



EXPLORING TANGIBLE FACTORS INFLUENCING THE CHOICE OF PHYSIOTHERAPY SERVICES

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ABSTRACT

Physical evidence (tangibles) encompasses various aspects such as physical facilities, equipment, and the appearance of personnel, all of which serve as indicators of healthcare service quality and influence patients' choices when selecting healthcare facilities. In the context of physiotherapy services, patient satisfaction often arises from their experiences and perceptions of these tangible elements. Specifically, physical evidence plays a critical role in shaping the quality of service, thereby affecting patient satisfaction levels. This relationship underscores the significance of tangible factors in assessing the overall quality of healthcare services and their impact on patient experiences. This study aims to investigate the relationship between the factors of physical evidence (tangibles) and the selection of physiotherapy services in Malang City. This research employs an analytical observational design with a cross-sectional approach. The study population consists of residents of Malang City, with a sample size of 105 respondents selected through purposive sampling techniques. The results of the Chi-Square test revealed a significant value of 0.026 ($p < 0.05$), indicating a relationship between the factors of physical evidence (tangibles) and the selection of physiotherapy services in Malang City. There exists a relationship between the factors of physical evidence (tangibles) and the selection of physiotherapy services in Malang City.

Keywords: chi-square test; facilities; malang city; physiotherapy services; satisfaction

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INTRODUCTION

An essential component of national development as a whole is the health development system, which aims to raise public awareness about the importance of leading a healthy lifestyle to ensure equitable and high-quality healthcare services for all citizens of Indonesia (Sulaiman & Anggriani, 2019). Healthcare facilities such as hospitals, community health centres, clinics, and private practices serve as venues for implementing health programs conducted by both government and private sectors within their operational areas, including promotive, preventive, curative, and rehabilitative programs (Meilinawati et al., 2023). According to the Minister of Health Regulation PERMENKES, (2015), the provision of healthcare services must be supported by facilities and infrastructure that meet patient needs and are regularly maintained to ensure patient safety. Physical evidence (tangibles) serves as one of the indicators of healthcare service quality that influences the selection of healthcare (Choiriah et al., 2021; Jeyar et al., 2024). Physical evidence encompasses various aspects such as physical facilities, the appearance of personnel, and the completeness and quality of materials used. Among the tangible elements that require attention for their completeness and comfort are physiotherapy services (Puklin et al., 2023).

Physiotherapy services are a component of healthcare facilities designed to assist patients in enhancing their physical capabilities and bodily functions through the application of appropriate physiotherapy methods or techniques (Ghavami et al., 2024; Napitupulu, 2021).

In physiotherapy practice, the availability of physical evidence (tangibles) often creates a gap between patient expectations and the quality of services provided, as patients tend to evaluate service quality based on the dimension of physical evidence (tangibles) (Maarif et al., 2023). The aspects of physical evidence, including the appearance and functionality of facilities, infrastructure, and equipment in relation to the services offered and environmental conditions, significantly contribute to long-term patient satisfaction (Ihsan et al., 2023). Moreover, patient satisfaction can influence trust in the physiotherapists providing care, subsequently impacting patients' decisions when selecting physiotherapy services (Mariana, 2019; Yahyaa & Al-Rawi, 2024). According to Siagian as cited in Al-Faraqi, (2015), service selection is a systematic approach to the choices faced and making decisions accurately. Service quality is closely related to patient loyalty, as positive patient experiences significantly influence their decisions to seek healthcare services. (Mariana, 2019). Research by Mahdzir et al., (2013) found that patient dissatisfaction was most pronounced in the "Tangibles" dimension, indicating the highest level of discontent. Patient dissatisfaction is a psychological component that can impact their decision-making regarding the selection of physiotherapy services (Effendi & Junita, 2020). Thus, the quality of tangibles that does not meet patient expectations will affect their decisions in choosing physiotherapy services (Ahmed et al., 2020). Based on findings from (Sesrianty et al., 2019), among the five dimensions of service quality, physical evidence (tangibles) emerged as the most significant factor influencing healthcare service quality, accounting for approximately 3.88%.

The study by Choiriah et al., (2021) demonstrated a correlation between service quality and patient interest in revisiting the facility. The quality of service, particularly influenced by tangible aspects such as primary and supporting equipment, is associated with the intent to revisit Choiriah et al., (2021). Adequate facilities availability contributes positively to patient satisfaction due to favourable perceptions formed by clean environments and well-maintained facilities, ultimately influencing patients' desires to continue receiving further services (Rizal et al., 2021). Based on a preliminary study conducted in Malang City, there are 10 hospitals, 7 clinics, and 8 private practices that provide physiotherapy services. Among the patients who received physiotherapy, 60% expressed dissatisfaction with the physical evidence (tangibles) available. This dissatisfaction is attributed to incomplete modalities and inadequate public facilities, which ultimately influence decision-making in the selection of physiotherapy services. Patient decisions regarding the selection of physiotherapy services can arise from their level of satisfaction. Physical evidence (tangibles) is one aspect of service quality that can significantly influence patient satisfaction. Therefore, it is hypothesised that physical evidence is related to patients' decisions in choosing physiotherapy services (Iswara, 2020). This study aims to investigate whether there is a relationship between physical evidence (tangibles) and the selection of physiotherapy services in Malang City.

METHOD

This study employs a quantitative method with an analytical observational design and a cross-sectional approach. The research population consists of the residents of Malang City, which, according to the Central Statistics Agency (2023), has a population of 847,182 individuals. The sample comprises 105 residents of Malang City who meet the established criteria. The sample size for this study was determined using Slovin's formula. The sampling technique employed in this study is purposive sampling, where the sample is aligned with the objectives and interests of the research, utilising inclusion and exclusion criteria (Campbell et al., 2020). The inclusion criteria consist of residents of Malang City, individuals who have previously received physiotherapy services, and adults aged 19 to 59 years. In contrast, the exclusion criteria include individuals with communication disorders and those unwilling to participate as respondents. To assess the physical evidence (tangibles) present in physiotherapy services, the research instrument utilised was the Service Quality (Servqual) questionnaire, focusing

specifically on the tangibles aspect, which consists of five questions. These statements encompass various dimensions, including physical facilities, medical equipment, and the appearance of personnel. The response scores will be summed, resulting in a final score ranging from a maximum of 20 to a minimum of 5, which will then be converted into a percentage format and categorised into three levels: physical evidence (tangibles) is considered excellent if the score is between 80-100%, good if it ranges from 60-79%, and poor if it falls below 60%. The validity test of the physical evidence (tangibles) questionnaire yielded a p-value of <0.01 , indicating that the questionnaire is valid. Additionally, the reliability test produced a Cronbach's Alpha value of 0.807 for the therapeutic communication questionnaire, confirming its reliability (Campbell et al., 2020).

To assess the selection of physiotherapy services, the research instrument utilised was a questionnaire specifically designed for evaluating the choice of physiotherapy services. This questionnaire is derived from the Ministerial Regulation of 2015 concerning Physiotherapy Services. It encompasses three forms of physiotherapy services available in Malang City: hospital-based physiotherapy services, clinic-based services, and private practice services. This study includes both univariate and bivariate analyses. The bivariate analysis employed is the chi-square test with an alpha level of 0.05. The Chi-square test is a type of non-parametric comparison test conducted between two variables; when one of the variables is measured on an ordinal scale, the Chi-square test is applied, with the understanding that it must be performed at the lowest measurement degree. The criteria for drawing conclusions from the Chi-square test between variable X (physical evidence (tangibles)) and variable Y (patient decision-making in selecting physiotherapy services) are as follows: if the p-value is greater than 0.05, then H_0 is accepted and H_1 is rejected, indicating no relationship between variable X (physical evidence (tangibles)) and variable Y (patient decision-making in selecting physiotherapy services). Conversely, if the p-value is less than or equal to 0.05, then H_0 is rejected and H_1 is accepted, indicating a relationship between variable X (physical evidence (tangibles)) and variable Y (patient decision-making in selecting physiotherapy services) (Negara & Prabowo, 2018).

RESULT

Table 1.
Respondent Characteristics Based on Gender

Gender	F	%
Female	57	54,3
Male	48	45,7

Table 2.
Respondent Characteristics Based on Job Type

Job Type	F	%
Entrepreneur	32	30,5
Self-employed	31	29,5
Civil servant	19	18,1
Not working	23	21,9

Table 3.
Respondent Characteristics Based on Address (Sub-district)

Address	f	%
Sukun	19	18,1
Lowokwaru	43	41
Blimbing	18	17,1
Klojen	13	12,4
Kedungkandang	12	11,4

Table 4.

Respondent Characteristics Based on Physical Evidence (Tangibles)		
Physical Evidence (Tangibles)	f	%
Very Good	91	86,7
Good	14	13

Table 5.

Respondent Characteristics Based on Type of Service Selection		
Type of Service Selection	f	%
Hospital	31	29,5
Clinic	31	29,5
Independent Practice	43	41

Table 6.

Distribution of Respondents Based on Cross Tabs Test Results					
Physical Evidence (Tangibles)	Selection of Physiotherapy Services			Total	P Value
	Hospital	Clinic	Practice		
Baik	8 (61,5%)	2 (15,4%)	3 (23,1%)	13 (100%)	0,026*
Sangat Baik	23 (25%)	29 (35,5%)	40 (43,5%)	92 (100%)	

DISCUSSION

Respondent Characteristics Based on Gender

According to data from the Central Statistics Agency of Malang City (2023), female respondents constitute the largest group in terms of gender characteristics. This aligns with the observation that women tend to perceive health needs more acutely than men, primarily due to their vulnerability to diseases and infections throughout various life stages, from adolescence to menopause. Additionally, the heightened level of concern experienced by women contributes to their greater perception of health needs (Islami et al., 2021).

Respondent Characteristics Based on Job Type

According to Table 2, the occupations of entrepreneurs and self-employed individuals represent the largest groups seeking physiotherapy services, with 32 (31.5%) identifying as entrepreneurs and 31 (29.5%) as self-employed. This prevalence can be attributed to the nature of these jobs, which often involve heavy physical activity and prolonged static positions, thereby increasing the risk of movement dysfunction. Such dysfunction can have negative biological, psychological, and social impacts (Meilani et al., 2023).

Respondent Characteristics Based on Address (Sub-district)

According to Table 3, the highest number of respondents comes from the Lowokwaru sub-district, totaling 43 respondents (41%). According to the Health Office (Dinkes, 2023), Lowokwaru has the highest number of cases of type 2 diabetes mellitus, with a total of 2,879 cases. The increased formation of Advanced Glycation End Products (AGEs) is one of the complications associated with type 2 diabetes mellitus. AGEs can damage joint capsules, tendons, ligaments, and nerves. This damage can lead to structural and functional impairments in the body, which are at risk of resulting in musculoskeletal disorders (Wardojo et al., 2023).

Respondent Characteristics Based on Physical Evidence (Tangibles)

According to Table 4, the majority of respondents rated the physical evidence (tangibles) present in physiotherapy services as excellent, with a total of 91 respondents (86.7%). Tangibles refer to tangible or physical evidence that can be perceived, encompassing physical facilities, equipment, and personnel (Bella et al., 2019). Factors influencing patient satisfaction include service quality aspects such as the availability of physical facilities,

completeness, and the appearance of staff, which can be observed through their neatness, discipline, and the overall environment (Erlina et al., 2021).

The Relationship between Physical Evidence Factors (Tangibles) and the Selection of Physiotherapy Services

Based on Tables 5 and 6, the results of the study indicate a significant correlation between the factor of physical evidence (tangibles) and the selection of physiotherapy services in Malang City. The findings reveal that the majority of tangible factors in Malang City fall within the "excellent" category, with a significant value of 0.026. This condition is influenced by several key aspects, including the use of modern equipment, well-maintained physical facilities and buildings, as well as staff who present a neat appearance. This indicates that high-quality physical evidence not only enhances the attractiveness of physiotherapy services but also serves as a crucial factor in patients' decisions to choose healthcare facilities. This aligns with the research by Sesrianty et al., (2019), which states that the quality of tangibles that meet patient expectations will influence their decisions in selecting physiotherapy services. The selection of physiotherapy services reflects individuals' tendencies in seeking healthcare or treatment, influenced by their responses to health conditions. Physiotherapy facilities equipped with adequate resources and meeting tangible aspects can ensure patient safety and ease of access (Silva et al., 2021). The availability of sufficient facilities not only supports service quality but also enhances patient trust in the physiotherapy services provided (Kementerian Kesehatan Republik Indonesia, 2015). Research findings indicate that a significant portion of respondents, specifically 41%, chose private practices as their preferred physiotherapy facility.

Private practices are healthcare facilities managed by professionals, such as physiotherapists, who can serve patients both directly and through referrals from doctors (Kuswardani et al., 2018). The facilities available in private practices are comprehensive and adequate, including modern equipment, clean bathrooms, well-maintained buildings, and staff who present themselves neatly and behave courteously (Kementerian Kesehatan Republik Indonesia, 2015). Compared to hospitals, private practices offer advantages in terms of comfort and facility completeness. In hospitals, bathrooms are often located far from treatment areas, physiotherapy equipment may not always be sufficient, and although staff may appear tidy, some do not exhibit a friendly demeanour towards patients. Physiotherapy services in hospitals can accommodate patients both directly and through referrals (Kementerian Kesehatan Republik Indonesia, 2015). In contrast, clinics, which function as primary or specialised healthcare facilities, have certain limitations. The equipment used in clinics is often inadequate, and the bathrooms are typically cramped. Although clinic staff appear neat, the limited capacity of services can affect patient comfort (Kementerian Kesehatan Republik Indonesia, 2014). Overall, private practices provide a better service experience compared to hospitals and clinics, particularly in terms of comprehensive facilities, a comfortable environment, and friendly staff. This is supported by Siagian's research as cited in Al-Faraqi, (2015), which states that service selection is a systematic approach to various available options, enabling accurate decision-making. Additionally, research by Mariana, (2019) emphasises that service quality is closely related to patient loyalty. High-quality services provide positive experiences for patients and influence their decisions in selecting healthcare facilities (Suria Marliane & Hendarta, 2023).

CONCLUSION

This study concludes that there is a significant relationship between physical evidence (tangibles) and the selection of physiotherapy services in Malang City. Healthcare services that provide adequate facilities and infrastructure will enhance patient satisfaction and preference for those services. This research can serve as valuable input for improving the

quality of resources and infrastructure available in physiotherapy healthcare services, thereby increasing the likelihood of patients choosing specific physiotherapy services and contributing to the overall enhancement of physiotherapy service quality.

REFERENCES

- Ahmed, M. A., Ahmed, U., Rizwan, N., Tauqeer, S., & Javed, H. (2020). Assessing the services quality: Expectations and perceptions of patients receiving physiotherapy services at teaching hospitals in Lahore, Pakistan. *Khyber Medical University Journal*, 12(2), 143–148. <https://doi.org/10.35845/kmu.j.2020.19445>
- Al-Faraqi, F. A. (2015). Pengaruh Kelompok Referensi dan Efikasi Diri Terhadap Pengambilan Keputusan Dalam Memilih Jurusan Kedokteran. *Psikoborneo*, 3(2), 112–121. <https://e-journals.unmul.ac.id/index.php/psikoneo/article/view/3765>
- Campbell, S., Greenwood, M., Prior, S., Shearer, T., Walkem, K., Young, S., Bywaters, D., & Walker, K. (2020). Purposive sampling: complex or simple? Research case examples. *Journal of Research in Nursing*, 25(8), 652–661. <https://doi.org/10.1177/1744987120927206>
- Choiriah, A. N., Iswanto, A. H., Istanti, N. D., & Arbitera, C. (2021). Hubungan Mutu Pelayanan terhadap Minat Kunjungan Ulang Pasien pada Poli Umum di Puskesmas Rawa Buntu Tahun 2021. *Kesehatan Masyarakat*, 12.
- Effendi, K., & Junita, S. (2020). Tingkat Kepuasan Pasien terhadap Pelayanan Kesehatan di UPTD Pukesmmas Mutiara Tahun 2019. *Excellent Midwifery Journal*, 3(2), 82–90. <https://jurnal.mitrahusada.ac.id/emj/article/view/127>
- Erlina, H. R., Fakhsiannor, & Herman, M. (2021). Kualitas Pelayanan Kesehatan pada Pusat Kesehatan Masyarakat (PUKESMAS) Cempaka Putih Kecamatan Banjarmasin Timur Kota Banjarmasin Tahun 2021. Doctoral Dissertation, Universitas Islam Kalimantan MAB, 1–12. <https://eprints.uniska-bjm.ac.id/8109/1/Artikel%20Hasyifa.pdf>
- Ghavami, V., Ghiyasi, K. A., Kokabi-Saghi, F., & Shabanikiya, H. (2024). Patients' Satisfaction With Physiotherapy Services of Red Cross Physical Rehabilitation Services and Related Factors: A Case Study of Afghanistan. *Journal of Patient Experience*, 11. <https://doi.org/10.1177/23743735241241182>
- Ihsan, Harefa, K., & Yosepha Ginting, D. (2023). Kepuasan Pasien pada Pelayanan Fisioterapi di RSUD Kota Kendari. <https://stikes-nhm.e-journal.id/NU/index>
- Islami, S. Q., Azizah, I. Z., & Arifah, I. (2021). Faktor Predisposing Yang Berhubungan Dengan Persepsi Kebutuhan Pada Pelayanan Kesehatan Peduli Remaja Di Smkn 7 Surakarta Predisposing Factors Of Need's Perception Of Adolescent-Friendly Health Services At Smkn 7 Surakarta. *Jurnal Kebijakan Kesehatan Indonesia : JKKI*, 10(04), 197–202. <https://doi.org/https://doi.org/10.22146/jkki.67702>
- Iswara, A. (2020). Hubungan Kualitas Mutu Pelayanan Asuhan Keperawatan dengan Proses Pengambilan Keputusan Pasien untuk Memilih Pelayanan Rawat Inap Rumah Sakit. <https://doi.org/https://doi.org/10.31219/osf.io/q6hsy>
- Jeyar, M., Moudden, A. El, & Taouab, O. (2024). Healthcare service quality management: Evidence from Morocco. *International Journal of Applied Economics, Finance and Accounting*, 19(1), 196–215. <https://doi.org/10.33094/ijaefa.v19i1.1632>

- Kementerian Kesehatan Republik Indonesia. (2014). Peraturan Menteri Kesehatan Republik Indonesia Nomor 9 Tahun 2014 tentang Klinik.
- Kementerian Kesehatan Republik Indonesia. (2015). Peraturan Menteri Kesehatan Republik Indonesia.
- Kuswardani, Purwoko, A. J., & Wibowo, D. B. (2018). Pelaksanaan Perlindungan Hukum terhadap Pasien sebagai Konsumen Jasa dan Fisioterapis dalam Pelayanan Fisioterapi Mandiri di Kota Malang. *Jurnal Fisioterapi Dan Rehabilitasi (JFR)*, 2(2), 79–103.
- Maarif, I., Haeruddin, & Sumiaty. (2023). Hubungan Kualitas Layanan dengan Kepuasan Pasien. *Journal of Muslim Community Health (JMCH)* 2023, 4(2), 79–88. <https://doi.org/10.52103/jmch.v4i2.1206>
- Mahdzir, M. N., Ismail, A., Faridah, N., & Roslan, A. (2013). Assessing the service quality of physiotherapy services: a cross sectional study at teaching hospitals in. In Malaysia Article in *Malaysian Journal of Public Health Medicine*. <https://www.researchgate.net/publication/372134686>
- Mariana, D. (2019). Hubungan Kualitas Pelayanan Keperawatan Rawat Inap dengan Proses Pengambilan Keputusan Pasien untuk Memilih Rumah Sakit. *Jurnal Ilmiah Multi Science Kesehatan*, 10(2), 145–162.
- Meilani, S., Yohanan, A., & Dwi Cahyani, S. (2023). Analisis Faktor Risiko Kejadian Musculoskeletal Disorders (MSDS) pada Pengrajin Keramik di Tlogomas Kecamatan Lowokwaru Kota Malang. *Jurnal Kesehatan Tambusai*, 4(3), 2731–2742. <https://journal.universitaspahlawan.ac.id/index.php/jkt/article/view/17603/13850>
- Meilinawati, R., Fatmawati, S., Meilinawati dan, R., Ilmu Kesehatan Universitas, F., & Surakarta, A. (2023). Hubungan Kualitas Pelayanan dengan Kepuasan Pasien di Puskesmas Cawas II. *Jurnal Psikologi*, 19(2), 1–8.
- Napitupulu, R. M. (2021). Hubungan Antara Aktivitas Fisik dan Manajemen Stress Pada Mahasiswa Fisioterapi. *Jurnal Fisioterapi Dan Rehabilitasi*, 5(1), 76–95. <http://repository.uki.ac.id/3140/1/Hubunganantaraaktifitasfisikdanmanajemenstres.pdf>
- Negara, I. C., & Prabowo, A. (2018). Penggunaan Uji Chi-Square Untuk Mengetahui Pengaruh Tingkat Pendidikan dan Umur Terhadap Pengetahuan Penasun Mengenai Hiv-Aids Di Provinsi Dki Jakarta. Prosiding Seminar Nasional Matematika Dan Terapannya, 1–8. <https://matematika.fmipa.unsoed.ac.id/wp-content/uploads/3.-igo-dkk.pdf>
- Puklin, L. S., Harrigan, M., Cartmel, B., Sanft, T., Gottlieb, L., Zhou, B., Ferrucci, L. M., Li, F. Y., Spiegelman, D., Sharifi, M., & Irwin, M. L. (2023). Randomized Trial Evaluating a Self-Guided Lifestyle Intervention Delivered via Evidence-Based Materials versus a Waitlist Group on Changes in Body Weight, Diet Quality, Physical Activity, and Quality of Life among Breast Cancer Survivors. *Cancers*, 15(19). <https://doi.org/10.3390/cancers15194719>
- Rizal, F., Ani Marwati, T., & Solikhah. (2021). Dimensi Kualitas Pelayanan dan Dampaknya Terhadap Tingkat Kepuasan Pasien: Studi di Unit Fisioterapi. In *Kesehatan Masyarakat Khatulistiwa* (Vol. 8, Issue 2). <http://openjurnal.unmuhpnk.ac.id/index.php/JKMK?page=index>
- Sesrianty, V., Machmud, R., & Yeni, F. (2019). Analisa Kepuasan Pasien Terhadap Mutu Pelayanan Keperawatan. *Perintis's Health Journal*, 6(2), 116–126.

- Silva, G., Yam, A., Court, J., Imtiaz, R., & Chisholm, C. (2021). Constructing high-quality rest facilities to maximise performance and ensure patient safety. *BMJ Open Quality*, 10(3). <https://doi.org/10.1136/bmjopen-2021-001403>
- Sulaiman, S., & Anggriani, A. (2019). Hubungan Mutu Pelayanan Terhadap Kepuasan Pasien di Poli Fisioterapi RSUD Siti Hajar. *Jurnal Endurance*, 4(2), 252. <https://doi.org/10.22216/jen.v4i2.3965>
- Suria Marliane, A., & Hendarta, A. (2023). The Influence of Doctor Service and Facilities on Healthcare Service Quality. *International Journal of Research and Innovation In Social Science (IJRISS)*, 7(7), 1971–1978. <https://doi.org/10.47772/IJRISS>
- Wardojo, S. S. I., Ritonga, S. F., & Yuliadarwati, N. M. (2023). Analisa faktor yang mempengaruhi gangguan fungsi muskuloskeletal pada lansia dengan diabetes melitus tipe 2 di kota malang. *Jurnal Ilmu Kesehatan Bhakti Husada: Health Sciences Journal*, 14(02), 370–375. <https://doi.org/10.34305/jikbh.v14i02.783>
- Yahyaa, B., & Al-Rawi, R. (2024). Patient satisfaction about the primary health care services in Anbar province, Iraq. *Journal of Ideas in Health*, 7(1), 1020–1025. <https://doi.org/10.47108/jidhealth.vol7.iss1.331>