Flamenco Dance Workshop were funded by the City Council of Seville (Ayuntamiento de Sevilla) through a grant to the Autoestima Flamenca Association: File: 10/2021, from the Urban Habitat and Social Cohesion Area, Directorate General of Social Action, Social Services Administration.

Institutional Review Board Statement: This study was conducted in accordance with the ethical principles of the Belmont Report [53] for the protection of human subjects in biomedical and behavioral research, and in compliance with European and Spanish regulations on the protection of personal data [51,52]. These are essential requirements for obtaining funding from the University of Seville and the City Council of Seville, and we refer to the corresponding grant files for further information [10/2021].

Informed Consent Statement: Informed consent was obtained from all subjects involved in this study.

Data Availability Statement: The anonymized research data are available to any researcher upon written request to the corresponding authors. The request should indicate the purpose for which the data will be used and must be accompanied by a sworn statement of compliance with European and Spanish regulations governing the protection of personal data. It should also adhere to the ethical principles derived from the Belmont Report for the protection and safety of human subjects in biomedical and behavioral research. Additionally, the requester must commit to citing the original source in any scientific output resulting from the use of these data.

Conflicts of Interest: The authors declare no conflict of interest. One of the authors (C.S.) is a member of the Autoestima Flamenca Association and participated in this study due to his dual role as a psychologist and designer of the flamenco workshop, as well as being a flamenco dancer. Although this affiliation and participation are acknowledged, they are not considered to have generated any conflicts of interest regarding the results or their interpretation. His role in the study was limited to establishing the workshop content and delivering it, without participating in data collection, analysis or interpretation. Furthermore, it is stated that the funders had no role in the design of the study, data collection, analysis, interpretation, manuscript writing or decision to publish the results.

Appendix A. Pedagogical Methods Used in Flamenco Dance Workshops

Group Dynamics: This refers to the interaction between the members of the workshop. A class might be divided into small groups with assignments of different tasks or choreographies. This can facilitate learning, as students can learn from each other and collaborate on creating a dance. Activities can also be conducted to build trust and encourage collaboration, such as trust games or group improvisation exercises.

An example of a trust game is called “Blind Guide”. Participants are divided into pairs, in which one acts as the guide and the other acts as the blind. The latter is blindfolded to ensure that they cannot see. A route is defined, as simple or as complex as is agreed, and the guide must direct the blind without touching them. The blind person must trust the guide’s instructions to move. Once the route is completed, the pairs switch roles and repeat the exercise.

This game is excellent for building trust among participants and teaching the importance of clear and effective communication. It can also be adapted in various ways, for example, by adding obstacles, changing communication rules (for example, not allowing words and only using sounds) or even integrating dance movements into the course.

Games: Games are an excellent way to make learning more fun and engaging. For example, rhythm games can be used to help participants understand the beat of different flamenco “palos”. Imitation games can also be performed, in which one student performs a dance step and the others should copy it.

An example of a rhythm game that is often used in a flamenco dance workshop is called “Call and Response”, and it is an effective way to teach and practice rhythm. Participants are randomly divided into two groups. One group creates a rhythm, which is the “call”, and the other group tries to repeat the same rhythm, which is the “response”. For the first group, a rhythm leader is chosen, who is the person in charge of creating a rhythm that is as simple or as complicated as they want, and they are reminded that the other group must repeat it. The first group is invited to play the rhythm, using clapping, finger snaps, foot tapping or any other sound they can make with their bodies, and they repeat it a few times so that the other group can clearly hear it. Then, this group is asked to repeat the rhythm as faithfully as possible. After they have responded, the roles are reversed, and so on.

This game can be adapted and modified in many ways to keep it interesting and challenging. For example, the types of sounds they use can be limited, the rhythms can be made progressively more complicated, and elements of movement or dance can be added.

Demonstrations: Showing participants how movements or steps are performed can be very helpful. This can involve instructor demonstrations, or videos of professional flamenco dancers can be used. Visual demonstrations can help participants understand what the movements should look and feel like.

Guided Practice: This method involves the instructor guiding participants through steps or movements, providing detailed instructions and corrections as they go. This can be particularly useful for teaching complex movements or difficult techniques.

Feedback and Reflection: It is important to give participants the opportunity to receive feedback on their dance and to reflect on what they have learned. This can involve group discussions or one-on-one feedback sessions.

Differentiated Teaching: This method involves adapting the teaching to the individual needs and abilities of each participant. For example, modifications for the movement of beginners or additional challenges for more advanced ones can be provided.

Appendix B. Specific Flamenco Dance Techniques Employed in the Workshops

1. *Zapateado:* This is a technique that dancers use to hit their shoes against the floor in a variety of ways. The zapateado can be gentle and subtle, or it can be strong and passionate, depending on the intent of the dance. It is important to practice zapateado regularly to gain precision and speed.
2. *Floreos:* These are delicate, fluid movements of the hands and fingers. *Floreos* are used to add expression and grace to the dance. Each dancer can have their own interpretation of how to perform the *floreos*, which contributes to their unique flamenco dance style.
3. *Braceo:* This technique refers to the arm movements in the flamenco dance. The *braceo* can vary from soft, undulating movements to stronger, more emphatic movements.
4. *Vueltas:* Turns, or spins, are a common technique in many forms of dance, including flamenco. In flamenco, turns are usually fast and precise, requiring good technique and balance control.
5. *Marcajes:* These are steps and movements that dancers use to keep time or mark the rhythm of the music. They can also be used to interpret the melody in a flamenco dance.
6. *Pitos and Palmas:* These are the sounds made with the hands to add percussion to the dance. They can be used to keep the rhythm, accompany the zapateado or add emphasis to certain moments of the dance.
7. **Posture and Balance:** Maintaining proper posture is vital in the flamenco dance. Dancers should keep their bodies upright, with their heads high and chests open. In addition, balance is crucial to correctly perform turns and some steps.

8. Emotional Expression: Flamenco is known for its emotional intensity. Dancers must learn to convey various emotions through their dance, such as passion, sadness, joy or desire.

References

1. Eurostat. Demography of Europe 2023. Interactive Edition [Internet]. Publications Office of the European Union: Luxembourg. Available online: <https://ec.europa.eu/eurostat/web/products-interactive-publications/w/ks-fw-23-001> (accessed on 13 May 2023).
2. Pérez Díaz, J.; Ramiro Fariñas, D.; Aceituno Nieto, P.; Muñoz Díaz, C.; Bueno López, C.; Ruiz Santacruz, J.S.; Fernández Morales, I.; Castillo Belmonte, A.B.; de las Obras-Loscertales Sampérez, J.; Villuendas Hijosa, B. *Un perfil de las Personas Mayores en España, 2022. Indicadores Estadísticos Básicos. [A profile of the elderly in Spain, 2022. Basic Statistical Indicators]*; Informes Envejecimiento en red, no. 29.; 2022. Available online: <http://envejecimiento.csic.es/documentos/documentos/enred-indicadoresbasicos2022.pdf> (accessed on 17 January 2023).
3. INE. *Encuesta Europea de Salud en España EESE-2020 [European Health Survey Spain EESE-2020]*; Secretaría General de Salud Digital, Información e Innovación del Sistema Nacional de Salud (SNS), Subdirección General de Información Sanitaria: Madrid, Spain. Available online: https://www.sanidad.gob.es/estadEstudios/estadisticas/EncuestaEuropea/Enc_Eur_Salud_en_Esp_2020.htm (accessed on 17 January 2023).
4. Subdirección General de Información Sanitaria. *Salud Mental en Datos: Prevalencia de los Problemas de Salud y Consumo de Psicofármacos y Fármacos Relacionados a Partir de Registros Clínicos de Atención Primaria [Mental Health in Data: Prevalence of health Problems and Consumption of Psychotropic and Related Drugs from Primary Care Clinical Registries]*; BDCAP Series 2; Ministerio de Sanidad: Madrid, Spain, 2021. Available online: https://www.sanidad.gob.es/estadEstudios/estadisticas/estadisticas/estMinisterio/SIAP/Salud_mental_datos.pdf (accessed on 17 January 2023).
5. ISGlobal. *Estudio La Salud Mental en España [Study Mental Health in Spain]*; Farmacéuticos—Consejo General de Colegios Farmacéuticos: Madrid, Spain, 2023. Available online: <https://www.isglobal.org/documents/10179/12351497/Estudio+La+Salud+Mental+en+Espa%C3%B1a/dd17d955-b852-4983-afd0-53d6515fc990> (accessed on 13 May 2023).
6. Aguilar Sugañes, L.; Audicana Alcalá, M. *La salud Mental: El Reto Invisible [Mental Health: The Invisible Challenge]*; IQVIA: Madrid, Spain, 2022. Available online: <https://www.iqvia.com/locations/spain/library/brochures/la-salud-menta-el-reto-invisible> (accessed on 17 January 2023).
7. Palma Ayllon, E.; Escarabajal-Arrieta, M.D. Efectos de la soledad en la salud de las personas mayores [Effects of loneliness on the health of the elderly]. *Gerokomos* **2021**, *32*, 22–25. [CrossRef]
8. OECD/European Union. *Health at a Glance: Europe 2022: State of Health in the EU Cycle*; OECD Publishing: Paris, France, 2022. [CrossRef]
9. Salvador-Carulla, L.; Almeda, N.; Álvarez-Gálvez, J.; García-Alonso, C. En la montaña rusa: Breve historia del modelo de atención de salud mental en España. Informe SESPAS 2020 [On the roller coaster: An abridged history of mental health planning in Spain. SESPAS Report 2020]. *Gac. Sanit.* **2020**, *34* (Suppl. S1), 3–10. [CrossRef] [PubMed]
10. Ruiz-Rodríguez, P.; Cano-Vindel, A.; Muñoz Navarro, R.; Medrano, L.; Moriana, J.A.; Buiza-Aguado, C.; Jiménez Cabré, G.; González-Blanch, C.; Grupo de Investigación PsicAP. Impacto económico y carga de los trastornos mentales comunes en España: Una revisión sistemática y crítica [Economic impact and burden of common mental disorders in Spain: A systematic and critical review]. *Ansiedad Y Estrés* **2017**, *23*, 118–123. [CrossRef]
11. OECD/European Union. *Health at a Glance: Europe 2018: State of Health in the EU Cycle*; OECD Publishing: Paris, France, 2018. [CrossRef]
12. Henares Montiel, J.; Ruiz-Pérez, I.; Sordo, L. Salud mental en España y diferencias por sexo y por comunidades autónomas. [Mental health in Spain and differences by gender and autonomous communities]. *Gac. Sanit.* **2020**, *34*, 114–119. [CrossRef] [PubMed]
13. OMS. *Informe Mundial Sobre Salud Mental: Transformar la Salud Mental Para Todos. Panorama General*; [World Mental Health Report: Transforming Mental Health for All. Executive Summary]; Organización Mundial de la Salud: Geneva, Switzerland, 2022. Available online: <https://apps.who.int/iris/handle/10665/356118> (accessed on 17 January 2023).
14. Llorente, M.D. (Ed.) *Culture, Heritage, and Diversity in Older Adult Mental Health Care*; American Psychiatric Association: Washington, DC, USA, 2018.
15. Martínez del Castillo, J.; Campos Izquierdo, A.; Jiménez-Beatty Navarro, J.E.; Martín Rodríguez, M.; Alfaro Gandarillas, E.; García Fernández, M.; González Rivera, M.D.; del Hierro Pinés, D. Barreras percibidas para la actividad física de las mujeres mayores en España [Perceived barriers to physical activity among older women in Spain]. *Act. Train.* **2008**, *VII*, 36–38.
16. Cavill, N.; Cowburn, G.; Foster, C. *The UNDERPIN Study. UNDERstanding the Experiences of Physically Inactive People in Mild-Life: Qualitative Research*; Centre for Ageing Better, University of Bristol: Bristol, UK, 2021. Available online: <https://ageing-better.org.uk/sites/default/files/2021-09/physical-inactivity-keep-on-moving-qual-research.pdf> (accessed on 20 May 2022).
17. Cavill, N.; Cowburn, G.; Jago, R.; Foster, C. A qualitative exploration of English black adults' views of strength and balance activities in mid-life. *BMC Public Health* **2022**, *22*, 2109. [CrossRef]

18. Eggenberger, P.; Schumacher, V.; Angst, M.; Theill, N.; de Bruin, E.D. Does multicomponent physical exercise with simultaneous cognitive training boost cognitive performance in older adults? A 6-month randomized controlled trial with a 1-year follow-up. *Clin. Interv. Aging*. **2015**, *10*, 1335–1349. [CrossRef] [PubMed]
19. Guo, W.; Zang, M.; Klich, S.; Kawczyński, A.; Smoter, M.; Wang, B. Effect of Combined Physical and Cognitive Interventions on Executive Functions in OLDER Adults: A Meta-Analysis of Outcomes. *Int. J. Environ. Res. Public Health* **2020**, *17*, 6166. [CrossRef]
20. Wu, C.; Yi, Q.; Zheng, X.; Cui, S.; Chen, B.; Lu, L.; Tang, C. Effects of Mind-Body Exercises on Cognitive Function in Older Adults: A Meta-Analysis. *J. Am. Geriatr. Soc.* **2018**, *67*, 749–758. [CrossRef]
21. Rikkonen, T.; Sund, R.; Koivumaa-Honkanen, H.; Sirola, J.; Honkanen, R.; Kröger, H. Effectiveness of exercise on fall prevention in community-dwelling older adults: A 2-year randomized controlled study of 914 women. *Age Ageing* **2023**, *52*, afad059. [CrossRef]
22. Cross, R.; Greaves, C.; Withall, J.; Kritz, M.; Stathi, A. A qualitative longitudinal study of motivation in the REtirement in ACTion (REACT) physical activity intervention for older adults with mobility limitations. *Int. J. Behav. Nutr. Phys. Act.* **2023**, *20*, 50. [CrossRef]
23. Bennett, C.G.; Hackney, M.E. Effects of line dancing on physical function and perceived limitation in older adults with self-reported mobility limitations. *Disabil. Rehabil.* **2017**, *40*, 1259–1265. [CrossRef] [PubMed]
24. Granacher, U.; Muehlbauer, T.; Bridenbaugh, S.A.; Wolf, M.; Roth, R.; Gschwind, Y.; Wolf, I.; Mata, R.; Kressig, R.W. Effects of a salsa dance training on balance and strength performance in older adults. *Gerontology* **2012**, *58*, 305–312. [CrossRef] [PubMed]
25. Joung, H.J.; Lee, Y. Effect of Creative Dance on Fitness, Functional Balance, and Mobility Control in the Elderly. *Gerontology* **2019**, *65*, 537–546. [CrossRef] [PubMed]
26. Liu, X.; Shen, P.L.; Tsai, Y.S. Dance intervention effects on physical function in healthy older adults: A systematic review and meta-analysis. *Aging Clin. Exp. Res.* **2021**, *33*, 253–263. [CrossRef] [PubMed]
27. Borhan, A.; Hewston, P.; Merom, D.; Kennedy, C.; Ioannidis, G.; Santesso, N.; Santaguida, P.; Thabane, L.; Papaioannou, A. Effects of dance on cognitive function among older adults: A protocol for systematic review and meta-analysis. *Syst. Rev.* **2018**, *7*, 24. [CrossRef]
28. Klimova, B.; Dostalova, R. The Impact of Physical Activities on Cognitive Performance among Healthy Older Individuals. *Brain Sci.* **2020**, *10*, 377. [CrossRef]
29. Nascimento, M.M. Dance, aging, and neuroplasticity: An integrative review. *Neurocase* **2021**, *27*, 372–381. [CrossRef]
30. Marchiano, M.; Martínez, I.C. Interacciones durante el baile social: El rol de los procesos de percepción-acción en la producción participativa de sentido [Interactions during social dancing: The role of perception-action processes in the participatory production of meaning]. *Epistemus. Rev. Estud. En Música Cognición Y Cult.* **2017**, *5*, 9–33. [CrossRef]
31. González, S.G.; Lagos, V. *Danza Integradora, una Cátedra Para la Inclusión Social, la Diversidad y la Integración Comunitaria en Artes del Movimiento del IUNA [Danza Integradora, a Chair for Social Inclusion, Diversity and Community Integration in Movement Arts at IUNA]*. XI Congreso Iberoamericano de Extensión Universitaria; UNL: Santa Fe, Argentina, 2011. Available online: <https://www.unl.edu.ar/iberoextension/dvd/archivos/ponencias/mesa3/danza-integradora-una-catedr.pdf> (accessed on 20 May 2022).
32. Alises Castillo, A.M. La danza como instrumento al servicio de la Psicología Positiva aplicada a la educación [Dance as an instrument at the service of Positive Psychology applied to education]. *Rev. Científica Electrónica Educ. Y Comun. En La Soc. Del Conoc.* **2018**, *18*, 335–350. [CrossRef]
33. Cruces Roldam, C. (Ed.) *El flamenco: Identidades Sociales, Ritual y Patrimonio Cultural [Flamenco: Social Identities, Ritual and Cultural Heritage]*; Centro Andaluz de Flamenco: Jerez de la Frontera, Spain, 1996.
34. Steingress, G. La hibridación transcultural como clave de la formación del Nuevo Flamenco (aspectos histórico-sociológicos, analíticos y comparativos) [Transcultural hybridization as a key to the formation of New Flamenco (historical-sociological, analytical and comparative aspects)]. *TRANS Rev. Transcult. Música* **2004**, *8*, 12.
35. López Aranque, B. Beneficios de la práctica del baile flamenco en la vejez. [Benefits of flamenco dance practice in old age]. *Rev. Del Cent. Investig. Flamenco Telethusa* **2010**, *3*, 32–35.
36. Aparicio, V.; Andrade, A.; Camiletti-Moirón, D.; Borges-Cosic, M.; Peces-Rama, A.; Segura-Jiménez, V.; Álvarez-Gallardo, P.; Estévez-López, F.; Soriano-Maldonado, A.; Martín, J.; et al. Effectiveness of an exercise intervention on body composition and physical fitness in midlife women: The FLAMENCO project. *Rev. Andal. Med. Del Deporte* **2015**, *8*, 22. [CrossRef]
37. Špacírová, Z.; Epstein, D.; García-Mochón, L.; Aparicio, V.A.; Borges-Cosic, M.; Puerto López del Amo, M.; Martín-Martín, J.J. Cost-effectiveness of a primary care-based exercise intervention in perimenopausal women. The FLAMENCO Project. *Gac. Sanit.* **2019**, *33*, 529–535. [CrossRef] [PubMed]
38. Acosta-Manzano, P.; Segura-Jiménez, V.; Coll-Risco, I.; Borges-Cosic, M.; Castro-Piñero, J.; Delgado-Fernández, M.; Aparicio, V.A. Association of sedentary time and physical fitness with ideal cardiovascular health in perimenopausal women: The FLAMENCO project. *Maturitas* **2019**, *120*, 53–60. [CrossRef]
39. Avilés-Martínez, M.A.; López-Román, F.J.; Galiana Gómez de Cádiz, M.J.; Arnau-Sánchez, J.; Martínez-Ros, M.T.; Fernández-López, M.L.; García-Sánchez, E.; Menarguez-Puche, J.F. Beneficios de un programa de ejercicio físico comunitario prescrito desde Atención Primaria en la salud de mujeres perimenopáusicas/menopáusicas [Benefits of a community physical exercise program prescribed from primary care for perimenopausal/menopausal women]. *Atención Primaria* **2022**, *54*, 102119. [CrossRef]
40. Flor-Aleman, M.; Marín-Jiménez, N.; Nestares, T.; Borges-Cosic, M.; Aranda, P.; Aparicio, V.A. Mediterranean diet, tobacco consumption and body composition during perimenopause. The FLAMENCO project. *Maturitas* **2020**, *137*, 30–36. [CrossRef]

41. Esmail, A.; Vranceanu, T.; Lussier, M.; Predovan, D.; Berryman, N.; Houle, J.; Karelis, A.; Grenier, S.; Minh Vu, T.T.; Villalpando, J.M.; et al. Effects of Dance/Movement Training vs. Aerobic Exercise Training on cognition, physical fitness and quality of life in older adults: A randomized controlled trial. *J. Bodyw. Mov. Ther.* **2019**, *24*, 212–220. [[CrossRef](#)]
42. Merom, D.; Mathieu, E.; Cerin, E.; Morton, R.L.; Simpson, J.M.; Rissel, C.; Anstey, K.J.; Sherrington, C.; Lord, S.R.; Cumming, R.G. Social Dancing and Incidence of Falls in Older Adults: A Cluster Randomised Controlled Trial. *PLoS Med.* **2016**, *13*, e1002112. [[CrossRef](#)]
43. Ou, K.L.; Wong, M.Y.C.; Chung, P.K.; Chui, K.Y.K. Effect of Square Dance Interventions on Physical and Mental Health among Chinese Older Adults: A Systematic Review. *Int. J. Environ. Res. Public Health* **2022**, *19*, 6181. [[CrossRef](#)]
44. Tommasini, E.; Cipriani, E.; Antonietti, A.; Galvani, C. Correlations Between Physical Activity Level, Quality of Life, and Cognitive Performance in Elderly Individuals Engaging in Multi-Year Dance Activities. *J. Dance Med. Sci.* **2022**, *26*, 34–40. [[CrossRef](#)] [[PubMed](#)]
45. Britten, L.; Pina, I.; Nykjaer, C.; Astill, S. Dance on: A mixed-method study into the feasibility and effectiveness of a dance programme to increase physical activity levels and wellbeing in adults and older adults. *BMC Geriatr.* **2023**, *23*, 48. [[CrossRef](#)]
46. Shrout, P.E.; Fleiss, J.L. Intraclass correlations: Uses in assessing rater reliability. *Psychol. Bull.* **1979**, *86*, 420–428. [[CrossRef](#)] [[PubMed](#)]
47. Sanz, J.; Gutiérrez, S.; García-Vera, M.P. Propiedades psicométricas de la Escala de Valoración del Estado de Ánimo (EVEA): Una revisión [Psychometric properties of the Mood Rating Scale (EVEA): A review]. *Ansiedad Y Estrés* **2014**, *20*, 27–49.
48. López Riera, A.; Castillo Hornero, A.; León Leyva, L.; Caballer Miedes, A. Escala Who-5: Validación en personas mayores de las propiedades psicométricas de la versión española [Who-5 Scale: Validation of the psychometric properties of the Spanish version in elderly people]. *Àgora Salut.* **2022**, *VIII*, 151–160. [[CrossRef](#)]
49. WHO-5 Questionnaires. Psykiatri-Regionh.Dk. Available online: <https://www.psykiatri-regionh.dk/who-5/who-5-questionnaires/Pages/default.aspx> (accessed on 3 June 2023).
50. Topp, C.W.; Østergaard, S.D.; Søndergaard, S. The WHO-5 Well-Being Index: A Systematic Review of the Literature. *Psychother. Psychosom.* **2015**, *84*, 167–176. [[CrossRef](#)]
51. Ley Orgánica 15/1999, de 13 de diciembre, de Protección de Datos de Carácter Personal. Madrid (España): «BOE» núm. 298, de 14/12/1999. 1999. Available online: <https://www.boe.es/eli/es/lo/1999/12/13/15/con> (accessed on 20 May 2022).
52. Real Decreto-ley 5/2018, de 27 de julio, de Medidas Urgentes Para la Adaptación del Derecho Español a la Normativa de la Unión Europea en Materia de Protección de Datos. Madrid (España): «BOE» núm. 183, de 30/07/2018. 2018. Available online: <https://www.boe.es/eli/es/rdl/2018/07/27/5/con> (accessed on 20 May 2022).
53. National Commission for the Protection of Human Subjects of Biomedical and Behavioral Research. *The Belmont Report: Ethical Principles and Guidelines for the Protection of Human Subjects of Research*; U.S. Department of Health and Human Services: Washington, DC, USA, 1979. Available online: <https://www.hhs.gov/ohrp/regulations-and-policy/belmont-report/index.html> (accessed on 17 January 2022).
54. WHO. *Promoting Mental Health: Concepts, Emerging Evidence, Practice: A Report of the World Health Organization*; World Health Organization: Geneva, Switzerland, 2005. Available online: <https://www.who.int/publications/i/item/9241562943> (accessed on 20 May 2022).

Disclaimer/Publisher’s Note: The statements, opinions and data contained in all publications are solely those of the individual author(s) and contributor(s) and not of MDPI and/or the editor(s). MDPI and/or the editor(s) disclaim responsibility for any injury to people or property resulting from any ideas, methods, instructions or products referred to in the content.