

The effect of wudu therapy on sleep quality as a determinant of happiness and work productivity among college lecturers

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Abstract

This study aims to examine the effect of wudu therapy on happiness, sleep quality, and work productivity in college lecturers. This type of research uses mixed methods with Embedded Design. Respondents of the study were active lecturers at four universities in South Sumatra, as determined by the Multistage Sampling Technique, which obtained $N = 58$ and was divided into 29 experimental groups and 29 control groups. The measurement of the study used the Sleep Quality Scale ($\alpha = 0.81$), the Muslim Spiritual Happiness Scale ($\alpha = 0.80-0.90$), and the Lecturer Work Productivity Scale ($\alpha = 0.882$). Data analysis techniques used path analysis techniques, Independent T-test analysis, and descriptive analysis with the help of IBM SPSS version 25. The main findings of this study found that wudu therapy affected happiness and work productivity indirectly through sleep quality as a mediator. Recommendations from this study provide new insights for the implementation of wudu therapy in Higher Education to improve the quality of Lecturers and further research development.

Keywords: Happiness, Sleep Quality, University Lecturers, Work Productivity, Wudu Therapy

Abstrak

Penelitian ini bertujuan untuk menguji pengaruh terapi wudu terhadap kebahagiaan, kualitas tidur, dan produktivitas kerja pada dosen perguruan tinggi. Jenis penelitian ini menggunakan mixed methods with Embedded Design. Responden adalah dosen aktif di empat universitas di Sumatera Selatan yang ditentukan dengan Multistage Sampling Technique didapatkan $N=58$ yang dibagi menjadi 29 Kelompok Eksperimen dan 29 Kelompok Kontrol. Pengukuran penelitian menggunakan Skala Kualitas Tidur ($\alpha = 0.81$), Skala Kebahagiaan Spiritual Muslim ($\alpha = 0,80-0,90$), dan Skala Produktivitas Kerja Dosen ($\alpha = 0.882$). Teknik analisis data menggunakan teknik analisis jalur, analisis Independent T-Test, analisis deskriptif dengan bantuan IBM SPSS versi 25. Temuan utama penelitian ini menemukan bahwa terapi wudu berpengaruh terhadap kebahagiaan dan produktivitas kerja secara tidak langsung melalui kualitas tidur sebagai mediator. Rekomendasi dari penelitian ini memberikan wawasan baru bagi penerapan terapi wudu di Perguruan Tinggi untuk meningkatkan kualitas Dosen dan pengembangan penelitian selanjutnya.

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Introduction

Higher education is one of the main places in organizing educational learning at the Bachelor (S1), Master (S2) and Doctoral (S3) levels. In carrying out the learning process there are elements of Lecturers, Education Personnel and Students ([OECD / Asian Development Bank, 2015](#)) In this article, it focuses more on the phenomenon sleep quality of the Lecturer element at Higher Education in South Sumatra. Poor sleep quality has become a global problem that affects mental and physical health, and work productivity, including among lecturers. Data shows that worldwide, about 1 in 3 adults do not get enough sleep, with a duration of less than 7-9 hours per night, as recommended by the American Academy of Sleep Medicine (AASM). This imbalance can increase the risk of chronic diseases such as diabetes, hypertension, and cardiovascular disorders, as well as reduce work productivity ([Almarzouki et al., 2022](#); [Heart & Institute, 2023](#))

Based on data on the poor quality of sleep in adults and the various risks of disease that can be experienced as a result of poor quality sleep, then in this study, the researcher focuses on examining Lecturers as the subject of the main research. The researcher views the theme of lecturer productivity in carrying out the tri dharma of higher education (education, research, and community service) as very important because lecturers play a key role in improving the quality of higher education. In the context of the tri dharma, lecturers are required not only to provide teaching, but also to contribute to the development of science through research and community service ([Kasinyo Harto, 2018](#); [Susanti et al., 2018](#)). With the many responsibilities and demands that lecturers have to work on, this can have an impact on the quality of lecturers' sleep, where the quality of sleep will certainly have an impact on the balance of hormones such as serotonin and dopamine which are closely related to feelings of happiness.

In addition, happiness in a person, including lecturers, is also an important aspect in the journey of human life. Research on the happiness of lecturers in carrying out the Tri Dharma of higher education, which includes education, research, and community service, requires lecturers to have a balance between professional responsibility and personal satisfaction ([Sugiarti, 2022](#); [Yudiani & Istiningtyas, 2022](#)).

In addition, sleep quality is one of the important aspects in maintaining a person's physical and mental health. Quality sleep can affect various aspects of life, including happiness and work productivity. In an academic context, college lecturers often face high workloads, stress, and busy schedules. These conditions can affect their sleep quality and, ultimately, their performance at work. Studies show that poor sleep quality can reduce productivity and affect a person's psychological well-being ([Peng et al., 2023](#)). Therefore, strategies to improve sleep quality become very relevant. Specifically in the context of teaching staff, high workloads, irregular schedules, and pressure to meet academic targets often lead to sleep deprivation or sleep disorders. A global study shows that sleep deprivation can reduce cognitive capacity, decision-making ability, and work efficiency by up to 20% ([Heart & Institute, 2023](#)).

In Indonesia, local data reflects a similar trend, with most lecturers facing similar challenges related to long working hours and stress from research or teaching (Andriany & Pertiwi, 2021; Tamaela, 2011). Data shows that studies on lecturers in Indonesia found that poor sleep quality has a direct impact on their level of fatigue and daily work effectiveness (Prakoso et al., 2018; Ramma, 1999; Rochmah & Nurmina, 2022).

Several interventions on sleep quality, happiness and work productivity have been conducted by several experts. Such as interventions on sleep quality conducted with Cognitive Behavioral Therapy / CBT (Ramsawh et al., 2015; D. Xu et al., 2024), Guided Imagery technique (Abidin et al., 2023; Kermani et al., 2020; Yeci et al., 2021), use of Eyemask and Earplug (Bahcecioglu Turan et al., 2024; Karimi et al., 2021). Interventions on happiness with Gratitude Training (Diniz et al., 2023; Komase et al., 2021), Mindfulness-Based Self-Training (Allen et al., 2021; Sulosaari et al., 2022; Zheng et al., 2022), Quality of Work Life Program (Berkland et al., 2017; Gurdogan & Uslusoy, n.d.; Nabila et al., 2021; Raúl & Velásquez, 2024). Furthermore, interventions on work productivity with Sleep Quality Improvement (Olson et al., 2014; Redeker et al., 2019), Workload and Fatigue Management (Caldwell et al., 2019; Cohen et al., 2023; P. F. Lestari et al., 2024), Employee Assistance Program (EAP) (Melandari & S, 2025; Safitri & Amelasasih, 2024; Zieringer & Zapf, 2024).

If we look at some interventions that are carried out to improve sleep quality, happiness and work productivity. We criticize the interventions that are carried out which are only based on one dominant aspect. For example, only on the physical aspect, without considering the essence of other aspects that humans have, namely the psychological, social, spiritual and even religious aspects. Therefore, one practice that is known to help with relaxation and improve sleep quality is wudu therapy. Wudu, as a ritual practice in Islam, involves physical cleansing with water that serves to cleanse the body and mind before performing the prayer service. In addition to being a religious ritual, several studies have found that wudu has physiological benefits, including providing a calming effect on the nervous system, helping to relax muscles, and reducing stress levels (Reza, 2020a; Reza et al., 2024).

As interest in spiritual and religious-based health approaches continues to grow, Wudu therapy emerges as a potential solution for improving sleep quality, particularly among college lecturers who frequently experience stress due to heavy workloads. According to research conducted by Lestari and Minan (2018) regarding the effectiveness of Wudu therapy before going to sleep on the quality of adolescent sleep, it is stated that indeed Wudu therapy before going to sleep is effective in improving the quality of sleep in adolescents. . Furthermore, good sleep quality also has the potential to increase happiness, which is an important factor in creating a productive and positive work environment (Peng et al., 2023; Pilcher & Morris, 2020; Sandybayev, 2019). This study aims to analyze the effect of Wudu therapy on sleep quality and how this impacts the happiness and work productivity of lecturers. This study aims to analyze the effect of Wudu therapy on sleep quality and how this impacts the happiness and work productivity of lecturers.



Therefore, it is important to explore approaches that can help improve lecturers' well-being, including through Wudu therapy that has the potential to improve sleep quality and happiness. In this context, research on the effect of Wudu therapy on sleep quality and work productivity can provide important contributions to the development of strategies to improve lecturers' well-being, especially in Indonesia. This is proven by the results of research from [Rinawati \(2012\)](#) regarding the effect of Wudu before bedtime on the incidence of insomnia in Tilaman, Wukirsari, Imogiri, Bantul, Yogyakarta, the study found a significant impact of performing Wudu before sleep on insomnia (sleep disorders). The results indicated that seven respondents did not experience insomnia, while three still did. A t-test analysis revealed a p-value of 0.000, indicating a statistically significant relationship between Wudu therapy before bedtime and the incidence of insomnia. Given the growing evidence that happiness and sleep quality are closely related to work productivity, this study is expected to provide new insights in supporting a healthier and more productive work environment among academics.

Based on the 2022 credit score assessment (PAK) achievement data, more than half of the applications for senior lecturer and professor functional positions need to be improved. There were 4,456 applications for senior lecturers, but only 2,098 were approved. Meanwhile, there were 2,851 applications for professors, of which 1,207 were approved. Applications at state universities (PTN) are much higher than applications from private universities (PTS) ([Napitupulu, 2023](#)).

Lecturer productivity needs serious attention. Based on the release of the Science and Technology Index (SINTA), as of February 2022, the aggregate number of lecturer publications on Google Scholar in the last three years has decreased. In 2019, the number of publications was 401,716 articles, in 2020 there were 400,792 articles, and in 2021 there were 326,901 articles. The same thing happened to Scopus-indexed publications. In 2019 there were 46,138 articles and in 2021 it dropped to 38,635 articles. Likewise, the results of lecturers' work that are used by the public and receive international recognition, in 2020 the average achievement was 6.41 percent. When compared to the number of lecturers of 29,0573 people ([PDIKTI Kemendikbud, February 2022](#)), this means that each lecturer has 1.12 articles published per year and 0.13 articles published in Scopus per year. Based on the quantitative data above, it is not wrong if many spotlights are directed at lecturer productivity. This spotlight complements a number of other spotlights on higher education, such as cases of plagiarism, corruption, sexual harassment and violence, predatory journals, and position transactions that are actually far from the world of PT. ([Asyari, 2022](#)).

The origins of productivity are related to manufacturing and agricultural industries. ([Tangen, 2005](#)). Usually defined as the ratio of output and resources. ([Craig & R.C. Harris, 1973](#)). This definition of productivity is very close to the concept of efficiency, but is different from the definition of productivity where the quality of results is also important in productivity. ([Drucker, 1991](#); [Parasuraman, 2002](#)). Another concept that is closely related to productivity is performance ([Koopmans et al., 2011](#)). According to

[Tangen \(2005\)](#), There are distinctions between these concepts, as performance can be considered a general term encompassing all frameworks used to assess organizational success. For example, Kaplan and Norton's Balanced Scorecard performance (1996) Encompassing the dimensions of internal processes and customer relations, as well as financial aspects, learning, and organizational growth. In this study, productivity is defined as the comparison between output and input, with output quality also being a crucial factor. Productivity drivers refer to key elements in the process where input is utilized to generate output ([Davenport et al., 1996](#)).

Work productivity shares similarities with general productivity but presents unique challenges within the context of knowledge-based work ([Davenport et al., 2002](#)). Unlike manufacturing, where inputs and outputs are tangible and measurable, knowledge-based work often involves intangible resources and outcomes, making the direct application of traditional productivity measures challenging ([Antikainen & Lönnqvist, 2005](#); [Bosch-Sijtsema et al., 2009](#); [Ramírez & Nembhard, 2004](#)). To address this issue, researchers have proposed various approaches, such as breaking down productivity into smaller components ([Koopmans et al., 2011](#); [Laihonen et al., 2012](#); [Ramírez & Nembhard, 2004](#)).

Even based on the results of the researcher's initial search related to the work productivity of Lecturers at one of the Universities in South Sumatra. That work productivity is especially in the field of Tri Dharma of Higher Education consisting of Education, Research and Community Service. That the results that need to be considered are aspects of research in the form of publications, both books, proceedings and scientific journals which tend to be unproductive when viewed from the Google Scholar account and the existing Sinta account.

Several factors affecting work productivity include leadership style, job satisfaction, stress, and promotion. Absenteeism negatively impacts productivity, as [Kondalkar \(2007\)](#) noted, emphasizing its detrimental effects on employee contribution and organizational growth. Similarly, [Singh et al \(2016\)](#) found absenteeism harms businesses by reducing productivity, lowering profits, and threatening overall organizational performance.

In this study, researchers provide solutions to what can be applied to improve the happiness and work productivity of lecturers in South Sumatra. Duration and quality of sleep, as well as physical activity are related to high levels of work ability ([Camerino et al., 2008](#); [Kettunen O, 2015](#); [Lian et al., 2015](#)). In addition, research shows that lack of sleep causes a decrease in cognitive capacity ([Bartrim et al., 2020](#); [Rosekind et al., 2010](#)) important in work, this study estimates how productivity is affected by changes in sleep, activity, maximal oxygen uptake, and work ability index.

In addition, research conducted by [Ezzati et al.\(2020\)](#)This shows that sleep quality in coronary patients is related to their happiness. Therefore, sleep quality in these patients can be a greater consideration for public health service providers. Further research conducted by [Oswald et al\(2015\)](#)that work productivity is influenced by a person's happiness.



Work productivity is a key factor in the workplace that directly contributes to achieving organizational goals. Theoretically, the concept of work productivity was introduced by [Gomez-Mejia et al \(2012\)](#), productivity is viewed as a measure of the value an employee adds to a good or service. Poor sleep quality is a global issue affecting mental and physical health, including work productivity among lecturers. Most studies on Wudu therapy and sleep quality focus on the general public or patients with specific health conditions, overlooking lecturers as research subjects. Additionally, research often examines the links between sleep quality, happiness, and work productivity separately, with few integrating these variables into a single model. A potential solution is implementing Wudu training as a health therapy, raising awareness of its benefits, and promoting a healthier lifestyle.

The psychological dynamics of Wudu therapy in realizing sleep quality, happiness and work productivity as explained below. Wudu therapy, which is a cleansing practice in Islamic tradition, has a positive impact on sleep quality ([Reza, 2020a](#)). Psychologically, Wudu therapy can provide a calming effect and reduce stress levels which are often the main cause of sleep disorders ([Herliana, 2023](#)). Wudu before bed is believed to provide a relaxing effect by reducing muscle tension, slowing the heart rate, and activating the parasympathetic nervous system, which plays a role in the body's relaxation process. ([Setyowati et al., 2022](#)). In addition, ablution also has a spiritual dimension that strengthens inner peace, increases feelings of gratitude, and reduces anxiety, all of which contribute to improved sleep quality ([Amir et al., 2021](#)). When Lecturers have good quality sleep, the implications are for Happiness and Work Productivity. Improving sleep quality contributes directly to happiness ([Bakhtiyary et al., 2024](#); [Kudrnáčová & Kudrnáč, 2023a](#); [Scott et al., 2021](#)) and work productivity ([Peng et al., 2023](#); [Pilcher & Morris, 2020](#); [Y. Xu, 2024](#)).

For college lecturers who often face high academic pressure, the implementation of ablution therapy as a simple and non-pharmacological intervention has the potential to improve their sleep quality. With better sleep quality, lecturers can have more stable emotions, better focus in teaching and conducting research, and a more optimal life balance. This will ultimately increase their happiness and work productivity. Thus, the psychological dynamics of ablution therapy not only improve sleep quality but also have a positive impact on the emotional and professional well-being of college lecturers. Integrating this spiritual practice into daily routines can be a holistic approach to improving well-being and work performance in an academic environment.

Based on the phenomena and theories put forward. So in this study, researchers are interested in conducting a study entitled The Effect of Wudu Therapy on Sleep Quality as a Determinant of Happiness with Work Productivity in College Lecturers in South Sumatra. This study formulates 12 research hypotheses: (H1) Wudu therapy indirectly influences happiness through sleep quality as a mediator; (H2) Wudu therapy indirectly influences work productivity through sleep quality; (H3) Wudu therapy directly influences happiness; (H4) Wudu therapy directly influences work productivity; (H5) Sleep quality differs

between the Experimental (Lecturers) and Control Groups before and after Wudu therapy; (H6) Happiness differs between the groups pre- and post-Wudu therapy; (H7) Work productivity differs between the groups pre- and post-Wudu therapy; (H8) Sleep quality directly influences happiness; (H9) Sleep quality directly influences work productivity; (H10) Wudu therapy directly influences sleep quality; (H11) Wudu therapy directly influences work productivity without mediation; (H12) Wudu therapy positively correlates with sleep quality.

Method

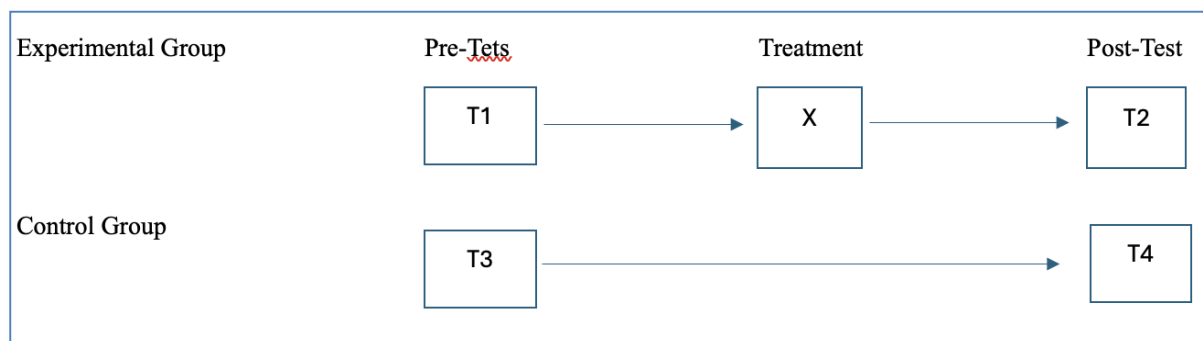
Types of research

This research employs a mixed-methods approach with an Embedded Design (Creswell & Poth, 2021). In this design, one quantitative or qualitative method is dominant, while the other method serves as a complement. Typically, quantitative data is the main focus, while qualitative data is used to support or explain the findings (Creswell & Jhon, 2016). This approach allows for a deeper and more comprehensive understanding of the phenomena studied.

In this study, the quantitative approach aims to measure and analyze data numerically. The data produced can be in the form of numbers or variables that can be measured. This approach generally uses statistical techniques to describe and analyze data, so that accurate and reliable information can be obtained. Meanwhile, the qualitative approach in this study is used to explore and explain the results of quantitative analysis. The qualitative approach focuses more on an in-depth understanding of the phenomena being studied, and can provide a broader and more detailed perspective on the research results.

Figure 1

Two-group pre-test- post-test control group design research design



Caption:

T1: Measurement of Sleep Quality in PT Lecturers

X: provision of Wudu therapy treatment

T2: Measurement of sleep quality in PT lecturers after administering Wudu therapy treatment

T3: Measurement of sleep quality in PT lecturers in the control group

T4: Measurement of sleep quality in PT lecturers in the non-treatment group



In mixed method research with Embedded Design, both approaches complement each other. The quantitative approach is used as the main approach to collect data and analyze it statistically, while the qualitative approach is used as a support to explore it in a more detailed and comprehensive way. The main type of quantitative research approach used is an experimental research approach (J. Creswell & Clark, 2011). Meanwhile, the supporting approach to qualitative research used is a narrative research approach. (Suter, 2012). For the main type of research approach, experiments use two groups, namely the experimental group and the control group. For the main research approach, namely the experimental method, two groups are used: the experimental group and the control group, employing a factorial design that considers the possibility of moderator variables influencing the effect of the treatment (independent variable) on the results (dependent variable).

Population and Sample

The respondents in this study were active lecturers from four universities in Palembang City: Raden Fatah State Islamic University, Sriwijaya University, PGRI University, and Muhammadiyah University. Respondents were selected based on the following criteria: active lecturers who are Muslim, consisting of men and women, carrying out Tri Dharma Perguruan Tinggi activities, and willing to be research respondents.

This study employed a multistage sampling technique (Sedgwick, 2015). The process of determining participants in this experimental study followed two main stages. The first stage was the initial selection of participants who experienced problems, in this case low sleep quality, happiness, and work productivity. The second stage, from participants who experienced these problems, only those who were willing to participate in the intervention were recruited as research participants.

In accordance with Creswell's (J. W. Creswell, 2012) recommendation regarding experimental research, the minimum number of participants recommended is 15 people per group. In this study, 58 respondents were willing to fill out the research scale in the pre-test stage. After conducting an initial analysis of the total scores obtained, participants were divided into two groups using randomization techniques, which is the main principle in the experiment. Respondents with low scores on sleep quality, happiness, and work productivity were selected as candidates for the experimental group. Meanwhile, to ensure equality between groups at the beginning of the intervention, a randomization process was applied in the division of groups. Thus, the division of participants into the experimental and control groups was not only based on low scores, but also considered. The principle of randomization was applied to maintain the validity of the study. As a result, 29 respondents were assigned to the experimental group and 29 to the control group. By implementing randomization in group allocation, this study ensures that variability in participant characteristics is controlled, enhancing the reliability of the experiment in measuring the effectiveness of the intervention.

Measurement of Variables

Data collection was conducted through psychological scales for quantitative data and interviews for qualitative data. Non-cognitive tests measure aspects such as interests, attitudes, self-concept, values, personality, and beliefs, which can be influenced by positive or negative responses to ambiguous items (Clark-Carter, 2004). The research scale was distributed via Google Forms. Meanwhile, qualitative data were obtained through interviews, which were then reduced to find the main meaning or "essence" of the informant's experience (McCaslin & Scott, 2003).

Sleep Quality Scale

Sleep quality in this study was measured using the Sleep Quality Scale by Yi et al. (2006). The Sleep Quality Scale measures six sleep quality factors with a total of 28 items, including Daytime Dysfunction, Recovery After Sleep, Difficulty Falling Asleep, Difficulty Waking Up, Satisfaction with Sleep, and Difficulty Maintaining Sleep. Responses are recorded using a four-point Likert scale: 'little' (0), 'sometimes' (1), 'often' (2), and 'almost always' (3). The scores for items in factors 2 and 5 are reversed before calculating the total score. The Sleep Quality Scale used in this study is a valid and reliable instrument for comprehensive sleep quality assessment, with a Cronbach's alpha coefficient of 0.92 for internal consistency and a test-retest reliability correlation coefficient of 0.81 (Yi et al., 2006). Examples of scale items include: Difficulty thinking due to lack of sleep; Difficulty getting back to sleep after waking up at night; Wishing for more sleep after waking up.

Muslim Spiritual Happiness Scale

Happiness in this study was measured using the Muslim Spiritual Happiness Scale developed by Sukmawati et al (2022). The seven sub-scales and thirty-one items are valid for measuring Muslim spiritual happiness. These sub-scales include: (1) a grateful heart (qalbun syakirun), (2) a good partner (al-azwaju shalihah), (3) filial children (al-auladun abrar), (4) a conducive environment (al-bi'atu shalihah), (5) wealth or sustenance obtained lawfully (al-malul halal), (6) enthusiasm or sincerity in studying religion (tafaqquh fiddin), and (7) a blessed life (barakatun fi al-'umr), with a total of 38 scale items. The internal consistency value ranges from 0.8 to 0.9. Examples of scale items include: gratitude for God's blessings, having a spouse who respects their partner, and children who obey their parents' advice.

Lecturer Work Productivity Scale

The work productivity of lecturers in this study was measured using a research scale developed based on the study by Wahyuni et al (2021). "The scale was developed based on the Tri Dharma of Higher Education for lecturers, which includes Education and Teaching, Research and Development, and Community Service, along with supporting activities. Initially, the scale consisted of 14 items, but after further development by researchers, it expanded to 20 items. The reliability test of this scale yielded a coefficient of 0.882.



Examples of scale items include: 'I can easily deliver online lecture materials,' 'I can produce research publications,' and 'I can carry out community service activities with work units.'

Intervention Procedure

Wudu therapy, as an implementation of Islamic psychotherapy through a worship-based approach, serves as an intervention targeting sleep quality as a moderating variable that influences happiness and work productivity among research respondents. Furthermore, the intervention used in this study, Wudu Therapy for Sleep Quality, is adapted from previous research (Reza, 2020b). The implementation of the intervention follows the practice of Wudu as a form of worship before prayer, based on the interpretation of QS. Al-Ma'idah [5]: 6 from an Islamic perspective. The Wudu therapy intervention carried out by the research respondents includes: (1) before going to bed at night, (2) in the morning before starting daily activities, and (3) after performing certain actions that are considered to invalidate Wudu. This Wudu therapy is performed routinely according to the prescribed interventions, with a total of three times per day. The intervention was conducted over one week during the study.

Respondents who were given wudu therapy treatment were respondents who had the criteria of tending to have low sleep quality, happiness, and work productivity selected as respondents in the experimental group $N = 29$ from $N \text{ Total} = 58$ respondents based on the pretest results. Before the experimental group research respondents were given treatment in the form of wudu therapy. To ensure that Wudu therapy was carried out correctly, respondents were given an understanding in the form of education about the application of wudu therapy by two experts in the field of Islamic Psychology with stamps: 1) Application of wudu according to the Qur'an; 2) Benefits of wudu for health holistically; 3) The process of implementing wudu therapy. After that, respondents carried out the wudu therapy treatment for 1 week. After carrying out the wudu treatment for one week, a posttest was carried out.

Analysis Data

The data analysis in this study consists of two stages. The first stage employs the path analysis technique (Streiner, 2005), T-Test analysis, descriptive analysis (Rustamov, 2021) to analyze data from the research scale. In analyzing quantitative data, this study uses the assistance of the IBM SPSS version 25 statistical program. Then the second stage uses coding techniques consisting of open coding stages, as a process of breaking down data, reviewing one by one, comparing, and conceptualizing data (JW Creswell, 2012).

A good analysis provides a rich and accurate description of the phenomenon under study (Suter, 2012). Interview data, documents, photographs and videos were converted into text through transcription, then interpreted and categorised in the coding process. Coding helps researchers find answers from a large amount of data (Auerbach &

Silverstein, 2003) and shows the relationship between data and analysis (Prihapsari & Indah, 2021)& Indah, 2021).

Results

Study Experimental Design

This study employs a two-group pre-test-post-test control group design, but the analysis focuses only on the experimental group. The effect of Wudu therapy (X) is assessed through scores obtained from the pretest (T₁) and posttest (T₂). The study aims to determine the impact of the intervention on the experimental group (Gravetter & Wallnau, 2013). The advantage of this research design is that it provides a comparative measure between the treatment group and the control group. Figure 1 illustrates the concept of the two-group pre-test-post-test control group design.

To test the research hypothesis, statistical analysis was conducted using bivariate analysis to assess changes in sleep quality among college lecturers. Pre-test and post-test data from both the experimental and control groups were analyzed using the independent sample t-test. The difference test was used to compare two or more data samples. In this study, the Independent Sample T-Test was applied as a hypothesis test to determine whether there was a significant difference in the average scores between the paired or interconnected control and experimental groups.

According to Gravetter et al (2013), The purpose of the Independent Sample T-Test is to compare the mean of two unrelated groups. The statistical test results will yield a significance value. If the Sig. (2-Tailed) value is > 0.05, then H₀ is accepted and H₁ is rejected, indicating no significant difference in Sleep Quality, Happiness, and Productivity between the Control Group and the Experimental Group. Conversely, if the Sig. value is < 0.05, then H₀ is rejected and H₁ is accepted, indicating a significant difference in Sleep Quality, Happiness, and Productivity between the two groups.

Table 1

Group Statistik

	Kelompok	N	Mean	Std. Deviation	Std. Error Mean
Sleep Quality	Group-Control	29	60.47	6.368	1.644
	Group-Experiment	29	62.07	9.269	2.477
Happiness	Group-Control	29	44.40	4.626	1.194
	Group-Experiment	29	48.50	7.205	0.856
Work Productivity	Group-Control	29	42.33	6.966	1.799
	Group-Experiment	29	46.29	10.730	2.868

Based on Table 1, the mean sleep quality scores in the control and experimental groups show a difference. The control group has a mean value of 60.47, while the experimental group has a mean value of 62.07. This indicates that respondents in the experimental group, who received Wudu therapy, experienced a 62% improvement in sleep quality, whereas those in the control group, without Wudu therapy, showed a 60% improvement. Thus, the average sleep quality improvement in the experimental group



was 2% higher than in the control group. Each group consisted of 29 respondents. The standard deviation in the control group was 6.368, while in the experimental group, it was 9.269. Descriptively, since the average sleep quality score in the control group (60.47) is lower than in the experimental group (62.07), there is a difference in sleep quality between the two groups. To determine whether this difference is statistically significant, refer to Table 2: Independent Samples Test.

Furthermore, for the happiness variable in Table 1, the control group has an average happiness score of 44.40, while the experimental group has an average score of 48.50. This indicates that respondents in the experimental group, who received Wudu therapy treatment, experienced a 48% increase in happiness, whereas respondents in the control group without the treatment showed a 44% increase. The standard deviation in the control group is 4.626, while in the experimental group, it is 7.205. Descriptively, since the average happiness score in the control group (44.40) is lower than in the experimental group (48.50), there is a difference in happiness between the two groups.

For the work productivity variable, Table 1 shows an average score of 42.33 in the control group, compared to 46.29 in the experimental group. This means that respondents in the experimental group experienced a 46% increase in work productivity, while those in the control group showed a 42% increase. The standard deviation in the control group is 6.966, while in the experimental group, it is 10.730. Based on the mean and standard deviation values, there is a descriptive difference in work productivity between the control and experimental groups.

To determine whether these differences in happiness and work productivity are statistically significant, refer to Table 2: Independent Samples Test.

Table 2
Independent Samples Test

		Levene's Test for Equality of Variances		t-test for Equality of Means						
		F	Sig.	t	df	Sig.(2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
									Lower	Upper
Sleep Quality	Equal variances assumed	0.278	0.602	-0.547	27	0.039	-1.605	2.935	-7.628	4.418
	Equal variances not assumed			-0.540	2.858	0.039	-1.605	2.973	-7.758	4.548
Happiness	Equal variances assumed	2.649	0.115	-2.755	27	0.010	-4.100	1.488	-7.154	-1.046
	Equal variances not assumed			-2.790	4.984	0.010	-4.100	1.470	-7.127	-1.073
Work Productivity	Equal variances assumed		0.738	-2.419	27	0.034	-3.960	3.895	-2.798	6.858
	Equal variances not assumed				8.898	0.034	-3.960	3.778	-2.972	6.877

Note: Sig.(2-tailed) $p < 0.05$

Based on the output of the Independent Samples Test in Table 2, the Sig. value from Levene's Test for Equality of Variances for the sleep quality variable is 0.602 > 0.05. This

indicates that the variance between the control and experimental groups is homogeneous or equal (Gravetter et al., 2021). Therefore, the interpretation of the Independent Samples Test results follows the 'Equal variances assumed' row. In the 'Equal variances assumed' section, the Sig. (2-tailed) value is $0.039 < 0.05$. According to the hypothesis testing criteria in the Independent Sample T-Test, this result leads to the rejection of H_0 and the acceptance of H_1 , meaning that there is a significant difference in the average sleep quality between the control and experimental groups. Thus, hypothesis H_5 , which states, 'There is a difference in sleep quality between the Experimental Group (Lecturers) and the Control Group before and after the implementation of Wudu therapy,' is supported. Furthermore, the mean difference between the control and experimental groups is calculated as $(60.47 - 62.07) = -1.605$. This value represents the difference in average sleep quality between the two groups.

Next, in the happiness variable column, the Sig. value from Levene's Test for Equality of Variances is $0.115 > 0.05$, indicating that the variance between the control and experimental groups is homogeneous or equal (Gravetter & Wallnau, 2013). Therefore, the interpretation of the Independent Samples Test output in Table 2 follows the 'Equal variances assumed' row. In this section, the Sig. (2-tailed) value is $0.010 < 0.05$. Based on the hypothesis testing criteria for the Independent Sample T-Test, this result indicates that H_0 is rejected and H_1 is accepted. This means there is a significant difference in the average happiness levels between the control and experimental groups. Thus, hypothesis H_6 , which states, 'There is a difference in happiness between the Experimental Group (Lecturers) and the Control Group before and after the implementation of Wudu therapy,' is supported.

Furthermore, the mean difference in happiness between the control and experimental groups is calculated as $(44.40 - 48.50) = -4.100$. This value represents the difference in average happiness scores between the two groups. In Table 2, the third column also presents the t-test value for work productivity. The Sig. value from Levene's Test for Equality of Variances is $0.738 > 0.05$, indicating homogeneous variance between the control and experimental groups. The Sig. (2-tailed) value is $0.034 < 0.05$, leading to the acceptance of H_7 , which states, 'There is a difference in Work Productivity between the Experimental Group (Lecturers) and the Control Group before and after the implementation of Wudu therapy.' This result is statistically significant. Additionally, the mean difference in work productivity between the control and experimental groups is calculated as $(42.33 - 46.29) = -3.960$. This value represents the difference in average work productivity scores between the two groups.

These findings are supported by several previous studies, including research on the relationship between sleep quality and work stress, which indicates that sleep disorders are often associated with decreased work performance and quality of life. Other studies also highlight that lower sleep quality is linked to reduced cognitive performance and productivity, as well as an increased risk of burnout (Darydzaky & Desiana, 2023). Furthermore, the relationship between sleep duration and happiness has been



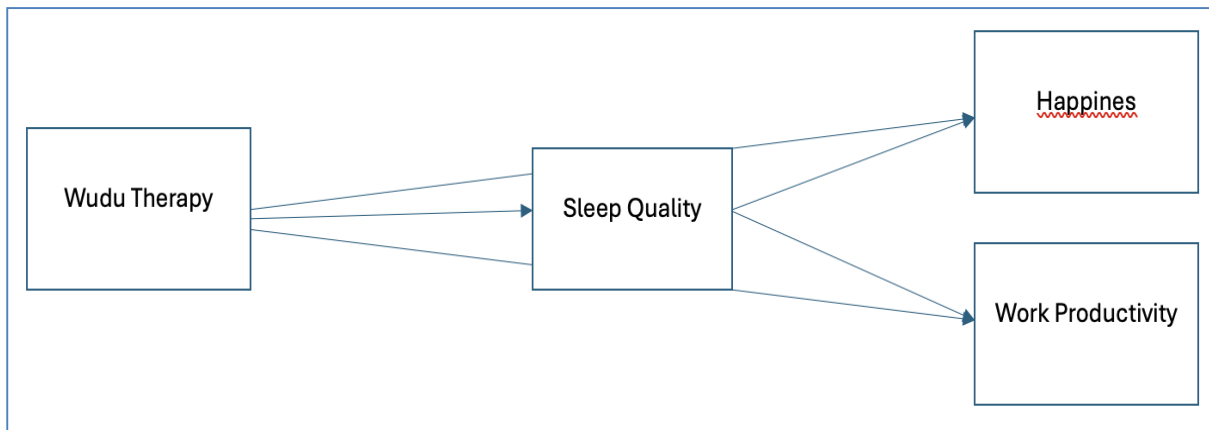
documented in studies showing that happiness can influence sleep quality, and individuals who feel happy tend to have a lower risk of depression. Happiness is often considered a protective factor in various studies on mental health and sleep (Al Balushi et al., 2022; Kudrnáčová & Kudrnáč, 2023a).

The relationship between stress, sleep quality, and work productivity has also been explored in research on burnout and work stress. Findings suggest that poor sleep quality can negatively impact work performance, increase the risk of absenteeism, and reduce overall productivity. (Corbeanu et al., 2023; Gunawati et al., 2022). The results of this study found significant differences between the experimental and control groups after the Wudu therapy intervention, aligning with previous findings that emphasize the importance of sleep quality and happiness in enhancing work productivity.

Based on the formulation of the problem and the formulation of the hypothesis to be analyzed in this study, Study 2 was conducted to see the indirect effect and direct effect of the sleep quality variable (Z) as a mediating variable, with Wudu therapy as (X) the independent variable and happiness (Y1) as dependent 1, and work productivity (Y2) the second dependent variable in the control group and the experimental group. It is conceptualized as in Figure 2.

Figure 2

Conceptual Path Diagram



The first step that the researcher took was to create a conceptual model or path diagram based on a literature review in the study. The path diagram consists of 4 variables used in the study. Furthermore, the researcher identified the parameters in the model by determining the endogenous (η) and exogenous (ξ) variables in the study. To estimate the parameters of the path analysis model, the researcher also used the Maximum Likelihood estimator. While in terms of scoring, using the Bayesian estimator. The parameter estimation was carried out using Mplus 8.0 software (Muthen & Muthen, 2017). The third step, to test whether the data obtained from the field is in accordance with the model created, the researcher tested the model fit (test of goodness of fit). This study uses the root mean square error of approximation (RMSEA) index in determining whether a model fits or not.

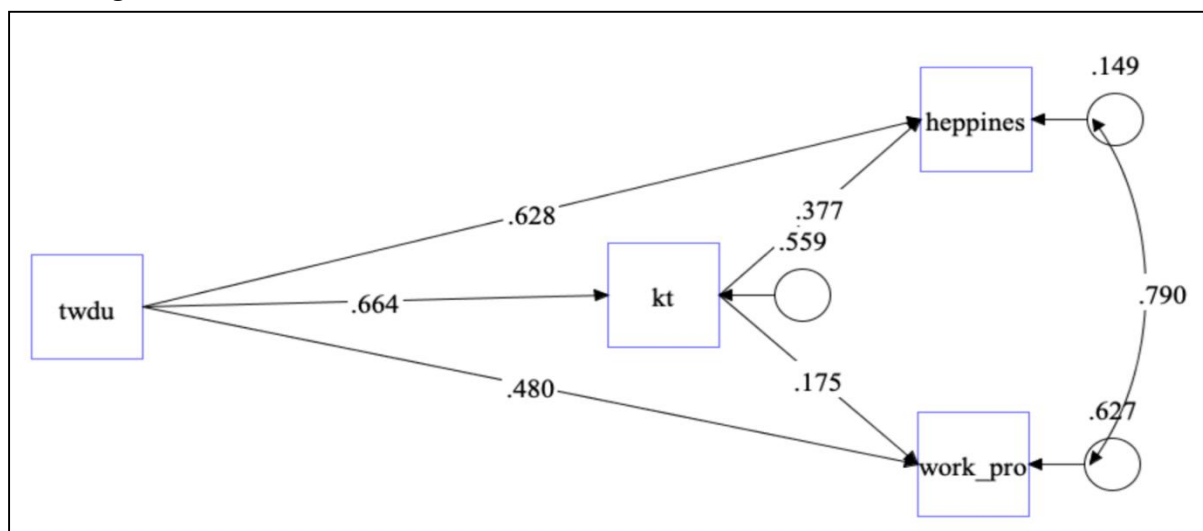
The model can be said to be fit if two of the three outputs of the following RMSEA are significant, namely RMSEA Estimate < 0.05 , RMSEA 90 percent CI < 0.05 , and probability RMSEA > 0.05 . If these criteria are met, the model is fit. If the model is known not to fit, the researcher performs a modification model. The modification stage is carried out if the model created does not fit the data. The first step in this stage is to look at the largest load on the output on statements in Mplus, then modify the Mplus syntax based on the output, this step can be repeated until a fit model is obtained. Furthermore, the last step in testing the research hypothesis in this case is to conduct a significant test on the parameters of the path analysis model, namely (1) The direct impact coefficient from one variable to another, namely Beta (β) and Gamma (γ), (2) The indirect impact coefficient from one variable to the dependent variable.

Measurement Model Test

The first step the researcher makes a model that fits the initial hypothesis as the basis for creating a research analysis framework. The researcher tests whether the framework created is fit according to the flow and adjusts it to the data. The researcher makes a model as follows:

Figure 3

Path diagram of the fit model



Based on Figure 2, the model is proven to fit the data, meaning that the major hypotheses H1, H2, H3, and H4 are supported. These hypotheses state: (H1) 'Wudu therapy indirectly influences happiness through sleep quality as a mediator,' (H2) 'Wudu therapy indirectly influences work productivity through sleep quality as a mediator,' (H3) 'Wudu therapy directly influences happiness,' and (H4) 'Wudu therapy directly influences work productivity.' The model effectively explains the influence of Wudu therapy on happiness and work productivity among college lecturers, confirming the acceptance of the study's hypotheses. Furthermore, the model test yielded an RMSEA coefficient of 0.045 ($p < 0.05$), a 90% confidence interval ranging from 0.051 to 0.097, and an RMSEA probability of 0.091



($p > 0.05$). These values indicate that the model fits the data, as all three RMSEA indices meet the significance criteria. Table 3 further supports that the model, as depicted in Figure 2, meets the fit criteria and is therefore acceptable.

Table 3

Indexes that can be used to test model fit

Index	Compliance Index	Model Index	Model Evaluation
RMSEA Coefficient	<0.05	0.045	Meets fit criteria
90 percent C.I	<0.05	0.051 - 0.097	Meets fit criteria
RMSEA Probability	>0.05	0.097	Meets fit criteria
CFI	1- > 0.80	1,000	Meets fit criteria
TLI	1- > 0.80	1,972	Meets fit criteria

Information:

RMSEA:Root mean square error of approximation CFI : Comparative fit index

CI: Confident interval TLI : Tucker Lewis index

Results of Indirect Influence Analysis of IV on DV

In this section, the researcher looks at the indirect influence of the Wudu therapy variable (Twdu) on Happiness, Work productivity (work_pro) through the Sleep Quality variable (KT). The results of the indirect effect can be seen briefly in the following table:

Table 4

Indirect Impact Coefficient IV on DV

Impact	Coefficient	S.E	T-Value	P-Value	Sig
Effects from TWdu to Happiness					
Sum of indirect	0.377	0.099	2,904	0.000	√
Twdu → KT → Happiness	0.377	0.099	2,904	0.000	√
Effects from Twdu to Work_pro					
Sum of indirect	0.175	0.098	3.131	0.002	√
Twdu → KT → Work-Pro	0.175	0.098	3.131	0.002	√

Information:

√= Significant (T-value > 1.96 and P-value < 0.05) x = Not significant

Based on Table 3, there are two indirect paths that influence happiness and work productivity. Both of these paths have a significant indirect effect on happiness and work productivity. Furthermore, to address the various hypotheses related to the indirect paths in this study, the research findings in Table 3 are explained as follows:

The Wudu therapy variable has a significant and positive indirect influence on happiness and work productivity through the sleep quality variable, as indicated by a T-value of 2.904 ($t > 1.96$) and a P-value of 0.000 ($p < 0.05$), which is statistically significant (see Table 4). These results support H1, confirming that the hypothesis (H1) can be accepted in this study. Furthermore, the Wudu therapy variable also has a significant and positive indirect influence on happiness and work productivity through the sleep quality variable, with a T-value of 3.131 ($t > 1.96$) and a P-value of 0.002 ($p < 0.05$), which is

statistically significant (see Table 4). These findings support H2, indicating that the hypothesis (H2) can also be accepted.

From these results, it is in line with several previous studies. Such as [Kudrnáčová et al \(2023b\)](#) The study examined the effects of changes in sleep duration, sleep quality, and social jetlag on life satisfaction, happiness, work stress, subjective health, and well-being. While sleep duration and timing were important factors, panel analysis revealed that sleep quality was the strongest predictor among all sleep variables in explaining both within-person and between-person differences in quality of life indicators. Further research conducted by [Al Balushi et al \(2022\)](#) Sensitivity analyses showed that individuals reporting less than six hours of sleep per 24 hours were more likely to report depression compared to those who reported seven hours of sleep.

[Yunsoo et al\(2022\)](#) revealed that sleep quality has a positive impact on emotional stress. Furthermore, according to [Zhang et al.\(2022\)](#) Negative emotions strengthen the negative relationship between sleep quality and the subjective well-being of elderly individuals with multimorbidity, while perceived social support plays a moderating role. Psychological and behavioral interventions should be implemented as early as possible to improve mental health, enhance social support, and ultimately increase the subjective well-being of elderly individuals with multimorbidity. Furthermore, according to [Cao et al \(2022\)](#) Sleep quality is positively correlated with life satisfaction, with better sleep quality leading to higher life satisfaction.

Study Qualitative

To strengthen the findings of quantitative data research. Researchers conducted qualitative data collection to support the findings of whether the process of changing sleep quality, happiness and work productivity in Lecturers is truly influenced by the Wudu Therapy provided. From a total of N = 29 researchers conducted a qualitative analysis by confirming the implementation of the application of wudu therapy on research respondents whether they carried out wudu therapy by performing wudu before going to bed at night, performing wudu in the morning before starting daily activities, and maintaining a state of purity by regularly performing wudu.

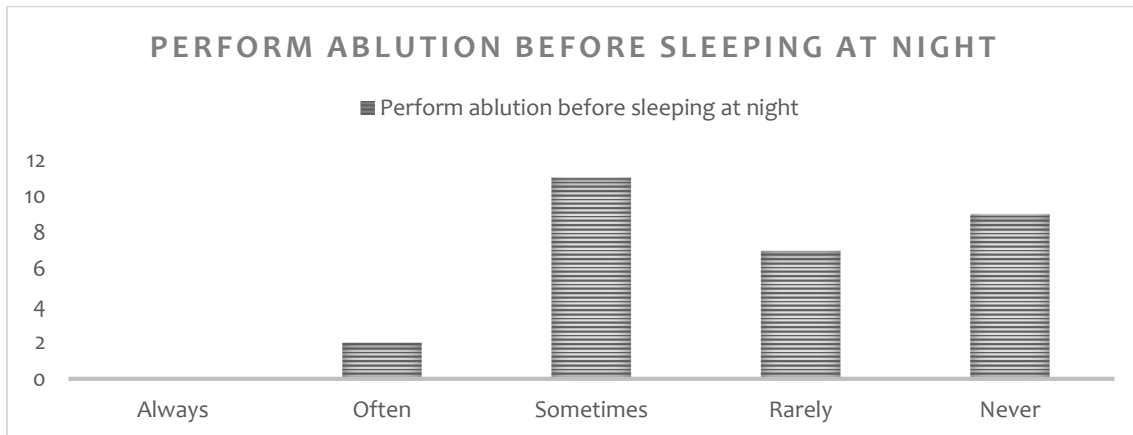
Wudu Before Bedtime At Night

Based on qualitative data analysis by confirming the implementation of wudu therapy at the stage of wudu before bedtime at night.



Figure 4

Perform Ablution Before Sleeping At Night



It can be observed from the total sample of 29 respondents in the experimental study that most respondents tend to perform Wudu before going to bed. Among them, 11 respondents stated that they sometimes perform Wudu before sleeping, while 9 respondents reported that they never do so. This finding is quite interesting, as performing Wudu before bed not only helps cleanse oneself from physical impurities but also enhances a sense of comfort before sleeping. Additionally, Wudu can contribute to a calmer and more relaxed state, potentially improving sleep quality. However, some respondents rarely or never perform Wudu before bed, which may be due to various factors such as busy schedules, a lack of awareness about its benefits, or other personal reasons. Hopefully, this analysis can encourage more people to recognize the importance of Wudu before sleeping.

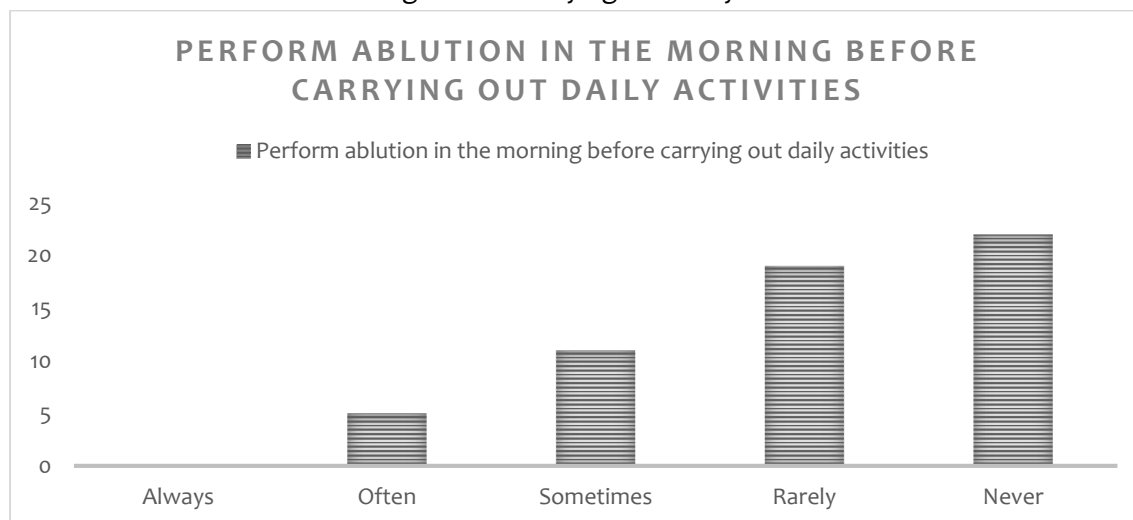
In addition to physical health benefits, wudu also has spiritual benefits. By performing wudu before going to bed, we are also cleansing ourselves from minor sins that we may have committed throughout the day. So, always remember to perform wudu before going to bed as a form of our readiness to meet the Creator in the morning. From the data that has been analyzed, it can be concluded that although not everyone does it routinely, performing wudu before going to bed has enormous benefits for our physical and spiritual health. So, from now on, let's get used to performing wudu before going to bed to get the benefits.

Performing wudu in the morning before doing daily activities

Based on qualitative data analysis, the implementation of Wudu therapy was confirmed at the stage of performing Wudu in the morning before engaging in daily activities. From the total of N = 29 respondents in the experimental study, the collected data indicates that the majority of respondents perform Wudu in the morning before engaging in daily activities. A total of 5% of respondents stated that they always perform Wudu every morning, while 11% reported that they sometimes do it. Only a small portion, 19%, rarely perform Wudu in the morning, while the remaining 22% admitted that they never perform Wudu before starting their activities.

Figure 5

Perform Ablution in The Morning Before Carrying Out Daily Activities



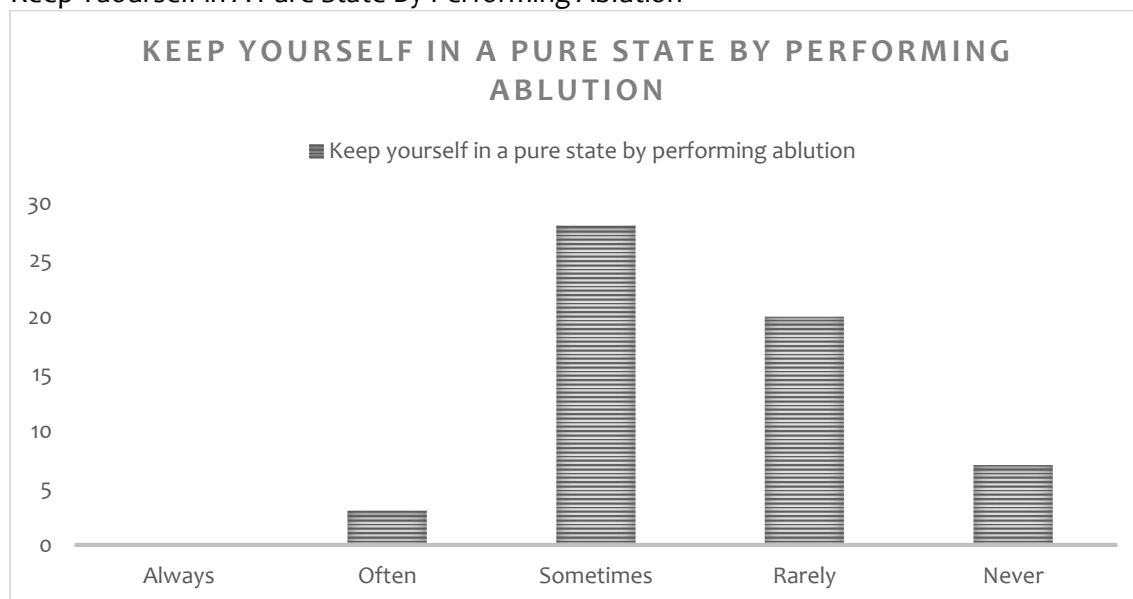
From the results of this analysis, we can see that most respondents have good habits in maintaining physical and spiritual cleanliness by performing wudu in the morning. Although there are some who still rarely or even never do it, awareness of the importance of wudu as a spiritual provision before doing activities is starting to increase. It is hoped that through this analysis, more and more people will be aware of the importance of maintaining the quality of wudu as part of daily worship. Hopefully with this small step, we can get closer to Allah SWT and achieve blessings in every step of our lives.

Keep yourself in a pure state by performing wudu

Based on qualitative data analysis, it confirms the implementation of wudu therapy at the stage of keeping oneself in a pure state by performing wudu.

Figure 6

Keep Yourself in A Pure State By Performing Ablution





From the total of N = 29 respondents in the experimental study, the collected data indicates variations in individuals' consistency in maintaining purity through Wudu. Among the 100 respondents studied, the results showed diverse levels of consistency. Data analysis revealed that 7 respondents never performed Wudu, while 3 respondents did so frequently. Additionally, 28 respondents sometimes performed Wudu, and 20 others performed it only rarely.

From a total of 29 respondents who answered the question, it can be concluded that the majority of them were inconsistent in maintaining themselves in a state of purity by performing wudu. This may be due to various factors, such as being busy, lack of awareness of the importance of maintaining oneself in a state of purity, or perhaps also due to environmental factors.

The existence of variation in the level of consistency of a person in maintaining themselves in a state of purity by performing wudu shows the importance of continuing to remind and provide a good understanding of the importance of maintaining oneself in a state of purity. Always trying to increase self-awareness and reminding others to always maintain spiritual cleanliness is an important first step to creating a more sacred and comfortable environment.

The level of consistency in maintaining oneself in a state of purity by performing wudu can also affect the quality of one's worship. As taught in Islamic teachings, maintaining oneself in a state of purity is very important in carrying out worship, because physical cleanliness also reflects spiritual cleanliness. By maintaining personal cleanliness, we will also be closer to Allah SWT and feel calm and peaceful in our hearts.

In addition to having an impact on one's spirituality, cleanliness also has an impact on physical health. Performing wudu is one way to cleanse oneself from dirt and bacteria that stick to the body. By maintaining ourselves in a state of purity, we also get used to maintaining overall body cleanliness, which will ultimately have a positive impact on our health. As humans, of course we are not free from mistakes and shortcomings. However, it is important for us to always try to improve the quality of ourselves, including in terms of maintaining ourselves in a state of purity by performing wudu. This is not just a routine, but more about appreciation and awareness of the importance of physical and spiritual cleanliness.

In the context of everyday life, keeping oneself in a pure state by performing wudu should be a habit that should not be forgotten. By keeping ourselves pure, we also help keep the surrounding environment clean and set a good example for others. Hopefully, with awareness of the importance of keeping ourselves in a pure state, we can all become better humans and have noble morals.

Discussion

These results are relevant to previous literature that highlights the positive impact of religious rituals, including Wudu, on psychological and physical well-being. This discussion will further elaborate on these findings by linking them to relevant and

supporting theories. Psychological dynamics of why wudu therapy can improve sleep quality in lecturers. That wudu as a cleansing ritual in Islam offers psychological and physiological benefits that are relevant to improving sleep quality. In lecturers, who often face stress due to workload and academic demands, this therapy provides a relaxing and calming effect (Fatoni et al., 2023; Murodi et al., 2022; Reza et al., 2024).

Physiologically, cold water used in wudu can stimulate the parasympathetic nerves, lower blood pressure, and reduce physiological stress. This contributes to the stabilization of the circadian rhythm, preparing the body for better sleep. (Halsen et al., 2008). Research also shows that hygiene before bed, such as wudu, improves the sleep cycle through the mechanism of increasing relaxation. (Alanazi et al., 2023; Reza, 2020a).

In psychological terms, wudu helps the mindfulness process by bringing full awareness to simple and spiritual activities. This activity resembles the progressive relaxation technique which has been shown to reduce anxiety and improve sleep quality. (Baharuddin et al., 2024; Hobson et al., 2018) For lecturers, spiritual reflection during wudu also promotes mental detachment from daily pressures.

Empirically, several studies support the effectiveness of wudu therapy. That this therapy is effective in reducing insomnia symptoms in certain groups. (Aprilla et al., 2022). It has been similarly reported that the spiritual and psychological aspects of wudu provide a holistic effect that supports improved sleep. (Reza, 2020a; Rusnaini et al., 2024). This study shows that Wudu therapy has a significant effect on happiness, work productivity, and sleep quality in college lecturers, both directly and indirectly through sleep quality as a mediator.

This study found that Wudu therapy significantly improved sleep quality in lecturers (H5 and H12). This improved sleep quality also mediated the effect of Wudu on happiness and work productivity. This finding is consistent with research showing a strong relationship between spiritual practices and sleep quality. In a study conducted by Koenig (2012) found that individuals who engage in religious practices have better sleep quality than those who do not. Activities such as Wudu, which involve relaxation, cleansing the body, and mental focus, can help reduce stress and provide a sense of calm before bed. According to research by Mesquita et al (2010), religious rituals involving calmness and personal hygiene are positively associated with improved sleep quality due to their calming effect on the nervous system.

Wudu therapy can create a relaxed atmosphere and provide a calming psychological effect, which is very much needed in managing stress and anxiety that often disrupt healthy sleep patterns (Fatoni et al., 2023; Murodi et al., 2022; Reza et al., 2024). This positive influence is important to note, especially in the context of a lecturer's life which is often full of stress due to academic and professional demands.

The findings showing that Wudu therapy directly increases happiness (H3, H8, H9) are very consistent with theory and empirical evidence on the relationship between happiness and spiritual activity. In a study by Koenig and Larson(2001), spirituality and happiness have been found to be related, with individuals who engage in frequent



religious practices tending to report higher levels of happiness. This is because spiritual practices such as Wudu facilitate reflection and introspection, which help individuals find meaning and purpose in life, important factors in happiness.

Wudu, as a form of self-cleansing ritual in Islam, not only cleanses the body physically, but can also provide a feeling of inner peace. As expressed by [Pribadi et al \(2024\)](#), spiritual activities that involve elements of relaxation and reflection can reduce stress, increase mental calm, and ultimately influence feelings of happiness. In addition, research from [Levin\(2010\)](#) revealed that participation in religious activities is positively correlated with emotional well-being, including happiness.

This study also found that Wudu therapy had a significant direct effect on work productivity (H4, H10, H11). This strengthens the view that spiritual and psychological well-being have a direct impact on individual productivity in the workplace. Work productivity is closely related to a person's mental and physical condition. Research by [Culbertson, Fullagar, and Mills\(2010\)](#) shows that employee happiness and well-being can significantly impact their work performance and productivity.

Wudu therapy can serve as a means to relieve stress and increase focus, which is very important in increasing productivity. In the context of lecturers' work that requires high concentration, this therapy provides an opportunity to reflect on themselves and calm the mind, which can ultimately increase work efficiency. As expressed by [Emmons and McCullough\(2022\)](#), spiritual activities can increase individual gratitude and motivation, which in turn have a positive impact on work productivity.

The finding that sleep quality mediates the effect of Wudu therapy on happiness and work productivity (H1, H2) is also in line with previous studies. According to [Baglioni et al. \(2016\)](#), poor sleep quality can lead to decreased mental health, which leads to decreased happiness and productivity. Therefore, therapies that improve sleep quality, such as Wudu therapy, have a significant indirect impact on a person's well-being and performance.

The relationship between quality sleep and work productivity has been widely proven in the literature. Research by [Pilcher and Morris \(1997\)](#) found that lack of sleep affects cognitive and physical performance, and causes decreased work productivity. Therefore, by improving sleep quality, Wudu therapy can play a role in maintaining consistency and focus in work, which is important for lecturer productivity.

This study makes an important contribution to the literature explaining the relationship between spirituality, mental well-being, and work performance. In a theoretical context, these results support the subjective well-being theory which states Spiritual and religious practices can enhance an individual's psychological well-being ([Diener, 1984](#)). In a practical context, Wudu therapy can be one of the effective interventions to improve mental well-being and productivity in the workplace, especially among lecturers who often face high pressure.

In addition, the results of this study suggest the importance of promoting spiritual practices in the workplace, especially in the education sector. Spirituality-based

interventions, such as Wudu therapy, can help reduce stress levels and improve emotional well-being, which ultimately have a positive impact on job performance and satisfaction (Alaidin et al., 2024; Nikensari & Yudhistira, 2024).

Based on the results of the study, Wudu therapy was proven to have a significant positive effect on happiness, work productivity, and sleep quality of lecturers. This effect occurs both directly and through the mediator of sleep quality. These results are consistent with previous studies showing that spiritual activities have a positive impact on individual well-being. Wudu therapy can be an effective intervention to improve mental well-being and work performance in educational settings. Further studies can be conducted to further explore the potential benefits of this therapy in various contexts and populations.

Conclusion

This study examines the effect of Wudu therapy on happiness, sleep quality, and work productivity in college lecturers, using a model that is proven to fit the data. This study involves major and minor hypotheses related to the role of Wudu therapy, both directly and through the mediator of sleep quality. The results of this study indicate that Wudu therapy has a significant effect on happiness, work productivity, and sleep quality in college lecturers, both directly and indirectly, with sleep quality serving as a mediator.

The findings of this study further reinforce the positive impact of Wudu therapy on various aspects of well-being among college lecturers. The results indicate that Wudu therapy has a significant effect on happiness, work productivity, and sleep quality, both directly and indirectly through sleep quality as a mediating variable.

In terms of the indirect effect, the results support the acceptance of hypotheses H1 and H2, which state that Wudu therapy influences happiness and work productivity indirectly through sleep quality. This suggests that individuals who practice Wudu therapy experience improvements in their sleep quality, which in turn enhances their overall happiness and productivity at work. Moreover, the direct effect of Wudu therapy is also confirmed, as hypotheses H3 and H4 are accepted. This indicates that Wudu therapy itself plays a crucial role in increasing happiness and work productivity, even without the mediation of sleep quality. This finding highlights the intrinsic psychological and physiological benefits of Wudu therapy in promoting well-being.

Furthermore, significant differences were observed between the experimental and control groups, supporting hypotheses H5, H6, and H7. The acceptance of H5 confirms that sleep quality differs significantly between those who practiced Wudu therapy and those who did not. Similarly, the acceptance of H6 demonstrates that happiness levels were notably higher in the experimental group compared to the control group. Lastly, H7 was also accepted, proving that Wudu therapy contributes to an increase in work productivity, with the experimental group showing a significant improvement compared to the control group.



Overall, these findings provide strong evidence that Wudu therapy is an effective intervention for enhancing sleep quality, happiness, and productivity among college lecturers. The study highlights the potential benefits of incorporating spiritual and religious practices into daily routines to improve psychological well-being and professional performance. Furthermore, the direct effects of Wudu therapy have been confirmed through the acceptance of hypotheses H8, H9, H10, and H11, which indicate that Wudu therapy has a direct, positive, and significant impact on happiness and work productivity, independent of any mediating variables. Additionally, the effect of Wudu therapy on sleep quality is supported by the acceptance of hypothesis H12, which confirms that Wudu therapy has a significant and positive influence on improving sleep quality. These findings reinforce the importance of Wudu therapy as a holistic practice that contributes to overall well-being and professional efficiency.

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