

The relationship between flexibility and the quality of elderly worship

Asyhara Naela Arifin*, Andry Ariyanto, Syarifahatun Najmi Al Kamilah, Rima Raudatul Khasanah

Physiotherapy Study Program, Faculty of Health Sciences, Universitas 'Aisyiyah Yogyakarta, Indonesia

*Email: Asyharafisio@unisayogya.ac.id

Abstract

Cording to Law No. 13 of 1998, elderly people are those who have reached the age of 60 and above. Throughout the world, the elderly population (aged 60 and above) is growing very rapidly, even faster than other age groups. The World Health Organization (WHO) shows that the percentage of elderly people will reach 9.77 percent of the total population in 2010 and 11.34 percent in 2020. Entering old age will experience physical decline, which will result in a decrease in muscle mass and flexibility. Thus, it can affect the ability of the elderly to carry out their activities. According to preliminary study results, 7 out of 100 elderly women members of the PRA Sumber Arum Moyudan Sleman stated that they had difficulty performing prayers and could not sit cross-legged for long during routine studies. Based on these results, the researchers wanted to determine the relationship between the flexibility of the elderly and the quality of their worship. The measuring instrument used to measure flexibility is the sit and reach test. The quality of worship is measured using a worship quality questionnaire. This research is a non-experimental study, and the research design used in this study is analytical observation. The approach used in this study is a cross-sectional approach. Sampling in this study uses non-probability sampling techniques with a purposive sampling model. The instrument used to collect data in this study is a closed questionnaire. The data analysis technique in this study uses analysis techniques. Purposive sampling model. The instrument used to collect data in this study was a closed questionnaire. The data analysis technique used in this study was qualitative-quantitative descriptive statistical analysis with percentages

Keywords: foot; flexibility; hamstring; position; trunk

1. Introduction

The elderly, also known as seniors, are a group of people who are biologically undergoing the aging process, characterized by declining stamina and susceptibility to health problems. Some of the health problems that often arise in the elderly include obesity, hypertension, diabetes, heart disease, high cholesterol, stroke, chronic obstructive pulmonary disease, dementia, insomnia, depression, arthritis, osteoporosis, and other health problems (Yusi, 2022). This has a negative impact on various aspects of life, including the quality of worship. Worship during old age can help them feel useful, have a sense of purpose in life, and feel close to God. Worship can also be a means of maintaining the mental and emotional health of the elderly.

The length of worship for the elderly can vary depending on their physical condition and health. The elderly may not be able to worship for as long as younger people. Therefore, they can adjust their worship time according to their abilities and comfort. For example, prayer times for the elderly can be adjusted to their physical abilities. They may not be able to stand for long periods of time or perform the movements of prayer perfectly, so they can perform prayers with more flexible timing. For other acts of worship such as zikr, prayer, or reading the holy book, the elderly can also do so according to their comfort and ability. They may not be able to sit or concentrate for long periods of time, so when performing acts of worship, they focus more on how to position themselves rather than enjoying the essence of worship (Ladyani et al. 2021).

Entering old age will experience physical decline, physical decline will result in a decrease in muscle mass and flexibility. Thus, it can affect the ability of the elderly to carry out their activities. Flexibility can be defined as the ability of a joint and muscle, as well as the surrounding ligaments, to move freely and comfortably within the maximum expected range of motion. Flexibility is influenced by many factors. These factors include muscles, tendons, ligaments, age, gender, body temperature, and joint structure. Poor flexibility can cause slower movements and susceptibility to muscle, ligament, and other tissue injuries. With age, a person's flexibility will decrease (Salahudin and Rusdin 2020).

According to the preliminary study results, 7 elderly women out of 100 members of the Sumber Arum Moyudan Sleman PRA stated that they had difficulty performing prayers and could not sit cross-legged

for long during routine studies. From these results, the researchers wanted to know the relationship between the flexibility of the elderly and the quality of their worship.

2. Methods

This research is a non-experimental study, using an analytical observation research design. The approach used in this study is a cross-sectional approach. Sampling in this study uses non-probability sampling techniques with a purposive sampling model. The instrument used to collect data in this study was a closed questionnaire. The data analysis technique used in this study was qualitative-quantitative descriptive statistical analysis with percentages.

3. Results

Between flexibility and the quality of worship among the elderly, which will produce data on the flexibility of the elderly along with the contributing factors and data on the quality of worship among the elderly.

3.1. Characteristics Based on Age

Table 1. Characteristics of Respondents Based on Age

Age	(n)	(%)
50-60	7	30.4
61-67	16	69.6
Total	23	100.0
Mean	61.2	
Upper limit	50	
Lower limit	67	

Table 1. shows that most respondents were aged 50-60 years old, with 7 subjects (30.4%), and the rest were aged 61-67 years old, with 16 subjects (69.6%).

3.2. Characteristics based on gender.

Table 2. Characteristics of Respondents Based on Gender.

Gender	(n)	(%)
Women	23	100.0
Total	23	100.0

Based on Table 2. with a total of 23 subjects, it shows that all research respondents were female.

3.3. Functional Movement *Measurement Results*

The flexibility measurement results using the Sit and Reach test before treatment are presented in Table 3 below:

Table 3. *Sit and Reach Test* Measurement Results

	N	(%)
15-16	16	69.6
17-18	7	30.4
Total	23	100.0
Mean	16.09	
Upper limit	18	
Lower limit	15	

The results of the flexibility measurement showed a score of 15-16 with a total of 16 respondents (69.6%) and a score of 17-18 with a total of 7 respondents (30.4%).

3.4. Spearman Rank (Rho) Test Results

Table 4. Spearman Rank (Rho) Test Results

		VAR00001	VAR00002
Spearman's rho	VAR00001	Correlation Coefficient	1,000
		Sig. (2-tailed)	-,275**
		N	,004
	VAR00002	Correlation Coefficient	110
		Sig. (2-tailed)	110
		N	-,275**
			,004
			1,000
			,004
			.
			110
			110

Based on Table 4, the results of the Spearman's rank correlation test show that $r_{xy} = -0.275$ with a P value of 0.004 ($P < 0.05$). This indicates that H_0 is rejected and the correlation coefficient (r) value is 0.227 with a low level of relationship intensity, where the (r) value is between 0.20 and 0.399 (low). These results can be concluded that there is a significant relationship between the flexibility of the elderly and the quality of worship, showing a positive correlation, namely that the higher the ergonomic risk factors, the greater the risk of musculoskeletal complaints experienced by workers.

4. Discussion

The results of the above study clearly show that there is a relationship between the flexibility of the elderly and the quality of worship and its contributing factors. Based on the sit and reach test measurements, the majority of respondents had flexibility scores in the range of 15-16 cm (69.6%), while the rest were in the range of 17-18 cm (30.4%). Based on Table 4.4, the results of the Spearman's rank correlation test showed $r_{xy} = -0.275$ with a P value of 0.004 ($P < 0.05$). This indicates that H_0 is rejected and the correlation coefficient (r) value is 0.227 with a low level of relationship intensity, where the (r) value is between the range of 0.20–0.399 (low). These results can be concluded that there is a significant relationship between the flexibility of the elderly and the quality of worship, showing a positive correlation, namely that the higher the ergonomic risk factors, the greater the risk of musculoskeletal complaints experienced by workers.

5. Conclusion

This study concludes that there is a relationship between flexibility and the quality of worship among the elderly.

- Age and gender greatly influence flexibility in relation to the quality of worship.
- The more flexible the elderly are, the easier it is for them to worship; if their flexibility decreases, it becomes an obstacle to worship.
- There is a significant relationship between the flexibility of the elderly's bodies and the quality of worship, with a r_{xy} value of -0.275 ($P < 0.05$) and a low level of relationship intensity.

References

- Kurniawan, Erizal. 2017. "OLAHRAGA DALAM PANDANGAN ISLAM."
- Ladyani, Festy, Arti Febriyani, Toni Prasetya, dan Ica Berliana. 2021. "Hubungan antara Olahraga dan Stres dengan Tingkat Hipertensi Pada Lansia." *Jurnal Ilmiah*
- Ligita, Titan, Nita Arisanti Yulanda, Riski Konyan, dan Dinda Pratiwi. 2023. "SCREENING, EDUKASI DAN SENAM DIABETES BAGI KELOMPOK PROLANIS." 6(4).
- Muhtar, Tatang. 2020. *Sosiologi Olahraga*. Bandung: CV Salam Insan Mulia.
- Pasaribu, Rati Anggraini. 2018. "Hukum senam bersama yang bukan mahram di lapangan biro UIN Sumatera Utara analisis berdasarkan mazhab syafi'i (Studi kasus di lapangan Biro
- Yüksek, S. (2017). The Effects of Performing Prayer on the Physical Fitness Levels of Men over 60 Years Old. *Journal of Education and Training Studies*, 5(11), 56-63.

- Reza, M. F., Urakami, Y., & Mano, Y. (2002). Evaluation of a new physical exercise taken from salat (prayer) as a short-duration and frequent physical activity in the rehabilitation of geriatric and disabled patients. *Annals of Saudi medicine*, 22(3-4), 177-180.
- Jumini, S., & Munawaroh, C. (2018). Analisis vektor dalam gerakan shalat terhadap kesehatan. *SPEKTRA: Jurnal Kajian Pendidikan Sains*, 4(2), 123-134.
- Rofiqoh, A. (2020). Shalat dan kesehatan jasmani. *Spiritualita*, 4(1), 65-76.
- Fajrussalam, H., Imaniar, A. F., Isnaeni, A., Septrida, C., & Utami, V. N. (2022). Pandangan sains terhadap shalat untuk kesehatan. *JPG: Jurnal Pendidikan Guru*, 3(3), 201-212.
- Rahmanto, S., Masrinda, M., Utami, K. P., Rahim, A. F., & Rosadi, R. (2020). Pengaruh Gerakan Sholat Terhadap Ketahanan (Endurance) Otot Extensor Punggung Bawah Pada Mahasiswa Fisioterapi Umm. *Physiotherapy Health Science*, 2(1), 7-12.
- Nayla, N. A., & Ramadhiani, N. (2023). Manfaat Gerakan Ruku'pada Shalat terhadap Kesehatan Tulang. *Religion: Jurnal Agama, Sosial, dan Budaya*, 2(6), 1185-1192.
- Zahra, N. A., & Amalia, R. (2023). Gerakan Dalam Sholat Untuk Memperbaiki Postur Tubuh. *Religion: Jurnal Agama, Sosial, dan Budaya*, 2(6), 1099-1104.
- Hendrawan, A. (2019). Gambaran Posisi Kaki Saat Sholat dan Fleksibilitas Otot Hamstring. *Jurnal Kesehatan Al-Irsyad*, 12(2), 42-46.
- Khairul, K., Hsb, J. S., & Pohan, I. Y. (2023). PELAKSANAAN SHOLAT SEBAGAI SARANA KESEHATAN. *NUSANTARA: Jurnal Ilmu Pengetahuan Sosial*, 10(6), 3256-3266.
- Hasanah, S. U. (2023). MANFAAT PELAKSANAAN SALAT BAGI KESEHATAN MANUSIA. *Aisyah Journal of Intellectual Research in Islamic Studies*, 1(2), 73-82.
- Prahesti, A., Faza, A. H., & Salsabila, Z. N. (2023). Pengaruh Ruku'Terhadap Kesehatan. *Islamic Education*, 1(4), 790-799.
- Trisnawati, F. (2025). Manfaat gerakan shalat bagi Kesehatan tubuh manusia: analisis manfaat shalat bagi kesehatan rohani dan jasmani. *Maliki Interdisciplinary Journal*, 3(2).
- Ulum, M. (2023). Mengungkap rahasia kedahsyatan gerakan shalat bagi kesehatan tubuh. *Excelencia: Journal of Islamic Education & Management*, 3(01), 77-89.
- Maharani, A., Rahmi, A., & Anjani, R. (2023). PENGARUH GERAKAN SHALAT LIMA WAKTU TERHADAP FLEKSIBILITAS SENDI PADA MASYARAKAT UMUM. *Religion: Jurnal Agama, Sosial, dan Budaya*, 2(6), 1226-1234.