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DEVELOPING AN INSTRUCTIONAL MODEL BASED ON THE COMMUNICATIVE PRACTICES AND ROLE OF PROPHET MOHAMMAD (PBUH)

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ABSTRACT

Understanding the communicative practices, character, and credibility of Prophet Mohammad (PBUH) can provide a deeper connection to Islam and to the role and significance of his method of instruction. While instructional models exist, there has yet to be an empirically tested instructional model that reflects the sunnah of Prophet Mohammad (PBUH) for universal application for both Islamic and non-Islamic settings and content. The results of this mixed methods survey study reflect the opinions and validation of six expert participants from fields including Islamic sciences and education, ranging from 3 to 20 years of experience in their roles. The concluding results of the quantitative 5-point Likert scale questions provided a generally positive perception of the instructional model, with a mean rating of 3.264, suggesting an overall favorable view. Likewise, triangulated qualitative responses to three interview questions summated themes of strengths, weaknesses, and recommendations of the developed instructional model. The final dichotomous question of overall recommendation was unanimous, with all expert participants (100%) answering "Yes" in favor of the developed Al-Huda instructional model. The results of this study validate in favor of the developed Al-Huda instructional model based on the communicative practices and role of Prophet Mohammad (PBUH), recommending its use for universal instruction.

Keywords: *Instructional Model, Communication, Hadeeth, Education, Instructional Communication*.

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1. INTRODUCTION

The instructor is the embodiment of the message of learning. Therefore, it is a crucial role that is intertwined, influential, and foundational in the learning process, as a breakdown of the role of the instructor leads to a breakdown in learning and the transference of information. The method of learning is furthered through teaching and a formalized system of education by which knowledge is presented and linked to a presentation and demonstration of ability or skills (Faryadi, 2015). Ruben & Feezel (1986) agree with this view to suggest that "skill, or the ability to communicate appropriately and effectively, is an essential ingredient in teaching". Thus, the ability of an educator to communicate knowledge effectively determines the output of response and cognitive processing of such knowledge by the student.

Verbal and nonverbal communication formulate a message and complete each other in the communication process while being aware that one's body language can compose one's communication with greater success (Erul, 2008). Dialogue contributes to critical thinking, questioning, listening, communication skills, social-emotional and identity development (Ahmed, 2014; Alkouatli, 2018), which is essential in building confident student-educator relationships to promote positive cognitive processing of information. Self-confidence within an individual creates an ability to calculate, organize, respond, and overcome all conflicts and solve problems (Hamzah et al., 2020). Likewise, the perceptions of educators by students determine the cognitive processing of information to which both verbal and non-verbal communicative elements of the instructor affect the content and processing of the message.

Additionally, the perceptions of students of educators who have higher knowledge and demonstration of that knowledge, and even in the physical manifestations of practice, may heavily impact how the student processes to accept or reject such information. Therefore, it may not be the information or content that becomes rejected but instead the method of communication of verbal and non-verbal elements of the instructor that causes a disequilibrium of student understanding or acquisition of knowledge (Bower et al., 2013).

When searching for an ideal role model of instruction and efficient delivery of instruction, Prophet Mohammad (PBUH) is the perfect example of a systematic model of instruction that can be developed rooted in the communication, character, and credibility he possesses. Prophet Mohammad's (PBUH) central role as the guide, leader, and ultimate source of Islamic knowledge and exemplary way of life, as the sunnah, became realized through his embodiment of the message of Islam.

Prophet Mohammad (PBUH) was not only to deliver the message of the Oneness of God (SWT) and the systematic approach to life with the purpose of submission to The One God (SWT) but also demonstrated and taught this message to humankind over 23 years from the age of 40 until his death (Jamilin et al., 2017). The credibility and character established of Prophet Mohammad (PBUH) before his Prophethood continued, enhanced, and was confirmed through the Islamic doctrine of Divine revelation of the Quran for all of humanity to witness during his lifetime and ever since. Allah (SWT) confirms this in the Quran in Surah al Qalam stating, "verily, you (O Muhammad) are upon great moral character" (Quran 68:4). Historians, scholars, academics, and even critics throughout the world have commented on the remarkable character and qualities of credibility, such as leadership, kindness, justice, and compassion Prophet Mohammad (PBUH) possessed, including Muslims and non-Muslims alike (Al-Olaqi, 2015). Muhamad et al. (2017) also state that "the communication approach shown by Rasulullah SAW is indefinitely relevant regardless of time" as his "approach used is crucial to be practiced in alignment with today's needs" (p.97).

This research explores the foundational communicative elements of Prophet Mohammad (PBUH) as demonstrated through his sunnah, or way of life, through which an instructional model is developed and employs a mixed quantitative and qualitative validation survey study validated by experts in the fields of Islamic sciences and education with cumulative years of experience and qualifications. The following research questions are to be addressed:

RQ1: Can an instructional model based on the sunnah of Prophet Mohammad (PBUH) be developed?

RQ2: What is the overall effectiveness of the instructional model based on the sunnah of Prophet Mohammad (PBUH)?

RQ3: Does an instructional model based on the sunnah of Prophet Mohammad (PBUH) provide a greater opportunity to reach the instructional goals of educators when compared to other instructional models?

RQ4: What is the potential impact of content comprehension for learners taught through an instructional model based on the sunnah of Prophet Mohammad (PBUH) compared to potential content comprehension for learners taught through other instructional models?

The data results aim to provide insight into the development and application of the Al-Huda Instructional Model conceptual framework, based on the sunnah of Prophet Mohammad (PBUH) for universal application for both Islamic and non-Islamic settings and content by which the message of learning and the role of the instructor is center for an optimal learning experience to take place.

2. REVIEW OF LITERATURE

The literature review evaluates the existing literature, including a review of the theoretical framework of this study and subsequent related topics, which includes the establishment of the role of Prophet Mohammad (PBUH) as the instructor, Islamic Pedagogical Approach vs. an Instructional Model based on the Sunnah of Prophet Mohammad (PBUH), and the instructional model conceptual framework. Further gaps in the existing literature are also presented, bringing importance and necessity to this study and its outcomes.

2.1 Theoretical Framework

The foundational theoretical framework of this research is inspired by communicative theorist Marshall McLuhan (1964), who presented the theory "the medium is the message" in his work Understanding Media: The Extensions of Man. His theory centered on the premise that the medium by which a message is communicated is part of the influence of the message itself and is "an extension of ourselves" (p.1), alluding to a consciousness of the medium by which content is delivered.

McLuhan (1964) argues the medium is influential and holds its own character, appealing to a sub-conscious and psychological stimulus of desire by which technology and its development thrive, leaving the need for users of media and mediums to be as McLuhan (1964) states, "exceedingly informed and aware" and "to locate cultural safety in the power of the will, rather than in the power of adequate perception of situations" where the idea of "character as opposed to intellect" becomes relevant (p.17). It is with this view that McLuhan relates perceptions and the awareness of the power of perceptions to an ability to judge the use of mediums through an assessment of character rather than rational reasoning in the justification of use based on the perceived need and nature of desire of the use of technology and such mediums, as when used and contextualizing content, creates a dimension of questioning morality rooted in credibility and character within communication processes. With this framework, this study aims to investigate the communicative elements of Prophet Mohammad (PBUH) in alignment with his character and by which his communication is analyzed and proven as exemplary communication for disseminating knowledge and instruction.

2.2 Establishment of the Role of Prophet Mohammad (PBUH) as the Instructor

The most imperative element of the instructional model is the establishment of the role of the instructor. Prophet Mohammad (PBUH) was both a teacher and an instructor, among many other roles. Muhamad et al. (2017) state, "Rasulullah SAW. is an exemplary figure of all times" (p.90). Prophet Mohammad (PBUH) was to deliver a message and demonstrate and teach this message to humankind. Jaafar et al. (2017) concur, stating, "In education, the Prophet Muhammad p.b.u.h. not only acts as a presenter of knowledge known as *mu'allim*, the Prophet PBUH even serves as a role model that educates (*tarbiyyah*) human soul." (p.2). Jaafar et al. (2017), support the importance of the role of the instructor in teachers who develop to "feel more responsibility to the students and have integrity in performing their duties" (p.2). Kazmi (1999) considers a *murabbī* the perfect person to learn from because they teach facts and show the learners how to behave, believe, and practice their knowledge multi-dimensionally. He defines *murabbi* as "a person who combines a life of learning with a life of virtue, and hence a perfect and ideal person to learn from." (p.209). Tambak et al. (2020) reflected this idea, stating, "The position of teachers is very strategic in Islam" (p.27), furthering the importance of the role of Prophet Mohammad (PBUH) as a teacher and for the contextual understanding of teachers of the instruction that they implement through the demonstration of their qualities and skills.

The elements of character and credibility go beyond the instructional role of simply teaching content but also lead to a position established where the credibility and character of the instructor are also factored into the learning process, thus allowing the perception of learners to determine a level of confidence of the source of who they are learning from, therefore, providing an opportunity for the communicative elements of Prophet Mohammad (PBUH) to be examined and modeled for universal application. In the Holy Quran, Allah SWT states in Surah al-Ahzab (33:21), translated, "There has certainly been for you in the Messenger of Allah an excellent pattern (an example to be followed) for anyone whose hope is in Allah and the Last Day and [who] remembers Allah often" (Quran, 33:21, Sahih International).

2.3 Islamic Pedagogical Approach vs. an Instructional Model based on the Sunnah of Prophet Mohammad (PBUH)

2.3.1 The Scope of Pedagogy, "*Tarbiyya*" and "*Murabbi*"

While the term pedagogy has sparked a debate among the types of learners it applies to, the idea of pedagogy as a learning method has also developed into different types. The original term pedagogy and its etymological root of the term "pedagogue" refers not to a teacher but to a slave who cared for and accompanied a student to and from school (van Manen, 1994). This meaning is supported by Cuenca (2010) to investigate this relationship of the pedagogue as someone to care for a student, which goes beyond the scope of teaching but enters into the terms of nurturing and definition of the term pedagogy as a student-teacher relationship.

One understood view of pedagogy and pedagogue derives from the Greek meaning of "nurturing a child". Such an idea of nurturing is better described by the Arabic word and Islamic concept of "*tarbiyah*", or the "nurturing" or "growth" associated with holistic Islamic development and progression of the individual (Sahin, 2013; Halstead, 2004; Waghid, 2014) extending to what Lafrarchi (2020) states as "*ta'leem* and *ta'deeb* to strengthen an Islamic personality in Muslim pupils" (p.1). Susanti et al. (2023) argue that *tarbiyah*, *ta'leem*, and *ta'deeb* are connected while each holds its own trait stating,

"ta'lim includes aspects of knowledge and skills that a person needs in his life and guidelines for good behavior. Whereas in tarbiyah, the emphasis is on guidance so that a person has the potential and grows his basic completeness and can develop perfectly, the development of knowledge in humans and the cultivation of morals, and true scientific experience in educating individuals. As for ta'dib, the emphasis is on mastering the right knowledge in a person to produce stable deeds and good behavior" (2023, p.17-18).

They support a need for all three elements to exist independently and as a whole to define the educational process (Susanti et al., 2023).

Other secular approaches such as student/learner-centered, teacher-centered, and learning-centered pedagogies have emerged as different approaches, such as constructivism, behaviorism, and liberationism. The discrepancy is that such approaches are not traditionally classified as pedagogical approaches but as learning theories, as Gagne et al. (2005) mentioned within the parameters of instructional design.

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Scholars have identified the need for nurturing the one seeking knowledge, child or adult, by which the term "*murabbi*" becomes relevant. Ab. Halim Tamuri (2006), identifies five roles of teachers, namely "*mudarris*", "*mu'addib*", "*murabbi*", "*murshid*", and "*mu'allim*" where "*murabbi*" is further defined by him with the idea of the role of the instructor is to nurture and preserve students through education, teaching, love, and develop the abilities that are within them, regardless of age.

In contrast, Mohammed (2011) views the idea of the teacher overall as *murabbi* where the role of a *murabbi* should act as a teacher *(muallim)*, guide *(mu'adib)*, trainer *(mudarrib)*, advisor or counselor *(muwajjih)* and consultant (murshid). Kazmi (1999) considers a *murabbī* the perfect person to learn from because he not only teaches facts but shows the learners how to behave, believe, and put into practice their knowledge viewed multi-dimensionally. He defines *murabbi* as "a person who combines a life of learning with a life of virtue, and hence a perfect and ideal person to learn from" (p.209). The concept of *murabbi* and holistic growth is also encapsulated within the additional dimension of "*adab*," translated and understood as "manners, etiquette, and behaviors" by which Islamic nurturing is connected.

2.3.2 Islamic Pedagogy and Limitations

While "*tarbiyah*" or "nurturing" is the best-used term over its English counterpart of "Islamic pedagogy", it exemplifies that, again, the use of the pedagogical idea to describe its use in Islamic schools is related to the overall environment that is created where learning takes place, rather than its definition outlined by Mohring (1989) as the teaching of children which implies a simple transference of information to children without consideration for values and the holistic development of a child. Here, the term "Islamic pedagogy" becomes contextualized and with limitations.

At the same time, empirical research has not validated the Islamic pedagogical approach. Chown & Alam (2016) state, "The tragedy in Islamic schools can be the assumption that certain practices are working without empirically assessing their effectiveness" (p.1). The lack of tested research in Islamic pedagogy provides erroneous methods by which curriculum is developed and implemented to be tailored to the goals and visions of Islamic schools. Often, secular content that aligns with government-certified curriculum standards is used while incorporating Islamic principles, discussions, and activities to create a culmination of what is termed "Islamic pedagogy." Ultimately, Chown & Alam (2016) conclude that the instructor's interpretation and experience in understanding Islamic concepts to educate children have primarily relied upon Islamic schools hiring Muslim teachers, as a lack of an agreed-upon idea of Islamic education exists. Likewise, a universal instructional model approach rooted in Islamic teachings has not been developed or empirically tested for implementation within the field of education for both Islamic and non-Islamic settings and content, to the best knowledge of the researcher.

2.4 The Need for an Instructional Model Based on the Sunnah

Studies such as the previously mentioned study by Chown & Alam (2006) suggest and support a cognitive approach to instructional model development rooted in the awareness of

the communicative process by which perceptions based on verbal and nonverbal communication are necessary to design successful learning experiences; supporting the development and validation of an instructional model rooted in the Sunnah of Prophet Mohammad (PBUH). Muhamad et al. (2017) support the need for an instructional model based on the sayings (*ahadeeth*) of the Prophet (PBUH), stating, "Although he has left us, his hadiths are well recorded and contain a vast array of knowledge that can be used to solve various problems" (p.90).
The lack of an agreed-upon understanding of Islamic education outlined by Chown & Alam (2016) and a lack of formalized training for instructors in Islamic education leaves an instructional model based on the sunnah of Prophet Mohammad (PBUH) providing an opportunity for the elements of *tarbiyyah* in the nurturing of the Islamic way of life and Islamic identity as outlined by Lafrarchi (2020), to become applicable in all contexts, ages, environments, content, and subject matter, creating an instructional model comparative to existing models in the field of education and instructional design.

Rayan (2012) agrees that education from the Islamic view constructs human life to develop a balance between the individual, society, and the world, based on ethical considerations. Likewise, Alexander (2004) supports Islamic education or education that is presented through an Islamic value system, by which one can extend through the teaching methods exemplified by the Prophet (PBUH) and aims to develop the character of a person, rather than Western education which focuses on intellectual and academic development as expressed through the emphasis of standardized tests and academic performance. Developing an instructional model based on the sunnah of Prophet Mohammad (PBUH) becomes relevant and necessary through this understanding.

2.5 Developed Instructional Model Conceptual Framework: Al Huda Instructional Model Design

The primary goal of the Al Huda model is for the instructor to gain conscious awareness of learners' perception of their role as the instructor through their perceived character and credibility established through verbal and nonverbal communication. The central focus is the role of the instructor throughout the environments in which the interactions between the instructor and learners have the potential to take place, establishing a perception of the instructor. As such, the perception by the learner of the instructor affects the reception, cognitive processing of information, and ultimate acceptance of knowledge and information by the learner, thus prioritizing such instructional awareness and implementation for a positive learning experience.

2.5.1 Communicative Elements of Prophet Mohammad (PBUH)

Maragha (2024) completed a comprehensive analysis of the verbal and nonverbal communicative elements of Prophet Mohammad (PBUH) from the complete collection of Sahih Al Bukhari, including all 7,563 *ahadeeth*, on which this instructional model is based. The results of the quantitative study conducted by Maragha (2024) displayed the communication frequencies divided into three communicative categories: verbal, nonverbal, and both verbal and nonverbal.

Furthermore, the study determined 23 subcategories, which include Concise Speech, Declarative Statement, Conditional Statement, Dialogue, Question from the Prophet (PBUH), Question to the Prophet (PBUH) with Answer, Repetition, Imperative/Instructional Statement, Statement of Listener's Name, Example, Figurative Language, Emotional Appeal/Volume, Storytelling, Quran Recitation, Action, Silence/No Response, Gesture, Listening/Active Hearing, Expression/Appearance, Human Attribute, Reference of Character, Written Letter/Communication through Writing, and Position with Relation to Others or Self.

Maragha states, “Understanding the usage of the types of communication by Prophet Mohammad (PBUH) can aid other fields outside of Islamic sciences, such as communication and education, in developing a model for instruction and message delivery in the frequency of implementation of each category and subcategory of communication and communicative elements” (2024, p.68). These communicative elements determine the perception of the credibility and character of an instructor. The undeniable and incomparable character and credibility of Prophet Mohammad (PBUH), in addition to his status as a Prophet and Messenger of Allah (SWT), provide the context for the delivery and outcomes of his message to learners and, therefore, are essential for use in the Al Huda instructional model.

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2.5.2 Two Parts of the Al Huda Model

The Al Huda model is two parts that are intertwined as a complete model as follows:

a. Environment and Perception of Credibility and Character of the Instructor.
b. Seven Stages of Instruction Centered on the Role of the Instructor.

Within the learning environment, the role of the instructor is based on their verbal and nonverbal communication as the seven stages of instruction are implemented, in which message acceptance and perception of the instructor by the learner take place at each stage within the fluid learning experience.

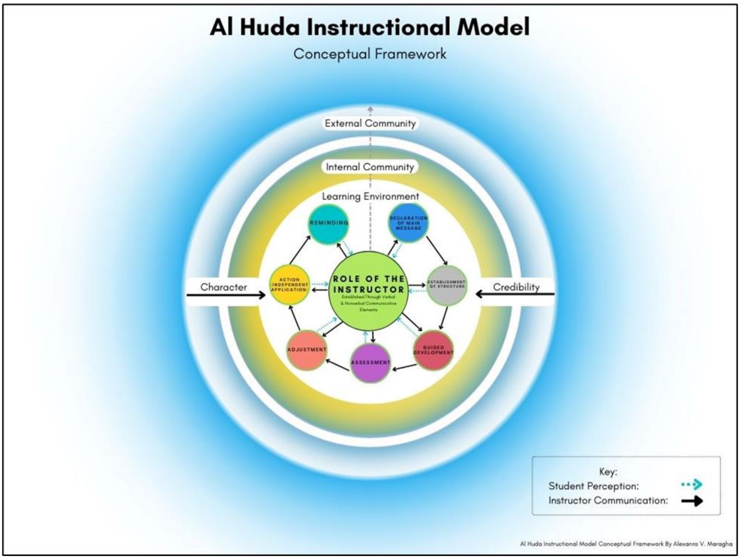

Figure 1. Al Huda Instructional Model Conceptual Framework.

2.5.3 Part 1: Credibility and Character of the Instructor Established through Verbal and Nonverbal Communication

The establishment of the role of the instructor entails two factors: credibility and character, both displayed through the instructor's verbal and nonverbal communication. In the context of the instructional model, verbal and nonverbal communication determine the credibility and character of an instructor.

A. Credibility

In this instructional model, credibility is the established clout, expertise, experience, reputation, and influence that one obtains or has based on non-controllable factors. Uncontrollable factors that an individual experiences include birth, family ties/lineage, race, ethnicity, place, location, financial upbringing, societal affluence, societal/cultural understandings, and norms (both outstanding and timely), and any other factors by which an individual is not in control of an element that affects their pre-disposed character or credibility from birth through adulthood. However, the credibility and character of an individual based on their verbal and nonverbal communication is the context by which each becomes fully controllable by the individual.

B. Character

This model defines character as a person's perceived traits or qualities based on immediate and long-term verbal and nonverbal communication. For example, to evaluate if a person is truthful or a liar, an individual's verbal and nonverbal communication in one and multiple interactions and long-term observations can determine such character. Character is objective in that an individual's verbal and nonverbal communication provides evidence of determination. For example, either one is a liar or they are not. Either one is honest, or they are not. Either one is generous, or they are not. The depictions of an individual's character are absolute in that they can be valid as such or denied. They are traits that, while absolute, are fluid. For example, one who is honest may become a liar, and one who is a liar may change to become a truthful person. An instructor develops their credibility and character, and indirectly their perception as an instructor, as they interact within their environments.

2.5.4 The Fluidity of Learner Perception with Relation to the Environments of the Instructor

The alignment of verbal and nonverbal communication of an instructor within all environments aids in formulating perceptions that ultimately evaluate the character and credibility of an instructor. The verbal and nonverbal communicative elements determine the perception of an instructor observed within three defined environments in the instructional model, which include the following:

A. Learning Environment

The learning environment exists where learning occurs and includes the instructor and their students. The critical factor defining the learning environment is the instructional communicative exchange between the instructor and the learner. The learning environment is not limited to structural boundaries or locations but to the environment where the learning process occurs.

B. Internal Community

The internal community is the community that extends after the learning environment to include other individuals who are part of the greater learning community. This environment contains other educators, students, administrators, faculty, staff, and others in the organization and community where immediate communication occurs. This direct communication is by which the instructor can frequently communicate with those within the internal community who are members of such a community based on their current role as instructors and educators.

C. External Community

The external community is the community that is outside the learning process, the learning environment, and the internal community. This environment is the public or society at large.

By comparison of all three environments, a learner's perception of an instructor can become a confirmed reality through such experiences. The model indicates that an instructor is to remain conscious of the relationship between the environment and perceptions of their credibility and character that learners may form. A learner will ultimately accept with minimal cognitive disequilibrium related to the perception of the credibility and character of the instructor, one who is genuine in the embodiment of their message. Likewise, such an instructor is potentially influential in all three environments, indicated by the gray arrow representing a "service flow" or "flow of benefits" from the instructor in the model.

2.5.5 Additional Factors

Factors such as time, frequency, duration, longevity, and occurrence, as well as the context, may be considered when evaluating the effect of a cognitive disequilibrium among learners by which their overall perception of the instructor and the content and message of learning from the instructor becomes genuinely affected.

2.5.6 Part Two: Seven Stages of Instruction within the Learning Environment Foundational Development

When analyzing the entire 23 years of the Prophethood of Prophet Mohammad (PBUH) from a complete view, a pattern or stages of instructional delivery can be seen as established (Jamilin et al., 2017). At the beginning of the revelation, while living in the city of Mecca, establishing the central message of the Oneness of God was the first stage of instruction to humankind. As time passed and the number of people accepting the main message grew, structure in the way of life was established. Furthermore, Prophet Mohammad (PBUH) guided his pupils and believers to understand the main message further and develop the structure of Islam within the immediate society (after the migration to Medina) and to be everlasting for all humankind.

Later, assessments of the state of the Muslim society took place. Likewise, individual assessment through individual interactions with the Prophet (PBUH) and his companions took place, by which adjustment of the application of Islamic practice would occur, as well as the finalization of Islamic laws. As Muslims grew in population, migrated to Medina, and eventually spread through the region, equipping believers and society with the knowledge to practice and implement the main message of Islam independently in their lives leading into the present day. Throughout this process of establishment, assessment, and individual application, and at the end of the life of Prophet Mohammad (PBUH), he reminded people of Islam's main message and teachings. Likewise, the preservation of the timeless message of Islam since the life of Prophet Mohammad (PBUH) has continued where the systematic establishment, implementation, and individual application has allowed for each generation of humankind to be reminded and to teach and remind others of the teachings of Islam, surpassing learning environments and benefiting internal and external environments (indicated through the flow of influence of an instructor in the model) on a global scale. As Prophet Mohammad (PBUH) demonstrated, the replication of these seven stages can be implemented to deliver any content (short- or long-term) in any educational setting.

2.5.7 The Seven Stages of Instruction

In the Al Huda Instructional Model, as the role of the instructor is established and continual based on a fluid perception between learners and the instructor, the instructor communicates the message of learning through seven stages of instruction within the learning environment. The seven stages of instruction apply to any learning content, context, and learner age groups, from children (early education to secondary school) to adults in higher education and organizational training. These seven stages developed by the researcher are as follows:

Table 1. Seven Stages of Instruction in the Al-Huda Instructional Model

Stage of Instruction	Execution
1. Declaration of the Main Message	In this stage, the instructor declares the central focus of the content, such as the main topic, lesson, unit, subject, course study, etc., to provide a focused purpose of learning through formal communicative delivery.
2. Establishment of Structure	The establishment of structure is communicated and enforced by the instructor to align the learning purpose with a realistic approach to the execution of achieving the acquisition of knowledge of the main message through a structure of learning.
3. Guided Development	In the guided development stage, the instructor guides learners to acquire an understanding of the main message through direct instruction and learner interaction, including both formal and informal methods of communication such as presenting information, small groups, one-on-one, and examples through gestures, visuals, and verbal storytelling to take place.
4. Assessment	The instructor provides a formative or summative assessment to measure the knowledge acquired by learners.
5. Adjustment	The following adjustment stage allows the instructor to adjust through the removal, revision, or replacement of content according to assessment outcomes.

6.	Action (Independent Application)	In the sixth stage of action, the instructor facilitates learners to reflect and apply the concepts of the main message learned in real life; at this stage, the instructor is no longer involved in the application of concepts by the learner unless instructor involvement is prompted or requested.
7.	Reminding	In the final stage, the instructor reinforces and reminds learners at a future point of the learning experience of the main message, encouraging its continual application in real life.

The timeline of the completion of the instructional model is not restricted as the stages of instruction are applicable to use in a short or long-term focus.

2.5.8 Conscious Awareness of Perception in the Model Within the Stages of Instruction

A continual awareness by the instructor of their established role throughout their instruction is necessary for them to be held accountable for their verbal and nonverbal communication. A breakdown of the role of the instructor at any stage of the model could lead to a dismantling of the overall modeling of message delivery within the context of the stage of occurrence. If, at any stage of the instructional model, the learner experiences a disequilibrium that negatively affects the processing of information (the message), that stage and possibly the delivery of the main message, including any preceding stages, may become compromised or wholly rejected.

The instructional model displays this relationship and perception dependence as a two-way exchange where the role of the instructor affects the learner's acceptance of the current stage of the model. Likewise, the learner's acceptance or positive experience of cognitive processing allows the instructor to continue progressing through the instructional model to complete the seven stages.

2.6 Summary and Gaps in Existing Literature

The existing literature identifies a gap where the initial research question asking if an instructional model based on the sunnah of Prophet Mohammad (PBUH) can be developed becomes relevant, as such a model has not been attempted for universal application. Other studies focused on the communication methods that Prophet Mohammad (PBUH) used when making "dawah" or calling people to accept the Islamic religion. Bakti's (2013) study resulted in four areas of communication used by Prophet Mohammad (PBUH), which included information, change, forbidding the bad and joining the good, and noble ethics, deducting from the work of the Muslim scholar Badiuzzaman Said Nursi, only central elements to inviting and spreading the message of Islam to others.

As the literature details the existing efforts in Islamic pedagogical implementations, there is yet to be an established and understood single method of Islamic pedagogy, leaving different interpretations to develop rather than one clear and agreed model of Islamic pedagogy for application to exist universally and that has been empirically tested. Likewise, Islamic pedagogy is centered on nurturing youth, mostly attached to elementary settings, rather than a universal learner audience to include adults. A developed instructional model based on the sunnah of Prophet Mohammad (PBUH) can be used for all learners. This weakness provides a supporting evidential-based model of instruction based on the sunnah to be developed, which may guide those in the field of education to use in conjunction with such pedagogical methods in Islamic and secular education settings.

3. RESEARCH METHODOLOGY

3.1 Research Methodology

The research methodology of this study is a survey strategy. Survey strategy is a common strategy in social research related to the deductive research approach (Saunders et al., 2009). According to the pragmatist research philosophy for this study, a survey strategy is a critical element in the deductive research of the instructional model validation to provide further insight into the balance of obtaining results of a Likert scale questionnaire to reflect the research questions within quantitative values.

Likewise, a qualitative element of the survey strategy was also executed to provide further insight into the quantitative results and bring together through the pragmatist philosophy an actionable experience of what Kelly & Cordiero (2020) deduce to be "both knowing and acting" to enable the "sequencing of different data collection methods" (p.6). In addition, the survey research strategy can also collect primary data more efficiently, accurately, inexpensively, and quickly (Zikmund, 2003), making it a primary choice to reflect the research objectives of this study, including instructional model validation.

Additionally, it may be considered, as outlined by Onwuegbuzie & Combs (2010), that "if the quantitative analysis component is given significantly higher priority, then the analysis essentially is a quantitative-dominant mixed analysis" (p.5). For this study, the research is quantitative-dominant mixed analysis in that the research design holds a higher focus and priority on the quantitative portion over the qualitative portion of the design, supporting the quantitative data. The sample population targeted and obtained for this study, outlined in the sampling methods and sample size sections of this chapter, create a necessity for further opinions and perspectives of such individuals from their respective backgrounds to be further included in the data analysis of this study to answer further the outlined research questions, which otherwise would not provide enough insightful data to complete the study.

3.2 Data Analysis Method

The quantitative and qualitative data were collected concurrently using the same questionnaire tool. Therefore, the decision to collect both data types took place before the study in the data collection tool design used to collect the views and expert analysis of the developed instructional model. Al-Ababneh (2020) supports this method, stating, "The collected qualitative data through semi-structured interviews may be a valuable way of triangulating collected quantitative data through a questionnaire" (p.88). The data collection tool and mixed methods research design is to produce triangulation in the data results to have further qualitative insight into the quantitative numerical results.

Furthermore, the quantitative data analysis method allowed the researcher to calculate the data according to quantitative descriptive and inferential statistics, calculating the frequencies results from a descriptive Likert scale survey. The qualitative data analysis method allowed the researcher to determine themes of the qualitative responses of the expert participants from the qualitative interview portion of the data collection survey tool.

3.3 Sampling Method

The sampling method applied in the study was the non-probability sampling method. This method used convenience sampling, or participants being selected based on availability and willingness to become part of the study (Quinlan et al., 2019). This study includes an expert validation study by which a set criterion of parameters of experts was selected and contacted to participate based on their qualifications to evaluate the developed instructional model.

Through online query searches to seek participants with the desired qualifications, outlined in the "sampling size" section of this chapter, participants were contacted via email, messaging, or phone to seek their participation in this study. Once participation was confirmed, participants were electronically sent the materials, which included the developed instructional model conceptual framework and the questionnaire, necessary to complete their role for expert validation in this study. Once they completed the research questionnaire, their participation was complete.

3.4 Sampling Size

The sample size chosen for this study was 30 expert participants. The qualifications of the participants selected were with the following parameters listed in order of importance:

Table 2. Desired Qualifications of Expert Participants

Order of Importance	Desired Qualifications of Expert Participants
1	Ph.D. in Islamic Sciences / Islamic Studies with a focus in Hadeeth studies / Prophetic Tradition
2	Ph.D. in Islamic Sciences / Islamic Studies with a focus on Sunnah Studies
3	Ph.D. in Islamic Sciences / Islamic Studies
4	Master's degree in Islamic Sciences / Islamic Studies while currently completing Ph.D. in Islamic Sciences / Islamic Studies
5	Master's degree (or bachelor's) in Education or other fields with a Ph.D. in Islamic Sciences / Islamic Studies.
6	Master's degree (or bachelor's) in Islamic Studies with a Ph.D. in Education focusing on Islamic Education.
7	Master's Degree in Islamic Sciences / Islamic Studies with a Ph.D. in another field with Hafiz Quran and/or Hadeeth mastery/certification (Ijazah).

The desired demographics of selected expert participants also include the following parameters, listed in random order:

Table 3. Desired Demographics of Expert Participants

Random Order	Desired Demographics of Expert Participants
1	Gender: Male or female.
2	
3	Age: Over 18 years old (adult).
4	Location: Any location (worldwide)

The above-outlined parameters were used as guidance in the selection process of contacting the expert population of this study.

3.5 Methodological Limitations

This study incurred methodological limitations that centered on the sampling of this study. The researcher had to find professionals in the field willing to provide input to the prepared questions. This method is prone to disadvantages, such as the willingness of the participants to provide relevant feedback based on the study (Young et al., 2010).

While expert validation is the ideal method of validating and testing the developed instructional model conceptual framework, contacting and retaining expert participants was difficult, affecting the overall sampling size of this study. The desired sample size was 30 expert participants, as outlined in the previous section, according to the parameters of what is deemed as "expert" status for participation to enhance the confidence of the results of this study; however, six experts participated in this study, including five responses to the quantitative Likert scale and six responses to the qualitative interview questions (one participant completed only the qualitative feedback and did not complete the quantitative Likert scale).

4. RESULTS AND DISCUSSION

4.1 Sample Demographics

The participants of this study used cross-sectional sampling techniques, and the researcher sought participants based on the qualifications previously outlined in the methodology section. The range in demographics of the six participants, five of whom participated in the Likert scale results and all six who participated in the qualitative questionnaire, allow for the data results to be contextualized and interpreted to further the validity and discussion of the outcomes of this study.

A. Gender

The gender distribution data indicates an equal representation between male and female categories, constituting 50% of the total: three male and three female participants.

B. Title/Position Distribution

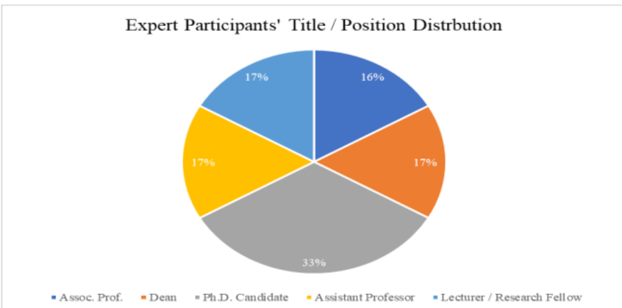

Figure 2. Expert Participants' Title/Position Distribution

Associate Professors and Ph.D. Candidates each constitute 33.33% of the dataset, reflecting a significant presence in the dataset. Dean and Associate Professor positions account for 16.67% each, while Assistant Professors and individuals with titles of Lecturer/Research Fellow also contribute 16.67% each.

C. Current or Most Recent Institution Affiliation

The distribution of affiliations within the dataset showcases a diverse representation of educational institutions. International Islamic University Malaysia (IIUM) and International Online University (IOU) each contribute 33.33%, indicating a significant presence of these institutions. Al-Madinah International University, Malaysia, holds a share of 16.67%, as does the combined representation of the University of South Australia and Cambridge Muslim College, U.K.

D. Related Field(s) of Study

Participants hold the following credentials in the related fields of study:

- Ph. D. Islamic Studies, Islamic Education
- Ph. D. Sunnah Studies
- B.Sc. Economics, B.A. Islamic Studies, M.A. Islamic Studies, Ph. D. Candidate Islamic Studies
- Ph. D. Islamic Scriptural Sciences, Quran and Hadith Studies, Islamic epistemology, Islamic theosophy
- B.Sc. Physics, M.Sc. Applied Physics, M.A. Islamic Sciences, Ph.D. Candidate Islamic Sciences

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- Ph. D. Human Development, Learning and Culture, Islamic Education

E. Years of Experience in Related Field(s)

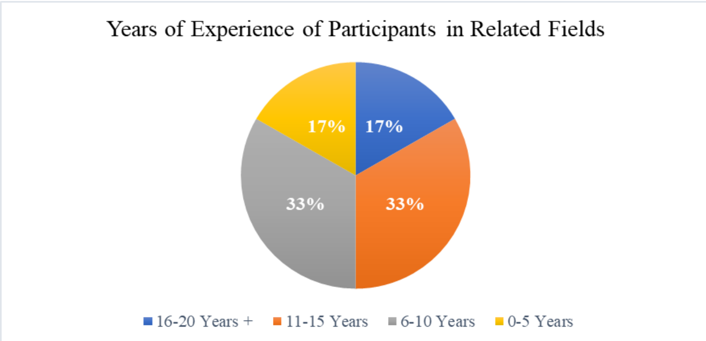

Figure 3. Years of experience of expert participants in related fields.

Most values are evenly distributed between two intervals, with 33.33% for 15 years and ten years of experience, respectively. Additionally, there is a 16.67% allocation for 20 years and three years of experience.

4.2 Quantitative Data Results of the Likert Scale

4.2.1 Reliability of the Likert Scale

The reliability statistics, notably Cronbach's Alpha, offer a robust measure of internal consistency for the evaluation instrument employed in assessing the instructional model.

Table 4. Cronbach's Alpha Reliability Test for the Likert Survey

Reliability Statistics		
Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.972	.978	22

With Cronbach's Alpha of .972 and .978 based on standardized items, the high coefficients suggest that the 22 items used in the evaluation consistently measure the same underlying construct. This result indicates a strong level of reliability, affirming the coherence and dependability of the data collected from respondents. The internal consistency demonstrated by these high Cronbach's Alpha values enhances the credibility of the evaluation instrument, indicating that it effectively measures the targeted dimensions related to the instructional model. The confidence in the reliability of the gathered data reinforced the validity and consistency of the insights derived from respondents' perceptions.

4.2.2 Summary Statistics of Likert Scale Results

Five of the six experts participated in the Likert scale questionnaire. The summary item statistics present vital metrics that provide insights into the overall perceptions of the respondents.

Table 5. Summary of Item Descriptive Statistics of Quantitative Likert Scale

Summary Item Statistics of Likert Scale Questionnaire

	Mean	Min	Max	Range	Max / Min	Variance	N of Items
Item Means	3.264	2.800	3.800	1.000	1.357	.097	22

The summary item statistics reveal respondents' generally positive perception of the instructional model, with a mean rating of 3.264. On average, the respondents provided ratings slightly above the midpoint, suggesting an overall favorable view. The range from 2.800 to 3.800 showcases the variation in responses across different evaluation items. This range indicates that while some aspects received lower ratings, others were perceived more positively. The range of 1.000 shows the extent of variability in the respondents' ratings. While some items received higher scores, others had lower ratings, contributing to the diversity of opinions. The maximum-to-minimum ratio provides insight into the relative spread of ratings. A ratio of 1.357 suggests a moderate level of variability, indicating that the range of responses is not extreme. The variance of 0.097 reflects the degree of dispersion of responses around the mean. A lower variance suggests that respondents' ratings are relatively consistent, contributing to a more stable overall perception. The evaluation included 22 items, each addressing specific aspects of the instructional model.

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4.2.3 Likert Scale Descriptive Statistics

The data collected from five respondents includes ratings on a scale from 2 to 5 for each question.

Table 6. Likert Scale Descriptive Statistics by Question

Likert Scale Descriptive Statistics by Question					
Questions	N	Min	Max	Mean	Std. Deviation
1. How would you evaluate the elements (sub-categories) of verbal and nonverbal communication by Prophet Mohammad ﷺ and their relevance to the execution of the instructional model?	5	3	5	3.80	.837
2. How would you rate the relevance of credibility and character in relation to the perception of students as described in the instructional model?	5	3	4	3.40	.548
3. How would you rate the importance of the role of the instructor as the central focus of the instructional model?	5	2	4	3.40	.894
4. How would you evaluate the seven stages of instruction with relation to the potential impact of content comprehension on learners as outlined in the instructional model?	5	2	4	2.80	.837
5. How do you rate the impact of the environment with relation to student perceptions of the instructor as outlined in the instructional model?	5	3	5	3.60	.894

6. How would you evaluate the potential impact of learner perceptions of the instructor with relation to content cognitive processing and academic achievement as outlined in the instructional model?	5	3	4	3.40	.548
7. How would you rate the presentation and explanation for understanding of the instructional model for use by instructors?	5	2	4	3.00	.707
8. How would you evaluate the use of the instructional model to teach any content/subject matter in a classroom teaching space?	5	2	4	3.00	.707
9. How would you rate the ability of ease for an instructor to move through each of the seven stages of the instructional model to teach required content short-term or long-term?	5	2	4	2.80	.837
10. How would you rate the instructional model for use in elementary educational settings?	5	2	4	3.00	.707
11. How would you rate the instructional model for use in higher education educational settings?	5	2	4	2.80	.837
12. How would you rate the instructional model for use in organization training settings?	5	2	4	3.00	.707
13. Please rate the overall degree of completion of the instructional model.	5	3	4	3.40	.548
14. Please rate the overall ease of understanding of the instructional model.	5	2	4	2.80	.837

15. How would you rate the instructional model overall providing a greater opportunity to reach the instructional goals of educators when compared to existing instructional models?	5	3	5	3.60	.894
16. How would you rate the overall potential impact of content comprehension of learners being taught through the instructional model compared to their potential content comprehension of being taught using existing instructional models?	5	3	4	3.40	.548
17. How would you evaluate the overall structure of the instructional model?	5	3	5	3.60	.894
18. How would you rate the overall use of the instructional model to achieve learning/educational goals?	5	3	4	3.40	.548
19. How would you evaluate the overall applicability and need for the instructional model in educational settings?	5	3	5	3.60	.894
20. How would you rate the overall relevance of the instructional model in educational settings?	5	2	4	3.20	.837
21. How would you rate the overall elements in the instructional model and the level in which they reflect and are based on the sunnah of Prophet Mohammad ﷺ?	5	3	4	3.40	.548
22. How would you rate the instructional model overall?	5	3	4	3.40	.548
Valid N (listwise)	5				

Descriptive statistics, such as the mean and standard deviation, were calculated for each question to comprehensively understand the respondents' perceptions. The following sections indicate the results for each Likert scale question:

Question 1: Verbal and Nonverbal Communication

Question 1 aimed to evaluate elements of verbal and nonverbal communication by Prophet Mohammad (PBUH) in relation to the instructional model. Respondents provided a mean rating of 3.80 with a standard deviation of 0.837, indicating a generally positive evaluation.

Question 2: Credibility and Character

Question 2 assessed the relevance of credibility and character with student perception. The mean rating was 3.40 with a standard deviation of 0.548, suggesting a moderate perceived relevance level.

Question 3: Role of the Instructor

Question 3 focused on the instructor's role in the instructional model. With a mean rating of 3.40 and a standard deviation of 0.894, respondents generally agree on the significance of the instructor's role. However, there is more variability in responses compared to some other questions.

Question 4: Seven Stages of Instruction

Question 4 evaluated the seven stages of instruction about the potential impact of content comprehension on learners. The mean rating of 2.80 suggests a moderate evaluation, and the standard deviation of 0.837 indicates some variability in responses. This flexibility implies that respondents have diverse opinions regarding the effectiveness of the seven stages in enhancing content comprehension.

Question 5: Impact of Environment

Question 5 explored the impact of the environment on students' perceptions of the instructor. The mean rating of 3.60 indicates a relatively high perception of the environment's importance. The standard deviation (0.894) suggests some variability, indicating that while respondents generally agree on the significance, there are differing opinions on the specific impact of the environment.

Question 6: Impact of Learner Perceptions on Content Processing

Question 6 examined the potential impact of learner perceptions of the instructor on content cognitive processing and academic achievement. The mean rating of 3.40 suggests a moderate evaluation, and the standard deviation of 0.548 indicates a relatively consistent agreement among respondents. Such consistency implies that respondents generally see an average impact of learner perceptions on content processing.

Question 7: Presentation and Explanation for Understanding

Question 7 focused on rating the presentation and explanation for understanding the instructional model. The mean rating of 3.00 and the standard deviation of 0.707 indicate a moderate evaluation with some response variability, suggesting that while respondents generally find the presentation and explanation satisfactory, there are varying opinions on its effectiveness.

Question 8: Use of Instructional Model in Classroom Teaching Space

Question 8 evaluated using the instructional model to teach any content/subject matter in a classroom teaching space. The mean rating of 3.00 and the standard deviation of 0.707 indicate a moderate evaluation with some variability. This result shows that respondents hold varied opinions on the effectiveness of using the instructional model in a classroom setting.

Question 9: Ease for an Instructor to Move Through Instructional Stages

Question 9 assessed the ease of ability for an instructor to move through each of the seven stages of the instructional model. The mean rating of 2.80 and the standard deviation of 0.837 suggest a moderate evaluation with some variability, indicating that respondents have diverse opinions on the ease of navigating through the instructional stages.

Question 10: Use of Instructional Model in Elementary Educational Settings

Question 10 assessed how respondents rate the instructional model for use in elementary educational settings. The mean rating of 3.00 and the standard deviation of 0.707 indicate a moderate evaluation with some variability, suggesting that respondents have diverse opinions regarding the effectiveness of the instructional model in elementary educational settings.

Question 11: Use of Instructional Model in Higher Education Educational Settings

Question 11 focused on how respondents rate the instructional model for use in higher education educational settings. The mean rating of 2.80 and the standard deviation of 0.837 suggest a moderate evaluation with some variability. Respondents have varying opinions on the effectiveness of the instructional model in higher education settings.

Question 12: Use of Instructional Model in Organization Training Settings

Question 12 assessed how respondents rate the instructional model for use in organization training settings. The mean rating of 3.00 and the standard deviation of 0.707 suggest a moderate evaluation with some variability, showing respondents hold diverse opinions on the effectiveness of the instructional model in organization training settings.

Question 13: Overall, Degree of Completion of Instructional Model

Question 13 focused on respondents' ratings of the overall degree of completion of the instructional model. The mean rating of 3.40 and the standard deviation of 0.548 indicate a generally positive evaluation with a relatively consistent agreement among respondents that they perceive the instructional model as complete.

Question 14: Overall Ease of Understanding of Instructional Model

Question 14 assessed respondents' ratings of the overall ease of understanding of the instructional model. The mean rating of 2.80 and the standard deviation of 0.837 suggest a moderate evaluation with some variability. This implies that respondents have diverse opinions regarding the ease of understanding of the instructional model.

Question 15: Overall Impact on Instructional Goals Compared to Existing Models

Question 15 focused on how respondents rate the instructional model's overall impact on reaching instructional goals compared to existing models. The mean rating of 3.60 and the standard deviation of 0.894 indicate a relatively high evaluation with some variability. This suggests that respondents generally perceive the instructional model as positively impacting instructional goals compared to existing models.

Question 16: Overall Impact on Content Comprehension Compared to Existing Models

Question 16 assessed how respondents rate the overall potential impact of content comprehension using the instructional model compared to existing models. The mean rating of 3.40 and the standard deviation of 0.548 suggest a moderate evaluation with a relatively consistent agreement among respondents. This implies that respondents generally see a mild impact on content comprehension compared to existing models.

Question 17: Overall Structure of the Instructional Model

Question 17 focused on respondents' evaluation of the overall structure of the instructional model. The mean rating of 3.60 and the standard deviation of 0.894 indicate a relatively high evaluation with some variability. This suggests that respondents generally perceive the instructional model's structure positively, although there are varying opinions.

Question 18: Overall Use to Achieve Learning/ Educational Goals

Question 18 assessed how respondents rate the overall use of the instructional model to achieve learning/educational goals. The mean rating of 3.40 and the standard deviation of 0.548 suggest a moderate evaluation with a relatively consistent agreement among respondents viewing the instructional model as effective in achieving learning goals.

Question 19: Overall Applicability and Need in Educational Settings

Question 19 focused on respondents' evaluation of the overall applicability and need for the instructional model in educational settings. The mean rating of 3.60 and the standard deviation of 0.894 indicate a relatively high evaluation with less variability, showing that respondents generally perceive the instructional model as applicable and needed in educational settings.

Question 20: Overall Relevance in Educational Settings

Question 20 assessed how respondents rate the overall relevance of the instructional model in educational settings. The mean rating of 3.20 and the standard deviation of 0.837 suggest a moderate evaluation with some variability. This implies that respondents have diverse opinions regarding the overall relevance of the instructional model in educational settings.

Question 21: Reflection on Sunnah of Prophet Mohammad (PBUH)

Question 21 addressed the reflection of instructional elements based on the sunnah of Prophet Mohammad (PBUH). The mean rating of 3.40 suggests a moderate alignment with the sunnah. The low standard deviation (0.548) indicates a relatively consistent perception among respondents agreeing with the instructional model reflecting the sunnah of Prophet Mohammad (PBUH).

Question 22: Overall Rating

The overall evaluation of the instructional model (Question 22) yielded a mean rating of 3.40 and a standard deviation of 0.548, indicating a generally positive perception among respondents viewing the instructional model favorably.

4.3 Qualitative Data Results of Interview Questionnaire

The qualitative data collected was completed through semi-structured written interviews conducted as part of the Likert scale questionnaire. Three qualitative interview questions were asked of the expert participants to provide an open-ended response. The participants were told their identity would not be shared in the results discussion; therefore, the researcher assigned each participant a number. This section will analyze the collected qualitative data from the interview questions.

4.3.1 Interview Question 1: "Please identify the most relevant/effective aspects of the instructional model."

Question 1 provided responses that included varied and like ideas. Five of the six expert participants provided a written response to this question. The most relevant and effective aspects of the instructional model, as indicated by the provided statements, were stated to include:

Theme 1: Classification of Communicative Elements of Verbal and Nonverbal Communication:

- "Participant 2" responded by stating the "classification of verbal and nonverbal communication,"
- Both "Participant 2" and "Participant 4" agreed that the "communicative elements" are effective/relevant elements of the instructional model.

Theme 2: Instructor's Credibility and Character:

- "Participant 5" noted the "credibility and character of the instructor really affects the learning" as a relevant aspect of the instructional model.

Theme 3: Role of the Instructor:

- "Participant 3" stated that "the role of the instructor" is the instructional model's most effective/relevant element.

In summary, the responses indicate the instructional model's most relevant/effective aspects: religious teachings, communication classification, the impact of instructor credibility, recognition of communicative elements, and the definition of the instructor's role.

4.3.2 Interview Question 2: "Please identify any weaknesses in the instructional model"

The responses to question 2 indicate agreeable themes about weaknesses in the instructional model. Five of the six expert participants provided a written response to this question. The following five themes emerged from the expert participants' responses as follows:

Theme 1: Lack of Clarification on Communication Elements Extraction and *Ahadeeth* Examples:

- "Participant 2" stated, "No clarification on how the elements (subcategories) of verbal and nonverbal communication were extracted from the hadiths of Sahih al-Bukhari."
- "Participant 5" stated, "The individual components should be introduced and defined briefly along with an example hadeeth following that type could facilitate comprehension."

- "Participant 6" agreed, stating, "It might be optimally useful to educators if everything you include in the model would directly reference Hadith and Seerah exemplified with vivid examples, stories, anecdotes to bring it to life."

Theme 2: Concerns about Stages of Instruction:

- "Participant 3" stated, "While teachers can be trained to adopt the Prophet's model, the rate of application by the teachers highly depends on their natural traits."

Theme 3: Limitations in Instructional Communication

- "Participant 3" also noted, "Not everyone is able to communicate effectively, though effective communication can be learned."

Theme 4: Instructor-Centered Model

- "Participant 6" included, "The model seems to be very 'instructor'-centered."

This grouping reflects the common themes in the experts' feedback regarding weaknesses in the instructional model, where half of the participants agreed that more examples of *ahadeeth* must be included in the instructional model description and background explanation.

4.3.3 Interview Question 3: "Please provide additional comments/recommendations for future considerations"

Question 3 provided further opportunities for insights into any additional comments/recommendations from the expert participants. Five of the six expert participants responded to this question. The feedback provided can be analyzed into the following themes identified:

Theme 1: Clarity in Extracting Communication Elements and Examples from the Seerah

- "Participant 2" re-emphasized, "The model should offer more clarity on the extraction process of verbal and nonverbal communication elements from Sahih al-Bukhari."
- "Participant 6" concurred in stating, "More information is needed on how the Prophet (peace and blessings be upon him) established credibility. How did he exhibit and share his character? We need colorful examples from the Seerah and Hadith."

Theme 2: Application in Educational Settings

- "Participant 4" stated an overall recommendation, "To compare with other proposed models in Islamic education".
- "Participant 6" stated, "The model lacks details on crucial educational moments, like learning in tense situations or emotional events, requiring further exploration."

Theme 3: Recommendation in favor of the Instructional Model

- "Participant 3" stated, "There is a lot of good in following the way of the Prophet PBUH."

- "Participant 5" agreed, stating, "A good overall idea."
- "Participant 6" commented, "This seems to be a good attempt at help[ing] educators structure learning environments in line with our beloved Master Prophet Muhammad, peace and blessings be upon him."

4.4 Dichotomous Question: Overall Recommendation

The questionnaire also included one dichotomous question in which expert participants were asked to respond to the question by selecting "Yes" or "No." The question asked, "Overall, do you recommend this instructional model for use by instructors in any learning/institutional setting?" Five of the six expert participants answered this question.

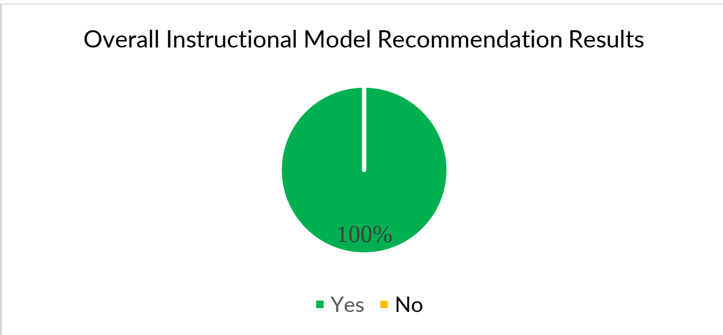

Figure 4. Overall Instructional Model Recommendation Results by Expert Participants

The dichotomous "Yes" or "No" question results indicate unanimous support for the instructional model among respondents. The data shows that all expert participants (100%) answered "Yes" to the question, while zero participants chose the "No" option.

The data results can add further insight into this research by which the research questions can be answered. "RQ1: Can an instructional model based on the sunnah of Prophet Mohammad (PBUH) be developed?" proved to be answered with a unanimous "yes" through the overall dichotomous question of recommendation in favor of the instructional model. Likewise, the qualitative responses indicated the classification of the communicative elements of Prophet Mohammad (PBUH) as a strength of the instructional model.

Numerous questions from the Likert scale and the qualitative interview questions provided insight into RQ2: "What is the overall effectiveness of the instructional model based on the sunnah of Prophet Mohammad (PBUH)?" Interview "Question 2" directly addresses the effectiveness of the instructional model in which expert participants indicated that the instructional model's most relevant/effective aspects are those elements of the communicative elements, the aspects of credibility and character of the instructor, and the role of the instructor. Mirroring the qualitative responses, the Likert scale responses to "Question 1" indicated parallel results in which experts provided an "Excellent" rating and the highest average score of 3.8 to the question "How would you evaluate the elements (subcategories) of verbal and nonverbal communication by Prophet Mohammad (PBUH) and their relevance to the execution of the instructional model?" The model proves to be strong in reflecting the communicative elements of Prophet Mohammad (PBUH), thus accurately capturing and reflecting the sunnah, as expressed through the verbal and nonverbal communicative elements of Prophet Mohammad (PBUH).

The expert participants were also asked to validate the ability of the developed instructional model to "provide a greater opportunity to reach the instructional goals of educators when compared to other instructional models," as stated in RQ3. "Question 15" of the Likert scale directly addresses this research question in which the average response of the expert participants was 3.6 with an "Excellent" rating, providing a positive correlation for the instructional model based on the sunnah of Prophet Mohammad (PBUH) to reach the instructional goals of educators when compared to other instructional models, despite a concern of application by instructors as Participant 3 noted, “Not everyone is able to communicate effectively, though effective communication can be learned,” providing insight for a potential need of training educators to implement the Al Huda instructional model or further formal educational training on instructional communication.

The last research question (RQ4) asks, "What is the potential impact of content comprehension for learners being taught through an instructional model based on the sunnah of Prophet Mohammad (PBUH) as compared to potential content comprehension for learners being taught through other instructional models?" This question can directly be assessed by examining the results of the Likert scale "Question 16," in which the expert participants recommended the instructional model, providing an average of 3.4 with multiple scores of "very good."

Studies such as the previously mentioned study by Chown & Alam (2006) suggest and support a cognitive approach to instructional model development rooted in the awareness of the communicative process by which perceptions based on verbal and nonverbal communication are necessary to design successful learning experiences; supporting the development and validation of an instructional model rooted in the Sunnah of Prophet Mohammad (PBUH). Muhamad et al. (2017) support the need for an instructional model based on the ahadeeth of the Prophet (PBUH), stating, "Although he has left us, his hadiths are well recorded and contain a vast array of knowledge that can be used to solve various problems" (p.90). The lack of an agreed-upon understanding of Islamic education outlined by Chown & Alam (2016) and a lack of formalized training for instructors in Islamic education leaves a need for an evidential-based model of instruction based on the sunnah of Prophet Mohammad (PBUH) to be developed.

The Al Huda Instructional Model encourages genuine credibility and character of the instructor with consistency and awareness in their environmental alignment to model after the embodiment of the learning message by which Prophet Mohammad (PBUH) and his method of instruction is the ultimate model for all humankind through his credibility, character, and communication.

The role of the instructor based on the perception of learners of the instructor is the central focus of the Al Huda model. Likewise, the credibility and character of the instructor are presented through the verbal and nonverbal communication they possess and present within the three environments. Moreover, the seven stages of instruction present opportunity for learners to have positive content comprehension, as content is presented to include the stages of declaration of the main message, establishment of structure, guided development, assessment, adjustment, action (independant application), and reminding. As stated by expert Participant 6, “This seems to be a good attempt at help[ing] educators structure learning environments in line with our beloved Master Prophet Muhammad, peace and blessings be upon him”, answering RQ4 with a result of positive potential impact of content comprehension for learners. Jamilin et al. (2017) support the development of such a model, stating, "It is important therefore to explore how Prophet Muhammad disseminated the divine message into a form that people could learn and understand" (p.1), supporting an effort for the Al Huda Instructional Model, as it has yet to be comprehensively done.

5. CONCLUSION

Instructional design and model development allow instructors to implement a method to communicate learning. However, there is supporting evidence that current theoretical educational frameworks and, thus, instructional models lack foundations in communication where an instructor's verbal and nonverbal elements can be modeled from a single individual and examples of communicative elements that are proven to be successful instruction. Likewise, existing models are aimed at specific learner audiences where discrepancies in educational approaches have become apparent in education.

The implications of this expert validation survey study confirm that the developed Al-Huda instructional model is a sound, empirically tested alternative to existing instructional models and can reach the educational goals of educators and learners alike. While experts identified some weaknesses in the developed model, such as further examples of *ahadeeth* to be included to provide more significant insights into the stages of instruction, these elements can be addressed for further clarity with modifications and greater explanations and training provided to educators for implementation. As such, the Al Huda model can be used in educational settings to reach educational goals of educators and learners alike, potentially compared to existing models. Likewise, the contributions of this research to the fields of Islamic sciences and education based on a communication theoretical framework, in which the merging of such fields to produce research provides an alternative lens in approaching an effective understanding of phenomena in the related fields and support the relevance of Islamic sciences within secular fields of academia and practical applications.

A continuation of future research will further develop the necessary details and elements to compare existing instructional models to the conceptualized instructional model based on the Sunnah of Prophet Mohammad (PBUH), by which the methodology and validation process of this research will provide comparative data to such models for final practical application and add to the existing literature filling the research gap in the related fields of education, communication, and Islamic sciences.

Likewise, empirical testing on implementation of the Al Huda Instructional Model in non-Islamic content and settings would be the next step to justify the application of the instructional model, using non-Islamic content with a pre-and post-test structure on learner comprehension and achievement with content implementation and assessment compared to other existing empirically tested instructional models. However, the unanimous recommendation favoring the developed model based on the Sunnah of Prophet Mohammad (PBUH) provides a positive outlook for universal application in and with Islamic and non-Islamic settings and content.

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THE ROLE & STRATEGY OF AMIL ZAKAH INSTITUTION TO IMPROVE AWARENESS OF ZAKAH PAYMENT IN INDONESIA: CASE STUDY OF RUMAH ZAKAT - YOGYAKARTA BRANCH

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ABSTRACT

Indonesia, the world's most populous Muslim country, faces pressing challenges like poverty, unemployment, and education quality. Zakah, a fundamental Islamic duty, seeks to redistribute wealth and boost productivity. Zakah's growth is notable, reaching approximately USD 1.4 billion in 2022, with the potential for USD 21.4 billion annually. Effective zakah management is pivotal for addressing poverty and social inequality, necessitating community-government collaboration. This study delves into the roles and strategies of Amil Zakah Institutions, focusing on Rumah Zakat (RZ) - Yogyakarta Branch, to enhance awareness and trust among Zakah payers. Employing qualitative methods, specifically the case study approach, the research extracts insights from literature reviews, field research, and interviews with administrators, zakah payers, and recipients. RZ adheres to Islamic Sharia and government regulations, emphasizing meticulous zakah asset management, regular audits, and transparent reporting. Their diverse methods encompass awareness campaigns through Friday sermons, social media, and informative materials to promote zakah contributions. RZ's pivotal role underscores the importance of precise planning in zakah collection, distribution, and reporting for effective zakah management. This research aims to illuminate the strategies employed by amil zakah institutions, like RZ, and their

significance in fulfilling their Islamic mission and benefiting the Muslim community.

Keywords: *Amil Zakah Institution, Awareness, Indonesia, Rumah Zakat, Zakah Payment*.

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1. INTRODUCTION

Indonesia is the largest Muslim population country in the world. According to World Population Review data (2023), the total number of Muslims is approximately 231 million inhabitants of Indonesia, or around 87 percent of the total population. However, as a developing country, Indonesia is facing many problems nowadays, such as a high poverty rate, high unemployment rate, infrastructure development inequality, and poor-quality education. According to Indonesia's Central Bureau of Statistics (2023), the number of poor people with a per capita expenditure per month below the poverty line in Indonesia reached 25.9 million people (9.36 percent).

In Islam, *zakah* is the third pillar of Islam, which is an obligation for every Muslim who is able to pay and is intended for those who are entitled to receive it (al-Fawzan, 2009). *Zakah* is the obligation of every Muslim individual who has excess wealth. One of the reasons why *zakah* is compulsory in Islamic teachings is that this method equalizes the gifts that Allah SWT gives so that it can also be enjoyed by people who have not received it. The *zakah* assets given should be useful for the advancement of the productivity of their lives.

According to the National Zakah Agency (BAZNAS), national zakah growth throughout 2022 increased by around 52% compared to the previous year (BAZNAS, 2022). The amount, which is approximately Rp. 21.3 trillion (USD 1.4 billion), was compiled by the National Zakah Agency (BAZNAS) and the *Amil Zakah* Institution (LAZ). Moreover, data from the Indonesian Ministry of Religious Affairs survey showed that the potential of zakah for individual wealth and income in Indonesia can reach Rp. 327 trillion (USD 21.4 billion) per year (Khoeron, 2023).

Zakah can become a source of funds that can be used for community welfare, especially to alleviate poverty and eliminate social inequality. Due to that, it is necessary to have professional and responsible *zakah* management carried out by the community together with the government. In this case, the government is obliged to provide protection, guidance, and services to *zakah* payers (*muzakki*), *zakah* receivers (*mustahiq*), and *amil zakah* institutions. With good management, *zakah* will be a potential source of funds that can be used to advance the general welfare of the entire community.

In Indonesia, *zakah* is managed by the National Zakah Agency (BAZNAS) and the Amil Zakah Institution (LAZ). There are 91 Amil Zakah Institutions that are recognized by the government (CNN Indonesia, 2021). One of those is *the Rumah Zakat* (RZ). The *Amil Zakah* Institution must be optimized to achieve its goals and objectives. LAZ requires roles and strategies to increase the awareness and trust of the Muslim community, especially for zakah payers (*muzakki*).

This study aims to address two primary objectives based on the background provided. Firstly, it seeks to evaluate the role of the *Amil Zakah* Institution in increasing the awareness and trust of the *Zakah* payer. Understanding the effectiveness of the institution in fostering awareness and trust among the *zakah* payers is crucial for improving the management and impact of *zakah* collection. Secondly, the study aims to develop effective strategies that will enable the *Amil Zakah* Institution to achieve its goals and objectives. By identifying and formulating suitable strategies, the institution can enhance its capacity to fulfill its mission in accordance with Islamic law (Sharia) and effectively contribute to the welfare of the Muslim community.

The findings of this study improve the management of *Amil Zakah* Institution and benefit the Muslim community by adhering to Islamic law (Sharia). The results of this study are expected to meet the objectives of the research, namely: To find out the role of the *Amil Zakah* Institution in order to increase the awareness and trust of the *Zakah* payer and to develop the strategies for Amil Zakah Institution to achieve its goal and objectives.

2. REVIEW OF LITERATURE

2.1 Zakah Definition

Linguistically, *zakah* means "to grow" and "to increase." However, the root of the word *zakah* means "cleanliness, growth, blessing, and praise" (al-Qaradawi, 1999). Sh. Salih al-Fawzan (2009) defines *zakah* according to Sharia as "a rightful obligation on a special property of a particular group of people to be paid at a particular time." The relationship between the meaning of *zakah* according to language and terminology is very real and close, signifying that the wealth issued by *zakah* will be a blessing, growing, developing, and increasing.

Zakah is an obligation upon every Muslim because it is one of the Islamic pillars. Zakah is a strict obligation based on the decree of Allah SWT. Because of its importance, Allah *taala* says in the Qur'an about the obligation of *zakah*, "*Take Sadaqah (alms) from their wealth in order to purify them and sanctify them with it, and invoke Allah for them....*" (*Sura At-Taubah*: 103).

In the Qur'an, there are many verses about the obligation of *zakah*, where *zakah* is mentioned together with the obligation of salah (prayer), and both are pillars in Islam, as stated in the word of Allah *taala*, "*And perform As-Salat (Iqamat-as-Salat), and give Zakah, and whatever good you send forth for yourselves before you, you shall find it with Allah. Certainly, Allah is All-Seer of what you do*" (al-Quran al-Karim, Sura Al-Baqarah: 110).

Moreover, Prophet Muhammad (*pbuh*) emphasizes in Hadith the five pillars of Islam, "*Narrated Ibn 'Umar: Allah's Messenger (pbuh) said: Islam is based on (the following) five (principles): To testify that none has the right to be worshipped but Allah and Muhammad is Allah's Messenger (pbuh); To offer the (compulsory congregational) prayers dutifully and perfectly; To pay Zakah (i.e., obligatory charity); To perform Hajj. (i.e., Pilgrimage to Mecca); To observe fast during the month of Ramadan*" (The Hadith of the Prophet Muhammad at your fingertips, Sahih Bukhari: 8, Sahih Muslim: 111).

2.2 Productive Zakah

Zakah is considered capable of alleviating poverty because it is a legalized means of religion in capital formation. The formation of capital does not solely come from the processing and utilization of natural resources, but also through efforts to provide a portion of the assets for the capable, which must be paid to the *zakah* manager. Zakah is considered to be able to maximize the quality of human resources through the provision of facilities and infrastructure for the community, increasing productivity, and enhancing public income in general (Amalia & Mahalli, 2012).

Productive *zakah* is the giving of *zakah* that can enable recipients to produce something continuously, using the assets of zakah they have received. In other words, *zakah* is given in a way that the assets or *zakah* funds provided to *mustahiq* (those eligible to receive *zakah*) are not spent but are instead developed and used to help their businesses, enabling them to fulfill their needs continuously.

The utilization of productive *zakah* through means or efforts brings greater and better results and benefits. The utilization of *zakah* is highly dependent on its management. If the management is good, the utilization will be felt by the community. The use of *zakah* usually varies from one region to another. From the field research conducted, it is evident that *zakah* wealth is used for the empowerment of the community's economics, such as in agriculture, animal husbandry, and other small businesses.

2.3 *Zakah* Management in Many Countries

Zakah management has been implemented in many Muslim countries. For example, in Ghana, according to Dogarawa (2009), the institutions of *zakah* & *waqf* are used to combat poverty and enhance welfare in society. Due to that, there is a dire need to activate, revitalize, and reform *zakah* & *waqf* management formulas and to address unsettled issues inherent in the institutions. In another research, Dogarawa (2008) concluded that the Zakah system provides a continuous transfer of income from the rich to the poor in Nigeria. If promptly collected and properly disbursed, it plays a role in solving dangerous problems such as poverty and inequitable income distribution in a Muslim society.

On the other hand, Hasanah (2014) compared the implementation of *zakah* management in three different countries, namely Saudi Arabia, Sudan, and Indonesia. In Saudi Arabia and Sudan, *zakah* can be used for the economic empowerment of people. Zakah is managed by amil who are able to manage *Zakah* productively and regulated by appropriate legislation. In Indonesia, *zakah* should be able to help the government tackle social and economic problems. However, currently, *Zakah* in Indonesia cannot be utilized properly due to unprofessional *amil*.

In the city of Kedah, Malaysia, some issues and gaps were identified, such as the effectiveness of *zakah* distribution not being shown. This issue of effectiveness in *zakah* distribution needs to show a healthier trend to convince worried payers (al-Haq & Abd-Wahab, 2017). *Zakah* plays an important role in poverty alleviation and socio-economic development in

Malaysia. The *zakah* system shall progress alongside the tax system and provide satisfaction and enhance loyalty to *zakah* contributors (Shariff, Jusoh, Mansor, & Jusoff, 2011). Ibrahim & Ghazali (2014) highlighted problems and challenges faced by the *Zakah* Board in performing as a "micro-finance institution" in Selangor, Malaysia. This productive *zakah* has the goal of alleviating poverty and reducing income inequality.

In Pakistan, the national *zakah* system is a simple system based on traditional Islamic law. The *zakah* system faces challenges of deficiencies due to corruption, favoritism, and government greed. Apart from that, Pakistan's national *zakah* system has enormous potential to help vulnerable poor older people but is undermined through insufficient funding, cumbersome administrative processes, and corruption (Clark, 2001).

2.4 Zakah Management in Indonesia

In Indonesia, *zakah* management is governed by Law No. 38 of 1999 concerning the Management of *Zakah* and Director General of Islamic Community Guidance and Hajj Affairs No. D. D / 291 of 2000 concerning Technical Guidelines for the Management of *Zakah*. In this Law, there are still many shortcomings, especially the absence of sanctions for *muzakki* who neglect their obligation to pay *Zakah*. However, this Law encourages efforts to establish *zakah* management institutions that are trustworthy, strong, and trusted by the community.

In this Law, it is stated that the management of *zakah* aims to:

- Improve services for the community in carrying out *zakah* according to religious guidance.

- Improve the function and role of religious institutions in an effort to realize societal and social justice.
- Increase the yield of use and the usability of *zakah*.

In Chapter III of Law No. 38 of 1999, it is stated that the zakah management organization consists of two types, namely the *Amil Zakah* Agency (BAZ) and the *Amil Zakah* Institution (LAZ).

The management of *Zakah* by institutions has several advantages, including (Parakkasi, 2019):

- Guaranteeing the certainty and discipline of *zakah* payments.
- Avoiding the inferiority complex of the *zakah mustahiq* when facing directly to receive *zakah* from the *muzakki*.
- Achieving efficiency and effectiveness as well as the right targets in the use of *zakah* assets according to the scale of priorities that exist in a place.
- Showing the prominence of Islam in the spirit of Islamic governance.
- Facilitating the coordination and consolidation of *Muzakki* and *Mustahiq* data.
- Facilitating reporting and accountability to the public.
- Ensuring *zakah* management can be managed professionally.

Conversely, if *zakah* is handed over directly from *muzakki* to *mustahiq*, although legal by Sharia, the wisdom and function of *zakah*, especially those relating to the distribution and welfare of the ummah, will be difficult to realize. The National Amil Zakah Agency (BAZNAS) is a non-structural government institution that is independent and responsible to the President through ministers to carry out *zakah* management. The function of BAZNAS is for planning, implementing, controlling, collecting, distributing, and utilizing *zakah*, as well as reporting and accountability for the management of *zakah*. BAZNAS is authorized to collect *zakah* through the Zakah Management Unit (UPZ) and/or directly. UPZ includes state institutions, ministries/government institutions, state-owned enterprises, private companies, representatives of the Republic of Indonesia abroad, and state mosques (Sahroni, Suharsono, & Setiawan, 2018).

To assist BAZNAS in carrying out the collection, distribution, and utilization of *zakah*, the community can form the *Amil Zakah* Institution (LAZ). The establishment of LAZ must obtain permission from the minister and fulfill the requirements as an Islamic community organization that manages the fields of education, *da'wah*, and social services registered with the Ministry of Religion. LAZ is a legal entity that has been approved by the Ministry and organizes government affairs in the legal field. LAZ must get a recommendation from BAZNAS and have its own internal sharia supervisor. LAZ must have technical, administrative, and financial capabilities to carry out its activities. LAZ is a non-profit organization and is willing to be regularly audited for sharia and finance.

BAZNAS and LAZ are obliged to distribute *Zakah* to *mustahiq* according to Islamic law. The distribution of alms is based on a priority scale, considering the principles of equity, justice, and territoriality. *Zakah* can be utilized for productive efforts in the framework of handling the poor and improving the quality of life. The utilization of *zakah* for productive endeavors is carried out if basic needs have been fulfilled. In addition to receiving *zakah*, BAZNAS, and LAZ can also receive *infaq*, charity, and social funds. The distribution and utilization of these funds must be carried out in accordance with Islamic law and line with the designation made by the giver.

3. RESEARCH METHODOLOGY

3.1 Research Design

The research design employed in this study utilizes a qualitative method. Qualitative research involves a research procedure that produces descriptive data in the form of written or oral words from individuals and observed behavior. The method aims to explore and derive meaning from the data obtained through the study's results.

One of the approaches used in this qualitative research is the case study approach. This approach is employed to investigate and understand an event or problem by collecting various kinds of information, which are then processed to find a solution to the revealed problems.

3.2 Sources of Data

The data for this research is sourced from primary data, which refers to directly collected data from the first source. Primary data will be obtained through literature study, field research, and interviews with several administrators at Amil Zakah

Institution, *zakah* payers (*muzakki*), and *zakah* receivers (*mustahiq*).

3.3 Analysis and Interpretation

Analyzing the problems and data interpretation are essential to achieve the objectives of this research. In the case study approach, data analysis can be conducted through the following steps:

a. Organizing information/data.

b. Reading the entire information/data and providing suitable codes.

c. Making a detailed description of the case and its context.

d. Establishing patterns and identifying relationships between several categories.

e. Interpreting and developing a natural generalization of the case.

f. Presenting the findings narratively in the study.

4. RESULTS AND DISCUSSION

4.1 Profile of *Rumah Zakat* (RZ)

Rumah Zakat is an *Amil Zakah* Institution that focuses on the management of *zakah*, *infaq*, and *sadaqa* to be distributed to those in need, especially in efforts to alleviate poverty and improve social welfare. This institution plays a role in collecting and distributing *zakah* funds as well as implementing various humanitarian programs and projects to assist the underprivileged and people in need of assistance.

Vision: International philanthropy organization based on professional empowerment.

Mission:

a. To actively participate in building an international philanthropy network.

b. To facilitate society's independence.

c. To optimize all related aspects of resources through human excellence.

Brand Values:

Trusted: To run the business professionally, transparently, and reliably.

Progressive: To bravely innovate and educate in order to gain more benefits.

Humanitarian: To facilitate every humanitarian action sincerely and universally for the sake of humankind (Rumah Zakat, 2022).

Rumah Zakat was officially established on September 1, 2003, in Bandung, Indonesia. It was founded by a group of young Muslim professionals and philanthropists with the aim of creating an efficient and transparent *zakah* institution. Their goal was to collect and distribute *zakah* funds effectively to assist the less fortunate and contribute to community development.

Since its inception, *Rumah Zakat* has experienced rapid growth and expanded its presence across Indonesia. It operates as a non-profit organization with a strong emphasis on accountability, professionalism, and innovation. The institution collaborates with various partners, including government agencies, NGOs, and international organizations, to implement a wide range of humanitarian and development projects.

Over the years, *Rumah Zakat* has played a significant role in poverty alleviation, disaster relief, healthcare, education, and various other social and community development initiatives. Through its programs, it has positively impacted the lives of millions of people throughout Indonesia.

Currently, *Rumah Zakat* continues to evolve and adapt to the changing needs of society, aspiring to be a leading philanthropic institution that empowers communities and contributes to creating a more just and equitable society.

4.2 Collection and Distribution of Zakah Funds at RZ - Yogyakarta Branch

The management aspect plays a crucial role in the successful collection and distribution of *zakah* at RZ - Yogyakarta Branch. The process of *zakah* collection is closely intertwined with its management, which is vital for achieving the desired outcomes. To raise funds from the community, RZ employs the following methods:

A. Direct Fund Collection System: RZ's representatives visit potential donors in person. During these interactions, RZ presents its programs through presentations. Alternatively, donors can visit the RZ office to directly contribute their *zakah*. In this case, donors have the flexibility to specify the recipients or entrust RZ with distributing *zakah* to those in need.

B. Indirect Fund Collection System: RZ organizes events that engage prospective donors, such as seminars and gatherings related to social issues. These events provide education to prospective donors about RZ's programs, motivating them to contribute their funds through RZ, including zakah and other humanitarian donations.

In its efforts to collect funds from the community, RZ offers various service products that continuously evolve with the organization's growth. Currently, RZ's service products can be categorized into several parts:

- Collection of Zakah funds;
- Collection of humanitarian funds;
- Collection of *infaq* / *sadaqa* funds;
- Collection of orphan funds;
- Collection of cash *waqf* funds;
- Collection of *qurban* savings funds;
- Collection of CSR (Corporate Social Responsibility) funds;
- Collection of relief goods;
- Partnership for implementing corporate social programs by government / private sector.

In the distribution of *Zakah*, the first step involves the Amil Aakah identifying and classifying potential recipients, known as *mustahiq*. This process is crucial for determining priority, including who should receive Zakah first, the criteria used for prioritization, and whether Zakah should be given in consumptive or productive forms.

At RZ - Yogyakarta Branch, *zakah* distribution primarily focuses on aiding the needy and impoverished, given the substantial number of people living in poverty in the area. However, RZ remains open to assisting other groups as well, as dictated by the specific circumstances on the ground.

According to RZ, there are two main groups classified as poor and destitute:

A. People Unable to Work: This group includes the elderly, orphans, and individuals with mental or physical disabilities who cannot engage in employment. They receive regular *zakah* support, either for the duration of their lives or until they can achieve independence.

B. People Capable of Work but Lacking Capital: This category comprises individuals who have the potential to work and generate income but lack the necessary capital to start businesses. This group, which includes traders, craftsmen, and farmers, receives *zakah* to establish small businesses, enabling them to attain self-sufficiency and meet their daily needs.

RZ provides assistance to these disadvantaged individuals through various levels of support, ranging from consumptive to productive assistance:

A. Consumptive Assistance: This form of aid is provided directly to address immediate needs. It may take the form of financial assistance or the provision of essential items required by those in need.

B. Productive Assistance: RZ offers community development programs as a form of productive assistance. These programs include training and the provision of capital to help individuals lift themselves out of poverty. An example of such a program is "*Rumah Mandiri*," an economic development initiative. This approach ensures that *zakah* funds are used effectively to uplift the less fortunate, providing them with the means to improve their livelihoods and become self-reliant.

4.3 RZ's Roles and Strategies

To raise awareness among *muzakki*, RZ employs several strategies to encourage donors to channel their funds through RZ. These strategies include:

A. Friday Sermons: Utilizing Friday sermons to educate the community about the importance of *zakah* and how to calculate it.

B. *Majelis Ta'lim*: Organizing educational gatherings to provide insights into *zakah* and its practical aspects.

C. Magazines, social media, and Brochures: Creating practical materials that explain the assets subject to *zakah* and the calculation process, which are disseminated through magazines, social media channels, and brochures.

D. Direct Involvement: Encouraging donors to participate in the direct distribution and utilization of *zakah* funds at RZ – Yogyakarta Branch.

These efforts are aimed at attracting more donors and increasing the funds received by RZ. RZ keeps *muzakki* informed through its website, which can be accessed at https://www.rumahzakah.org/care/donasisaya (account).

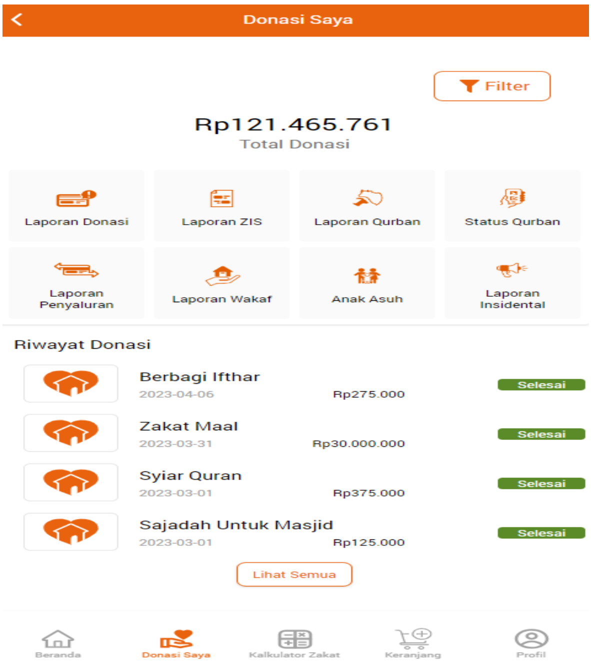

Figure 5. Rumah Zakat Donor Account

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RZ provides public information through:

- Monthly donor magazine
- Website
- Social media (Instagram, Facebook, Twitter)
- Rumah Zakat News videos on YouTube
- Local and national media

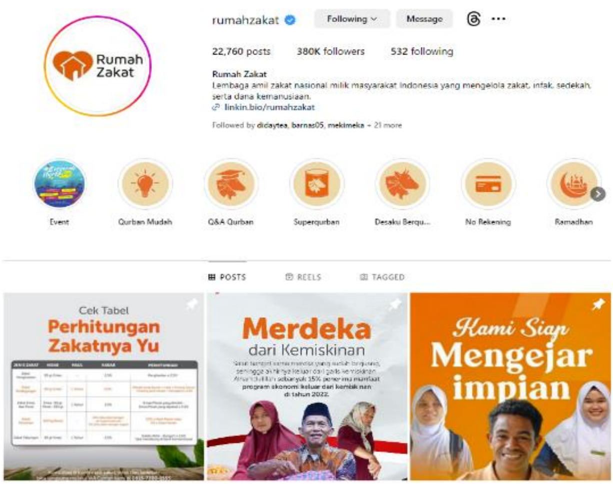

Figure 6. Rumah Zakat Instagram and Facebook Account

To increase trust among existing donors, RZ employs several methods to instill confidence in the organization's performance. Most donors trust RZ with their funds, and RZ employs the following strategies to enhance this trust:

A. Engaging Donors in Direct Fund Distribution: In the implementation of ongoing programs, RZ actively involves donors in directly distributing funds. For instance, by organizing social activities that allow donors to witness firsthand how their contributions support clinics, schools, and other initiatives.

B. Regular Reporting to Donors: RZ consistently provides donors with detailed reports on the receipt and allocation of their funds. These reports are delivered through monthly magazines or reports. By doing so, RZ aims to fulfill donors' information needs, ensuring they are well-informed about how their contributions are utilized, the form in which funds are distributed, and whether their donations reach the intended recipients. Monthly financial audits are conducted by the main office, and annually, external public accountants perform nationwide audits, ensuring transparency in the centralized funding system.

RZ strictly adheres to Islamic Sharia principles in the management of *zakah* and alms funds, overseen by the Sharia Council comprising three individuals knowledgeable in Islamic Sharia. This council supervises and deliberates on matters related to *zakah* management, community empowerment programs, and financial records. New programs proposed by RZ management are subject to consultation and review by the Sharia Council, which provides fatwas and guidance.

In accordance with the law, RZ is obligated to comply with government regulations and is required to submit reports to both the Ministry of Religious Affairs and BAZNAS. The Yogyakarta branch of RZ has earned an 'A' accreditation and received a Shariah compliance audit report from the Ministry of Religion, affirming that its management aligns with Sharia principles. Additionally, RZ has been awarded the ISO 9001 Quality Management certification by BSI in the category of Customer Relationship Management for Donors.

The role and function of RZ as an amil *zakah* is crucial to the success of Zakah management. Therefore, RZ needs careful planning, including the collection, distribution, recording, and reporting of *Zakah* funds. With the increasing number of *muzakki* over time, the number of *mustahiq* will also rise, necessitating greater awareness among people to pay *zakah*. This presents a challenge for RZ in raising funds from the community, as it serves as a partner for the government in addressing social problems.

According to Mr. Listanto, the Funding Manager at RZ Yogyakarta Branch, RZ's role and strategy in maintaining donors while effectively managing *zakah* involves strengthening donor engagement in this digital era. Currently, RZ raises awareness by delivering transparent financial reports regarding the distribution of *zakah* and alms. Building trust within the community is achieved by offering simple, user-friendly digital payment facilities for Zakah.

RZ has introduced the funding platform sharinghappiness.org to facilitate this process. Recognizing Indonesia's high level of social sensitivity, RZ is dedicated to providing convenient options for *zakah* payment.

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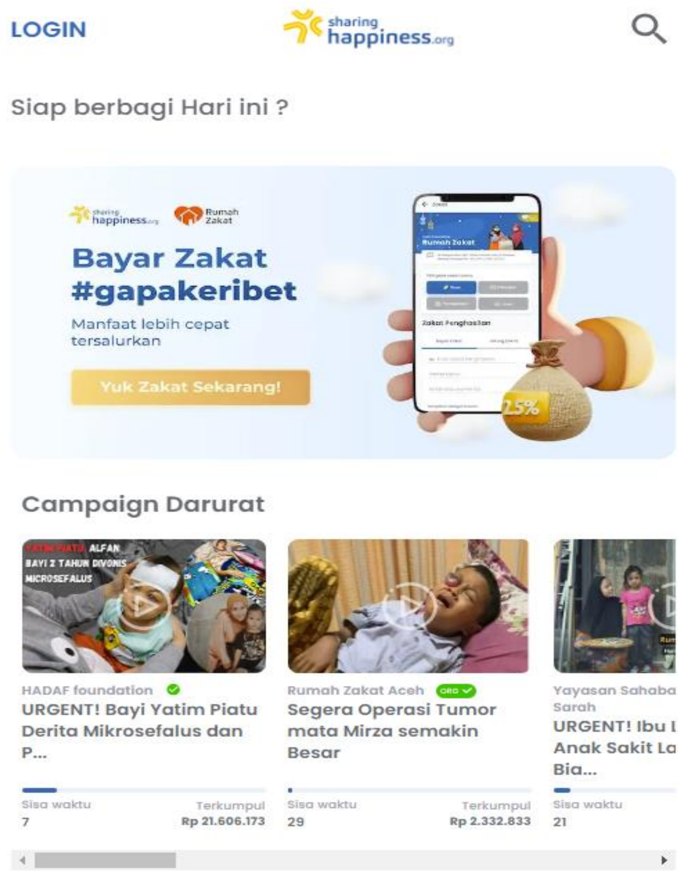

Figure 7. Sharinghappiness.org Funding Platform

RZ offers services that directly benefit donors. Across all its branch offices, RZ maintains standardized characteristics, ensuring that its services resemble those of a bank. This approach aims to convey the message that social institutions

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provide services with the same level of professionalism as commercial businesses.

RZ regularly updates donors on empowerment programs through various channels, including SMS, email, and online accounts. Public information is disseminated through social media platforms such as Facebook, Twitter, Instagram, and YouTube. Additionally, financial reports are made publicly accessible on the website and through mass media channels.

Figure 8. Rumah Zakat Main Website

Convenience is an integral part of Rumah Zakat's commitment to enabling *muzakki* to optimize their worship, including Zakah, *Infaq*, *Sadaqa*, and other empowerment programs. RZ is dedicated to fulfilling the *muzakki*'s mandate by providing easy access to pay *zakah* through various methods, including:

- Visiting the counters in person
- Donation pick-up services
- Credit card or PayPal transactions
- Inter-account transfers or ATM transactions
- Donations via the Post Office

RZ actively involves donors, ensuring that *Muzakki* can directly participate in and witness the community empowerment process funded by their contributions. RZ has gained donors' trust through numerous awards received in 2022, including:

- Global Good Governance Awards for the 2022 3G Social Responsibility Award
- Certificate of Appreciation for its efforts in the Special Protection of Children, especially orphans affected by Covid-19
- Indonesia Brand Communication Champion award in the category of "The Best Social Media Performance"
- Philanthropic Institution for Community Economic Empowerment in 2022
- Indonesia Halal Industry Award 2022 in the category of Best Community Social Impact Initiative

As a support system for *Muzakki*, RZ provides program updates, particularly those with special and transparent values related to RZ's empowerment initiatives. Donors can seek consultations by visiting our offices in person or contacting us by telephone to address any questions regarding zakah and alms. RZ offers assistance in providing arguments (*daleel*) and calculating the required *zakah* amount. Through these efforts, RZ aims to instill confidence and strengthen trust among *Muzakki*.

RZ also plays a vital role in educating the public about the obligation of *zakah* through routine community teachings, engagement in disaster relief efforts, and partnerships with large corporations involved in education and health programs.

5. CONCLUSION

This paper discusses the roles and strategies of the *amil zakah* institution in increasing awareness of *zakah* payments by *Muzakki*. The performance of the Rumah Zakat (RZ) - Yogyakarta Branch has adhered to Islamic Sharia and government regulations. In carrying out its main duties, which include recording and administering *zakah* assets in compliance with applicable regulations, conducting regular internal and external inspections by public accountants, publishing annual audited financial reports through mass media, and submitting semi-annual reports to the Ministry of Religion and BAZNAS.

The method used by RZ in collecting funds can motivate and raise awareness in the community to channel their *zakah* through RZ, ensuring that *zakah* distributed through RZ is more productive for the *mustahiq*. RZ - Yogyakarta branch adopts various approaches, such as raising awareness about the obligation to pay *zakah* and informing *muzakki* about the option to channel their *zakah* through established *amil zakah* institutions. These efforts include Friday sermons, *majelis ta'lim*, social media, websites, magazines, brochures explaining the assets that must be paid, how to calculate them, and direct involvement in the distribution and utilization of zakah.

The role of RZ - Yogyakarta Branch as an *amil zakah* is crucial for the success of *zakah* management. Therefore, the RZ - Yogyakarta Branch needs careful planning, including the collection, distribution, recording, and reporting of *zakah* funds.

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AN ANALYSIS OF ZAGHLOUL EL-NAGGAR THOUGHT (CRITICAL STUDY OF HADITH USED IN *AL-I’JĀZ AL-‘ILMI FĪ SUNNAH AL-NABAWIYYAH* BOOKS)

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ABSTRACT

This research aims to criticize the hadiths included by Zaghloul El-Naggar in his book Al-I’jāz al-‘Ilmi fī Sunnah al-Nabawiyyah. This research departs from the results of the researcher's reading of Zaghloul El-Naggar's book, which often uses weak (ḍa’īf) or fabricated (mauḍu) hadith as evidence (dalīl) but he claims that the redaction is from hadith of the Prophet. The research was conducted using qualitative methods. Several things that will be the focus of discussion in this research are: 1) What are the ḍa’īf and false hadiths that Zaghloul El-Naggar includes in his book Al-I’jāz al-‘Ilmi fī Sunnah al-Nabawiyyah? 2) Why did Zaghloul El-Naggar include weak (ḍa’īf) and fabricated (mauḍu) hadiths in his book? 3) How to address the problem of using weak (ḍa’īf) and fabricated (mauḍu) hadiths in Al-I’jāz al-‘Ilmi fī Sunnah al-Nabawiyyah books? Among the conclusions that the researcher reached through this research was that the researcher found valid evidence that the hadiths listed by Zaghloul El-Naggar were ḍa’īf and even fabricated (mauḍu) hadiths. This has become a criticism from researchers because the use of fabricated (mauḍu) hadith is completely inconsistent with the title of the book which claims that this book contains miracles originating from the Sunnah Nabawiyyah (hadith)..

Keywords: *Hadis, Zaghloul, Sunnah, Al-I'jāz al-'Ilmi.*

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1. INTRODUCTION

Hadith is the second authoritative source after al-Qur'an in Islam. Al-Quran and Hadith are two things that are mutually dependent on each other. Even though in terms of interpretation and implementation there are differences, at least the majority of scholars agree that the Al-Qur'an and hadith are reference sources in Islam.[1] The function of Hadith in the Qur'an is as a reinforcement (*Bayān al-Taqrīr*), interpret the verses that *mujmal* (*Bayān al-Tafsīr*), abolishing the laws in the Qur'an (*Bayān al-Naskhi*), establish laws that are not found in the Qur'an (*Bayān al-Tasyrī'*).[2] Therefore, the Al-Qur'an and Hadith must be used in harmony as guidelines in Islamic law. It also needs to be understood that basically the Qur'an as a whole is definitive *(Qath'i al-Wurūd)*, while the Hadith has its nature definitive *(Qath'i al-Wurud)* namely *mutawātir* hadith, and there are also those that are speculative *(ẓanni al-Wurūd)* namely the *aḥād* hadith.[3]

Hadith categorized as definitive (*ẓanni al-Wurūd*) more than definitive (*Qath'i al-Wurud)* hadith. Therefore, it is necessary to research the validity of a hadith before making it a proof. Hadith are classified into several categories based on the quality of

[1] Suryadi Suryadi and Muhammmad Alfatih Suryadilaga, *Metodologi Penelitian Hadis*, I (Yogyakarta: TH-Press, 2009), p. 1.
[2] Nur Azizah, Siti khalijah Simanjuntak, and Sri Wahyuni, 'Fungsi Hadis Terhadap Al-Qur'an', *Jurnal Dirosah Islamiyah*, 5.2 (2023), 535–43 (p. 541) <https://doi.org/10.47467/jdi.v5i2.3194>.
[3] Suryadi, *Metodologi Ilmu Rijal Hadis* (Yogyakarta: TH-Press, 2012), p. 1.

their chain of narrator *(sanad)* and *(matn)*, including *ṣaḥīḥ* hadith, *ḥasan* hadith, weak (*ḍa'īf)* hadith and fabricated (*mauḍū')* hadith.[4] However, it cannot be denied that there are still some people who apply a hadith without researching the quality of the hadith first. Moreover, if you use a hadith whose quality is not yet clear, then after examining the chain of narrator *(sanad)* and content *(matn)* it is known that the hadith is a fabricated (*mauḍū')* hadith.

Hadith whose quality is not yet clear, you should first carry out research in the chain of narrator (*sanad)* and content (*matan)* of hadith aspect. This is a necessity to obtain information regarding the acceptance or rejection of the quality of a hadith. After that, the suitability of the hadith can be determined in its implementation. Moreover, remembering that the hadith were not written in their entirety during the time of the Prophet SAW. which then provides opportunities for some individuals to fabrication hadiths for political, economic and popularity interests.[5] Therefore, selective efforts towards hadith are very important.

Al-I'jāz al-'Ilmi fī Sunnah al-Nabawiyyah Books by Zaghloul El-Naggar is a book that collects hadiths related to science. Researchers suspect that El-Naggar did not confirm the validity of the hadiths contained in his book. This makes researchers anxious, because the title contained in his book is miracles in the hadiths of the Prophet Muhammad, is the word of miracles

[4] Muhammad 'Ajjaj al-Khatib, *Ushul Al-Hadis: 'Ulumuhu Wa Musthalahuhu* (Beirut: Dar al-Fikr, 1989).
[5] Yuzaidi, 'METODOLOGI PENELITIAN SANAD DAN MATAN HADIS', *Al-Mu'tabar*, 1.1 (2021), 42–64 (p. 62) <https://doi.org/10.56874/almutabar.v1i1.385>.

intended for the meaning of the hadiths he includes? or is it the quality of the chain of narrator (*sanad)* and content (*matan)* of hadith in the book. Therefore, this paper wants to examine the hadiths listed in the *Al-I'jāz al-'Ilmi fī Sunnah al-Nabawiyyah* by El-Naggar.

There are several things that will be the focus of discussion in this research, namely: 1) What are the weak (*ḍa'īf)* hadith and fabricated (*mauḍū')* hadith that El-Naggar includes in his book *Al-I'jāz al-'Ilmi fī Sunnah al-Nabawiyyah*. 2) Why did El-Naggar include weak and false hadiths in his book? 3) How to address the problem of using weak (*ḍa'īf)* hadith and fabricated (*mauḍū')* hadith in *Al-I'jāz al-'Ilmi fī Sunnah al-Nabawiyyah* books? These three questions will be the focus of this research.

2. REVIEW OF LITERATURE

In an effort to look for new aspects of this discussion topic, reseachers have reviewed previous writings that have similar discussions with the theme of this research. In presenting literature review data, researchers will divide the discussion into two categories, namely literature review of Zaghloul An-Naggar and his thoughts and literature review of books *Al-I'jāz al-'Ilmi fī Sunnah al-Nabawiyyah.* After dividing into two categories, the researcher will explain in detail the types of research forms found in each category.

The first category is research that discusses Al-Naggar and his Islamic thoughts. In this category, researchers found two types of research that had been written by previous researchers. The first type is research that discusses Naggar's thoughts in general in the field of interpretation Al-Quran and hadith. Some examples are research on Naggar's efforts in interpreting islamic religious texts[6], research on the challenges of Zaghloul An-Naggar's scientific thinking in the modern era[7] and research on interpretive figures in the contemporary era which makes Zaghloul An-Naggar Naggar as one of the main figures in the discussion. [8]

The second type is research that discusses the interpretation of Islamic religious texts using the perspective of Naggar. Some examples of research that researchers have found are research on the cycle of water circulation on earth from Naggar's perspective[9], research on the meaning of Al-Quran verses which discuss the process of human reproduction from Naggar's perspective [10] and research on the meaning of the *"Ar-Raj'u"* (returning of rain) word in surah *Al-ṭarīq* in tafsir *Al-Ayat Al-Kauniyyah fī Al-Qur'ān Al-Karīm* by Naggar. [11]

The second category of literature review is research that discusses the book which is the main object of this research,

[6] Aboul Fotouh Shaker Abdel Qader, "Dr. Zagloul Al-Najjar and his efforts in interpretation," *Journal of Islamic sciences*, 2.29 (2021), 481–502.
[7] Selvia Santi, "SAINS MODERN DAN DUNIA ARAB: TANTANGAN PENDEKATAN ISLAM TERHADAP SAINS ALAM OLEH SEYYED HOSSEIN NASR, ZAGHLOUL AL-NAJJAR DAN NIDHAL GUESSOUM" (Sunan Kalijga State University of Indonesia, 2019).
[8] Muhammad Chouirul Anam dan Dul Saiin, "Figures of Contemporary Interpretation," *Al-Fatih: Jurnal Studi Islam*, 10.2 (2022).
[9] Ali Mahfuz Munawar dan Ike Nuraini, "Daurah Al-Mâ' 'Inda Zaghloul An-Najjâr," *Studia Quranika*, 3.1 (2008), 1–14.
[10] Muhammad Zaki Rahman, "PENAFSIRAN ZAGHLOUL AL-NAJJAR TERHADAP AYAT REPRODUKSI MANUSIA DALAM AL-Qur'an." (UIN Sunan Kalijaga Yogyakarta, 2016).
[11] Nur Afifah, "Term Al-Raj'u dalam Q.S At-Thariq Ayat 11 Menurut Tafsir Al-Ayat Al-Kauniyyah fi Al-Qur'an Al-Karim Karya Zaghloul An-Najjar" (Universitas Islam Negeri Salatiga, 2022).

namely *Al-I'jāz al-'Ilmi fī Sunnah al-Nabawiyyah*. In this case, researchers only found two studies that specifically used this book as the object of their research. First is research on Naggar's understanding of genetics in books *Al-I'jāz al-'Ilmi fī Sunnah al-Nabawiyyah*. [12] Second, research that tries to reconstruct the method of hadith interpretation by Naggar in *Al-I'jāz al-'Ilmi fī Sunnah al-Nabawiyyah* books.[13]

Through the literature review data that the researchers has presented, it can be seen that the research about quality of the hadiths that Najjar used in his book, *Al-I'jāz al-'Ilmi fī Sunnah al-Nabawiyyah* never been done before. However, after reading and researching the quality of the hadiths in the book, researchers were able to find a number of hadith that were weak (*ḍa'īf)* quality or even fabricated (*mauḍū')*. This is the factor that prompted this research, as well as an aspect of novelty that will be brought up in this research.

3. RESEARCH METHODOLOGY

This research method is qualitative, namely scientific research by referring to a data base that has been collected. In collecting it, researchers grouped it into two parts, namely primary and secondary data. First, primary data, namely data collected from the main reference, namely books *Al-I'jāz al-'Ilmi fī Sunnah al-Nabawiyyah* by Naggar. Second, secondary data is a collection

[12] Dwito Juliano Tobing, "Pemahaman Zaghlul An-Najjar Terhadap Hadis-hadis Genetika Manusia Di Dalam Buku Al-Ijaz Al-Ilmiy Fi As-Sunnah An-Nabawiyyah" (Universitas Islam Negeri Sumatera Utara, 2022).
[13] Zunaidi Nur, "Hermeneutika Hadis Zaghlul an-Najjar," *Tamaddun Journal of Islamic Studies*, 1.2 (2022), 170–90 <https://doi.org/https://doi.org/10.55657/tajis.v1i2.53>.

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of data from other sources in the form of books, scientific articles, or information obtained from the internet that has a correlation with this study.

This is aimed at enriching data and analysis materials so that research objectives are more in-depth. In processing data, researchers used descriptive-analytical methods. Namely describing data that has been collected from primary and secondary sources, then analyzed to achieve the purpose of the research.

4. RESULTS AND DISCUSSION

4.1 About *Al-I'jāz al-'Ilmi fī Sunnah al-Nabawiyyah* books

Al-I'jāz al-'Ilmi fī Sunnah al-Nabawiyyah is a compiled book by Naggar. This book was born out of concern over false and ambiguous accusations from orientalists and other haters of Islam. Naggar has the initiative to edit the understanding of the Prophet's hadiths regarding various events and conditions of the universe with all its cosmological facts. Facts or phenomena of natural law on this book are clearly implied and easily understood by humans in this century[14]. There are 71 scientific facts with comprehensive explanations raised by Naggar in this book.

This book confirms the existence of miracles in the Prophet's hadith, namely the miracle of scientific explanations in the hadith, even though the hadith is existed several centuries ago, where science was not as developed and advanced as it is now.

[14] Zaghlu An-Najjar, *Al-I'jaz Al-'Ilmi Fi As-Sunnah An-Nabawiyyah Al-Juz'u Al-Awwal*, 7th edn (Cairo: Nahdhah Mishr: Ath-Thiba'ah wan An-Naysr wa At-Tauzi', 2006).

The hadiths of the Prophet quoted by the author in this book were published late in daily news *Al-Ahram* Cairo during Ramadan. Then, colleagues and colleagues as well as people who followed the articles published in the newspaper asked the author to edit the article so that it could be useful for many people[15].

Hadiths in the book *Al-I'jāz al-'Ilmi fī Sunnah Al-Nabawiyyah* also written with complete chain of narrator *(sanad)* and complete content *(matn)* writing, only a small number of hadiths were written without complete chain of narrator *(sanad)*. This book also lists hadiths that have the same theme, either with the same or slightly different editors and some also include the names of the books where the hadiths are located. In several chapters that explain certain themes, verses from al-Qur'an are also included to strengthen the hadith commentary. Various phenomena that occur in the universe are discussed clearly with comprehensive scientific explanations by combining the hadiths of the prophet and verses of al-Qur'an in them.

4.2 Zagloul El-Naggar Biography

Zaghloul Ragheb Mohammed El-Naggar known as Zaghloul El-Naggar is a Muslim scholar who is an expert in the field of geology. Zaghloul was born in Masyal, al-Gharbiyah, Egypt on November 17, 1933[16]. His father, Ragheb El-Naggar, worked as a teacher, while his grandfather, Sheikh Mohammed El-Naggar, is a scholar in the city where Zaghloul was born. His father and grandfather were scholars who graduated from al-Azhar

[15] An-Najjar.
[16] An-Najjar.

University who loved books and science, especially books related to Islam and literature. This is proven by the existence of a large library and a meeting place for scholars from inside and outside Egypt in their house

When the Egyptian royal authority came under British colonial control, precisely in the mid-1940s, Naggar family moved to Cairo because of the cruelty of British soldiers who often abused women and indigenous people. This made Zaghloul grow into someone who had an anti-colonial spirit. He also got Zaghloul's nationalistic attitude from Sheikh Mohammed Amin al-Hussayni, an Arab-Palestinian scholar and nationalist. Other figures who influenced his thinking were Hasan al-Banna and Sayyid Qutb, people who provided many ideas for the revival of Islam, including in social life in Egypt.

At the age of 10, Naggar was able to memorize 30 juz of al-Qur'an. The development of his achievements became even more visible when he obtained a qualification certificate in the field of Arabic. Naggar continued his higher education at Cairo University in 1951, which at that time was a higher education institution at the center of the revolutionary movement. The lecturers, as teaching staff, took part in the revolutionary movement like troops ready to fight while holding weapons. This movement reached its peak on July 23, 1952, known as the "July 23 Revolution/July 23 coup" which was a movement by the Egyptian military against the kingdom in Egypt. Meanwhile in 1955, El-Naggar earned a bachelor's degree cum laude and received honors and awards in the field of geology from Cairo University. This year Naggar was also sentenced to 9 months in prison for fighting with several Egyptian security officers who did not like his organization's activities.

The cramped conditions in the prison greatly affected Naggar's mentality and spiritual well-being. Until one night, in the middle of his deep sleep, he dreamed that the Prophet Muhammad SAW visited him, giving him encouragement to fight for Islam. After being released from prison, he was not immediately able to realize his dream of becoming a teacher because he was hampered by his involvement with the *al-Ikhwan al-Muslimin* organization, whose activities were considered a threat to the Egyptian government at that time. But Naggar never gave up on this.

He tried his luck by trying to apply for a job and was accepted at a Sahara oil mining company. However, it wasn't long before the government discovered his criminal record, causing him to be fired after two months of work. It wouldn't be El-Naggar if he gave up hope, at the end of 1955 he joined the National Research Center (NRC) in Dokki, Cairo, Egypt as its headquarters. Naggar's position in his new place is not necessarily safe. The Egyptian government continued to exert pressure after pressure until it finally decided to leave Egypt in 1960. So, he was unable to attend the funeral of his father, who died in 1961 and his mother who died in 1968.

After Naggar left Egypt, he had the opportunity to teach at King Saud University, Riyadh. Then he earned a Ph.D after completing postgraduate education at the University of Wales, England under the guidance of Professor Allen Wood. In 1963, El-Naggar received a three-year postdoctoral research scholarship at the same university. After that, he was asked by the King Saud University academic community to jointly establish a Geology Department. The University also provided travel expenses to England in the summer to complete his seven years of study as a form of appreciation [17]

He began to study in depth al-quran and hadith fields when he was elected to be part of the Islamic World Research Council in Cairo in 1981. Still in the same year, he participated in forming a world scientific body regarding the scientific wonders of *al-Qur'an al-Karīm* and *al-Sunnah al-Mutahharah* (Association of the Islamic World) in Mecca, and was elected as a member of the Islamic World Research Council in Cairo. It didn't stop there, he was also elected chairman of the *al-I'jaz al-'Ilmi* Committee of the Supreme Council for Islamic Affairs in Egypt in 2001.[18]

El-Naggar is also known as a writer and received an award from the President of Sudan because of his dedication as a writer. His written works include 45 books and more than 150 articles and he has supervised 45 theses and dissertations at several universities. Naggar's works include *Mu'jizah al-Makan wa al-Zaman fī al-Rukn al-Khamis min Arkan al-Islam, Kitab al-I'jaz al-Anba'i wa al-Tarikhii fi al-Qur'an al-Karim, Hakaza ta'arraftu 'ala Allah, Ḥaqiqah al-Masiḥ, and Al-Mafhum al-'Ilmi li al-Jabal fi al-Qur'an al-Karim* dan *Al-i'jazul 'Ilmi fi Sunnah An-Nabawiyyah.* His works have been widely translated into English and French. In

[17] Dwito Juliano L Tobing, *Pemahaman Zaghlul An-Najjar Terhadap Hadis-Hadis Genetika Manusia Di Dalam Buku Al-Ijaz Al-Ilmiy Fi As-Sunnah An-Nabawiyyah Yang Diterjemahkan Oleh Zainal Abidin Kedalam Bahasa Indonesia Dengan Judul Buku Sains Dalam Hadis*, 2021 <http://repository.uinsu.ac.id/id/eprint/14920>.
[18] Zunaidi Nur, 'Hermeneutika Hadis Zaghlul An-Najjar', *Tamaddun Journal of Islamic Studies*, 1.2 (2022), 178–90 <https://doi.org/10.55657/tajis.v1i2.53>.

the field of Al-Qur'an Science, he has published more than 250 articles.

Naggar is a contemporary scholar who agrees with the scientific interpretation of al-Qur'an. His devotion to knowledge regarding the scientific interpretation of Kauniyah verses has increased his authority as an Islamic scientist in the modern era. The tendency towards I'jaz al-'ilmy in the Qur'an and hadith is of course based on the basis that in both the Qur'an and hadith there are scientific sign which can be proven by scientific facts. Therefore, he tries to provide an understanding of scientific hadith which includes aspects of astronomy, astrology, geology, natural phenomena, health, embryology, archeology and physiology with scientific data as a method of analysis.[19]

4.3 *Takhrīj* for Hadiths that are considered problematic

Based on the researchers elaboration in studying hadith through jawami' al-kalim applications, researchers found many hadiths that have quality weak (ḍa'īf) or even fabricated (mauḍū'). Below the researcher presents a sample of problematic hadiths.

No.	Position of hadith in the book	Description of the hadith in the book	Post-*Takhrij* hadith information
1.	Vol. 3 No. 2	In the book, it is written that the hadith mentioned	Using the keyword لا عَلَيْكُمْ أَنْ لا تَعْزِلُوا, researcher did not find the hadith mentioned by the author.

[19] Intan Pratiwi Mustikasari, 'Urgensi Penafsiran Saintifik Al-Qur'an: Tinjauan Atas Pemikiran Zaghlul Raghib Muhammad Al-Najjar', *Studia Quranika*, 6.1 (2021) <https://doi.org/10.21111/studiquran.v6i1.5674>.

		is what Ibn Rajab al-Hanbali quoted (without mentioning the book) but does not mention the *sanad* of the hadith and the quality of the hadith.	However, researchers found four hadiths that have a similar essence despite different editorials. These four hadiths are found in *Al-sunan al-kubro li al-nasā'i* 7392, 8751, *Al-sunan al-kubro li al-baiḥaqi* 20071, and *ma'rifatu al-ṣaḥābah* 664. All four hadiths have qualities *ṣaḥīḥ*.
2.	Vol. 3 No. 4	This hadith is found in *musnad al-imām Ahmad* 4424 without mentioning *sanad* and quality of hadith.	Researchers found three hadiths that had similar *matan* to those included by the author. The hadith with matan actually has *ṣaḥīḥ* quality. But the hadith mentioned by the author is *ḍa'īf* hadith. The reason is that this hadith was narrated by *al-imām Ahmad* via the *sanad* route of Husain bin al-Hasan, who according to al-Mizzi is *ḍa'īf* narrator in narrating the hadith. In this case the author should include two other quality hadith source *ṣaḥīḥ*, i.e. on *Al-sunan al-kubro li al-nasā'i* and *kitab al-'Udzmah*.
3.	Vol. 3 No. 11	There are two explanations in the book that are included by the author. 1). It is stated that Ibn Jarir and Ibnu Hatim said that the prophet said the following hadith.	Through the keywords إِنَّ النُّطْفَةَ إِذَا اسْتَقَرَّتْ فِي الرَّحِمِ أَحْضَرَهَا اللهُ, researchers found six hadiths related to various types of matan and various sources but having similar meanings. Unfortunately, the entire hadith went through the *sanad* route of Muthohir bin al-Haitsam al-tho'i who was convicted *matrūk al-ḥadīṡ* by al-

		2). Source of hadith from the *tafsīr al- ṭabariy* XXX/ 87 book.	Mizzi so that the hadith is considered a *ḍa'īf* hadith.
4.	Vol. 3 No. 16	The explanation in the book is the Hadith that is quoted from Ibn Jarir in *tafsīr al-ṭabariy* and Al-Tirmiẓi in *nawādir al-uṣūl li al-tirmiẓi*. Both were narrated from Ibn Umar.	Based on the researcher's search through the keywords إذا وقعت النطفة في الرحم, researcher found four hadiths of the same theme, although none of them had a similar editorial. These four hadiths have *ṣaḥīḥ* qualitie. researcher regrets the author's attitude in including references which, in the author's opinion, are bad. First, in *tafsīr al-ṭabariy* as stated by the author, researchers did not find any related hadith.[20] Second, in *nawādir al-uṣūl li al-tirmiẓi*, Researcher found a hadith with the same theme but the editorial was different from what was written. Apart from that, the book also does not explain at all the quality and source of the hadith. [21]
5.	Vol. 3 No. 20	The author does not include the details of the hadith, except for the mention that	Through the keywords في أي نصاب تضع ولدك فإن العرق دساس, researchers found five hadiths of the same theme, although the editorials were different. However, of the

[20]Abu Ja'far Muhammad bin jarir Al-tabari, *Tafsir al-tabari; Jami'ul bayan 'an ta'wil al-Qur'an*, ed. oleh Abdullah bin abdul muhsin Al-turki, 1 ed. (Qatar: Dar Hijr, 2001).

[21]Muhammad bin Ali bin Al-hasan Abu Abdillah al-hakim al-tirmizi, *nawādir al-uṣūl fi ahadis al-rasul*, ed. oleh Abdurrahman Umairah, 1 ed. (Beirut Lebanon: Dar Al jil, 1992).

	the hadith was narrated by Imam Ibnu Majah and al-Dailami.	five hadiths, researchers did not find any hadith narrated by Ibn Majah and Ibn Umar. Apart from that, all the five hadiths that researchers found are *ḍa'īf* hadith. This is because the entire hadith goes through the sanad route of Muhammad bin Abdurrahman bin al-Bailamani who was sentenced by al-Mizzi as *munkar al-ḥadīṡ*. Quality *ḍa'īf* in this hadith also confirmed by his father al-Bailamani. One of the narrations in the hadith is claimed as *ḍa'īf al-ḥadīṡ*. [22]

The five hadiths that the researcher listed in the table are samples of hadith that the researcher took from *Al-I'jāz al-'Ilmi fī Sunnah al-Nabawiyyah* books volume three.[23] In addition to the above hadiths, there are many hadiths that are also problematic in volumes one and two. At least, in volume one, there are seven hadiths (no. 2, 8, 14, 24, 25, and 28) that the researcher considers problematic.[24] Meanwhile in volume 2,[25] There are ten hadiths that are also problematic. (nos. 4, 5, 8, 9,

[22]An-Najjar, *Pembuktian sains dalam sunnah terj. Al I'jaz Ilmiy fi As-Sunnah An-Nabawiyyah jilid.3*.
[23]An-Najjar, *Pembuktian sains dalam sunnah terj. Al I'jaz Ilmiy fi As-Sunnah An-Nabawiyyah jilid.3*.
[24]Zaghlul An-Najjar, *Pembuktian sains dalam sunnah terj. Al I'jaz Ilmiy fi As-Sunnah An-Nabawiyyah jilid.1*, ed. oleh Zainal Abidin, Syaklrun Ni'am, dan M. Lukman, 1 ed. (Jakarta: Amzah Press, 2006).
[25]Zaghlul An-Najjar, *Pembuktian sains dalam sunnah terj. Al I'jaz Ilmiy fi As-Sunnah An-Nabawiyyah jilid.2*, ed. oleh Zainal Abidin, Syaklrun Ni'am, dan M. Lukman, 1 ed. (Jakarta: Amzah Press, 2006).

10, 12, 13, 14,19, and 23). However, the researcher presents his presentation only on the hadiths contained in volume three, for the sake of efficient discussion and study.

4.4 Analysis of Motives and Reasons *Dhaif* and False Hadith Used

The *Al-I'jāz al-'Ilmi fī Sunnah Al-Nabawiyyah* by Naggar is a book containing hadiths related to science. This book aims to do a deeper analysis into the scientific aspects of the hadiths of the Prophet Muhammad SAW. However, there is one aspect that is missing in this book, namely research into the validity of the chain of narrator *(sanad)* and content *(matn)* for the hadith that used in this book. Due to this, it feels like this book is too forced to correlate the hadith of the Prophet Muhammad with science. However, there must be some basis behind Naggar's inclusion of these weak (*ḍa'īf)* and fabricated (*mauḍū')* hadith in his book.

In the introduction of the *Al-I'jāz al-'Ilmi fī Sunnah Al-Nabawiyyah* book, Naggar stated that he believes that not all of the dialectics in the Qur'an and hadith can be accepted by reason, but Allah SWT knowledge covers everything. Naggar also believes that with the progression of time, humans will naturally reach an awareness phase of the truth of scientific findings and technological experiments which then have a connection with the Al-Qur'an and hadiths. Among the greatest secrets that hidden in the book of Allah and the Sunnah of the Prophet are signs about the world and a number of its components as well as phenomena and laws contained in the verses of the Qur'an and the hadith of the Prophet. All these signals are accepted as something that appears implicitly, so that it can give people the opportunity to carry out effort to understanding from generation to generation. According to him, this can lead Muslims more than other people to achieve knowledge of a number of facts about nature[26]

Naggar's purpose in producing this *al-I'jāz al-'Ilmi fī Sunnah Al-Nabawiyyah* is to show and remind Muslims of the importance of recognizing God's creation, deducing the rules in nature, and investing in prospering the earth and carrying out the obligations of the caliphate. Apart from that, he also thinks that cosmological signs contain elements that can amplify the faith of believers and provide guidance to misguided and polytheistic people. Naggar also wants to prove scientifically that the accusations made by Orientalists are very subjective and accompanied by hatred of al-Qur'an and hadith[27].

Naggar in his introduction (muqaddimah) explained about efforts to defend hadith scholars from some individuals who dare to falsify hadiths because of political interests and malice towards Islam. Apart from that, he also touched on testing the hadith sanad and checking the trustworthiness (tsiqah) of the hadith narrators, he even discussed the classification of hadith based on the quality of the sanad and matan[28]. However, in reality Naggar did not apply research on sanad and matan hadiths to the hadiths he included in his book.

Although at the beginning it was known that the aim of writing this book was to refute the false accusations of orientalists and those who were envious of Islam by explaining cosmological

[26] An-Najjar.
[27] An-Najjar.
[28] An-Najjar.

facts in the hadiths of the Prophet. This is a very good effort, but in reality the path taken tends to be very forced, especially in validity of hadith case. Researchers found several confusions in the hadiths that Naggar included in his book, there are several weak (*ḍa'īf)* and fabricated (*mauḍū')* whose quality was not fully explained, he even included several hadiths which the redaction are were different from the original hadiths than hadiths that researchers have discovered the major hadith books *(kutub at-tis'ah)*. There are also several hadiths that were attributed to the wrong narrator. However, we must understand that Zaghloul El-Naggar is a geologist, not a commentator or hadith expert.

4.5 Response to the *Al-I'jāz al-'Ilmi fī Sunnah al-Nabawiyyah* Books

The *Al-I'jāz al-'Ilmi fī Sunnah al-Nabawiyyah* book has great contribution in providing a fresh perspective to Muslims and hadith researchers. This is because this book was presented in an era where the Muslim community still did not know that the teachings of the Islamic religion not only contained doctrinal aspects, but also scientific aspects. The presence of this book can play a major role in motivating Muslims today to take part in studying other fields of knowledge such as science.

Apart from that, *Al-I'jāz al-'Ilmi fī Sunnah al-Nabawiyyah* book is also a fresh book for all of hadith researchers who tend to focus on the study of *sanad*. Due to some of these reasons, efforts to compile the *Al-I'jāz al-'Ilmi fī Sunnah al-Nabawiyyah* book by Naggar must receive the highest respect from Muslims. More than the many positive things that have been mentioned, writing this book is also Naggar's attempt to prove the authenticity of hadith through scientific research methods because hadith orientalists often doubt their authenticity [29].

The presence of various hadiths that lack valid authenticity status in the *Al-I'jāz al-'Ilmi fī Sunnah al-Nabawiyyah* book must be responded to wisely by Muslims who read the book. In the context of hadith researchers, this book is a very good academic object that has a great opportunity to be studied critically. Because the act of including weak (*ḍa'īf)* and fabricated (*mauḍū')* hadiths as data in an academic work without including information is an inappropriate act [30]. Moreover, Naggar claims that the hadith data contained in this book comes from *sunnah nabawiyyah*, that can be seen clearly from the title of the book. However, the presence of this book must also be appreciated by hadith researchers because apart from providing a fresh perpective in the hadith studies, this book can also be used as an object for various hadith research which then can produce various new research.

For the Muslim community in general, the presence of this book must be responded to very positively. The reason is that even though it contains several hadiths that are not valid, this number is actually negligible compared to the number of valid hadiths used by Naggar as study data. As Muslims who always hope for goodness in everything, we should always prioritize the positive aspects presented in this book. However, if viewed objectively, general readers of this book will be able to very easily conclude that the positive value presented by this book through the valid

[29] Nur.
[30] Muhammad Awwamah, *Hukmu liamali bihaditsi Adh-Dhaifi*, 1 ed. (Jeddah: Daaru Al-Minhaj li An-Nasyri wa At-Tauzi', 2017).

hadiths listed in it is much greater when compared to the non-positive value of the less valid hadiths listed.

5. CONCLUSION

The result of this research shows that not all of the hadith listed by Naggar are authentic hadith, some of them are weak (*ḍa'īf)* or even fabricated (*mauḍū')*. This is proven by the results of research that have carried out, namely finding several hadiths that have several irregularities such as not finding the hadith intended by Naggar on *Al-I'jāz al-'Ilmi fī Sunnah Al-Nabawiyyah* book. finding the weak (*ḍa'īf)* hadith clearly and the same hadith was found but with a different redaction than what was written in *Al-I'jāz al-'Ilmi fī Sunnah Al-Nabawiyyah*. However, it should be understood that Naggar is an expert in the field of geology, not an expert in exegesis (tafsīr) nor an expert in hadith, therefore, the authenticity of the chain of transmission and contain (matn) that he included in his book contains some weak (*ḍa'īf)* hadith.

Nevertheless, this book will remain a phenomenal work in the field of hadith because of the many benefits when reading and studying the book. Scientific facts about science in the hadith often escape discussion among scholars, but these can be found in a comprehensive explanation in this book. Moreover, hadiths with weak (*ḍa'īf*) validity are not more numerous than quality authentic hadith. This book can still be a source of reading and scientific research material by remaining critical and skeptical of the hadiths in the book.

Naggar's purpose in producing *al-I'jazul 'Ilmi fi Sunnah Nabawiyyah* is to show and remind Muslims of the importance of understanding and recognizing the creation of Allah The

Almighty, deducing its rules from nature, and investment in prospering the earth and carrying out the obligations of the caliphate. In addition, Naggar thinks that cosmological signs contain elements that can strengthen the faith of believers and give guidance to misguided and polytheistic (*mushrik*) people. Naggar aslo wants to refute the false accusations of Orientalists and Islamophobes by explaining science in the hadiths of the Prophet.

For the Muslim community in general, the presence of this book must be responded to very positively. The reason is that even though it contains several hadiths that are less valid, this number is actually not comparable to the number of valid hadiths used by Naggar as study data. As Muslims who always hope for goodness in everything, we should always prioritize the positive aspects presented in this book. However, if viewed objectively, readers of this book will be able to very easily conclude that the positive value presented by this book through the valid hadiths listed in it is very large when compared to the non-positive value of the less valid hadiths listed.

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THE ROLE OF THE *TAḤFĪẒ* HOUSE IN BUILDING THE QURANIC GENERATION IN INDONESIA

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ABSTRACT

This study aims to analyze the role of the Taḥfīẓ House in building the Quranic generation. This study uses a qualitative descriptive method with data collection methods that include interviews and observation. The research was conducted in Musi Rawas Regency, where Musi Rawas Regency is currently one of the areas in South Sumatra-Indonesia which have the largest regional budget to implement the Taḥfīẓ House program. This research involved informants from parties who played an important role in managing the Taḥfīẓ housing program in Musi Rawas Regency. The results showed that the role of the Taḥfīẓ House in building the Quranic generation was obtained mainly through learning to read the Qur'ān according to the rules of tajwid and memorizing verse by verse. The existence of Taḥfīẓ Houses accustoms students to interacting with the Qur'ān, which then gradually familiarizes students with Islamic teachings as a whole. This encourages students to adhere to all that is commanded and simultaneously to abstain from that which is prohibited in religion. It also encourages students to hold firmly to the guidelines of Qur'ān and the ḥadīth of Rasūl'Allāh (b). The existence of the Taḥfīẓ House is part of the efforts of the community and the government to create a generation of Qur'ān.

Keywords: *Taḥfīẓ House, Quranic generation.*

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1. INTRODUCTION

The results of research from Dedi Junaedi (2021) suggest that students are currently experiencing a shift in behavior in a negative direction. These negative behaviors include skipping school, dating, using uncivilized language, speaking disrespectfully to parents, leaving obligatory prayers, and consuming strong drinks or illegal drugs. Likewise, there is a shift in moral values in society at large. This can be seen from three aspects. One is the shift in individual moral values seen in attitudes like lying and showing no courtesy to parents or other people. Then the shift in religious moral values can be seen by the large number of young people and society who ignore the orders and prohibitions that exist in Islamic religious teachings. Finally, the shift in social moral values is seen in a lack of respect for people in general and older people in particular, as well as teachers and other figures of authority (Yolanda & Fatmariza, 2021). This has been observed not only in big cities but also in rural areas.

The factors that influence shifts in student behavior include family, which ultimately has an impact on students' psychological development; the environment; parents' lack of education; and finally technological developments or mass media. Apart from these factors, the environment also has a strong influence on the formation of children's education patterns in society. Lack of embedded religious values, lack of social control and lack of parental control play a role as well.

The efforts that need to be made to overcome the shift in society's moral values include preventive and repressive efforts (Suprapti, 2022). One of the individuals behind this is the Regent of Musi Rawas, Ir. Hj. Ratna Machmud, M.M., and Deputy Regent, Hj. Suwarti, who created the Regent's nine flagship programs, that is “one village, one *Taḥfīẓ House*”. The *Taḥfīẓ House* is considered an institution in society that can be used to guide children in learning the *Qur'ān*. The Regent said that the students of the *Taḥfīẓ House* are valuable treasures that must be cherished (Mureks.co.id, 2023).

Chairman of the *Taḥfīẓ House* Development Institute (Indonesian: Lembaga Pembinaan Rumah Tahfizh/LPRT) Musi Rawas Regency, Ustadz Dedi Irama (Lipos Streaming News, 2023) said that the assistance provided by the Musi Rawas District Government for *Taḥfīẓ Houses* was 100 percent of the budget, 60 percent of which was for teacher incentives, 35 percent for Sapras and 5 percent for activities to increase the capacity of *Taḥfīẓ House* teachers. According to him, the incentive for *Taḥfīẓ House* teachers is IDR 3 million per month, because special *Taḥfīẓ House* teachers have certain criteria and standardization. Irama explains, "So, there are indeed special standards for being a teacher at the *Taḥfīẓ House*. First, [they must be] *ḥāfiẓ* and *ḥāfiẓah*, should have at least memorized five *juz* of the Qur'ān, while *qārī* or *qāri'ah* should have excelled at the district level, having at least been first runner-up and second runner-up. So, to become a *Taḥfīẓ House* teacher, one has to be tested by a team of *Qur'ān* experts.” There were three *Qur'ān* experts who tested prospective *Taḥfīẓ House* teachers, namely K.H. Sulton, imam of the Darussalam Grand Mosque; Ustadz Jajang, Qur'ān expert; and H. Tabrani.

LPRT Musi Rawas, which is the program with the largest budget from the local government (Linggau Pos, 2023) can be used as a representation of the existence of *Taḥfīẓ Houses* in Indonesia. Indonesia, as the country with the largest Muslim population in the world, has great potential in building a generation of *Qur'ān*. This research paper describes the role of *Taḥfīẓ Houses* in building the Quranic generation. It also explains the strengths, weaknesses, opportunities and threats arising from the existence of *Taḥfīẓ Houses*.

2. REVIEW OF LITERATURE

2.1 *Taḥfīẓ Ul Qur'ān*

A. Definition of *Taḥfīẓ ul Qur'ān* (Memorizing *Al-Qur'ān*)

The term "memorization" comes from the Arabic verb حَفِظَ - يَحْفَظُ - حِفْظًا ج حُفَّاظ which means to maintain, look after, memorize (Fairuz, 2007). The word "memorization" comes from the root word "memorized", which refers to the absorption of material into one's memory or learning something by rote in order to reproduce it literally, according to the original material, without referring to books or other records. Memorization is a mental process for memorizing and storing impressions that later, when needed, can be recalled to the conscious mind (Djamarah, 2002).

The memorization of Qur'ān is said to be a process of remembering, in which all verses of the Qur'ān that have been memorized must be memorized perfectly and read aloud without referring to the *mus'ḥaf* of the Qur'ān. From a psychological perspective, memorization is identical to the process of remembering (memory). In humans, memory processes information received at any time.

Briefly, working memory passes through three stages: (1) Recording (2) Storage and (3) Recall. Recording (encoding) is the recording of information through sense receptors and internal neural circuits. The next process is storage, in which it is determined how long the information will remain, in what form and where. Storage can be active or passive; it is said to be active if we add additional information, and may be said to be passive if no addition is made. The next stage is retrieval, which in everyday language is known as remembering something; that is, using stored information (Rakhmat, 2005).

Likewise, the act of memorizing the Qur'ān also goes through three stages, namely recording, storing, and recalling. Recording is observed when students try to memorize verses of the Qur'ān continuously, so that these verses eventually enter the storage stage in the brain's memory. Then, the next phase of recalling the stored memory is when the students perform their memorization in front of the instructor.

Information processing theory discusses how the system or systematics of memory works in memorizing or processing information and states that information is initially recorded by a person's sensory system and enters temporary sensory memory to store the information. The information is then passed to short-term memory which stores it for 15 to 25 seconds. Finally, the information can move to long-term memory, which is relatively permanent. Whether the information moves from short-term to long-term memory

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depends on the type and amount of practice with the material (Gayati & Sofyan, 2012).

B. The Priorities of Taḥfīẓ ul Qur'ān

Many verses of the Qur'ān and the *ḥadīth* of *Rasūl'Allāh* (b) show the virtues and glory of the *Ḥāfiẓ Al-Qur'ān* and the reward that will be bestowed on them. These include:

1) People who study, memorize and practice the Qur'ān are among the chosen people of Allāh to receive the inheritance of the holy book, the Qur'ān. Reading and memorizing the Qur'ān will bring benefits and get rewards. As Allāh says in *Surah al-Fāṭir* (35: 32).

ثُمَّ أَوْرَثْنَا ٱلْكِتَـٰبَ ٱلَّذِينَ ٱصْطَفَيْنَا مِنْ عِبَادِنَا ۖ فَمِنْهُمْ ظَالِمٌ لِّنَفْسِهِۦ وَمِنْهُم مُّقْتَصِدٌ وَمِنْهُمْ سَابِقٌۢ بِٱلْخَيْرَٰتِ بِإِذْنِ ٱللَّهِ ۚ ذَٰلِكَ هُوَ ٱلْفَضْلُ ٱلْكَبِيرُ (٣٢)

"*Then We granted the Book to those We have chosen from Our servants. Some of them wrong themselves, some follow a middle course, and some are foremost in good deeds by Allāh's Will. That is ⌜truly⌝ the greatest bounty*".

2) On the Day of Judgement, both the parents of people who study, memorize and practice the Qur'ān will wear crowns whose light will be more beautiful than the sunlight that enters the houses of the world. As mentioned in the *ḥadīth* of *Rasūl'Allāh* (b):

Mu'ādh al-Juhanī reported the Messenger of Allāh (b) as saying:

"If anyone recites the Qur'ān and acts according to its content, on the Day of Judgement his parents will be given to wear a crown whose light is better than the light of the sun in the dwellings of this

world if it were among you. So, what do you think of him who acts according to this?" (Sunan Abī Dāwūd 1453, Book 8, Ḥadīth 1448).

Memorizing the Qur'ān is a specialty of Muslims, because Allāh has made them the best people among humans and made it easy for them to preserve His book, both written and memorized. There is no single book so significant as the Qur'ān such that millions of people, even children, memorize it. There is also not a single book that causes so many people to make a correction spontaneously when read incorrectly by anyone, even if the mistake happens to be in one letter. As the word of Allāh in the letter Al-Ankabūt verse 49.

C. The Success of Taḥfīẓ ul Qur'ān

There are several things that can support success in memorizing the Qur'ān, namely being of an ideal age. A person who memorizes the Qur'ān at a relatively young age will clearly have more potential for the absorption of the material he reads or memorizes (Al-Hafidz, 2005). The age between 5-23 years is certainly the right time to memorize the *Qur'ān*, because the memory is still very strong and not burdened with the problems of life. The older a person is, the more their memory will decrease (Wahid, 2013).

In psychology, there are several opinions regarding the developmental age of children. According to Desmita in her book "*Psikologi Perkembangan Peserta Didik*" (2009), children's development phases are divided into four, that is: (a) 0-6 years is the phase of developing sensory organs and acquiring basic knowledge under the care of their mother, (b) 6-12 years is the

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phase when children develop their memory, (c) 12-18 years is a phase of developing their thinking power, and (d) 18-24 years is a phase of developing their will. Agus Sujanto (2018), in his book "*Psikologi Perkembangan*", describes the phases of child development in three periods, that is: (1) 0-7 years is the phase for children to play, (2) 7-14 years is the child's learning phase, and (3) 14-21 years is the phase moving towards adulthood.

2.2 Quranic Generation

The term "generation" refers to all of the people born and living at about the same time, regarded collectively (Putra, 2016). The Qur'ān literally means "reading". According to the definition by Dr. Subhi As Shalih, the Qur'ān is "The Word of *Allāh* which is a miracle revealed to *Rasūl'Allāh* b, written in the *Mus'haf* and narrated *mutawātir*. Reading it is an act of worship" (Satrisno, 2017).

The Qur'ān means the word of Allāh which was revealed to the Prophet Muhammad b through the angel Gabriel as the holy book of Muslims. The Qur'ān is the holy book of Muslims which contains instructions and life guidelines for human beings to live in accordance with the provisions of Allāh. To understand the rules of life stated in the Qur'ān, there is no other way except by studying the Qur'ān, through reading and pondering its contents. Applying the Qur'ān in everyday life is extremely important because the Qur'ān is a guide to achieving happiness, both in this world and in the afterlife. Thus, the Qur'ān is a guide for humanity which covers all aspects of life, because the Qur'ān and life are a complete treasure which, if understood by everyone, will make life in this world harmonious (Munawar, 2002).

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From the description above, it can be concluded that the Quranic generation is a generation that lives while practicing the teachings of the Qur’ān, upholds the values of the Qur’ān, adheres to the Qur’ān and is proud of it.

A. The characteristics of the Quranic Generation

1. *Tawḥīd* in spirit: it is a generation that believes that the knowledge they have is sourced from Allāh; thus, they remain humble and increasingly believe in the greatness of Allāh.

2. Deriving morals from the Qur’ān: it is a generation that acts based on the guidance of the Qur’ān. This was explained *by Rasūl'Allāh b in the ḥadīth: "When ‘Ā’ishah* رضي الله عنها *was asked about the morals of Rasūl'Allāh b*, she answered that his morals were *the Qur’ān*."

B. Efforts to Build a Quranic Generation

To build this Quranic generation is certainly not easy and takes enormous effort and support from all parties so that this noble goal is achieved. The following are several efforts that we can make to build the Quranic generation:

1. Family

In Islam, family is the smallest unit of social life which is defined by the existence of descendants (*nasab*) as a result of blood ties. Educators state that family education is the first and foremost education. This is because it is in the family that children receive education for the first time. Besides, education in the family has a major influence on children's education in the future.

In the view of Islam, the family is the first school for children. It is the family that has a large share and role in the formation of the initial character of the child, and it is the family that recognizes and instills the principles of faith. The family also has a great opportunity to form an Islamic *aqliyah* and *nafsiyah*. In other words, the family is an example for the new generation; therefore, the family's attention to generational education is a very important factor in building the Quranic generation. As explained in one *ḥadīth*, Abu Hurairah reported *Rasūl'Allāh* b as saying:

"Every child is born on Islam, but his parents make him a Jew and a Christian, just as a beast is born whole. Do you find some among them any (born) maimed? The people asked: 'Messenger of Allāh! What do you think about the one who died while he was young?' He replied: 'Allāh knows best what he was going to do.'" (HR. Sunan Abī Dāwūd 4714)

The following are a few matters that need to be taught by parents from an early age in an effort to build a Quranic generation:

- Instilling Islamic *aqīdah* as the only standard in thinking and acting;
- Introducing the Qur'ān to children as early as possible;
- Instilling the belief that the Qur'ān is the source of truth;
- Familiarizing children with reading the Qur'ān every day;
- Creating a religious family environment.

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2. School

School is a forum that plays a very important role in the formation of generations. As a formal educational institution, there are many elements that play a big role in it, one of which is the teacher or educator. Islam appreciates people who have knowledge, so that only people who are knowledgeable deserve to reach a higher level and whole life. As the Word of Allāh.

يَٰٓأَيُّهَا ٱلَّذِينَ ءَامَنُوٓاْ إِذَا قِيلَ لَكُمۡ تَفَسَّحُواْ فِي ٱلۡمَجَٰلِسِ فَٱفۡسَحُواْ يَفۡسَحِ ٱللَّهُ لَكُمۡۖ وَإِذَا قِيلَ ٱنشُزُواْ فَٱنشُزُواْ يَرۡفَعِ ٱللَّهُ ٱلَّذِينَ ءَامَنُواْ مِنكُمۡ وَٱلَّذِينَ أُوتُواْ ٱلۡعِلۡمَ دَرَجَٰتٖۚ وَٱللَّهُ بِمَا تَعۡمَلُونَ خَبِيرٞ ١١

O believers! When you are told to make room in gatherings, then do so. Allāh will make room for you ⌜in His grace⌝. And if you are told to rise, then do so. Allāh will elevate those of you who are faithful, and ⌜raise⌝ those gifted with knowledge in rank. And Allāh is All-Aware of what you do (Al-Mujādilah 58: 11).

The teacher is a professional educator, because he has implicitly submitted himself to shoulder some of the educational responsibilities that fall on the shoulders of parents. As a teacher or educator, we hope to be able to educate the younger generation to love the Qur'ān more, and to study and understand everything contained in the Qur'ān so that they can solve every problem that occurs based on the guidance of the Qur'ān. Besides, it has been acknowledged by various parties that the role of schools/teachers in building the Quranic generation is extremely significant. Schools or teachers are tasked with developing cognitive, affective and psychomotor aspects.

Therefore, deep thought is extremely necessary in order to give birth to a generation of quality and excellence in various aspects of life, unlike the blurry portrait of our current generation. Therefore, to be able to build this Quranic generation, we need to recognize the reality of the current generation, understand the root of the problem and then provide solutions with Islamic education which has been proven to give birth to the number one generation in the world, whose quality has not been matched by humans throughout history. From the description above, we can conclude that the role and responsibility of educators to build a Quranic generation is extremely significant, because the educational process is very important in realizing everything.

3. Community

The community also bears a great responsibility in building a Quranic generation, because society – in particular its leaders – has an influence on generational education. The leader of the Muslim community obviously wants each of his students to become devout and obedient members of their religion. Thus, it is on leaders' shoulders that participation in guiding the growth and development of the next generation is carried. Making the Qur'ān the first reading material and reference in solving any problems that occur in society will indirectly familiarize and educate the younger generation to do the same.

This is explained by *Rasūl'Allāh* b in the *ḥadīth*.

Narrated \`Uthmān: The Prophet (b) said, *"The best among you (Muslims) are those who learn the Qur'ān and teach it."* (Saḥīḥ al-Bukhārī 5027)

Moreover, in society there are various kinds of organizations that can have a positive influence on generational education.

These organizations can help the next generation in manifesting Islamic teachings in everyday life.

3. RESEARCH METHODOLOGY

This research is a type of qualitative research. The method used is explanatory and descriptive. The data collection techniques used were participatory observation and interviews. The author is a part of the chairmanship and teacher of the *Taḥfīẓ House* in one of the villages in Musi Rawas. Musi Rawas is the area that spends most of the regional government budget for the empowerment needs of the *Taḥfīẓ House*. The author conducted participatory observations from January 2023 until the current period when this article was written in September 2023. The interviews were conducted with the chairman and supervisors of the *Taḥfīẓ House* Musi Rawas Home Development Institute (LPRT) as the people behind the success of the program 1 Village 1 *Taḥfīẓ House*. Apart from that, the author also conducted interviews with several parents of students studying the Qur'ān at the *Tahfiz* House. These interviews were conducted in September 2023.

4. RESULTS AND DISCUSSION

4.1 The Role of The *Taḥfīẓ House*

The *Taḥfīẓ House* is one of the places to teach the Qur'ān and carry out learning activities related to it, starting with reading and writing *hijāiyyah* letters; reading the Qur'ān according to *taḥsīn* and *tajwīd* rules; and memorizing the Qur'ān verse by verse. The following points comprise the role of the *Taḥfīẓ House* according to *Ustadz* Dedi Irawan, Chair of the Musi

Rawas Regency LPRT, as conveyed in an exclusive interview with the author (2023):

A. Liberating children from illiteracy

Even though Indonesia is the most populous Muslim country in the world, and Islam is also the majority religion, there are still many children who cannot read the *Qur'ān* due to limited access to education. Currently, access to proper religious education is often limited by the relatively high costs of enrolling children in integrated Islamic schools or *pesantren*. The *Taḥfīẓ House* can be a solution to bring children closer to the Qur'ān.

B. Restoring the culture of enthusiasm for learning the Qur'ān as it was in ancient times. In the past, when technology was not yet developed, children were still enthusiastic about learning to recite the *Qur'ān* from teachers in the village, no matter the obstacles and difficulties they faced. Thus, the existence of a *Taḥfīẓ House* can at least balance the current conditions, by getting children accustomed to interacting with the Qur'ān at an early age. Thus, creating a generation of the Qur'ān starts with children.

C. Creating benefits for the village, because of the *Taḥfīẓ House* program "1 Village has 1 *Taḥfīẓ House*".

D. Elevating humanity and grounding it in the Qur'ān, so that humans are elevated in rank. This is as Allāh says in Al-Mujādilah 58: 11, that Allāh will elevate those who are faithful, and ⌜raise⌝ those gifted with knowledge in rank.

E. The *Taḥfīẓ House* is then expected to become a forerunner and steppingstone for opening a *pesantren* in its area. *Pesantren* is an indigenous Islamic educational institution from Indonesia, a kind of boarding school that uses a religious curriculum, often even having a self-developed curriculum. Among the *pesantren* in Indonesia, there is a leader who is called a *kyai*.

Likewise, a survey was conducted with several parents of the *Taḥfīẓ House* students in Musi Rawas Regency, South Sumatra, Indonesia. Parents were randomly selected to provide answers to the questions asked. The results showed that in terms of learning, children are improving. In fact, some areas previously did not have teachers or places to study the *Qur'ān*. An increasing number of children is understanding how to read the Qur'ān correctly. After the *Taḥfīẓ House* was established, playing hours decreased, with especially lower dependence on gadgets and more socialization with friends. Apart from receiving material about the Qur'ān, children are also given material for studying jurisprudence, especially the procedures for ablution and prayer. Children are also used to behaving and speaking politely towards teachers and parents, and become affectionate towards their fellow friends.

The following is a schematic of the role of the *Taḥfīẓ House* in building the Qur'ān generation based on the author's research results.

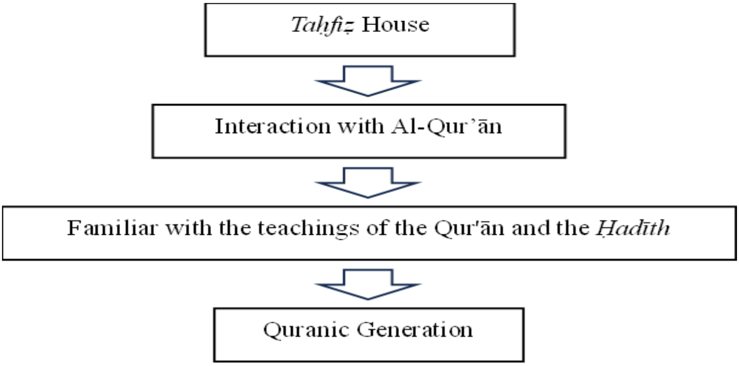

Figure 1. The Role of Taḥfiẓ House in Building Quranic Generation

It is hoped that the existence of the *Taḥfīẓ House* as an interaction with the Qur'ān will continue in the context of cultural changes. This can be done through familiarizing students with the teachings of the Qur'ān, so that they can distinguish between good and evil based on religion. It can also be done by making the Qur'ān and *Ḥadīth* students' main guide in living their lives, thus creating the generation of the Qur'ān.

4.2 Swot Analysis

A. Strengths

The strength of the *Taḥfīẓ House*, especially when it is part of a government program, will make it easier for *Taḥfīẓ House* activities to run. This is implemented by the LPRT of Musi Rawas Regency, where the "1 village 1 *Taḥfīẓ House*" program is the flagship program of the Regent and Deputy Regent in carrying out their duties in accordance with the regional leadership mandate. Then there will be full assistance from the government in the form of a salary budget for teachers, infrastructure and costs for upgrading teachers. The Musi

Rawas district government also brings in teachers from outside the region, such as Palembang, Bengkulu and even Lombok. With a source of strength in the form of full support from the government, *Taḥfīẓ House's* activities will run smoothly, providing support to students so that they will always be enthusiastic about learning. This will then support teaching and learning activities of the *Qur'ān*, which is the foundation of success in forming the *Qur'ān* generation.

B. Weaknesses

The weakness of the *Taḥfīẓ House* is that its existence is not yet known to the public. On an average, people only know about the type of school or Islamic boarding school but are not aware of the function of the *Taḥfīẓ House* or the virtues of studying the Qur'ān and memorizing it. Most parents also do not understand the concept of the *Taḥfīẓ House*, so children often do not continue memorizing the *Qur'ān* at home.

C. Opportunities

The main opportunity consists of the number of students spread across all regions in Indonesia, as the country with the largest Muslim population in the world, all of whom have the potential to form the Quranic generation in the future.

D. Threats

The main threat lies in the shortage of Qur'ān teachers. It may be that in any given area there are no teachers who are capable of teaching the Qur'ān. Apart from that, there are parents who do not prioritize their children taking part in Qur'ān learning activities because of their ignorance, which then results in unequal distribution of benefits from the existence of *Taḥfīẓ House*.

5. CONCLUSION

The existence of the *Taḥfīẓ House* is an oasis amidst the limited access to religious education in the region. This is especially the case with regard to the programs being carried out by Musi Rawas Regency under the current leadership, which is planning the regional budget in order to develop *Taḥfīẓ Houses* with the target of "1 Village 1 *Taḥfīẓ House*". The existence of the *Taḥfīẓ House* teaches children to be able to interact with Al-Qur'ān as early as possible, learn how to read it properly and correctly according to the rules of recitation, and continue by memorizing verse by verse. Children are then familiarized with Islamic teachings which are based on the *Qur'ān* and *ḥadīth*, so that they can act in accordance with what was exemplified by the Prophet. The role of the *Taḥfīẓ House* has been felt by the majority of parents in Musi Rawas Regency, as a region that provides the largest budget for running the *Taḥfīẓ House* program in Indonesia. For the continuation of future research, at the next opportunity, we can explore the educational development of *Taḥfīẓ House* students during the current period.

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THE EVOLUTION OF QURANIC TRANSLATION: THE IMPORTANCE OF QURAN TRANSLATIONS FOR MUSLIMS IN NON-MUSLIM COUNTRIES

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ABSTRACT

This research delves into the tradition of Quranic translation within Islam, seeking to trace its origin to determine whether it occurred at the time of the Prophet Muḥammad ﷺ and his companions. It aims to refute the misunderstanding that such translation was generally prohibited by Muslim scholars. The research highlights the essential role of Quranic translation in spreading the faith. To address the confusion regarding Quranic translation, it is necessary to emphasize such translation's importance by proving it to be a crucial tool for people to understand Islam. Historical roots, challenges, and contemporary relevance of Quranic translations are investigated to make Muslims aware of the lack of knowledge concerning such translation traditions in Islam and to remove confusion about Muslim scholars' consensus about the discussed topic. For a comprehensive understanding, a range of literature was explored, and both present and previous Islamic literature was compared to find a connection between the historical events and scholarly consensus. This research contributes to the vast field of Quranic translation, highlighting its timeless need and impact in conveying the Islamic message on a universal level. In conclusion, this study affirms Quranic translation as a Prophetic tradition and an approved tool for Muslims to use to invite others to their faith.

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Keywords: *Quran translation, language, origin of the method, different forms of translation.*

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1. INTRODUCTION

Quranic translation has been a part of Islam since the very beginning of the religion. The practice was founded by the Prophet ﷺ and his companions. Muslims depended on translating the Quran in the first era of Islam, and they still do.

In 1980, Universitetsforlaget launched the first complete Norwegian translation of the Quran, translated by Einar Berg. Berg stated that the Muslim belief is that the Quran cannot be translated into any language, but it is possible to explain its intended meaning (Berg, 1980). During an interview with the national Norwegian television station Nrk, Berg addressed the misconception that Quranic translation was forbidden among Muslims for a long time (Nrk, 1982, 02:43). This research aims to demonstrate that translating the Quran has always been an Islamic tradition, and it dates to the method at the time of the Prophet Muḥammad ﷺ.

The above-mentioned misconception clearly indicates a knowledge gap that needs to be discussed. This gap can be filled by making Muslims understand that it is important to translate

Quranic meanings because they build a relationship between people and the Lord, and that this has always been the method for Muslims to invite others to the faith.

Without the Quranic translations, it would not be possible for believers and people who are curious about the Islamic teachings to understand Islam's message (Awj, 2007). The diverse languages and cultures among Muslim communities rely on translations of the Quran to access the Quran's message. Thus, it becomes necessary to explore the origin of Quranic translation and whether it is something newly developed in modern times or whether its origin is in Prophetic practice. Understanding this phenomenon will bring believers closer to a tradition that has always been the greatest tool for conveying the message of the Quran.

The role of translation is to convey the essence of a message, in order to awaken curiosity within the minds of listeners and readers. The topic (the need and origin of Quranic translations) discussed in this research is an important part of Islam. The global spread of Islam demands Quranic translation. The roots of this tradition lay with the Prophet ﷺ and his companions early on in Islam's history (Al-Wādiʿī, 2006). However, it is the responsibility of a translator to adhere to the principles of Quranic interpretation based on authentic sources (Al-Dhahabī, 2010).

The primary challenge lies in navigating the details of Quranic translation, regarding both historical and contemporary challenges. While scholars have prioritized preserving the sanctity of the divine text, they should also recognize need to make it available to people from different communities. This research investigates how the first generation set a trend regarding this challenge of communicating the message of Islam in non-Arab lands. Identifying this problem offers Muslims insights into the complexities surrounding the need for Quranic translation.

People often criticize the science of Quranic translation without having sufficient knowledge of its origin and evolution. To examine the discussed topic, the following research questions were carefully constructed:

(1) What is the role and importance of language in Islam?

(2) What was the origin of Quranic translation? Who founded this tradition?

(3) Was Quranic translation a necessary tradition, and is it still needed?

This research investigates and explains the role of Quranic translation in Islam by providing insights into how it originated, why it was important, and why it remains relevant. These aims were achieved via the following objectives:

(1) Analyze the role and significance of language within the context of Islam, with a focus on the need for translation to communicate the divine message.

(2) Investigate historical sources to detect the roots of Quranic translation by identifying the first people to translate the Quran and what their motivations were.

(3) Examine whether it was necessary to translate the Quran and whether it will always be necessary.

This research investigates the tradition of Quranic translation within Islam, identifying its origin and emphasizing its constant practice by early Muslims. The ambiguity of whether Quranic translation is permitted highlights the study's fundamental role in inviting people to the faith. Scholars have always faced the challenge of balancing the sacredness of the Quran with ease of access in translating the divine text. However, the necessity for understanding the Quran's message among non-Arabic speakers underscores the indispensability of translation.

To explore the discussed topic, the research examines the role of language in Islam, the origin of Quranic translation, and its ongoing importance in diverse global communities. Drawing on historical sources, the research identifies the role of language in Islam and how the motivations behind Quranic translation originated, while also evaluating the practice of Quranic translation.

The significance of this research is in making Muslims aware of the greatest tool for conveying the message of the Quran. By concentrating on the points above, the research endeavors to bridge the knowledge gap regarding whether Quranic translation is a Prophetic, lawful, and necessary tradition.

2. REVIEW OF LITERATURE

This review helps to understand the sacredness of the Quran in the eyes of scholars. The review also provides insights into the issues of not reciting the Quran in any language other than Arabic and how translating the Quran is not the same phenomenon as reciting the words of the Quran.

2.1 The Sacredness of the Quranic Text

Some scholars have criticized writing the Quran in any language other than Arabic. This point may concern transcribing the Quran into another language and claiming it to be the words of God, emphasizing the importance of preserving the original Arabic text, to prevent and mixing with other languages. The companion Zayd wrote revelations in front of the Prophet ﷺ, and the Prophet ﷺ dictated them. When the companion Zayd finished writing, the Prophet ﷺ told him to read it; if there was something missing, the Prophet ﷺ would correct it. Then, these words were presented to the people. Mālik ibn Anas was asked if it was permitted to write the Quran in a contemporary language people were used to, be it in Arabia or outside. He refused and said that it should only be in the original language. This was also the opinion of Aḥmad ibn Ḥanbal and al-Bayhaqī. Al-Zamakhsharī added that the script of the Quran was based on Prophetic traditions. Al-Rūmī (2005, p. 370) concluded these scholarly sayings by stating these narrations reveal that Quranic script is a matter of divine guidance and should not be violated.

The above-mentioned Islamic scholars also debated the recitation of the Quran in another language (i.e., not Arabic) during the daily obligatory prayer or outside of it. Al-Nawawī (1928, vol. 3, p. 379) was clear about that it does not matter if a person understands Arabic or not, or is able to recite beautifully or not, this action invalidates his prayer. Al-Zarqānī (1943, vol. 2, p. 163) supports this view, confirming it was the consensus of the scholars of Islam to not recite the Quran in any other language. However, a famous debated opinion is that Abū Ḥanīfah stated it is permitted to recite the Quran in

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Persian, which was deemed lawful by some scholars from the Ḥanafī school of law, but Abū Ḥanīfah later withdrew from this standpoint and followed the majority opinion, according to Ibn ʻĀbidīn al-Dimashqī (1992, vol. 1, p. 484).

2.2 The Origin of Quranic Translation

The opinions discussed primarily pertain to the recitation and preservation of the Quranic text in Arabic. However, throughout history, scholars have translated the Quran into other languages, either orally or written. For instance, the Prophet ﷺ sent letters to rulers of different parts of the world to invite them to Islam through the message of the Quran (Al-Nadwī, 2004, p. 396). Such interaction between messengers and rulers inherently relied on translation. However, the text of early sources of Prophetic traditions tends to omit the translators; when the Prophet ﷺ sent a letter to the ruler of Persia, it is narrated that "…when the ruler of Persia read it, he tore it into pieces" (Al-Bukhārī, 2001, vol. 9, p. 90, narration #7264). The same phenomenon of omitting translators is also sometimes found in the commentaries of the *ḥadīth* literature (Al-ʻAsqalānī, 1959, vol. 1, p. 44). Therefore, the *ḥadīth* literature does not emphasize translators being a part of these interactions. Nevertheless, the books of *ḥadīth* extractions and authentications mention the letter was read [by a translator] to the ruler of Persia, revealing the role of translators in communicating the message of the Quran (Al-Zaylaʻī, 1997, vol. 4, p. 421; Al-ʻAsqalānī, n.d., vol. 2, p. 296, narration #1063).

The companions of the Prophet ﷺ sent to Axum (Ethiopia/*Ḥabashah*) in Africa also orally translated the Quran to convey its meaning to the king of that land. The companions also translated the sayings of the Prophet ﷺ to the king, leaving a profound impression on the king that led to his acceptance of the truth (Ibn Ḥanbal al-Shaybānī, 2001, vol. 37, pp. 170–175, narration #22498, al-Arnā'ūṭ: acceptable chain).

Based on the method of the Prophet ﷺ and the companions and the understanding of scholars, the Quran has always been translated into different languages by scholars of Islam. According to some scholars, the companion Salmān al-Fārisī translated the first chapter of the Quran for the Persians when they wrote to him and requested it, and they used to recite the translation in their prayers until they were able to do it in Arabic (Al-Sarakhsī, 1993, vol. 1, p. 37). Al-Rāzī (1999, vol. 1, pp. 184–186) discusses the issue of reciting the Quran in Arabic, disagreeing with the notion in the above-mentioned narration. He presents several arguments by clarifying that it is not permitted to recite the Quran in any language other than Arabic; if it were, the Prophet ﷺ would have commanded the companion Salmān al-Fārisī to do so.

2.3 The Need to Translate the Quran

Khālid (2016, p. 14) explains that the need for Quranic translations became even more pressing when Islam spread to foreign countries outside the Arab world. People depended on the Quranic message in their own language. Khālid (ibid, p. 15) continues that, if one considers the argument above, it was not necessary to translate the Quran more than once in a language, but the Quran was often translated several times. The reason for these various translations was the changing nature of the language and the development of societies, technology, and science. Muslim (1994, p. 41) agrees with this theory and emphasizes that Muslim scholars dedicated their lives to the task of translating the Quran.

2.4 Summary of Review of Literature

Scholars have consistently upheld the Quran as a sacred text and unanimously agreed that its words in another language cannot replace the original (Al-Rūmī, 2005, p. 370). Evidence suggests that some words of the Quran were translated orally in the time of the Prophet ﷺ (Al-ʻAsqalānī, 1959, vol. 1, p. 44). The role of translating the Quran is to spread the religion, so people can strengthen their relationship with God (Al-Zaylaʻī, 1997, vol. 4, p. 421). Learning that translating the Quran was the method of the Prophet ﷺ and his companions fills the knowledge gap, providing Muslims with an understanding that Quranic translations are necessary and permitted according to Islamic tradition. This review clarifies that translating the Quran has always been an Islamic tradition, and it differs from reciting it. Translating the Quran was also a method of the Prophet ﷺ and his companions. Consequently, this research underlines the significance of translating the Quran and identifies its origin. The findings of the research reveal beneficial facts for Muslims in general.

3. RESEARCH METHODOLOGY

This section explains the methodological framework used to research the elements of Quranic translation, focusing on the role of translation and language in Islam and the historical background of this necessary practice.

3.1 Research Approach

The chosen literature was investigated using content analysis by employing a qualitative methodology. Krippendorff (2004, p. 81) explains that content analysis is a method that utilizes many specific techniques to manage textual data. These techniques are tools for creating suitable analyses. Krippendorff (ibid, p. 87) further adds that grouping similar parts of texts is the easiest technique for measuring or organizing information from the sources; this process helps to break down texts into manageable portions for investigation. The objective of this research is to raise awareness among Muslims regarding the primary tool employed by the first generation of Muslims to convey the meaning of the Quran. The selected method helped to identify patterns and consensus systematically within Islamic tradition and uncover the origin of the tradition of Quranic translation.

3.2 Data Collection

Neuendorf (2002) declares it a myth that content analysis is an easy task and that it does not require any special preparation. Therefore, it was important to be well prepared and select relevant literature to employ qualitative content analysis by thoroughly exploring the chosen data. The data collection was conducted manually by selecting books and articles by Islamic scholars on the discussed topic. Some articles by orientalists were also investigated. To trace a connection between the present and past tradition of Quranic translation, it was necessary to examine the role of language and translation in the first period of Islam. It was important to detect early incidents of Quranic translation in Islamic history through reliable and authentic sources. Hence, non-reliable information was rejected and not used in the research.

3.3 Sample Selection and Coding

The selected method required an understanding of the discussed topic via a literature review to establish the consensus of Muslim scholars concerning the tradition of Quranic translation. Therefore, scholarly literature discussing the topic from the present and past, connecting traditional and modern standpoints, was chosen. The sample contained literature from different parts of the world. An interesting observation during the sample selection was that people from various backgrounds claimed their country to be the first where the Quran was translated.

The selected method made it possible to identify patterns, theories, and tendencies related to my research questions. This systematic approach ensured a comprehensive analysis via categorizing and coding meaningful data, which resulted in a valuable understanding of Quranic translation.

3.4 Data Analysis

The approach adopted in this study provided valuable insights into the complicated tradition of translating the Quran. Key points regarding the topic were understood through investigating literature concerning Quranic translation, its history, and its need. A potential misunderstanding may evolve among Muslims when they see some scholars have criticized writing the Quran in any language other than Arabic. However, examining the topic helped to identify that this point relates to transcribing and calling the result the Quran rather than translating the meanings. By conducting a comparison of the selected literature and a thorough analysis, this study effectively clarified this misunderstanding by investigating the links and associations within the data.

4. ANALYSIS

Interpretation is an essential stage in drawing significant conclusions from the investigated data. Findings need to be understood by emphasizing the importance of detected patterns and themes, providing context to the research questions and integrating the literature's collective wisdom. This process aims to offer deeper knowledge of the topic.

The goal of the research is to identify for Muslims the need for Quranic translation and its historical origin via literature from past and present scholars. The research questions were answered systematically by employing content analysis of the selected data. A comparison of different sources was conducted to check whether the Quran was ever translated by the first generation of Muslims.

Relying on historical facts from the *ḥadīth* literature proving that the first generation of Muslims did translate the Quran, the *ḥadīth* literature played a vital role in this research. The *ḥadīth* literature was then compared with the research by scholars on these Prophetic narrations to identify a connection between the origin and development of the tradition (Quranic translation). All the Muslim scholars agreed that some parts of the Quran were translated at the time of the Prophet ﷺ (Al-Dhahabī, 1985; Muslim al-Nīsābūrī, n.d.; Ṭawīlah and Ḥalwānī, n.d.; Ibn Ṭulūn, 1987).

However, a disagreement was found during the research. Once such instance involves a weak narration gaining traction in Islamic literature suggesting that the companion Salmān was the first to translate the Quran. How this claim is not from a reliable source (Al-Zarqānī, 1943). Another element that can cause disagreement among Muslim scholars is the omission of the word "translator" from some Prophetic narrations, giving the impression that the person receiving the message knew Arabic and that the Quran was not translated (Al-Bukhārī, 2001); however, this was not the actual situation, as the tradition at the time was always to make people read the letters and translate them or to converse in the presence of a translator (Al-Zaylaʿī, 1997). This point underscores the importance of translation in Islam, but it is more important that Muslims themselves translate their own works due to the demanded understanding and respect.

Arab Muslims depend on Quranic translations in the form of interpretation when they have not studied traditional Arabic, enabling them to understand the words of the Quran, and non-Arab Muslims who do not speak Arabic at all depend on translations of the Quran in their local language. This research was undertaken to prove to Muslims that Quranic translation is a Prophetic tradition, and Muslims should appreciate these translations and read them to understand their own religion better and to teach it to other people. This research highly focuses on Quranic translation's history and present need, making it clear to readers that this tradition will always be necessary.

5. RESULTS AND DISCUSSION

This section discusses the findings of the research, revealing the insights gained.

5.1 Importance of Language

Whenever people want to communicate a message in one language from another language, translation plays a vital role. The Quran highlights the importance of language:

(1) The Quran was revealed in Arabic for the people to use their intellects (Quran, 12:2, 43:3).

(2) The Quran was revealed as an Arabic scripture, and people were given warnings in it, so they may become Godfearing or it may produce a lesson for them (Quran, 20:1113).

(3) People were given all kinds of examples in the Quran, so they may pay heed, and this was done via an Arabic book with no crookedness, so people may become Godfearing (Quran, 39:27–28).

(4) The Quran's verses are made distinct in Arabic for people who understand (Quran, 41:3).

(5) The Quran was revealed in Arabic, so people in Mecca could be warned (Quran, 42:7).

(6) The language in the Quran is clear Arabic (Quran, 26:195); therefore, no non-Arab could have taught this to the Prophet Muḥammad ﷺ (Quran, 16:103), nor any

Arab, because nobody knew this high level of eloquence.

(7) The Quran confirms the divine scriptures before it with its Arabic language to warn the evil people and give glad news to the good doers (Quran, 46:12).

(8) The Quran had to be in Arabic because the Prophet Muḥammad ﷺ was an Arab, or else people would have complained that an Arab Prophet was preaching in a foreign language (Quran, 41:44).

(9) The Quran was revealed as a judgment of authority in Arabic (Quran, 13:37).

(10) Whenever God sent a messenger, he was sent with the language of his people to make it clear for them (Quran, 14:4).

5.2 The Written Form of the Arabic Language

Scholars have engaged in an ongoing debate regarding the literacy of Arabs before the advent of Islam. The most likely situation is there were Arabs who could read and write before Islam, but there was no culture of literacy. God mentioned the pen, the book, and the tablet in the Quran, indicating the Arabs knew about these tools, and some were even using them (Shuraym, 2013).

Al-Mubārakfūrī (n.d., p. 97) highlights an instance where the Arab tribe Quraysh drafted a pact that they hung in the Kaaba during the boycott of the Banū Hāshim tribe, suggesting a degree of literacy within certain Arab tribes.

The written form of Arabic grew popular and spread throughout the Arabian Peninsula, especially following the battle of Badr (624 CE) because the Prophet ﷺ ordered that the captives be released on the condition that they teach the children of Medina to read and write (Bayān al-Islām, n.d.).

Ibn Kathīr al-Dimashqī (1986, vol. 5, pp. 339–355) mentions several of the Prophet's ﷺ companions who transcribed the words of the Quran proving that people knew the art of reading and writing before Islam came to Arabia. Therefore, it seems the Arabic written form existed before Islam, but the role of those who wrote down the revelations of the Quran and the Prophetic traditions was to transmit the Islamic message. Hence, their contributions gained more popularity and may have led to an impression that Islam created the written form of the Arabic language.

5.3 The Role of Translation in the Prophet's ﷺ Invitation

When the Meccan disbelievers tortured and punished the Muslims because they started to believe in the Prophet Muḥammad ﷺ, the Prophet ﷺ instructed the companions to immigrate to the Kingdom of Axum (Ethiopia/*Ḥabashah*). Here, the companions had the opportunity to live and to practice their faith freely. The Meccan disbelievers sent two diplomats to bring back the Muslims from Axum, but the king was a just man, so he asked the companions to recite something from their holy scripture. The companion Ja'far recited some verses from Chapter *Maryam* in the Quran. This made the king and his advisors cry. The king said that this message and the message that the king and his people believed in were from the same

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light (Al-Dhahabī, 1985, vol. 1, pp. 215–216, al-Arnā'ūṭ: authentic).

It is important to understand that the main reason behind sending the companions to Axum was so they could be safe and practice their faith, but it cannot be overlooked that they also had another goal there: to spread the message of Islam. The discussion between the companion and the king is mentioned in the Prophetic narrations, but they lack information about whether a translator was there. However, the conversation was probably either translated by an interpreter or directly into the local language of the people of Axum; maybe the companion Ja'far knew their language. In a sense, this was the first translation of Quranic verses in a foreign country and the first translation of the Prophetic traditions (teachings) into a foreign language; a new science was born in Islam.

Ṭawīlah and Ḥalwānī (n.d., p. 87) call the truce of al-Ḥudaybiyyah a great victory for spreading the Quranic message. This incident provided the Muslims with a break from fighting for the cause of God and focused on inviting people to the faith. This was an opportunity to spread the words of the Quran beyond the borders, to Persia and the Roman Empire. The Prophet ﷺ sent letters to rulers of different lands, calling them to Islam (Muslim al-Nīsābūrī, n.d., vol. 3, p. 1397, narration #1774). The companions wrote the letters, and the Prophet ﷺ told them what to write. The letters sent to the rulers were delivered by messengers, and they were translated for the receiver so the receiver could understand what the Prophet ﷺ wrote. The letters contained words from the Quran and some general guidance (Ibn Ṭulūn, 1987, p. 25). This was the method of the Prophet ﷺ to send letters to people in Arabia and beyond (Al-Wādiʿī, 2006, pp. 25, 77). The letters were in Arabic, but they were translated orally into the local language when they were read to the recipient.

5.4 In the Court of Heraclius, Emperor of the Byzantine Empire

There is a famous narration about the companion Abū Sufyān being in the Levant for business before he became a Muslim, and Emperor Heraclius called him to his court. Heraclius called his interpreter to translate the dialogue between him and the Arabs, and the letter of the Prophet Muḥammad ﷺ was read to him. Heraclius asked about what the Prophet ﷺ invited the Arabs to and what his message was, whether he was a just man, and other details about him. Abū Sufyān informed him, and the interpreter translated. Abū Sufyān admitted that he was not able to say anything bad about the Prophet ﷺ during this dialogue. Heraclius had heard about this awaited Prophet ﷺ, and, in his heart, he knew it was the truth, but he did not declare his belief for fear of losing power (Al-Bukhārī, 2001, vol. 1, p. 8, narration #7). This incident occurred during the time of the Prophet ﷺ, proving that Islamic guidance was translated, as well as giving information about the character of the Prophet ﷺ. Two main sciences of Islam, (1) the Quranic knowledge (message) and (2) the biography of the Prophet ﷺ, were a part of this dialogue with Heraclius, and both sciences were translated.

5.5 The Need for Quranic Translation

Muslim (1994, p. 17) argues the Quran was revealed in Arabic as guidance, humans were sent as messengers to the people

(Quran, 17:94–95), and these messengers spoke their language to communicate and clarify the message (Quran, 14:4). Prophet Muḥammad ﷺ was sent to warn all mankind (Quran, 34:28), but this makes it either obligatory for all humans to learn Arabic or for scholars of Islam to convert the meanings and understandings to other languages. The obvious answer is that it is the role of the scholars to convert the message of Islam to other languages, so more people may understand. Muslim (1994, p. 41) further adds that as the population of Muslims grew, and people from foreign countries converted to Islam, Muslim scholars increasingly depended on translation and interpreting the Islamic teachings. Several challenges, such as language, culture, and previous religious beliefs and practices, demanded Islamic knowledge in the local language. In this manner, the science of translation developed among Muslims, and scholars played a vital role in this.

Awj (2007, p. 15), agrees with the scholars that the main reason behind the need for translating the Quran is that not everybody speaks Arabic, nor is the Quranic Arabic something everybody understands. The argument for translating the Quran becomes even stronger when even Arabs depend on the Prophet ﷺ for understanding Quranic. Awj (ibid, p. 18) adds that translation is the first phase of conveying or interpreting the Quranic words because, without translation, nobody can understand the Quran. For Arabs, this process means providing an easier language or offering an explanation. For non-Arabs, it is done in their local language.

5.6 Conveying and Converting the Words of the Quran

As previously discussed, in the earliest phase of Islam, the Muslims depended on the translation of the Quran, and even more so when Islam was spreading to other countries. Whenever the Quran arrived in a new place, people required translation to understand it. A critical question, both in the past and today, is whether the Quran can be translated. Sharafuddīn (n.d., pp. 69–70) acknowledges that the Quran's words in themselves are impossible to translate. People face terminological and linguistic problems during the process. However, the translator's role is to communicate the text as honestly as possible and to provide the nearest equivalent meanings of the Quran. This is what translations are defined as: the nearest meaning.

Al-Dhahabī (2010, vol. 1, pp. 23–24) explains that conveying and converting the words of the Quran happens in two forms: (1) word for word, and (2) the meaning of the words. "Word for word" means to transmit completely the original words. "The meanings of the words" means to place greater emphasis on the meaning than the words themselves. A translator must apply both methods to retain the original meanings but also convey them in such a manner that they make sense in the target language. If the translator begins to add meanings without adhering to the methods employed by the companions, their disciples, and the scholars of Islam, the translator may fail to convey or convert the true and authentic meanings.

Al-Dhahabī (ibid, p. 31) recounts a disagreement among scholars regarding the interpretation of the Quran as being deductions or conclusions based on Quranic words or interpretations based on proofs. *Tafsīr bi al-Ma'thūr* (interpreting the Quran using authentic sources) assigned higher rank to proofs than conclusions, demanding the interpreter draw conclusions based on principles.

5.7 A Brief History of the Quran Translations

Al-Nawawī (1928, vol. 3, p. 380) mentions the famous theory about the companion Salmān al-Fārisī translating the first chapter of the Quran for Persians, so they could recite it in their daily obligatory prayers. Al-Nawawī (ibid) disputes this theory, stating the Quran is only the miraculous Arabic text revealed to the Prophet ﷺ and nothing else; therefore, reciting the Quran in any other language is forbidden. Al-Zarqānī (1943, vol. 2, p. 159) states this narration is unknown, its chain unidentified, and it is not permitted to act according to it. It is also not documented that the companion Salmān al-Fārisī translated the entire first chapter; it is only one sentence. In contrast, the narration about the companions when they emigrated to Axum is authentic (Al-Dhahabī, 1985, vol. 1, pp. 215–216, al-Arnā'ūṭ: authentic) and included in almost all biographies of the Prophet ﷺ. This was probably the first oral translation of the Quran into another language. Al-Balūshī (n.d., p. 4) highlights that the letter sent to Heraclius included verse 3:64 of the Quran, and it was translated for Heraclius, as well as an oral translation. This was also the case with the letter sent to the Persian ruler. Therefore, the letter to the Persian ruler may have been one of the first translations of Quranic words into Persian.

Having identified that the narration about the translation of the Quran into Persian by the companion Salmān al-Fārisī is unreliable, it is important to investigate when Quranic translations began to emerge both within and outside the Muslim world.

Høgel (2010, p. 66) argues that a not-so-popular Greek Quranic translation existed before 870 CE. He claims one of the main reasons for this translation going unrecognized by Muslims is that it was used to refute the Quran, which proves its aim was anti-Islamic. Høgel (ibid, p. 67) adds that this translation has not been assigned a specific date, but it was used as a main source by Nicetas in his refutation of the Islamic belief. Many dates have been assigned to the document of Nicetas in which this translation was used to refute the Quran; the specific period of this refutation is claimed to be 866–870 CE.

Ulbricht (2023, p. 222) also discusses an anonymous Quranic translation used by Nicetas in his refutation of the Quran and its creed. Ulbricht claims earlier Christian writers used some Quranic passages in their polemics against Islam. He mentions Christian writers doing this as early as approximately 50–70 years after the passing of the Prophet Muḥammad ﷺ, which corresponds to around 700s CE. Ulbricht states there is no doubt that Nicetas, who refuted the Quran, had a Greek Quranic translation at his disposal, but the author of the translation is unknown. Ulbricht states that Nicetas' refutation of the Quran is preserved in a single Greek manuscript in the Vatican library (Vat. gr. 681).

Al-Jarf (2014, p. 4) claims that a Sindhi translation was requested by a Hindu ruler named Mahrūk, who supposedly sent a request to ʻAbdullāh ibn ʻUmar ibn ʻAbd al-ʻAzīz, ruler of Mansura, Sindh (modern Pakistan). This translation is claimed to have been produced in 883 CE by a Muslim Arab poet who knew the Sindhi language. This theory is supported by Nadwī (2010, p. 160) in his research on the historical relations between Arabs and Indians. He presented this research in 1929 CE during his lectures and claimed that a Hindi or Sindhi translation was requested by an Indian ruler, Mahrūk, in Alwarā in Sindh. He wrote to the ruler of Mansura, requesting a text. The ruler of Mansura had an Iraqi poet fluent in Sindhi. The poet wrote a poem and sent it to the Hindu ruler of Alwarā, who appreciated it and invited the poet to court. The poet then translated the Quran, and the Hindu ruler would listen to the translation every day. Sarafuddīn (n.d., pp. 79–80) highlights that the first Urdu/Hindi Quranic translation in India was by Shāh ʻAbd al-Qādir al-Dihlawī in 1790 CE. Sarafuddīn (ibid, p. 81) adds that although this is the most famous first version of Urdu/Hindi in India, the struggle of translating the Quran had begun approximately 1,000 years earlier and was a developing and continuous effort of Muslim scholars on the Indian subcontinent.

Al-Balūshī (n.d., pp. 12–13) makes the interesting claim that Abū al-Ḥasan al-Ashʻarī, who, according to al-Balūshī, died in 945 CE, reported that he read a Quranic commentary written by his teacher, al-Jubbāʼī, whom he later renounced. Al-Jubbaʼī, who died in 915 CE, wrote a Quranic commentary in his Persian language. Al-Ashʻarī claimed this commentary contained nothing other than the words and philosophies of al-Jubbāʼī, that is, nothing from the Quran. Al-Balūshī (ibid, p. 18) adds that this commentary has not been seen in modern times and is only mentioned in a few sources. However, in the 10^{th} century CE, the major Quranic commentary by al-Ṭabarī was translated into Persian on the order of the ruler of the Samanids, Manṣūr I.

Thus, there were complete Persian translations of the Quran with commentaries at the end of the 800s CE and the beginning or middle of the 900s CE.

Furthermore, on 7 May 1649, Alexander Ross translated the Quran from French into English with the title *The Alcoran of Mahomet*. This was the first English translation of the Quran (Qudwā'ī, n.d., p. 107). Also, concerning the Norwegian language, the Quran has five published translations, and another is in production. The first complete translation into Norwegian was published in 1980.

6. CONCLUSION AND LIMITATIONS

Language is the key to all forms of knowledge; if you do not understand the language, you cannot understand the message. The language of the Quran has a clear goal: to make people Godfearing and give them guidance. The Quran's language is Arabic, but not all believers understand Arabic; therefore, it has always been a part of Muslim tradition to translate the words of the Quran. The companions were sent to a new land in Africa for their security. They aimed to spread the religion in a new part of the world, using the local language of that land. The letters sent to kings and rulers in other countries were also translated. This demonstrates that translation played a vital role in the growth of Islam. The Quran must be translated because messengers communicate with their communities in their own language, and the Prophet Muhammad ﷺ was the final messenger; hence, his message must be conveyed through translations for all humankind to understand.

The method of translating the Quran and the Prophetic traditions existed in oral form at the time of the Prophet Muḥammad ﷺ. Approximately 200 years after the passing of the Prophet ﷺ, a Greek Quran translation existed, and, in 883 CE, a Muslim translated the probable first Quranic translation into Sindhi. The need for Quranic translation also existed among the companions; they used to ask the Prophet ﷺ for the meanings of words. This was a form of translation through interpretation, proving that both Arabs and non-Arabs depend on Quranic translation. From the time of the Prophet ﷺ until today, it has been an Islamic tradition to translate the Quran to convey its meanings.

This research acknowledges the fundamental challenge of fully capturing the depth of Quranic translations within one single research project. The research may not cover all the topics related to Quranic translations and their vast field.

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FATWÁS OF INDONESIAN SCHOLARS' COUNCIL ON MEDICAL ISSUES IN THE LIGHT OF MAQĀṢID AL-SHARĪʿAH

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ABSTRACT

The Indonesian Scholars' Council has issued numerous fatwás on medical issues determined on the basis of the Qur'ān, Sunnah, ijmāʿ, and qiyās. Formulating a fatwá always takes into consideration maqāṣid al-sharīʿah, although it is not always evident how maqāṣid al-sharīʿah are applied in the fatwá. Hence, a study is required to discover the implementation of maqāṣid al-sharīʿah, especially on fatwás related to medical issues. Using a qualitative approach, the study has been conducted to find out the conformity of the fatwás with maqāṣid al-sharīʿah and examine its application. Medical issue fatwás from the Ijtimaʿ held by the Indonesian Scholars' Council were selected as primary data. The secondary data was collected from various books, journals, and writings about maqāṣid al-sharīʿah and the analysis of the Indonesian Scholars' Council fatwás, followed by data analysis using the content analysis method. In conclusion, the concept of maqāṣid al-sharīʿah is an important consideration in the establishment of the fatwás. Its implementation can be observed through the evidence provided in the fatwás alongside the ruling of the issues. The use of al-qawāʿid al-fiqhīyah and maṣlaḥah mursalah in the evidence indicates the implementation of maqāṣid al-sharīʿah. Among preservation of the five essentials, preservation of life and preservation of lineage are more commonly found in fatwás on medical issues.

Keywords: *Fatwá, medical issues, maqāṣid, maqāṣid al-sharīʿah, Indonesian Scholars' Council.*

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1. INTRODUCTION

The Indonesian Scholars' Council or *Majelis Ulama* Indonesia (MUI) is an organization founded to provide guidance for the Muslim society in Indonesia whether in religious or social affairs. Technological advances and developments in medical science raise questions for Muslims regarding Islamic law and Islamic perspectives on medical practices that come with the latest innovations and technology. In this case, the Indonesian Scholars' Council provides guidance to the Muslim community by issuing *fatwás* related to medical issues.

The basis of the Indonesian Scholars Council's *fatwás* is the Qur'ān, Sunnah, *ijmāʿ*, and *qiyās*. However, the concept of *maqāṣid al-sharī'ah* must be considered so that the *fatwá* will be valid and will not deviate from the objectives of the Lawgiver. Therefore, this research was conducted to examine the application of *maqāṣid al-sharīʿah* in the fatwás of the Indonesian Scholars' Council on medical issues and determine the conformity of the *fatwás* with *maqāṣid al-sharīʿah*. By understanding the role of *maqāṣid al-sharīʿah* in *fatwás* of the Indonesian Scholars' Council, this study is expected to increase people's faith that Islamic *Sharīʿah* is fair and aims to provide benefits for humans in this world and the hereafter.

2. REVIEW OF LITERATURE

2.1 Definition of *Maqāṣid al-Sharīʿah*

Maqāṣid al-sharīʿah is an annexation structure. It is composed of two Arabic words: *maqāṣid* and *al-sharīʿah*. *Maqāṣid* is the plural noun of *maqṣad*. *Maqṣad* is a verbal noun that begins with the *mīm* letter (*maṣdar mīmī*). It is derived from *qaṣada – yaqṣudu – qaṣdan*. The word *maqṣad* and *qaṣd* have the same meaning. According to Ibn Manẓūr, the meaning of *al-qaṣd* in Arabic is as follows:

(1) *istiqāmat al-ṭarīq* (straightness of the way)[31]

(2) *al-ʿadl* (justice)[32]

(3) *al-iʿtimād wa al-amm* (determination, intention)[33]

(4) *ityān al-shay'* (coming to something)[34]

(5) *mā bayna al-isrāf wa al-taqtīr* (moderation between extravagance and miserliness)[35]

(6) *al-kasr* (breakage).[36]

The most suitable meaning of *maqāṣid* is the third and fourth meanings which cover the meaning of the intention and

[31] Ibn Manẓūr, "Faṣl Al-Qāf," 353.
[32] Ibn Manẓūr, 353.
[33] Ibn Manẓūr, 353.
[34] Ibn Manẓūr, 353.
[35] Ibn Manẓūr, 354.
[36] Ibn Manẓūr, 355.

determination on something.[37] It is said that the original meaning of the word consists of *qāf*, *ṣād*, and *dāl* in the speech of the Arabs is determination, direction, and rise toward something, whether in moderation or injustice.[38] Other similar meanings to define *maqāṣid* are purposes, designs, aims, ends, goals, and objectives.[39]

Al-sharīʻah is a specific noun. It is derived from *sharaʻa – yashraʻu – sharʻan*. The word *al-sharīʻah* has several meanings mentioned as follows:

(1) "Places that a part of it descends into the water."[40]

(2) "Water resource that people go to drink and retrieve the water from."[41]

(3) "A place in the seashore where the animals come in."[42]

(4) "What Allāh has legislated from the religion and what He commanded, such as fasting, pilgrimage, *zakāh*, and every good deed."[43]

(5) Religion and way of life (*dīn*, *millah*, *minhāj*).[44]

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[37] Al-Yūbī, *Maqāṣid al-Sharīʻah al-Islāmīyah*, 28–29.
[38] Ibn Manẓūr, "Faṣl Al-Qāf," 355.
[39] Baalbaki, *Al-Mawrid*, 862 and 1091–92.
[40] Ibn Manẓūr, "Faṣl Al-Shīn," 175.
[41] Ibn Manẓūr, 175.
[42] Ibn Manẓūr, 176.
[43] Ibn Manẓūr, 176.
[44] Ibn Manẓūr, 176.

The first three meanings show that *sharīʿah* refers to a water resource. The other meaning refers to what Allāh has legislated and commanded from the religion. *Sharīʿah* also means religion or a way of life. Religion is a general meaning, which includes other religions besides Islam. However, in the context of *maqāṣid al-sharīʿah*, it is more suitable that the meaning of *al-sharīʿah* is Islamic *sharīʿah*.

Linguistically, it can be deduced that *maqāṣid al-sharīʿah* means the purpose, intention, goal, or objective of the *sharīʿah*. In terminology, the scholars define *maqāṣid al-sharīʿah* with various definitions:

(1) *Ibn ʿĀshūr*: "The meanings and wisdom of the Lawmaker noted in all conditions of legislation or most of it."[45]

(2) *ʿAlāl al-Fāsī*: "The aim (of the *sharīʿah*) and the secrets laid down by the Lawgiver in each of its rulings."[46]

(3) *al-Ḥasanī*: "The intended beneficial purposes of the rulings, and the intended meanings of the speech."[47]

(4) *al-Raysūnī*: "The goals, which the *sharīʿah* is established in order to achieve them, for the benefit of the people."[48]

[45] Ibn ʿĀshūr, *Maqāṣid Al-Sharī'ah al-Islāmiyyah*, 2:251.
[46] Al-Fāssī, *Maqāṣid Al-Sharīʿah al-Islāmīyah Wa Makārimuhā*, 7.
[47] Al-Ḥasanī, *Naẓarīyat Al-Maqāṣid*, 119.
[48] Al-Raysūnī, *Naẓarīyat Al-Maqāṣid*, 19.

(5) *al-Khādimī*: "They are the meanings observed in the *sharīʿah* rulings, and consequent upon them, whether those meanings are partial wisdom, general interests, or global characteristics, and they gather within one goal, which is: establishing the servitude to Allāh and attaining the human interest in two worlds."[49]

(6) *al-Yūbi*: "Meanings, wisdom, and so forth that the Lawgiver preserves generally and specifically in the legislation, to achieve the benefit of the people."[50]

It can be summarized that *maqāṣid al-sharīʿah* refers to the purposes, meanings, and wisdom of the *sharīʿah*. These purposes, meanings, and wisdom are preserved by Allāh as the Lawgiver in His legislation to establish servitude to Allāh and attain the benefits of the people in the world and the hereafter.

2.2 Classification of *Maqāṣid al-Sharīʿah*

Classification of *maqāṣid al-sharīʿah* according to priority and demand:

(1) *Ḍarūrīyāt* (necessities): Necessary objectives to establish the benefits of religion and the world.[51] The necessities contain the preservation of five elements: religion, life, intellect, wealth, and lineage.[52]

[49] Al-Khādimī, *Al-Ijtihād al-Maqāṣidī*, 52–53.
[50] Al-Yūbī, *Maqāṣid al-Sharīʿah al-Islāmīyah*, 37.
[51] Al-Shāṭibī, *Al-Muwāfaqāt*, 1997, 2:17.
[52] Al-Shāṭibī, 2:17.

(2) *Ḥājīyāt* (needs): The requirements needed to relieve and lift difficulty, burden, and hardship.[53] Examples: concession (*rukhṣah*) for travelers and sick people in shortening *ṣalāh* and fasting on Ramadan, the permissibility of loans, sharecropping contract, and advance payment sales (*bay'al-salām*).[54]

(3) *Taḥsīnīyāt* (luxuries): Appropriate matters according to customs and ethics, which do not lead to difficulty and hardship.[55] Examples: purification, covering one's private parts, the etiquette of eating and drinking, and prohibition of selling impurities.[56]

Classification of *maqāṣid al-sharī'ah* according to its inclusiveness:

(1) *Maqāṣid 'Āmmah* (general objectives): The objectives observed in all fields of *sharī'ah* or most of them.[57] The examples of general objectives of the *Sharī'ah*: maintaining the five essentials (preservation of religion, life, intellect, wealth, and lineage), eliminating harm, lifting difficulties, and enforcing justice among people.[58]

[53] Al-Shāṭibī, 2:21.
[54] Al-Shāṭibī, 2:21.
[55] Al-Shāṭibī, 2:22.
[56] Al-Shāṭibī, 2:22–23.
[57] Al-Khādimī, *'Ilm al-Maqāṣid al-Shar'īyah*, 72; al-Raysūnī, *Madkhal Ilá Maqāṣid Al-Sharī'ah*, 14.
[58] Al-Raysūnī, *Madkhal Ilá Maqāṣid Al-Sharī'ah*, 14.

(2) *Maqāṣid Khāssah* (specific objectives): The objectives that are related to a field or certain fields or several topics in *sharīʻah* law that are close to each other.[59] Examples of *Sharīʻah's* specific objectives are objectives in family law, objectives regarding finance, objectives pertaining to judgments and evidence, objectives of worship, objectives of transactions, etc.[60]

Maqāṣid Juzʼīyah (partial objectives): The objectives that are related to specific issues. It is the objective of each ruling of *Sharīʻah* in obligation, recommendation, forbiddance, dislike, or condition.[61] Examples: the objective of having witnesses in marriage is to strengthen the marriage contract and prevent disputes and denial,[62] objectives of ablution, objectives of *ṣalāḥ*, etc.[63]

2.3 Importance of Maqāṣid al-Sharīʻah in the Fatwá of the Indonesian Scholars' Council

Maqāṣid al-sharīʻah is important when dealing with the texts of *Sharīʻah*. It helps a *muftī* to comprehend the meaning of the text, assists in checking and making sure that the evidence on an issue is safe from contradiction, and helps in giving

[59] Al-Raysūnī, 14.
[60] Al-Raysūnī, 14.
[61] Al-Raysūnī, 15.
[62] Al-Raysūnī, 15.
[63] Al-Yūbī, *Maqāṣid al-Sharīʻah al-Islāmīyah*, 415.

preponderance or combining two contradicted pieces of evidence. [64]

Knowledge of *maqāṣid al-sharīʻah* is necessary when establishing a ruling on an issue in which the ruling is unknown in the *Sharīʻah* texts and there is no comparison in other cases.[65] It not only helps a *muftī* in his deduction but also in considering the contradiction between benefits and harms.[66] Besides that, *maqāṣid al-sharīʻah* can be used to verify whether a *fatwá* is valid and acceptable in *Sharīʻah* or not by examining the conformity of the *fatwá* with the objectives of *Sharīʻah*. [67]

In the *fatwás* of the Indonesian Scholars' Council, *maqāṣid al-sharī'ah* is an important concept to be preserved when establishing a *fatwá*. It is mentioned in the guidelines that the establishment of a *fatwá* must be done while maintaining benefits (*masālih*) and preserving *maqāṣid al-sharīʻah*. [68] According to the fatwá Number 6/MUNAS VII/MUI/10/2005, benefit in Islamic law is the achievement of *maqāṣid al-sharīʻah* manifested in the preservation of five essentials (*al-ḍarūrīyāt al-khams*), which are the preservation of religion, intellect, life, wealth, and lineage.[69] It can be deduced that the implementation of *maqāṣid al-sharī'ah* in the Indonesian Scholars' Council *fatwá* is by maintaining the five essentials.

[64] Ibn ʻĀshūr, 2:183.
[65] Ibn ʻĀshūr, 2:184.
[66] Al-Shībān, "Ḍawābiṭ Al-Fatwá," 260.
[67] Al-Shībān, 260.
[68] Indonesian Scholars' Council, Fatwa Establishment Guidelines 2015, Chapter III, Article 7.
[69] Majelis Ulama Indonesia, "Kriteria Maslahat (Criteria of Interests)."

3. RESEARCH METHODOLOGY

This study used a qualitative approach to obtain the best analysis of *maqāṣid al-sharīʿah* in the *fatwás* of the Indonesian Scholars' Council. The primary data of the study is the medical *fatwás* from the *Ijtimaʿ* of the Indonesian Scholars' Council. It was collected by document analysis. The secondary data was collected from various books, journals, and writings about *maqāṣid al-sharīʿah* and the analysis of Indonesian Scholars' Council *fatwás*. Then, the data was analyzed by content analysis method to uncover the meanings found in the texts. The general steps for data analysis in this study are based on the procedure of qualitative research by Creswell[70]:

(1) Preparation of the data which consists of the *fatwás* of the Indonesian Scholars' Council and the references related to *maqāṣid al-sharīʿah* and analyses of the Indonesian Scholars Council's *fatwás*.

(2) Coding or organizing the fatwás of the Indonesian Scholars' Council on medical issues.

(3) Generating themes from the coding process after sorting the *fatwás* with the same theme.

(4) Analyzing medical *fatwás* of the Indonesian Scholars' Council from the perspective of *maqāṣid al-sharīʿah*.

(5) Drawing conclusions from the findings.

[70] Creswell, *Research Design*.

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4. RESULTS

4.1 Preservation of Five Essentials

After analyzing the *fatwás* and observing the evidence, the implementation of *Sharīʿah* general objectives, particularly the preservation of five essentials, in medical issue *fatwás* of the Indonesian Scholars' Council can be seen in table 1.

Table 1. Preservation of Five Essentials in the *Fatwás* of the Indonesian Scholars Council

Issue	Preservation of Five Essentials				
	Religion	**Intellect**	**Life**	**Wealth**	**Lineage**
Embryo Transfer					✓
Alternative Medicine	✓		✓		
Vasectomy					✓
Eye Bank			✓		
The Use of Nicotine		✓	✓		
Immunization			✓		
The Use of Ethanol		✓	✓		
The Use of Blood Plasma			✓		
Uterus Transplantation					✓

Table 1 shows the preservation of five essentials considered in nine medical issue *fatwás* of the Indonesian Scholars Council.

Based on the number of occurrences, the preservation of life was considered in six of nine *fatwás*, followed by the preservation of lineage in three *fatwás*, then the preservation of intellect in two *fatwás*, and the preservation of religion in one *fatwá*. Consideration of wealth preservation was not found during the study.

4.2 The Use of al-Qawāʻid al-Fiqhīyah

Apart from the Qur'ān and Sunnah, there are *al-qawāʻid al-fiqhīyah* (maxims of Islamic law) mentioned nearly in every fatwá of the Indonesian Scholars Council. Maxims of Islamic law can be used to recognize *maqāṣid al-sharīʻah*. It is because the maxims contain clear descriptions regarding purposes and objectives in Islamic law.[71] However, not all of them related to the concept of *maqāṣid al-sharīʻah*.

The maxims of Islamic law that indicate the general objective of Sharīʻah in achieving benefit and removing harm can be seen in table 2.

Table 2. Maxims of Islamic Law Related to Maqāṣid al-Sharīʻah

Issue	**Maxims of Islamic Law (*al-Qawāʻid al-Fiqhīyah*)**
Embryo Transfer	Avoiding detriment takes precedence over bringing about benefit (*Dar'ul mafāṣid muqaddam ʻalá jalb al-maṣāliḥ*)
Alternative Medicine	Avoiding detriment takes precedence over bringing about benefit (*Dar' al-mafāṣid muqaddam ʻalá jalb al-maṣāliḥ*)

[71] Al-Zuḥaylī, *Al-Qawāʻid al-Fiqhīyah Wa Taṭbīqātuhā Fī al-Madhāhib al-Arbaʻ*, 28.

Vasectomy	-
Eye Bank	Necessities may permit forbidden things (*al-ḍarūrāh tubīḥu al-maḥẓūrāt*) When two detriments or two harms contradict, take the greatest harm into consideration by committing the least of the two (*Idhā ta'āraḍat mafsadatān aw ḍararān rū'iya a'ẓamuhumā ḍararan bi-rtikāb akhaffihimā*) When two evils or harms contradict, Sharī'ah intends to avert the worst of the two harms and two evils (*idhā ta'āraḍat sharrān aw ḍararān qaṣada al-shar' daf' ashadd al-ḍararayn wa a'ẓam al-sharrayn*) Harm must be eliminated (*al-ḍarar yuzāl*)
The Use of Nicotine	Necessity is determined according to its extent (*al-ḍarūrah tuqaddar bi-qadrihā*) Harm must be eliminated (*al-ḍarar yuzāl*). Harm should be avoided as much as possible (*al-ḍarar yudfa' bi-qadr al-imkān*)
Immunization	Averting something before its occurrence takes precedence over eliminating it (*al-daf' awlá min al-raf'*) Harm should be avoided as much as possible (*al-ḍarar yudfa' biqadr al-imkān*) Harm must be eliminated (*al-ḍarar yuzāl*) Need can develop into necessity (*al ḥājah tanzilu manzilat al ḍarūrah*) Necessities may permit forbidden things (*al-ḍarūrāh tubīḥu al-maḥẓūrāt*)

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	What is permitted for necessity is determined according to its extent (*mā ubīḥa lil-ḍarūrah yuqaddar biqadrihā*)
The Use of Ethanol	Harm should not be inflicted nor reciprocated (*lā ḍarar wa-lā ḍirār*)
	If a lawful and unlawful thing come together, the unlawful thing predominates (*idhā ijtamaʻa al-ḥalāl wa-al-ḥarām ghuliba al-ḥarām*)
	Harm must be eliminated (*al-ḍarar yuzāl*)
	Avoiding detriment takes precedence over bringing about benefit (*dar'ul mafāṣid muqaddam 'alá jalb al-maṣāliḥ*)
The Use of Blood Plasma	Necessity is determined according to its extent (*al-ḍarūrah tuqaddar biqadrihā*)
Uterus Transplantation	Necessity is determined according to its extent (*al-ḍarūrah tuqaddar biqadrihā*)
	Harm must be eliminated (*al-ḍarar yuzāl*)
	Need can develop into necessity (*al ḥājah tanzilu manzilat al ḍarūrah*)

Most of the maxims of Islamic law mentioned in the Indonesian Scholars' Council fatwás are maxims that contain the concept of removing harm, such as "*al-ḍarar yuzāl*" (harm must be eliminated) and "*dar' al-mafāsid muqaddam 'alá jalb al-maṣāliḥ*" (avoiding detriment takes precedence over bringing about benefit). The use of these maxims indicates the application of the concepts *maṣlaḥah* and *mafsadah* which is a concept included in *maqāṣid al-sharīʿah*.

Besides that, there are maxims that contain necessity such as "*al-ḍarūrāt tubīḥ al-maḥẓūrāt*" (Necessities permit the prohibited) and "*al-ḍarūrah tuqaddar bi-qadrihā*" (necessity is determined according to its extent). Necessity has a relation with the concept of *maqāṣid al-sharīʿah* as well. In the situation where the five essentials are harmed, the *Sharī'ah* objective is to preserve them and remove the harm.

4.3 The Use of *Maṣlaḥah Mursalah*

Other than *al-qawāʿid al-fiqhīyah* (maxims of Islamic law), *maṣlaḥah mursalah* is also mentioned in the evidence of *fatwá* regarding eye bank, organ donation, and transplantation. *Maṣlaḥah mursalah* is a benefit that is not confirmed by *Sharīʿah* texts nor it is abolished. In contemporary issues where there are no *Sharīʿah* texts that address the ruling of the issues, *maṣlaḥah mursalah* is used in determining the ruling of these issues.

The use of *maṣlaḥah mursalah* also indicates an implementation of *maqāṣid al-sharī'ah* in establishing a ruling. It is because maintaining the objectives of Sharīʿah is considered as *maṣlaḥah* (benefit). According to the Indonesian Scholars' Council, *maṣlaḥah* in Islamic law is the achievement of *maqāṣid al-sharīʿah* manifested by maintaining the five essentials: religion, intellect, life, wealth, and lineage. [72]

By considering the opinion of the scholars in the past, the Indonesian Scholars' Council explained further the meaning of

[72] Majelis Ulama Indonesia, "Kriteria Maslahat (Criteria of Interests)."

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maṣlaḥah or benefits. According to al-Ghazālī, *maṣlaḥah* is the preservation of *Sharīʻah* objectives.[73] Everything that embodies the preservation of five essentials is considered a benefit in Islamic law. It means that the preservation of religion, life, intellect, lineage, and wealth are benefits. Accordingly, everything that annuls benefit is harm, and removing harm is counted as a benefit.[74]

5. DISCUSSION

5.1 Embryo Transfer

From the perspective of Islamic law, the prohibition of transferring embryos from a husband and wife to foreign women is in accordance with Islamic law which has legislation that the believers must protect their private parts from unlawful actions such as *Sūrah al-Mu'minūn* (23): 5-7 and *al-Maʻārij* (70): 29-31. Based on these verses, to implant the embryo in the womb of a woman who does not have a marital relationship is not in accordance with the meaning of the verses. The uterus is a part of a woman's body that is not lawful except for her husband. The thing that allows a man to have rights over a woman including private parts and the womb is marriage. Thus, transferring the embryo into the womb of a foreign woman is forbidden according to *Sharīʻah*.

In the fatwá there is a *ḥadīth* that contains a prohibition from the Prophet *ṣallá-llāhu 'alayhi wa-sallam* for the believers to have intercourse with women who are pregnant by other men. He *ṣallá-llāhu 'alayhi wa-sallam* said, "It is not lawful for a man who

[73] Al-Ghazālī, *Al-Mustaṣfá min ʻIlm al-Uṣūl*, 1:416.
[74] Al-Ghazālī, 1:417.

believes in Allah and the last day to water what another has sown with his water."[75] This prohibition aims to protect offspring and avoid mixing offspring. This is because having intercourse with a woman who is pregnant by another man can cause the lineage to be mixed. Thus, Islamic law prohibits this act. According to this *ḥadīth*, transferring the embryo to another wife of the husband can cause problems in the lineage, such as when the second wife is pregnant from the husband even after transferring the embryo.

One of the *Sharīʻah* objectives is the preservation of lineage. Transferring the embryo to another woman's womb may cause confusion and mix the lineage, whether it is another wife of the husband or not. Thus, to prevent harm to the lineage, transferring the embryo must not be done except into the womb of the wife from whom the embryo originated. Other ways of embryo transfer are prohibited in *Sharīʻah.*

The Indonesian Scholars' Council mentioned a maxim of Islamic law: "*dar' al-mafāṣid muqaddam ʻalá jalb al-maṣāliḥ*," which means avoiding detriment takes precedence over bringing about benefit. In terms of benefits, having offspring is permissible and counted as a benefit for humans. However, the harm that will occur is even greater if embryo transfers are allowed without conditions. Thus, preventing harm takes precedence in consideration rather than achieving benefits. In the principle of *maqāṣid al-sharī'ah*, if a benefit contradicts *Sharīʻah*, then that benefit is not valid. In this case, transferring of embryo to the uterus of a foreign woman or another wife of the husband

[75] Al-Sijistānī, *Sunan Abī Dāwud*, 2009; al-Sijistānī, "Sunan Abi Dawud 2158 - Marriage."

contradicts *Sharīʿah*. It causes a mixing of lineage. Hence, having offspring obtained from an unlawful method of embryo transfer is not considered a benefit and Islam intends to remove harm caused by that practice.

5.2 Alternative Medicine

According to the *fatwá*, there are two types of alternative medicine methods: alternative medicine that contains *shirk* or magic and alternative medicine that does not contain *shirk* or magic. The first type is prohibited. The second type of medicine and treatment must be measured by the *Sharīʿah* law, such as using pure and lawful materials and avoiding using unlawful methods.

The prohibition of using magic for treatment or medication is in accordance with the principles of medication in Islam because all forms of treatment using unlawful methods are not permitted in Islam, including magic. From the concept of benefits and harm, *shirk* brings harm to a man's religion. If the one who commits *shirk* does not repent until his death, he is forbidden from entering Paradise and he will be punished in Hellfire as Allāh said in the Qur'an.[76] This is considered to be a great harm to humans, and *Sharīʿah* intends to remove this harm by forbidding *shirk* and every means that leads to *shirk*.

In the *fatwá*, a number of evidence point out the dangers of polytheism (*shirk*) and magic. *Sūrah an-Nisāʾ* (4): 16 contains the dangers of *shirk*, namely that *shirk* is a sin that cannot be forgiven. There is also a *ḥadīth* that shows the dangers of going

[76] The Qur'ān 5:72.

to a magician or soothsayer. In the *ḥadīth* reported by *al-Imām* Muslim, it is stated that a person who visits a soothsayer then his prayers will not be accepted for forty days. [77] Whereas the ḥadīth of Abū Hurayrah reported by Imam Aḥmad and al-Ḥākim contains that whoever justifies the words of the magician then he is a disbeliever. [78]All verses and *ḥadīths* that prohibit taking treatment using magic indicate the implementation of *maqāṣid al-sharī'ah* to preserve religion.

Besides the preservation of religion, the preservation of life is also considered in the *fatwá*. However, the preservation of religion takes precedence over the preservation of life. In the concept of *maqāṣid al-sharī'ah*, the preservation of religion is a top priority compared to other preservations. Although the *fatwá* does not mention the priority of this preservation, the use of the maxim of Islamic law "avoiding harm takes precedence over achieving benefits" (*dar' al-mafāṣid muqaddam 'alá jalb al-maṣāliḥ*) can be evidence on the priority of preserving religion.

Preservation of religion, which is manifested in the prohibition of taking treatment using magic, takes precedence over taking treatment which is part of life preservation. If the method of treatment does not contain *shirk* and the religion of people is not threatened, then the preservation of life is considered in the permission of the treatment. Therefore, treatment using any

[77] al-Ḥajjāj, *Ṣaḥīḥ Muslim*, 1991, 1:1751; ibn Ḥanbal, *Musnad*, 1999, 27:197; al-Ḥajjāj, "Sahih Muslim 2230 - The Book of Greetings."
[78] Ibn Ḥanbal, *Musnad*, 1997, 15:331; al-Ḥākim, *al-Mustadrak*, 2002, 1:50.

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methods other than magic is permissible as long as it uses lawful and pure material.

5.3 Vasectomy

The establishment of the *fatwá* that vasectomy is prohibited based on the opinion that it is categorized as sterilization which contradicts the purpose of *Sharīʻah* to preserve lineage. The Indonesian Scholars' Council presented various verses from the Qur'an. The main point of the verses mentioned in the *fatwá*, which are Al-Anʻām (6):151, Al-Isrā' (17):31, Al-Anʻām (6): 137, is a prohibition of killing children. The polytheists used to bury their children for fear of poverty and buried their daughters for fear of disgrace.[79] In the Sunnah, the Prophet ﷺ prohibited his followers from burying their daughters alive.[80] It is clear from the Qur'an and Sunnah that killing children is prohibited. *Sharīʻah* intends to preserve the life and the lineage of human beings. In this case, sterilization and vasectomy are not in accordance with the intention of *Sharīʻah* to preserve lineage.

Another verse of the Qur'an presented in the *fatwá* is *Ash-Shūrā* (42):50. This verse comprises meaning that Allāh is the One who grants children for whomever He wills and withholds them from whomever He wills. Al-Saʻdī mentioned the meaning of this verse and the previous verse. They indicate Allāh's authority and providence upon His creations.[81] Among them is the legislation of marriage which is the cause of the birth of children

[79] Ibn Kathīr, *Tafsīr al-Qur'ān al-ʻAdhīm*, 3:309.
[80] Al-Dārimī, *Musnad Al-Dārimī*, 1810–11.
[81] Al-Saʻdī, *Taysīr Al-Karīm al-Raḥman*, 897.

and He grants children to whom He wills.[82] This meaning confirms the preservation of lineage in Islam.

Preservation of lineage is one of general objectives that keep mankind's lineage and protect them *Sharī'ah's* from extinction. It is reported from Anas that the Prophet ﷺ used to command his companions to marry and forbid celibacy and say, "Marry women who are beloved (due to their good characteristics), prolific in bearing children, for I shall outnumber the Prophets by you on the Day of Resurrection."[83] This *ḥadīth* gives a clear indication that *Sharī'ah* intends to preserve lineage by recommending marriage and prohibiting celibacy.

Furthermore, *Sharī'ah* comes to achieve benefits and remove harm. In the case of vasectomy with the intention of sterilization, the harm is more prominent than the benefit. Although recanalization of vas deferens is possible, the probability of having children will decrease after vasectomy.[84] Hence, vasectomy is prohibited.

There are additional conditions mentioned in the *fatwá* established in 2012 regarding vasectomy surgery. By any means, vasectomy is prohibited except if it needs to be performed for acceptable reasons or purposes that do not contradict Islamic law. It must not cause permanent sterility and there is a guarantee that the canal can be restored to its original

[82] Al-Sa'dī, 897.
[83] Ibn Ḥanbal, *Musnad*, 1997; al-'Asqalānī, "Hadith - Marriage - Bulugh al-Maram," n.d.
[84] Majelis Ulama Indonesia, "Fatwa." See fatwa of 4th *Ijtimā'* 2012 on vasectomy.

state and function. It also must not cause harm to the patient. Additionally, the Indonesian Scholars' Council stated that vasectomy must not be recommended by the government as part of the contraception program. The purpose of these conditions is to ensure the preservation of *Sharīʿah* objective which is the preservation of lineage and prevention from the harm caused by vasectomy.

5.4 Eye Bank, Organ Donation, and Transplantation

The implementation of *maqāṣid al-sharīʿah* in this issue is evident in the concept of benefits and harm. In the permissibility of organ donation, transplantation, and eye banks, there are benefits that *Sharīʿah* intends to achieve, which are the preservation of life and removing harm from people. In some conditions, organ donation, organ transplantation, and eye banks may be necessities when a life of human is threatened. While in other conditions they are not necessary but needed to remove the harm. Still, organ donation, organ transplantation, and eye banks are allowed in order to preserve human life.

Another concept of *maqāṣid al-sharīʿah* in this *fatwá* is the objective of removing harm. This objective can be observed from the maxims of Islamic laws as follows:

- *Idhā taʿāraḍat mafsadatān aw ḍararān rūʿiya aʿẓamuhumā ḍararan bi-rtikāb akhaffihimā* (when two detriments or two harms contradict, take the greatest harm into consideration by committing the least of the two).
- *Idhā taʿāraḍat sharrān aw ḍararān qaṣada al-sharʿ dafʿ ashadd al-ḍararayn wa aʿẓam al-sharrayn* (when two

evils or harms contradict, Sharīʿah intends to avert the worst of the two harms and two evils).

These maxims of Islamic law are also considered the maxims of *maqāṣid al-sharīʿah* because these maxims indicate the intention of *Sharīʿah* to avert the worst of two harm by committing the lesser harm. In this issue, the application can be seen when taking priority of the harm caused by organ or cornea donation from a deceased person and the harm of neglecting organ donation from the one in need.

Another maxim is the maxim *al-ḍarar yuzāl* (harm must be eliminated). The use of this maxim in prohibiting a living person from donating cornea or permitting organ donation from a deceased person is an indication of the *Sharīʿah's* intention to remove harm.

Aside from removing harm, the concept of benefits or the application of *maṣlaḥah mursalah* in this *fatwá* also indicates the attempt to establish a *fatwá* that corresponds with the objectives of *Sharīʿah* to preserve life and achieve benefits for mankind. In this issue, the benefits of organ donation, organ transplantation, and eye banks are not affirmed nor rejected in the texts of *Sharīʿah*, However, these benefits are in accordance with the general purpose of *Sharīʿah.*

5.5 The Use of Nicotine as Medicine

The prohibition of nicotine consumption in the *fatwá* is in accordance with the aim of the *Sharīʿah* to preserve human life and intellect. The dangers caused by long-term consumption of nicotine can be detrimental to health and life-threatening. Nicotine can also cause addiction and affect brain function.

These effects of consumption contradict the purpose of *Sharīʿah* to protect the mind or intellect.

The prohibition of consuming nicotine is supported by verses in the Qur'an that are mentioned in the *fatwá*. In *Sūrah al-Aʿrāf*: 157 it is stated that the teachings brought by Allāh's messenger ﷺ are to justify good and forbid evil. In Islam, all bad things and evil are prohibited and shunned. In *Sūrah al-Baqarah*: 195 there is a prohibition against self-destruction. Because of the harm contained in nicotine and the negative effects of its long-term use, nicotine is forbidden in Islamic law. This prohibition aims to prevent and eliminate harm that occurs as a result of nicotine consumption.

As for the purposes of treatment, nicotine consumption is temporarily permitted if there is no other drug that can replace it. Furthermore, its use must be proven to heal and give good results. Apart from medicinal purposes, the use of nicotine is forbidden. This is based on the rule that in an emergency situation, using things that are unlawful is only permissible to eliminate the danger in the state of emergency. Outside of emergency situations, using something unlawful is not allowed. The maxim of Islamic ruling regarding this matter is *al-ḍarūrah tuqaddar bi-qadrihā*: "Necessity is determined according to its extent." The objective of nicotine consumption permissibility in emergency situations is to eliminate a greater danger which is in accordance with the principles and general objectives of Islamic law.

5.6 Immunization

The implementation of *maqāṣid al-sharīʿah* in this *fatwá* is the preservation of life which can be observed in the permission of immunization using *ḥalāl* and pure vaccine. Immunization is a means to prevent disease. Maintaining health and treating diseases is also legislated in Islam as mentioned in the *ḥadīth*, "Use remedies. For indeed Allāh did not make a disease but He made a cure for it."[85] The vaccines used in immunization must contain *ḥalāl* and pure materials because using unlawful and impure materials as medicine is prohibited.

However, there are several conditions that allow immunization using vaccines made from non-*ḥalāl* and impure materials. In a life-threatening situation, immunization using vaccines made from *ḥarām* and impure materials is permissible under the condition that a *ḥalāl* and pure vaccine has not been found and its unavailability must be confirmed by a trusted doctor. Impure materials are allowed to be used in medicine as long as there is no substitute because safety and health are more important than staying away from impurities.[86] In this situation, the preservation of life takes precedence over the harm of using unlawful and impure materials in order to prevent greater harm that threatens life.

As for the prohibition of immunization using unlawful and impure vaccines, its objective is to prevent harm. Immunization using unlawful and impure material is prohibited in Islam and

[85] Al-Tirmidhī, *Sunan Al-Tirmidhī*, 407; al-Tirmidhī, "Jami` At-Tirmidhī 2038 - Chapters on Medicine."
[86] Al-Silmī, *Qawāʿid al-Aḥkām fī Maṣāliḥ al-Anām*, 1:95.

considered harmful. There is a maxim that the Lawgiver does not command except for pure or preponderant benefits and does not forbid except for pure or preponderant harm. It means that unlawful materials are prohibited because of the harm contained in them. The use of *al-qawāʿid al-fiqhīyah* that indicates this meaning is also mentioned in the *fatwá*, such as: "averting something before its occurrence takes precedence over eliminating it" (al-daf' awlá min al-raf'), "harm should be avoided as much as possible" (*al-ḍarar yudfaʿ biqadr al-imkān*), "harm must be eliminated (*al-ḍarar yuzāl*).

The objective of *Sharīʿah* to remove harm is also observed in the permissibility to use unlawful and impure vaccines in emergency situations. It is supported by the use of *al-qawāʿid al-fiqhīyah* that is related to necessities or emergency situation, such as: "need can develop into necessity" (*al ḥājah tanzilu manzilat al ḍarūrah*), "necessities may permit forbidden things" (*al-ḍarūrāh tubīḥu al-maḥẓūrāt*), and "what is permitted for necessity is determined according to its extent" (*mā ubīḥa lil-ḍarūrah yuqaddar biqadrihā*).

5.7 The Use of Ethanol as Medicinal Ingredients

There is no disagreement that intoxicants are prohibited in Islam. In *Sūrah* Al-Mā'idah (5): 90, Allāh the Exalted forbade intoxicants for Muslims. The use of intoxicants as medicine is also prohibited. In the Sunnah, the Prophet ﷺ forbade a Companion from producing intoxicants to cure illness and stated that they are not medicine but ailment.[87]

[87] Al-Ḥajjāj, *Ṣaḥīḥ Muslim*, 1991, 3:1573.

The basic principle of medication in Islam is searching for a cure in a legal way (in accordance with Sharīʻah) and using only lawful and pure medicine.[88] Regarding the rule of using alcohol or ethanol in medicine, there are two kinds of alcohol mentioned in the fatwá. The first is the alcohol originating from intoxicants. It is impure (*najis*) and using it as medicine is forbidden as the rule on this kind of alcohol is the same as the rule on intoxicants. The second kind is the alcohol originating from non-intoxicants. It is pure (*ṭāhir*) and using it as medicine is permitted under the conditions that it is not dangerous for health, it is used in the right dosage, and it is not to be misused such as intentionally consuming it to get drunk.[89] The ruling of alcohol derived from non-intoxicants is different from the intoxicants because the cause of prohibition is intoxication or inebriety.

Establishing a *fatwá* regarding the use of alcohol or ethanol must consider the intoxication effect of the alcohol or ethanol. It is because *Sharīʻah* intends to preserve human intellect so that humans can perform their duty as the servants of Allāh. Intoxicants affect and harm the intellect. Thus, they are prohibited in the *Sharīʻah*. Alcohol or ethanol as the intoxicating substance found in intoxicants is prohibited for use as a medicinal ingredient. The objective is to preserve the intellect. Accordingly, if the amount of alcohol or ethanol does not cause

[88] Majelis Ulama Indonesia, "Fatwa." See the fatwa of 6th *Ijtimāʻ* 2018 on the use of ethanol as medicinal ingredients.
[89] Majelis Ulama Indonesia. See the fatwa of 6th *Ijtimāʻ* 2018 on the use of ethanol as medicinal ingredients.

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intoxication, it is permissible to use alcohol or ethanol as a medicinal ingredient.

There are three *ḥadīths* that contain the preservation of intellect in the *fatwá*. The first is the *ḥadīth*: "*Every intoxicant (muskir) is khamr, and every khamr is forbidden*."[90] The second is the ḥadīth: "*All drinks that intoxicate are forbidden*."[91] The third is the *ḥadīth:* "*If a large amount of anything causes intoxication, a small amount of it is prohibited*."[92] The similarity of these *aḥādīth* is the prohibition of intoxicants. Intoxicant affects brain function and hinders its work and *Sharī'ah* intends to preserve human intellect. Therefore, consuming intoxicants or using them as medicinal ingredients is forbidden in Islam.

Aside from the preservation of intellect, the preservation of life is also considered in the permissibility of using ethanol as a medicinal ingredient. There is a *ḥadīth* that prohibits the use of intoxicants as medicine.[93] In this case, the *ḥadīth* takes precedence over the concept of preserving life by permitting intoxicants to cure diseases. However, if alcohol or ethanol is not categorized as an intoxicant then it is permissible to use it as medicine. The intention of this permit is to preserve human life.

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[90] Al-Ḥajjāj, "Sahih Muslim 2230 - The Book of Greetings," 1587; al-Ḥajjāj, "Sahih Muslim 2003a - The Book of Drinks."
[91] Al-Bukhārī, *Ṣaḥīḥ al-Bukhārī*, 70; al-Bukhārī, "Sahih Al-Bukhari 242 - Ablutions."
[92] Al-Sijistānī, *Sunan Abī Dāwud*, 2009, 5:523; al-Sijistānī, "Sunan Abi Dawud 3681 - Drinks."
[93] Al-Ḥajjāj, *Ṣaḥīḥ Muslim*, 1991, 3:1573.

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The concept of removing harm in this *fatwá* can be observed in the evidence mentioned in the *fatwá*. The first is *Sūrah al-Mā'idah* (5):90 which contains the commandment to avoid intoxicants. The second is *Sūrah al-Baqarah* (2): 195 which contains the prohibition of throwing oneself into destruction. Then, the *aḥādīth* that contains the prohibition of intoxicants. All of this evidence indicates the objective of *Sharīʿah* to remove harm caused by intoxicants.

Additionally, there are maxims of Islamic law that indicate *maqāṣid al-sharīʿah* in removing harm. These maxims are: "*lā ḍarar wa lā ḍirār*" (harm should not be inflicted nor reciprocated), "*al-ḍarar yuzāl*" (harm must be eliminated), and "*dar' al-mafāsid muqaddam ʿalá jalb al-maṣāliḥ*" (avoiding detriment takes precedence over bringing about benefit).

5.8 The Use of Blood Plasma as Medicinal Ingredients

There are two different opinions on whether blood plasma is considered as blood or not. The first opinion is that plasma is blood. Thus, plasma is impure (*najis*) in Islamic law, and it is not permissible to use it as an ingredient for medicine because medication must be done using pure and lawful means. The second opinion is that plasma is a different substance from blood. Under this opinion, plasma is considered pure (*ṭāhir*) because it is not blood and it is permissible to use it as a medicinal ingredient.

The council took the opinion that blood plasma is different from blood with the argument that blood plasma is a substance in the blood and it differs from blood in characteristics, color, smell, and taste.[94] According to the *fatwá*, blood plasma is pure and it is permissible to be used as medicinal ingredients under the condition that it is used only for medication and used if necessary.[95] The blood plasma must be obtained from lawful (*ḥalāl*) animals. Using human and unlawful animal blood plasma in medicine is prohibited.[96]

The council stated in the *fatwá* that the permissibility of using blood plasma as medicinal ingredients is an opinion on this issue. They acknowledged another opinion that blood plasma is impure and forbidden to be used in medicine. In that case, it is only allowed to be used in medication if necessary. In the medical field, relief and exceptions are found frequently because emergency situations often occur. Yet, the permissibility to use unlawful and impure things in emergency situations must be dealt according to the extent of necessity and must not exceed the boundary.

In this issue, the intention behind the permissibility of using blood plasma in medicine is the preservation of life. The Indonesian Scholars' Council included the maxim of Islamic law *al-ḍarūrah tuqaddar bi qadrihā*. It means that if the use of blood plasma is necessary, it can be used only to deal with the harm

[94] Majelis Ulama Indonesia, "Fatwa." See the fatwa of 6th *Ijtimā'* 2018 (titled Ijtima Ulama 2018) on the use of blood plasma as medicinal ingredients.
[95] Majelis Ulama Indonesia. See the fatwa of 6th *Ijtimā'* 2018 (titled Ijtima Ulama 2018) on the use of blood plasma as medicinal ingredients.
[96] Majelis Ulama Indonesia. See the fatwa of 6th *Ijtimā'* 2018 (titled Ijtima Ulama 2018) on the use of blood plasma as medicinal ingredients.

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in the extent of the necessity. The intention behind that action is to eliminate harm and preserve life which are the objectives of *Sharīʿah*.

5.9 Uterus Transplantation

The Indonesian Scholars' Council has established a *fatwá* regarding organ transplantation. It is mentioned that organ transplantation is not allowed except if there is a necessity to perform it. Uterus transplantation is a part of organ transplantation. It is permissible if necessary. Infertility in women may be caused by illness or physical anomalies and women may undergo uterus transplantation if they are unable to bear offspring. After the transplantation, the uterus must only bear the embryo of the recipient and her husband. This is to emphasize and ensure that the lineage is preserved within the Islamically legal means.

The permissibility of uterus transplantation was also decided after considering the consequence of uterus transplantation on the lineage. The council took the opinion that the uterus is a reproductive organ that does not inherit genetic traits. It does not have the gonad and cannot pass the genetic traits. Thus, uterus transplantation is permissible because it has no effect on the lineage. The Indonesian Scholars' Council allows uterus transplantation only if there is a legitimate need or *ḥājah sharʿīyah*. Therefore, there are several conditions mentioned in the *fatwá* that must be met before carrying out uterus transplantation. One of the conditions is to ensure that the embryo implanted after uterus transplantation belongs to a husband and wife who are legally married and still alive. This condition is important to ensure that the entire process of uterus transplantation does not contradict the *Sharīʿah*. The intention is to remove harm from an unlawful embryo transfer.

Another condition is to make sure of the safety of the entire uterus transplantation process and procedure. The purpose of allowing uterus transplantation is to eliminate harm and lift the burden on women who cannot have children either due to disease or disability. However, if the transplant process is unsafe and impacts greater harm, then uterus transplantation is forbidden.

The intention of removing harm is apparent from the use of Islamic legal maxims in the *fatwá*. The maxim "harm must be eliminated" (*al-ḍarar yuzāl*) indicates the intention of removing harm that may appear if uterus transplantation is allowed without condition. In that case, allowing uterus transplantation under specific conditions is an implementation of *maqāṣid al-sharīʿah* to remove harm.

6. CONCLUSION

The implementation of *maqāṣid al-sharīʿah* in the *fatwás* of the Indonesian Scholars' Council can be seen through the analysis of the *fatwás* and the evidence. It is manifested in the preservation of the five essentials. Among the preservation of the five essentials, protection of life and lineage is found most often in the nine *fatwás*. Besides that, the general concept of *maqāṣid al-sharīʿah* to achieve benefits and remove harm is found in the *fatwás*. The concept of removing harm can be observed in the maxims of Islamic law (*al-qawāʿid al-fiqhīyah*) used in the *fatwás*. Lastly, the use of *maṣlaḥah mursalah* also indicates the implementation of *maqāṣid al-sharīʿah*, which is to achieve benefits for humankind.

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PROSPECTS OF ISLAMIC BANKING AND FINANCE (IBF) IN GHANA

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ABSTRACT

This study assesses the potential benefits of Islamic banking and Finance to the government of Ghana. The research is qualitative research that employed semi-structured interview to measure the opinion of a sample of 10 experts within and outside Ghana. The interviewees are experts in Islamic finance, finance in general and related fields, while others were practitioners. The data analysis was done thematically. Prospects of IBF include alternative source of finance, debt portfolio management strategy, employment opportunities, infrastructural development, widening of financial inclusion, attraction of foreign investors, financial diversification tool, financial transparency, Agric and renewable energy development. The findings are indication that the government should expedite actions in designing operational/regulatory framework for IBF to exploit the associated benefits. This work is the first of its kind in adopting written interview to measure the opinions of both local and international experts regarding the opportunities of IBF to the government. This study will contribute to the meager literature on IBF.

Keywords: *BoG, IBF, Prospects, Awareness, Ghana.*

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1. INTRODUCTION

The following highlights the global geographic distribution of consumers of Islamic finance services: The Gulf Cooperation Council (GCC) area continues to be the biggest buyer of Islamic financial assets worldwide. About 45.4% of all investments come from the Gulf States alone. Following the GCC in terms of investments are the Middle East and South Asia (approximately 25.9% each); Southeast Asia (about 23.5%); other geographical regions, such as Africa and the Western World, account for the remaining 5.2% (BNY Mellon). ICD-REFINITIVE study (2022) on the expansion of Islamic finance states that the worldwide assets of IBF currently stand at $4 trillion with a 17% annual growth rate. Banking accounts for 70% of the total, followed by Sukuk (18%) and the remaining sectors, 12%. The top three countries with the fastest growth rates, according to the research, are Tajikistan (84%), Burkina Faso (27%), and Ethiopia (26%). While Malaysia, Saudi Arabia, and Indonesia are the top three most developed nations in IBF, Iran, Saudi Arabia, and Indonesia continue to control the majority of IBF's global assets. By 2026, the report's growth value is projected to reach $5.9 trillion, an increase of over 50% over the previous four years. These statistics demonstrates that non-core IBF jurisdictions like Tajikistan (in Asia), Burkina Faso, and Ethiopia (in Africa) are experiencing the fastest growth rates. Likewise, the United States has a new fintech and the United Kingdom is ranked third globally in Islamic finance.

In the West African sub-region, Ghana, a Muslim-minority nation, has the second-largest economy after Nigeria and borders Burkina Faso Northern part, Togo eastern part, and La

Coted Ivoire in the western part (Abdullahi 2013; Julius, 2022). It is a nation where a variety of different ethnic groups live side by side in a state of largely peaceful cohabitation. The majority of Muslims in the nation are Dagombas (Mole-Dagomba Ethnic group/Tribe located in Northern Ghana). Alhaj Mahamudu Bawumiya, the nation's vice president at the moment, and Honorable Haruna Iddrisu, a former minority leader in the legislative branch of government, are both Mole-Dagomba extracts. Additionally, Muslims make up quite large minorities in some areas of almost all other regions of the country. Despite the aforementioned dynamics and the fact that Muslims make up a sizeable portion of Ghana's population—17%, according to the Ghana Statistical Service's 2021 Census, there is not a single Islamic bank in Ghana, not even in the over 90% Muslim-dominated Northern region.

Many customers were affected by the Bank of Ghana's (BoG) financial sector clean-up activity from 2017 to 2019; some are yet to fully recover from the shock, and some have even lost their lives as a result. This has caused the level of confidence in the industry (pure conventional financial system) to drop precipitously. Some financial institutions, numbering up to 436, were affected by the financial sector clean-up activity. Eight banks, 23 savings and loans organizations, more than 400 microfinance organizations, and five banks that the regulator merged to establish one bank are the specifics of the affected organizations (Graphic Online, 2022).

The BoG is the nation's central bank, and it oversees and regulates all matters pertaining to banking and non-banking financial industry. The Bank of Ghana is the only organization in the nation that can grant licenses for banks to operate after it is satisfied that an institution satisfies the requirements to qualify an institution to operate as a bank, in accordance with the new banking Act known as the Banks and Specialized Deposit Taking Institutions Act 2016 (Act 930), "Licensing authority of Bank of Ghana: The Bank of Ghana shall have the sole responsibility for the issuance of licenses to banks and specialized deposit taking institutions". Banks, Savings and Loans, Finance Houses, Leasing Companies, Finance and Leasing Companies, Mortgage Finance, Remittance Companies, Microfinance Institutions, Financial NGOs, Forex Bureau's, Microcredit Institution, Rural and Community Banks, Representative Offices in Ghana, and Other Banks make up the country's financial landscape. The BoG now has 23 banks registered and licensed to do banking business in the nation (BoG, 2020).

The country is today struggling with a high level of debt that is in part due to compound interests, which are the foundation of the conventional financial system. For instance, the entire public debt stock increased from US$ 45.6 billion (representing 67.55% of GDP) in the middle of 2020 to US$ 57.9 billion (representing 76.4% of GDP), according to the Bank of Ghana report for the first half of 2021 (BoG, 2021). According to the finance minister, Offori-Atta (2021), Ghana's debt stock stands at 80.1% of Gross Domestic Product (GDP). This includes GHS 170,009.8 million (US$ 28,339.2 million) of foreign debts and GHS 181,777.2 million (US$ 30,300.8), making a total of GHS 351,787.0 million (US$ 58,640.0 million). The external debt alone comprises about 48.3% of the total debt stock. He also reported that Ghana has issued about 16 Eurobonds since 2013 in order to solicit funds for the development of the nation. This shows the relevance of bonds in the debt stock of Ghana. Tax revenues alone cannot be relied upon.

However, it is important to note that there have been and continue to be initiatives to establish an Islamic bank in Ghana. The Islamic Finance Research Institute of Ghana (IFRIG), a registered institution, has taken it upon itself to engage in a series of sensitization programs, such as publications, seminars, webinars, forums, and conferences, to discuss issues relating to Islamic finance/banking in Ghana. For instance, the institute has been able to host numerous monthly webinars and international conferences since its founding in 2019.

The Muslim Ummah Development Initiative, Ghana (MUDI), which was founded in 2014 to economically empower Muslims, is another significant organization that is actively promoting the use of Islamic financing in Ghana. They have successfully introduced substitutes for traditional financing products. MUDI co-operative societies are example. Here, a group of ten or more people gather to contribute to a pool and make interest-free loans to one another. Another product is MUDI farms, whose major goal is to give Muslim investors a chance to make substantial investments in agricultural goods such as grains, cash crops, and cattle. For this, 2,195 acres of land have been acquired. The MUDI HAJJUMRAH, which provides Muslims with hajj and umrah services as well as Islamic tourism in a distinctive style. One example of a specific service offered is HHAJJUMRAH Invest, which aims to give Muslims the option to undertake the hajj or umrah but cannot immediately raise the necessary cash. In order to receive monthly payments from customers for a predetermined time during which the investor wants to make the hajj or umrah, a *murābahah* savings account is established. The extra money is returned to the investor if the hajj expenses turn out to be less than the entire deposits plus accrued profit. MUDI *Sharī'ah* advisory council supervises the activities of the institution to make sure their operations and products are in line with the tenets of Islam. (MUDI Ghana, 2021).

The recognition of non-interest banking, as outlined in the new banking laws, the Banks and Specialized Deposit Taking Institutions laws 2016 (Act 930), represents yet another enormous step towards the establishment of Islamic banking in Ghana. The BoG included non-interest banking clause in this statute, which is covered in Section 18(r) of the statute, though still needs clarification. The absence of a thorough framework by the BoG to direct the execution of this provision, however, is one of the major obstacles to the implementation of this Act. This demonstrates that Ghana's regulations are not particularly hostile to the introduction of Islamic banking there.

In view of this, this study aims at bringing to light the awareness level of IBF and its potential benefits to the Ghanaian government. The paper seeks to answer the following questions:

What is the awareness level about IBF in Ghana?

What potential benefits can the government of Ghana derive from IBF implementation?

The sections that follow after the introduction are literature review, the methodology, the results, discussion, conclusions and recommendations.

2. REVIEW OF LITERATURE

2.1 Theoretical Framework

Vinz (2014) claims that the theoretical framework is typically created based on the issue statement, research questions, and literature review and that it offers the structure to make it easier to evaluate and generalize findings. This section provides a succinct overview of forcefield analysis and how it was used in this study to tackle the research problem. Kurt Lewin's theory of force field analysis, which postulates that the interaction of opposing and supporting elements creates an equilibrium position during the process of change, serves as the foundation for this research. According to proponents, the first application of this theory was to an organization's management of change.

The concept of “unfreeze-alter-refreeze” is born in this situation. People frequently exhibit resistance to change, therefore applying a change process requires caution if it is to be effective. The nature of force field theory is dynamic rather than fixed (Swanson and Creed, 2014). Nantogmah (2017) used the notion of forcefield analysis to analyze the potentials and challenges of IBF in Ghana from a social science approach. This suggests that the theory is more general than just organizational management approach. The diagram that follows is an illustration of the theory of forcefield analysis.

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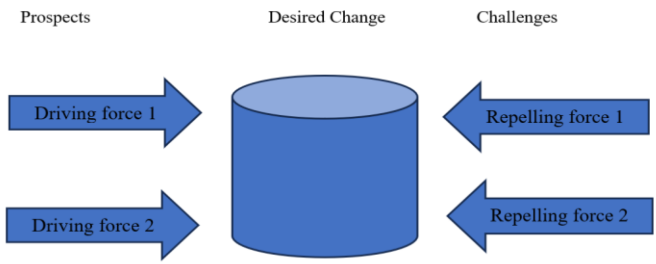

Figure 1. Diagram of Forcefield Analysis
Source: Authors' construct, 2023

The opportunities and benefits that the Ghanaian economy will experience if it changes the financial laws to include IBF in the nation are seen by the researchers as the driving forces in this study's force field analysis, while the obstacles that might prevent the country from making these changes are seen as the repelling/opposing forces. In spite of the many potential advantages, the country will encounter opposition because it is a secular state with a predominately Christian population. Baber (2018) and Rashid, Yousaf & Khaleequzzaman (2017) have all confirmed the value of Islamic banking over the conventional in terms of products.

2.2 Conceptual Literature Review

In many ways, conventional banking and Islamic banking are identical. As an illustration, both strategies try to transfer money from people who have extra to others who urgently need it. Islamic banking is one of the most crucial elements of Islamic finance. It is sporadically used interchangeably with the term "Islamic Finance." A segment of finance that adheres to Islamic principles. Islamic finance has existed since the time of the Prophet Muhammad (PBUH), despite the common perception that it is a relatively recent alternative source of funding to the conventional financial system. Shariah (Islamic law) is the foundation of Islamic finance. The fundamental principles of IBF are Wealth must be produced through legal trade and an underlying asset; Consideration of public interest; Profit/loss sharing; and Abstinence from forbidden activities (Institute of Chartered Accountants, Ghana, 2019)

Generally, payment and reception of interest (*ribā*) is not permitted in Islāmic finance. This is confirmed in several parts of the Qur'ān such as (Al-'Imrān, 3:130); Qur'ān (Al-Nisā, 4:161); Qur'ān (Al-Rūm, 30:39). The gravity of the sin in interest related dealings is as if the dealer is engaging Allah and His Messenger in a war fare, O you who believe! Be afraid of Allāh and give up what remains (due to you) from *Ribā* (usury) (from now onward), if you are (really) believers. And if you do not obey, then prepare for war against Allāh and His Messenger (peace and blessings be upon him) Qur'ān (Al-Baqarah, 2:278-279). Apart from the Quran, the other Abrahamic religions warn against interest dealings like Exodus 22:25, Leviticus 25:36-37, Deuteronomy 23:19-20, Nehemiah 5:7&10, Psalms 15:5, Proverbs 28:8, Isaiah 24:2, Jerimiah 15:10-20 and Ezekiel 19:8.

2.3 Empirical Literature Review

2.3.1 Potentials and Challenges of IBF in the West

Shabbir and Rehman (2019) used the distribution of 132 questionnaires to investors in Islamic financial institutions to validate the existence of opportunities and challenges in Islamic banking. The results showed that compared to the positively significant of the other two variables, opportunities and challenges, threat as a variable was inconsequential to investors' portfolios. The data are analyzed using the list significant difference (LSD) method of multiple regressions. Unfortunately, the survey did not include non-Islamic financial institutions, where there are many misunderstandings concerning IBF. However, in terms of the challenges and opportunities of Islamic banking, the conclusions were in agreement with those of other academics.

In an effort to evaluate the perspectives of important IBF stakeholders on the actual state of IBF in the UK, Riaz, Burton, and Monk (2017) found that there has been progress despite some obstacles like difficult terminologies, lack of internet banking, a lack of branch networks, and ineffective marketing tactics. They reach these conclusions by contrasting the viewpoints of important participants, including specialists, clients, and employees. In the context of Ghana, the current study seeks to use a similar methodology. However, the lack of Islamic banks in Ghana makes it necessary to measure the sentiments of experts in the field finance.

The West is witnessing growth in IBF performance compared to other jurisdictions despite the Muslim minority. In order to determine whether there is geographical variance in Islamic banking performance, Jawadi, Jawadi, Ameur, and A Cheffou (2017) used daily data as well as two performance ratio proxies (ROA (Return on Asset) and Tobin Q). The results showed that there are differences in performance, with the West displaying the highest performance. Even though the West has a minority

Muslim population and is not one of the primary IBF jurisdictions, the IBF is nevertheless making progress. This methodology might not be appropriate for investigations of a comparable nature in nations lacking even a single Islamic bank. This is the justification for the current study's qualitative methodology.

In order to develop a thorough grasp of the lessons and challenges of IBF, related studies published in highly regarded journals were reviewed by Narayan and Phan (2019). They discovered that six theme areas—Islamic bank performance, equities market performance, asset pricing, Islamic bonds, market interactions, and ethical issues in Islamic finance—are heavily referenced in the works. Performance of Islamic banks is the most current topic, followed by stock market performance, asset pricing, and market interaction, with Islamic bonds receiving the least amount of research. The current study does not fall exactly within any of the thematic areas.

IBF shown perseverance in the face of adversity throughout the global financial crisis and the 2019 pandemic. According to Hassan, Rabbani, and Ali's (2020) critical analysis of the financial sector's difficulties caused by Covid-19 and the contribution of Islamic banking to the development of a secure financial system after Covid, argue that Islamic Fintech innovation can create an environment that is favorable for the growth of IBF institutions and their capacity to compete with conventional banks.

2.3.2 Potentials and Challenges of IBF in Africa

Out of the four elements discovered in Nigeria, Ezeh and Nkamnebe (2020) identify Islamic ethics and knowledge of

Islamic bank services as the aspects that demonstrate substantial importance in the decision to choose Islamic banking. The study's goals are to develop a module for choosing Islamic banking and to evaluate the importance of the main influencing factor. This goal is accomplished by asking a sample of 348 clients of conventional and Islamic banks five-point Likert-type questions. The current study, which examines potential opportunities of Islamic banking, uses interview guide to target experts instead of customers.

Aliyu (2020) asserted that the challenges confronting Nigeria in the implementation of Islamic finance are unique as compared to those in the Asian and Middle Eastern worlds that have passed the advocacy stage and are now in the research and innovation stage. He concluded that there are abundant opportunities Nigeria can tap from Islamic banking, such as cross-border capital, advancement of the financial market, high financial inclusion, monetary policy effectiveness, and reduction of the unemployment rate. He admitted, however, that there are challenges to Islamic banking operationalization confronting both regulators and investors. The paper further recommended that Nigeria could realize its dream of becoming the hub of Islamic banking if the government fine-tunes its regulatory framework to match global standards. This recommendation agrees with the findings of Mulli (2020).

A descriptive study conducted by Ogunbado, Ahmed, and Abubaka (2017) on the opportunities and challenges of Islamic finance in Nigeria found that the establishment of Islamic finance institutions is an opportunity to reduce the rising unemployment situation in Nigeria. They also highlighted that

Islamic banking will be an opportunity to strengthen the religious practices of adherents. Another opportunity is the availability of viable alternative banking to compete with conventional banks that largely extort customers due to the interest component. This is what current study wants aims to explore in the case of Ghana.

2.3.3 Potentials and Challenges of IBF in Ghana

Possuma, Appiah, and Hilmiyah (2018) conducted research on the factors that influence IBF adoption in Ghana among the various religious groups and discovered that perceived knowledge, perceived benefit, perceived innovativeness, perceived religious promotion, customer's attitude, and readiness to follow sharia are the most important factors. However, religious coloration is a potential barrier to IBF adoption in Ghana. They adopted a quantitative approach to make their findings more practical to use while the current study adopts qualitative approach, seeking further elaboration on their finding of perceived benefit as an influencer of Islamic banking.

Mbawuni and Nimako (2019), elaborating on the factors found by Possuma et al (2018) report that both Muslims and non-Muslims in Ghana have favorable perceptions of the advantages of Islamic banking and are eager to use the services. IBF is not viewed by non-Muslims as posing a danger to the Ghanaian banking system. Non-Muslims are, however, hesitant to abide by Islamic law, and as a result, have less interest in IBF investment packages. Additionally, they know very little about IBF as a discipline. By distributing structured questionnaires to a sample of 975 people and using SPSS version 16 to analyze the data, Mbawuni and Nimako arrived at this conclusion.

Establishing Islamic Banking and Financing (IBF) In Ghana: Issues, Challenges, And Prospects by Ussif and Yussif (2020) revealed the following facts: there are opportunities for IBF to reach Ghana's sizable unbanked population; Islamic banking is non-discriminatory; global growth; improvement of financial inclusion; promotion of foreign and local investment; CSR; and Ghana has the potential to become the hub of IBF in Africa. Potential obstacles include a lack of understanding of IBF, a lack of legal and regulatory frameworks and policies, and a lack of public awareness of IBF. To get the aforementioned conclusions, they use secondary data sources by looking over relevant literature on the subject in other jurisdictions and then analyze it. The current study attempts to employ primary data to answer the research questions.

2.4 Conceptual Framework

The following chart represents the conceptual mechanism for the easy comprehension of the research topic and problem.

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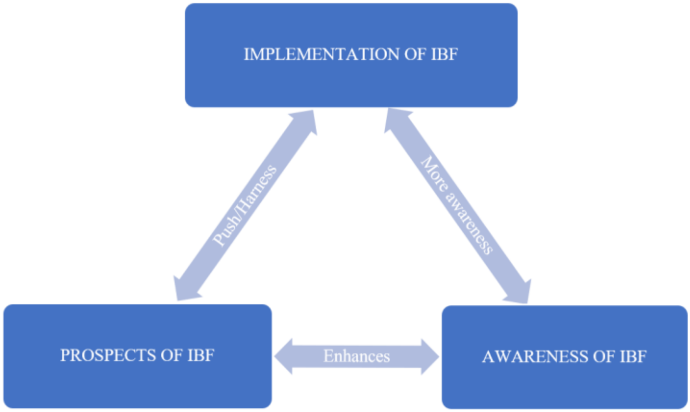

Figure 2. Conceptual Framework
Source: Author's construct, 2023

The diagram above shows that IBF opportunities push for implementation, likewise implementation will take advantage of the opportunities. Also, increase in awareness call for implementation, likewise implementation will increase awareness level. Finally, IBF prospects enhance awareness, and likewise awareness enhances the prospects of IBF.

3. RESEARCH METHODOLOGY

3.1 Research design

The researchers were guided by the interpretivism philosophy of research as a qualitative study, which requires the non-objective interpretation of the researchers to obtain more comprehension and insight about the perceptions of respondents. The study used an explorative type of research design. The design was adopted since the subject area is relatively new in the realm of academics and in the context of research, Ghana. Selvanathan, Nadarajan, and Suppramaniam (2018) tip exploratory design as the best for research in Islamic Banking. The researchers employed an inductive approach among the several existing research strategies in academia since the study is an exploratory type. Awwad, Razia, and Razia (2024) adopt an analytical and inductive strategy in researching the challenges and obstacles to issuing Islamic Sukūk in Palestine. The research is a cross-sectional study that involves data collection from sources according to stipulated timelines set for the study.

3.2 Target population

The population of this study are experts in Islamic finance, finance in general and related fields. The experts were mainly recruited from universities, research institutions, professional bodies and Investment institutions. They were targeted because of their perceived familiarity and adequate knowledge about the subject matter.

3.3 Sample Frame

This study has the sample frame as Institute of Chartered Accountants, Ghana (ICAG), Muslim Ummah Development Initiative, Ghana (MUDI), Islamic Finance Research Ghana (IFRIG), University of Ghana Business School (UGBS), Kwame Nkrumah University of science and Technology School of Business (KSB), University for Development Studies (UDS) and International Institute of Islamic Banking and Finance - Bayero University, Kano (IIBF-BUK).

Sampling Technique: The sampling techniques adopted were purposive, convenience and snowball. The participants in the sample were selected based on their knowledge, availability and willingness to participate. Thomas (2022) considers purposive sampling to provide the best results for qualitative studies in the social sciences when compared to random sampling. The researchers contacted experts personally, and the majority of them via phone call or WhatsApp, to inform them about the topic of study prior to the data collection date. Some of the contacted participants also recommended others for possible recruitment.

3.4 Sample Size

An estimated 12 experts were scheduled to be interviewed for their opinions on IBF in Ghana but 10 responded. Nantogmah (2017) also administered 12 semi-structured interview guides to interviewees to elicit their views in accessing the opportunities and challenges of Islamic banking in Ghana. Moreover, Dworkin (2012) suggests that an ideal sample size for an interview falls between the range of 5 and 30 interviewees to avoid saturation.

3.5 Data Gathering Tools and Strategies

This study relies on qualitative data that is obtained from primary sources. The data collection instruments employed is a written interview guide. The questions were both open-ended and closed-ended questions. They were designed based on modified data collection tools from similar studies, such as Nantogmah (2017), under the guidance of experienced researchers in the field of IBF.

The validity of the data gathering tools were enhanced by engaging in pilot testing of the instruments before the actual administration. This helped in addressing challenges in the research instruments such as ambiguities, provocative questions, errors, and omissions. This is in line with the view of Saunders and Bezzina (2015). Keshminder, Abdullah, and Mardi (2022) solicited the opinions of experts with the aid of interviews to study the performance and challenges of *Sukūk* in Malaysia.

Google Forms were leveraged on by the researchers in administering the data collection tools to the respondents due to its future prospects for qualitative research (Opara, Pangsdorf, and Ryan, 2023). It was set to make it impossible for one respondent to respond more than once. Also, the interview link was selectively shared with participants via their private WhatsApp lines.

For ethical reasons, respondents in this study are assured of utmost confidentiality in their responses and opinions expressed in the research work. They are also informed that the research is for academic purposes. Moreover, personal details of participants such as names, income levels, date of birth, place of birth, height, complexion, etc. were not included in the demographic measurements.

The researchers also complied with all the ethical guidelines prescribed by the IOU research department and Islamic tenets. This enabled respondents to be open-minded and free in expressing their opinions devoid of bias or fear, which added strength to the findings. Codes were used to codify the interviewees instead of names or other confidential details that can compromise confidentiality, and also for the purpose of data analysis and discussion.

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3.6 Data Analysis Methods

According to Cooper and Schindler (2014), data analysis refers to the organization, arrangements, and explanations of respondents' responses to make sense, taking into consideration the patterns, regularities, categories, and themes. The open-ended aspects of the interview were analyzed thematically. Thematic analysis is qualitative data analysis that involves six-step processes after transcription, in the case of voice data. The steps are data familiarization, data coding, searching for themes using codes, theme review, labeling and definition of themes, and finally drafting the report (Islam and Aldaihani, 2022). Thematic analysis is the most widely used analysis method in qualitative data (Kiger and Varpio, 2020; Islam and Aldaihani, 2022).

4. RESULTS AND DISCUSSION

This section analyzes the responses of interviewees under the following guidelines: demographics and experts views about the awareness and potential benefits of IBF to the government of Ghana.

4.1 Experts' Background

Table 7. Highest Academic Qualification

Qualification	Frequency	Percentage
PhD	4	40%
Masters	5	50%
Postgraduate Diploma	1	10%
Total	10	100

Source: Field data, 2022

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From the table above, the majority of interviewees have had an advanced academic qualification, as 9 out of the 10 respondents have acquired PhD and master's degrees, representing 90 percent of the total number of experts interviewed. Only one, representing 10% of the respondents, has a post-graduate diploma; however, it is important to mention that he is a veteran journalist reporting on Islamic finance in West Africa, which the research jurisdiction is part of. The academic background and experience of experts show that they are qualified to be interviewed on the subject matter. Moreover, aside from the respondents' academic qualifications, a good number of them are professionals from ACCA and ICAG.

4.2 IBF Awareness Level in Ghana

Table 8. Awareness about IBF in Ghana

Awareness level	Frequency	Percentage
Very High	0	0%
High	2	20%
Medium	3	30%
Low	4	40%
Very low	1	10%
Total	10	100

Source: Field data, 2022

From the table above, 2 out of the 10 interviewees representing 20% rate the advocacy of IBF in Ghana as high, 3 interviewees out of the 10 representing 30% rate it as medium, 4 interviewees representing 40% rate it as low, and the remaining 1 representing 10% rate it as very low. Thus, the majority of the respondents rate awareness as low or very low. None of the interviewees rate it very highly. There is a need for more advocacy about IBF in Ghana, as low awareness is identified as one of the causes of the slow growth of the IBF market in core IFB nations (Jahan, Muneeza, and Baharuddin, 2021). This can be related to the repelling forces in force field analysis theory that oppose to institution of change, and that need to be restrained/freeze for the introduction of change.

4.3 Potential Benefits of IBF to the Ghanaian Government

The following table (in appendix) is a representation of the views expressed by experts with regards to some of the potential opportunities IBF can make available to the government of Ghana. The analysis of the data is done under the themes infrastructure (red), employment (green), MSMEs funding (blue), financial inclusion(brown), debt management (yellow), broadening of financial system (violet) and other miscellaneous benefits(black). A theme with a frequency response of 8 – 10 is grade as typical; 6-7 is graded general; 3-5 is average and 1-2 is rare.

4.3.1 Infrastructure:

From the responses above, the interviewees typically articulated that, IBF can help the government of Ghana build more infrastructure in the country. Most of the loans in Ghana are for capital consumption such as roads, dams, schools, power plants, vehicles, hospitals, etc. They propose Sukūk bonds as an alternative source for the government to leverage for infrastructure development since the country is facing a deficit in infrastructure. For example, one of the interviewees responded, "Infrastructure development through Sukuk Issuance". In Nigeria, the DMON (2023) has hinted at the construction and rehabilitation of more than 75 roads and bridges across the country, financed from the sukuk, since 2017. This opportunity can be regarded as one of the key propelling factors in force field analysis theory that instigates change in the change process.

4.3.2 Employment

Interviewees also averagely believe that IBF can aid the government in fighting the current high rate of unemployment in Ghana. This will also help alleviate poverty, as people will have income to spend to boost economic activity. The responses above indicate that about three of the respondents believe that IBF can create direct and indirect employment opportunities when regularized in the country. In this sense, prospective investors or entrepreneurs without funds can have an alternative, cheaper source of funding to establish their businesses, and existing ones can also access funds from IBF to expand and employ more hands to help in running their businesses. An interviewee recounted that IBF would create an opportunity for employment as “Opportunity for more jobs for the unemployed". IBF institution establishments will also serve as a source of employment as skilled and unskilled staff will be required to operate successfully, as in the findings of Oumaima and Haf (2021). Moreover, this opportunity can be regarded as one of the averagely propelling factors in force field analysis theory that instigates change in the change process.

4.3.3 Support for MSMEs

Interviewees also rarely opine that IBF can serve as an alternative source of funding to support Micro, small, and medium-scale enterprises at a relatively cheaper cost or with no collateral security. For instance, contracts like Mudārabah only require the entrepreneur to have expertise, and the funding will be provided by the institution. A survey conducted among MSMEs in Ghana indicates that 90 percent of them are in need of funds to start or expand their ventures. Moreover, Kusi et al (2015) hint that the majority of MSMEs lack qualified personnel, have no reliable access to funding, and are usually self-financed. Not only MSMEs can be supported by IFB, the larger corporations as well. For instance, an American aviation corporate, Air Lease Corporation has succeeded in issuing a *sukūk* to the amount of $600 Million (Bank ABC, 2023). This benefits the government in terms of corporate taxes and employment opportunities.

4.3.4 Financial Inclusion

Financial inclusion is easy access to funds at an affordable rate in a sustainable manner (WBG, 2021). Experts interviewed averagely tip IBF as a tool to leverage by the government through BoG's agenda to widen financial inclusion to capture the larger unbanked society, especially the informal sector. One of the interviewees stated that Islamic banking will attract more Muslim investors, "high patronage of Muslims in banking activities".

According to Jahan et al. (2021), mobile *waqf sukuk* can be utilized to entice institutional and individual investors—some of whom might not even have bank accounts—to make investments through mobile phones, which are not always smart phones. With the collaboration of important financial sector key stakeholders such as the BoG, SEC, Ministry of Finance, the legislature, service providers, and other pertinent stakeholders, these kinds of *sukūk* can be created. This opportunity can be regarded as one of the propelling factors in force field analysis theory that averagely instigates change in the change process.

4.3.5 Broaden the Financial System

Experts also rarely argue that the IBF will help broaden the financial architecture of Ghana. Since IBF has now been integrated into the global financial system and is patronized by advanced economies, an economy without IBF can be described as having an incomplete system. The decision by governments to use *sukuk* to finance public projects is viewed by Shawaqfeh (2019) as a radical move that completes the financial system architecture since the Islamic Financial Market does so. DMON (2023) indicated the ability of sovereign *sukuk* listings on the secondary market to provide diverse financial opportunities for investors.

4.3.6 Debt Management Tool

From the table, experts generally also opine that the government can take advantage of IBF contracts to manage its ballooning debt stock. The country is currently saddled with a high debt rate, which has compelled it to surrender to the IMF for a bailout. One of the experts stated that "The ability to manage the financial needs of the government with less borrowing"; yet another also argued in favor of the interest-free nature of IBF. IFRIG (2023) argues that some of the IBF contracts and products, such as *sukuk*, can be utilized as an option to restructure the debt composition with little to no interest payments. Nigeria has an amount of N742.557 billion in sovereign sukuk issuance as part of its debt stock, as highlighted by the DMO of Nigeria. This chance can also be regarded as one of the pushing factors in force field analysis theory that generally influences change in the change process.

4.3.7 Other Benefits

Experts also generally highlighted other miscellaneous benefits that the government can earn from IBF, such as financial diversification tools, the ability to meet the financial needs of the government, alternative sources of financing, financial transparency, agricultural and renewable energy development (via green sukuk), the attraction of foreign direct investment into the country by attracting investment capital from the Muslim majority countries, unlocking cash from existing government assets for new projects, etc. For example, Malaysian sukuk issuance attracted Middle Eastern investors, as reported by Shawaqfeh (2019).

5. FINDINGS

Firstly, from a demographic perspective, despite the high population of females compared to their male counterparts per the 2020 National Population and Housing Census, the majority of respondents are male. Similarly, the majority of respondents are adherents of the Islamic religion, despite the fact that about 70 percent of Ghana's population are Christians per the census. Secondly, on the awareness of IBF in Ghana, the awareness level is still low, though there might be an improvement compared to previous findings due to the recent activities of advocacy by proponents of IBF in Ghana.

The analysis and discussion concerning the prospects of IBF to the Ghanaian economy reveal alternative sources of finance and savings; debt portfolio management strategy; employment opportunities; infrastructural development; creation of employment opportunities; widening of financial inclusion; attraction of foreign investors; financial diversification tool;

ability to meet the financial needs of the government; financial transparency; agricultural and renewable energy development (via green *sukūk*) as some of the benefits the Ghanaian economy can benefit from IBF implementation.

6. CONCLUSION AND RECOMMENDATIONS

The Ghanaian government can turnaround the economy of Ghana by implementing IBF to enjoy benefits such as broad financial system, a viable way of managing national debt, means of widening financial inclusion, the attraction of foreign investors, poverty alleviation, infrastructure development, and a reduction in unemployment. Other benefits include financial diversification tools, the ability to meet the financial needs of the government, alternative sources of financing, financial transparency, agricultural and renewable energy development (via green *sukūk*). There will be drastic decline in serious crimes such as arm robbery, illegal substances/ drags and money laundry due to the principles of IBF.

The outcome of the research indicates that the Ghanaian government, stands a chance of benefiting from IBF, however, the awareness level is still low in the country. There is a need for more education on IBF since the awareness level is still low. The governments should engage experts to educate key government officials and private sector businesses on the operations of IBF and Islamic finance in general. Sponsored Courses should be mounted at the higher learning institutions on IBF; workshops can also be organized by universities for business studies lecturers to update their knowledge on the principles of IBF.

The government of Ghana can also consider how it can use IBF products such as *sukūk* at the domestic or international level to help reduce the country's ballooning debt. It is possible for countries without any solid Islamic finance regulations to benefit from IBF, provided the basic principles of IBF are adhered to. This will be easy at the international stage; domestic issuance may require the adoption of a legal framework from another neighboring West African country, such as Nigeria, which has issued sukuk for the fourth (4th) time and has a full-fledged Islamic bank and windows. Also, *Salam sukūk* (a forward funding contract for agricultural produce) can help the government's planting for food and jobs agenda. The unemployed youth who wish to go into farming but lack the needed capital can benefit from *salam sukūk*. Existing farmers can also access *salam sukūk* to expand production. This can help boost production to meet local demand and for export. This can also help reduce the importation of some food items, which puts more pressure on the dollar and the subsequent persistent depreciation of the cedi.

Future researchers can focus on how these opportunities can actually be exploited through IBF. Also, the outcome of this study should be implemented with caution since all respondents were Muslims. Future studies should try to interview non-Muslim finance experts.

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APPENDIX

Table 9. Potential Benefits of Islamic Banking to the Ghanaian Government

Themes	Frequency
Infrastructure: Respondent 1: Infrastructure development Respondent 3: infrastructure development through Sukuk Issuance Respondent 5: infrastructure project funding Response 4: Infrastructure development at least cost Respondent 3: Unlocking cash from existing Government Assets for new Projects etc. Respondent 8: especially for infrastructure projects using the Sukuk also called Halal Bonds Response 8: most of the loans contacted are for Project Financing Respondent 9: Project financing, etc.	Typical
Employment: Respondent 1: job creation	Average

Respondent 3: Reduction of Poverty due to direct link of development projects with finance sector Respondent 6: Opportunity for more jobs for the unemployed	
MAMEs funding: Respondent 1: MSMEs development Respondent 7: empowering citizens with capital for their businesses with no interest rates.	Rare
Financial inclusion: Respondent 2: promoting inclusivity Respondent 3: Financial Inclusion Response 6: high patronage of Muslims in banking activities.	Average
Debt Management: Respondent 4: Easy access to funding Reduced "interest" payments Respondent 5: Addressing public sector funding gaps via sukuk issuance Respondent 6: accessibility to interest free loans Respondent 8: Using IBF will also reduce the debt servicing cost Respondent 7: The ability to manage the financial needs of government with less borrowing	General

Respondent 9: Debt management through the use of Sukuk Respondent 8: Islamic finance can serve as an alternative form of Financing	
Broadening of Financial System: Respondent 2: Broaden financial solutions Respondent 8: Diversification tool for Government as Government will (have) a basket of Financing options in the form of noninterest finance and interest base	Rare
Other Benefits: Respondent 3: attraction of Foreign Direct Investment into the Country by attracting investment capital from the Muslim Majority Countries. Respondent 5: issuance of Green Sukuks for funding projects aimed at addressing climate change impact adaptation and mitigation, funding primary agricultural and agribusiness, renewable energy projects, etc. Respondent 6: Great transparency will be achieved in financial transactions so that no party will cheat the other. Response 6: risk sharing between parties in businesses:	General

Response 9: Considering amount of research done on the 2008 global financial crisis indicates that Islamic finance assets were not affected. This is because of the asset backed feature of Islamic finance Respondent 10: Good	

Source: Field data, 2023

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LEVERAGING TECHNOLOGY TO COMBAT FOOD WASTE AND HUNGER: A CASE STUDY OF THE FEED ME TOO PROJECT

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ABSTRACT

The Feed Me Too Android application offers an innovative solution to address global food waste, hunger, and malnutrition challenges. In a world where approximately 821 million individuals suffer from hunger and one in three faces malnutrition, the need to combat food scarcity is urgent (FAO, 2022). Shockingly, a UN report from 2021 reveals that 30% of the global population grapples with extreme food shortages (FAO, 2022). Equally staggering is the fact that one-third of all food produced, equivalent to 1.3 billion tons, is wasted annually, costing the global economy approximately $940 billion (WFP, 2020). Feed Me Too represents a paradigm shift, functioning as a comprehensive waste food management and donation system. It empowers donors, including individuals, restaurants, and hotels, to efficiently notify potential receivers about surplus food. Simultaneously, it enables receivers, often NGOs and agents, to request or collect excess food, bridging the gap between waste and scarcity. This application embodies transformative ethos, reducing food waste and redistributing nourishment to the needy. It is more than technology; it is a testament to human compassion and environmental responsibility. This research explores Feed Me Too's mechanics, impact, and potential as a symbol of change in the fight against food waste and

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global hunger. It represents a future where sustainability prevails, food waste dwindles, and no one goes to bed hungry.

Keywords: *Food Waste Reduction, Hunger Alleviation, Food Redistribution, Android Application, Sustainability*.

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1. INTRODUCTION

In this research, we address the global challenges of food waste and hunger, exemplified by disconcerting statistics: approximately one-third of all globally produced food, equivalent to 1.3 billion tons, is lost or wasted annually (WFP, 2020), while about 821 million individuals, or one in nine people, suffer from hunger (FAO, UN Report: Global hunger numbers rose to as many as 828 million in 2021, 2022). This stark contrast highlights the urgent need to bridge the gap between food surplus and scarcity. The Feed Me Too Android application emerges as a beacon of hope and a catalyst for transformative change, not just as a technological innovation but as a visionary response to an urgent humanitarian challenge (Ramalingam & Bound, 2016).

Our primary research objective is to explore the Feed Me Too application's potential in addressing global food waste and hunger challenges. We will examine its mechanics and features, focusing on its role in waste food management and equitable surplus food redistribution. Additionally, we will assess its impact on reducing food waste and hunger while promoting community engagement. We will also analyze the application's contribution to sustainability, aligning with a 2013

FAO report that highlights the environmental harm caused by food waste (FAO, Food waste harms climate, water, land and biodiversity – new FAO report, 2013).

Furthermore, we will scrutinize the practical application of the Feed Me Too application by stakeholders, including donors, receivers, and non-governmental organizations (NGOs) engaged in food redistribution, capturing their experiences and challenges in utilizing this innovative tool. Finally, we will explore the potential for scaling and replicating the Feed Me Too model in regions facing similar food waste and hunger challenges.

This research aims to reveal the transformative potential of the Feed Me Too Android application, gaining a profound understanding of how technology can reshape the narrative surrounding food security. The Feed Me Too application symbolizes a beacon of positive change—a future where food waste is minimized, hunger is curtailed, and sustainability is prioritized, aligning with the United Nations' Sustainable Development Goal 2 to "end hunger, achieve food security and improved nutrition, and promote sustainable agriculture" (UN, 2016).

2. REVIEW OF LITERATURE

The Feed Me Too application's mission to bridge the gap between food waste and hunger resonates deeply with the global challenges of our time. This literature review aims to provide a comprehensive understanding of the issues surrounding food waste, hunger, and technology-driven solutions like Feed Me Too. It sets the stage for a detailed exploration of the application's mechanics, impact, and potential.

2.1 Food Waste: Causes and Consequences

Food waste is a complex issue influenced by various factors across the food supply chain. It occurs at multiple stages, including production, distribution, retail, and consumption. Some of the primary causes of food waste include overproduction, strict cosmetic standards, inefficient storage, and consumer behaviors (HLPE, 2014). Food waste imposes significant economic, environmental, and social consequences.

- **Economic Impact**: The economic cost of food waste is substantial. Globally, it amounts to approximately $940 billion annually (WFP, 2020). This wastage represents a direct loss to producers, retailers, and consumers.
- **Environmental Impact**: Food waste contributes to environmental degradation. It is responsible for approximately 8% of global greenhouse gas emissions (FAO, Food waste harms climate, water, land and biodiversity – new FAO report, 2013). Moreover, the resources used in food production, including water and land, are squandered when food is discarded.
- **Social Impact**: While millions suffer from hunger and malnutrition, large quantities of food are wasted daily. This stark contrast underscores the social injustice inherent in food waste. Food waste also depletes resources that could otherwise be used to combat hunger (Buzby, Wells, & Hyman, 2014).

2.2 Global Hunger and Malnutrition

Hunger and malnutrition persist as formidable global challenges. The United Nations' Sustainable Development Goal 2 seeks to "end hunger, achieve food security and improved nutrition, and promote sustainable agriculture" by 2030 (UN, 2016). However, progress toward this goal remains slow.

- **Hunger Statistics**: Approximately 821 million people, or one in nine, suffer from hunger globally (FAO, UN Report: Global hunger numbers rose to as many as 828 million in 2021, 2022). Malnutrition, in its various forms, affects one in three people, posing long-term health risks.
- **Food Insecurity**: Food insecurity is a multifaceted issue, characterized by a lack of consistent access to adequate and nutritious food. It often results from poverty, social inequalities, and inadequate food distribution systems (Hossain, 2017).

2.3 Technology-Driven Solutions: Role and Potential

Technology-driven solutions have emerged as powerful tools to address food waste and hunger. Mobile applications like Feed Me Too have the potential to reshape the way we manage and redistribute surplus food resources.

- **Mobile Applications for Food Redistribution**: Several mobile applications worldwide connect donors with surplus food to individuals or organizations in need. Examples include Too Good To Go, OLIO, and of course, Feed Me Too. These apps provide platforms for seamless communication and coordination.

- **Efficiency and Accessibility**: Technology-driven solutions enhance the efficiency of food redistribution. They enable donors to instantly notify prospective receivers about surplus food, reducing wastage and ensuring that excess food reaches those in need (Link, 2019).
- **Sustainability**: By optimizing food use and distribution, technology-driven solutions contribute to sustainability. They reduce the environmental footprint of food waste and promote responsible consumption (Szczesny, 2023).
- **Community Engagement**: Mobile applications foster community engagement by connecting donors, receivers, and volunteers. They encourage collective efforts to combat food waste and hunger at the grassroots level.

2.4 Feed Me Too: A Beacon of Hope

The Feed Me Too Android application emerges as a beacon of hope within this context. By functioning as a waste food management and donation system, it addresses the global paradox of food waste coexisting with hunger. Feed Me Too empowers donors to prevent food wastage by notifying prospective receivers about surplus food resources. Conversely, receivers, often represented by NGOs and their agents, can raise requests for food or directly collect excess food from donors, ensuring its equitable redistribution to those in need.

- **Impact on Food Waste**: Feed Me Too plays a pivotal role in reducing food waste by connecting surplus food with those facing hunger. By preventing food from ending up in landfills, it minimizes the environmental and economic costs of waste.
- **Impact on Hunger Alleviation**: Through real-time communication and efficient food distribution, Feed Me Too contributes to hunger alleviation. It empowers NGOs and their agents to reach vulnerable communities with much-needed nourishment.
- **Impact on Sustainability**: The application promotes sustainability by optimizing resource utilization. It aligns with global efforts to reduce greenhouse gas emissions, conserve water, and promote responsible food consumption (UNEP, 2020).
- **Community Engagement**: Feed Me Too fosters community engagement through its platform. Donors, receivers, and NGOs actively participate in addressing food waste and hunger at the grassroots level.

2.5 Theoretical Framework

This literature review draws on several theoretical frameworks, including:

- **Food Waste Behavior Theory**: Understanding the psychological factors that contribute to food waste at the consumer level (Russell, Young, Unsworth, & Robinson, 2017).

- **Diffusion of Innovation Theory**: Examining the adoption and spread of technology-driven solutions like Feed Me Too (Rogers, 2003).
- **Collaborative Framework for Food Systems Transformation - A multi-stakeholder pathway for sustainable food systems**: Analyzing the environmental and social dimensions of food waste and technology-driven interventions (Bortoletti & Lomax, 2019).

The literature reviewed here highlights the urgency of addressing food waste, hunger, and malnutrition on a global scale. It underscores the pivotal role of technology-driven solutions, such as the Feed Me Too application, in mitigating these challenges. As we delve deeper into the mechanics and impact of Feed Me Too, we gain a richer understanding of its potential to reshape the narrative surrounding food security and sustainability. The subsequent sections of this research paper will explore the application in detail, offering insights into its functionality, impact, and potential for scalability and replication.

3. RESEARCH METHODOLOGY

The methodology section outlines the research approach and methods employed to investigate the Feed Me Too Android application's mechanics, impact, and potential in addressing food waste and hunger. This section provides a detailed description of data collection methods, participant selection, and data analysis techniques.

3.1 Research Design

This research adopts a mixed-methods research design, which combines both quantitative and qualitative research approaches. This approach is chosen to gain a comprehensive understanding of the Feed Me Too application's functionality, impact, and user experiences. The research design encompasses the following components:

- **Quantitative Component**: Quantitative data was collected through structured surveys and app usage data analysis. Surveys were administered to a sample of Feed Me Too users, including donors, receivers, and administrators. The quantitative analysis provided statistical insights into user demographics, app usage patterns, and the impact of the application.
- **Qualitative Component**: Qualitative data was collected through semi-structured interviews with key stakeholders, including donors, receivers, and non-governmental organization (NGO) representatives involved in food redistribution. Qualitative data was also derived from open-ended survey responses. The qualitative analysis will offer deeper insights into user experiences, challenges, and the broader implications of Feed Me Too.

3.2 Data Collection Methods

- **Surveys**: Structured surveys were designed to collect quantitative data from Feed Me Too users. The surveys covered a range of topics, including user demographics, frequency of app usage, types of food donated, and user satisfaction. The surveys were administered electronically through the Feed Me Too application itself to reach a broad user base.

- **Interviews**: Semi-structured interviews were conducted with a purposive sample of Feed Me Too users, including donors, receivers, and NGO representatives. The interviews were designed to elicit in-depth insights into their experiences with the application. Interview questions explored topics such as motivations for using the app, challenges encountered, and perceived impacts on food waste and hunger alleviation.
- **App Usage Data Analysis**: Data regarding app usage patterns was collected and analyzed. This data included information on the frequency of food donations, the types of food items donated, and the locations of donors and receivers. App usage data was anonymized and aggregated to maintain user privacy.

3.3 Participant Selection

Participants for this research were selected through a combination of convenience and purposive sampling methods:

- **Convenience Sampling**: Users of the Feed Me Too application who voluntarily participated in the surveys were included in the study. Convenience sampling allowed for a broad representation of the user base.
- **Purposive Sampling**: Key stakeholders, such as donors, receivers, and NGO representatives, will be purposefully selected for interviews to ensure diverse

perspectives and a comprehensive understanding of the application's impact.

3.4 Data Analysis

- **Quantitative Data Analysis**: Quantitative data collected through surveys and app usage were analyzed using statistical software. Descriptive statistics, such as frequencies, percentages, and means, were calculated to summarize user demographics, usage patterns, and satisfaction levels.
- **Qualitative Data Analysis**: Qualitative data from interviews and open-ended survey responses were subjected to thematic content analysis. Transcripts and textual data were coded, categorized, and analyzed to identify recurring themes and patterns. Qualitative data analysis software aided in managing and organizing qualitative data.

3.5 Ethical Considerations

Ethical considerations are paramount in this research. The following ethical principles were adhered to:

- Informed Consent: Participants was provided with clear information about the research purpose and their voluntary participation. Informed consent was obtained before data collection.
- Anonymity and Confidentiality: All data collected was treated with the utmost confidentiality. Participants' identities were anonymized, and data was stored securely.

- Data Privacy: User data collected through the Feed Me Too application was used solely for research purposes and was not shared with third parties.
- Respect for Participants: Researchers respected the rights, values, and perspectives of participants, ensuring a respectful and non-biased approach during interviews and surveys.

4. DISCUSSION

The results section presents the findings of the research conducted on the Feed Me Too Android application. This section provides a comprehensive overview of the data collected through surveys, interviews, and app usage analysis. The results are organized based on the research objectives and questions outlined in the methodology.

4.1 User Demographics

- **Objective 1**: To examine the mechanics and features of the Feed Me Too application, including user demographics.
- **Research Question 1**: How does the Feed Me Too application function as a waste food management and donation system, and what are its key features?

Findings:

- **User Base**: The user base of Feed Me Too consists of a diverse group, including individuals, restaurants, hotels, and non-governmental organizations (NGOs).

- **Donor Profiles**: Donors include restaurants and hotels looking to redistribute surplus food, as well as individuals who occasionally donate excess food from their homes.

- **Receiver Profiles**: Receivers primarily consist of NGOs and their agents, who collect and redistribute food to those in need.

4.2 Impact on Food Waste and Hunger

- **Objective 2**: To assess the impact of the Feed Me Too application in reducing food waste and alleviating hunger.
- **Research Question 2**: What is the impact of the Feed Me Too application in reducing food waste and alleviating hunger, particularly in the context of the beneficiaries it serves?

Findings:

- **Reduction in Food Waste**: Survey responses indicate that 82.4% of donors reported a reduction in food waste since using the application. Restaurants and hotels, in particular, noted a significant decrease in food wastage.

Table 1. Donor or Receiver

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Donor	17	100.0	100.0	100.0

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Table 2. App's Positive or Negative Impact in Reducing Food Waste

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Negative	2	11.8	11.8	11.8
	Positive	14	82.4	82.4	94.1
	Undecided	1	5.9	5.9	100.0
	Total	17	100.0	100.0	

- **Alleviation of Hunger**: Interviews with receivers highlighted the application's role in ensuring a consistent supply of food resources for distribution. 91.3% of the surveyed receivers reported that Feed Me Too had a positive impact on their ability to provide food to those in need.

Table 3. Donor or Receiver

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Receiver	23	100.0	100.0	100.0

Table 4. App's Positive or Negative Impact in Alleviating Hunger

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Negative	1	4.3	4.3	4.3
	Positive	21	91.3	91.3	95.7
	Undecided	1	4.3	4.3	100.0
	Total	23	100.0	100.0	

- **Impact on Donors**: Donors expressed satisfaction in knowing that their surplus food was being put to good use. 82.4% of donors reported a sense of fulfillment in contributing to hunger alleviation.

Table 5. Donor or Receiver

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Donor	17	42.5	42.5	42.5
	Receiver	23	57.5	57.5	100.0
	Total	40	100.0	100.0	

Table 6. App Satisfaction

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Dissatisfied	2	5.0	11.8	11.8
	Neutral	1	2.5	5.9	17.6
	Satisfied	12	30.0	70.6	88.2
	Very satisfied	2	5.0	11.8	100.0
	Total	17	42.5	100.0	
Missing	System	23	57.5		
Total		40	100.0		

4.3 Sustainability and Environmental Impact

- **Objective 3**: To analyze the environmental implications of food waste and the role of technology-driven solutions like Feed Me Too in promoting sustainability.

- **Research Question 3**: What are the environmental implications of food waste, and how does the Feed Me Too application contribute to sustainability?

Findings:

- **Environmental Awareness**: Survey data showed that 67.5% of users, including both donors and receivers, reported increased environmental awareness since using the application. Users appreciated the role Feed Me Too played in reducing greenhouse gas emissions associated with food waste.

Table 7. Changes in Environmental Awareness or Sustainability Practices Among Users

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	No	10	25.0	25.0	25.0
	Yes	27	67.5	67.5	92.5
	Undecided	3	7.5	7.5	100.0
	Total	40	100.0	100.0	

- **Resource Conservation**: 77.5 % of surveyed users believed that the application contributed to resource conservation, particularly water and land use efficiency.

Table 8. App's Positive or Negative Impact in Contributing to Resource Conservation

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Negative	7	17.1	17.5	17.5
	Positive	31	75.6	77.5	95.0
	Undecided	2	4.9	5.0	100.0
	Total	40	97.6	100.0	
Missing	System	1	2.4		
Total		41	100.0		

4.4 Practical Application by Users

- **Objective 4**: To investigate the practical application of the Feed Me Too application by donors, receivers, and non-governmental organizations (NGOs) in the context of food redistribution.
- **Research Question 4**: How do donors, receivers, and NGOs practically utilize the Feed Me Too application in the process of food redistribution, and what are their experiences and challenges?

Findings:

- **Donor Experience**: Donors found the application easy to use and appreciated the real-time notification system. However, some donors mentioned logistical challenges, such as coordinating food pickups.

- **Receiver Experience**: NGOs valued the convenience of the application for food collection. They cited improved logistics and increased efficiency in food distribution.

- **Challenges**: Donors and receivers both reported occasional challenges related to app notifications, connectivity issues, and the need for better coordination.

4.5 Scalability and Replication Potential

- **Objective 5**: To consider the potential for scalability and replication of the Feed Me Too model in other regions and communities facing similar challenges.
- **Research Question 5**: What potential exists for scaling and replicating the Feed Me Too model in different geographic regions and communities facing similar food waste and hunger challenges?

Findings:

- **Scalability**: Survey responses from users indicated a willingness to support the expansion of Feed Me Too to other regions. 85% of respondents believed that the model could be scaled effectively.

Table 9. Users Supporting the Expansion of the Feed Me Too App

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Negative	5	12.2	12.5	12.5
	Positive	34	82.9	85.0	97.5
	Undecided	1	2.4	2.5	100.0
	Total	40	97.6	100.0	

Missing System	1	2.4		
Total	41	100.0		

- **Replication Potential**: NGOs and donors emphasized the need for customization to address specific local needs and regulations in new regions. They suggested that the core concept of the application could be replicated with appropriate adaptations.

The results of this research highlight the positive impact of the Feed Me Too Android application in reducing food waste, alleviating hunger, and promoting environmental sustainability. Users, including donors and receivers, reported significant benefits from the application's functionalities. While challenges exist, there is a clear willingness among users to support the expansion of the Feed Me Too model to other regions and communities facing similar challenges. The subsequent section of this research paper will provide a detailed discussion of these findings and their implications.

5. DISCUSSION

The discussion section interprets and contextualizes the research findings from the Feed Me Too Android application study. It explores the implications of these findings in the broader context of addressing food waste, hunger, and sustainability. The discussion is organized around the key research objectives and questions outlined in the methodology.

5.1 User Demographics and Application Functionality

The diverse user base of Feed Me Too, including individuals, restaurants, hotels, and NGOs, underscores the application's adaptability and broad appeal. The application's functionality as a waste food management and donation system is aligned with its mission to bridge the gap between surplus food resources and those in need. Donors, both commercial and individual, have found a platform to connect with receivers efficiently. Similarly, receivers, primarily represented by NGOs, have a user-friendly tool to raise requests for food or directly collect excess food from donors. The effectiveness of the application in facilitating these connections has been a key factor in its success.

5.2 Impact on Food Waste and Hunger Alleviation

The research findings strongly support the assertion that Feed Me Too has a positive impact on reducing food waste and alleviating hunger:

- **Reduction in Food Waste**: A significant percentage of donors reported a decrease in food wastage since using the application. This reduction is particularly notable among restaurants and hotels, which often deal with larger quantities of surplus food. The real-time notification system of the application allows donors to respond quickly to potential food waste situations.

- **Alleviation of Hunger**: The application's positive impact on NGOs' ability to provide food to those in need is evident. The consistent supply of food resources facilitated by Feed Me Too has strengthened the food redistribution efforts of these organizations. Users also reported a sense of fulfillment in contributing to hunger alleviation, reinforcing the application's social impact.

5.3 Sustainability and Environmental Impact

Feed Me Too has raised environmental awareness among its users and is seen as contributing to sustainability:

- **Environmental Awareness**: A significant portion of users expressed increased environmental awareness since using the application. This suggests that the application not only addresses immediate hunger but also aligns with broader sustainability goals. Users appreciate the role Feed Me Too plays in reducing greenhouse gas emissions and conserving resources associated with food waste.

- **Resource Conservation**: The research findings indicate that users believe the application contributes to resource conservation, particularly in terms of water and land use efficiency. By optimizing food distribution, Feed Me Too helps reduce the environmental footprint associated with food production and waste.

5.4 Practical Application and Challenges

Users' practical experiences with Feed Me Too reveal the application's strengths and areas for improvement:

- **Donor Experience**: Donors find the application easy to use and value the real-time notification system.

However, some donors reported logistical challenges, such as coordinating food pickups. Addressing these challenges could further enhance the donor experience.

- **Receiver Experience**: NGOs appreciate the convenience of the application for food collection, which has improved logistics and efficiency. Nevertheless, occasional challenges related to app notifications and connectivity need to be addressed to ensure a seamless experience.

5.5 Scalability and Replication Potential

The willingness of users to support the expansion of Feed Me Too to other regions highlights its scalability and replication potential:

- **Scalability**: Users expressed enthusiasm for expanding the application to new regions, underscoring its scalability. The application's adaptability to different contexts and its ability to connect donors and receivers can make it an effective tool in addressing food waste and hunger on a broader scale.

- **Replication Potential**: To replicate the Feed Me Too model in different regions, customization is key. Adapting the application to specific local needs, regulations, and cultural contexts will be essential for successful replication. The core concept of connecting surplus food with those in need remains replicable with appropriate adaptations.

6. CONCLUSION AND IMPLICATIONS

The Feed Me Too Android application represents a promising solution in the fight against food waste, hunger, and environmental degradation. The positive impact it has demonstrated, particularly in reducing food waste and alleviating hunger, highlights its potential as a tool for positive social and environmental change. To maximize its impact and reach, addressing user-reported challenges and ensuring the application's adaptability for different regions are essential steps.

Moreover, the success of Feed Me Too underscores the broader potential of technology-driven solutions in addressing global challenges. As society grapples with issues like food waste, hunger, and sustainability, applications like Feed Me Too exemplify how technology can facilitate efficient, sustainable, and socially responsible solutions. The model of connecting surplus resources with those in need can serve as a blueprint for future innovations in the humanitarian and sustainability sectors.

In conclusion, the Feed Me Too Android application is not only a waste food management and donation system but also a symbol of hope. Its impact on reducing food waste and alleviating hunger, combined with its potential for scalability and replication, positions it as a powerful tool in creating a more equitable, sustainable, and hunger-free world.

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ZAKAT AS A TOOL FOR POVERTY ALLEVIATION IN JOS NORTH LOCAL GOVERNMENT AREA OF PLATEAU STATE, NIGERIA

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ABSTRACT

Poverty remains a pressing issue, especially in underdeveloped and developing countries like Nigeria. Despite the country's diverse economic activities and efforts to reduce poverty, its effects persist. This paper aims to investigate the role played by Zakat, an obligatory form of charity in Islam, in poverty alleviation within the context of Jos North Local Government Area in Plateau State, Nigeria. The paper explores how Zakat is collected, managed, and distributed in the local government area. It also assesses the effectiveness of Zakat in poverty alleviation and its contribution to promoting socio-economic development. Additionally, this study examines the challenges and opportunities associated with Zakat fund management. A comprehensive analysis of the impact of Zakat on poverty alleviation in Jos North is conducted, employing both qualitative and quantitative methods, including surveys, interviews, and case studies. The findings of this study contribute to a better understanding of the potential of Zakat as a tool for addressing poverty in similar communities and inform policy recommendations for enhancing its impact.

Keywords: *Zakat, poverty, poverty alleviation, Jos North.*

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1. INTRODUCTION

One of the challenges other economic systems faces is the just and equitable relationship between the rich and the poor in society. Although some systems like Socialism preach about bridging the gap between the rich and the poor, it fails in putting it into practice. On the other hand, Islamic economics addresses this whole situation with a tool known as *Sadaqah* and *Zakat*.

Islam was built on five pillars, among which are Shahadah, Salah (prayer), giving out *Zakat*, fasting the month of Ramadan, and Hajj (pilgrimage). *Zakat* is one of the pillars that require Muslims who have accumulated a certain amount of wealth to give out a portion of it to the less fortunate or poor as well as the needy in their community.

Generally, poverty is a menace that bedevils the economy of the world; Nigeria like many other developing countries suffers from this menace of poverty with millions of people struggling to meet their basic needs. The World Bank (2021) maintained that Nigeria suffers from a high poverty rate with almost 40% of its population living just below the poverty line. This case study focuses on the impact of *Zakat* in reducing the menace of poverty in Jos North Local Government Area of Plateau State, Nigeria. In Jos North and most places in Nigeria and other Muslim countries, *Zakat* is collected and distributed by various organizations in the areas. The study is aimed at exploring how *Zakat* is both collected as well as distributed. Additionally, it delves into exploring the extent to which *Zakat* helps in poverty alleviation as well as the challenges and opportunities for improving its effectiveness in reducing poverty in the area.

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This study aims to comprehensively investigate poverty alleviation and the effective utilization of *Zakat* in Jos North, Plateau State, Nigeria. The primary objectives of the paper include gaining an understanding of the extent of poverty in the region, examining how *Zakat* is employed to aid the impoverished population, identifying potential challenges associated with the distribution of *Zakat*, measuring the tangible impact of *Zakat* on the lives of its recipients, and proposing strategies to enhance the efficacy of *Zakat* as a poverty reduction tool in Jos North. By integrating research objectives with practical inquiries, this research strives to contribute to the advancement of poverty alleviation efforts within the region.

The study on "*Zakat* as a Tool for Poverty Alleviation in Jos North Local Government Area of Plateau State, Nigeria" carries significant importance due to its localized focus on Jos North. This paper provides a targeted examination of the effectiveness of *Zakat*, an Islamic form of charity, in reducing poverty in a region where poverty is a pressing concern. By shedding light on the role played by *Zakat* within this specific community, the study has the potential to offer effective solutions as well as insights that can be directly applied to address the menace of poverty at a local level. This research not only addresses a critical need within Jos North but also sets a precedent for similar studies in other regions struggling with poverty and seeking culturally and contextually effective and relevant poverty alleviation strategies.

Additionally, the significance of this paper extends beyond its impact on Jos North immediately as its findings can inform policymakers as well as local and international charitable organizations about the potential of *Zakat* and the role it plays in reducing the menace of poverty.

2. REVIEW OF LITERATURE

2.1 The Concept of *Zakat*

The word *Zakat* is an Arabic word that means growth, it can be taken as the growth of wealth in the real sense, or the growth of the Ummah as a whole, or the growth of the purified soul.

Ahmad and Mahmood (2009) maintained that *Zakat* is one of the fundamentals of Islam; it was made obligatory in the second year after Hijrah. *Zakat* is a very important pillar of Islam, placed next to Salah in various verses of the Qur'an in Surah Baqarah (Q2: 43; 83; 110; 177; 277). *Zakat* is a term used to refer to the specific amount that is due in the property of the Muslims, after the amount is collected; it is distributed to the deserving Muslims, those eligible for it. They further maintained that in legal terms, *Zakat* is often called the "right on wealth" or the stipulated percentage of the wealth to be given to certain beneficiaries as ordained by Allah.

It is important to note that *Zakat* is made compulsory for all Muslims whose wealth is equal to or above the specific limit set by the Shariah. The theme of paying out *Zakat* is so important to the extent that the First Caliph of the Prophet (peace and blessings be upon Him) Abubakar (may Allah be pleased with him) fought against the Muslims who abandoned paying out *Zakat*.

Zakat can be paid directly to the Islamic treasury (baitul maal) of one's state, so that the head of Ummah will facilitate the distribution. In cases of the non-presence of Islamic treasury in one's community, one can pay the *Zakat* to charitable non-governmental organizations available nowadays to aid the distribution. One can also locate the eligible beneficiaries themselves and distribute the *Zakat* to them.

Furthermore, Allah restricted the beneficiaries of *Zakat* to some specific set of people; *Zakat* must be given strictly to them. Allah said in the Qur'an:

"Alms-tax is only for the poor and the needy, for those employed to administer it, for those whose hearts are attracted ⌜to the faith⌝, for ⌜freeing⌝ slaves, for those in debt, for Allah's cause, and for ⌜needy⌝ travellers. ⌜This is⌝ an obligation from Allah. And Allah is All-Knowing, All-Wise." (Surah at-Tawbah verse 60.)

The eligible beneficiaries that can be derived from this verse are: *Fuqaraah* (The poor), *Masakiin* (Needy), *Aamileen* (the *Zakat* collectors), *Mu'allaftulQuloob* (Those who have a reconciliation of heart), *Ar-Riqaab* (freeing those in bondage), *Al Ghaarimeen* (the Debt-ridden), *Fi Sabelillah* (for the sake of God) and Wayfarer.

Fathullah (2018) maintained that *Zakat* is broadly categorized into two kinds, *Zakat* al-Fitr is the charity to be done ahead of Eid el-Fitr i.e. in Ramadan. *Zakat* el-Fitr must be paid after the moon of the month of Shawwal and before Eid el-Fitr prayer. The minimum amount to be paid for *Zakat* el-Fitr is one sa' (four double handfuls) of food, grain, or dried food for every single member of the family, *Zakat* al-Fitr is not restricted to a specific gender or age, as it must be paid for even infants as far as his/her parents are eligible to pay.

On the other hand, *Zakat maal* encompasses *Zakat* on one's while such as agricultural products, mining, marine products, commercial products, livestock products, treasures, gold, and silver, etc. each of which has its *nisab* and calculation.

Zakat consists of two kinds, the first is *Zakat fitr*. *Zakat Fitr* is a charity that must be done for Muslims ahead of *IdulFitri* or in Ramadan. *Zakat Fitr* can be the equivalent of3.5 liters (2.5 kilograms) of the staple food of the area concerned. The staple food in Indonesia is rice, so that can be made as *Zakat* in the form of rice.

The second is *Zakat maal*. *Zakat maal* (wealth) is *Zakat* income such as agricultural products, mining, marine products, commercial products, livestock products, treasures, gold, and silver. Each type of income has its calculations.

2.2 The Concept of Poverty Alleviation

Citing (Westover, 2008), Addae-Korankye (2014) maintained that the word "poverty" and/or "poor" originates from the Latin word *pauper* which means poor, it has its roots in the words *pau* and *pario*is "giving birth to nothing"; referring to unproductive livestock and farmland. (Westover, 2008).

Addae-Korankye (2014) also considered poverty as the always and thus most resistant virus whose effect brings about devastating diseases in the world, especially in developing and third-world countries. The menace of poverty is incomparable to that of any disease from the genesis of mankind. He added that even with the renewed commitments over the past 15 years to alleviate poverty through international development discourse and policies, it seems almost less effective and abortive.

2.3 Poverty from an Islamic Viewpoint

Abba (2020) maintained that scholars differ in defining the two types of poor persons (*fuqara* and *masaakin*). One of the students of Imam Abu Hanifa, Abu Yusuf, for example, opined that among the rightful beneficiaries of *Zakat*, both Fuqara and *Masakeen* are the same. On the contrary, Imam al-Tabari maintained that a faqir is the needy who do not stoop so low to the extent of asking for people's help while a *miskeen* is the needy who asks for help from other people. Furthermore, Shaikh al-Qardawi maintained that poverty is a state of lacking resources that is up to the minimum amount on which *Zakat* is payable (otherwise known as *nisaab*).

It is important to note that being rich and being poor are all from Allah *azza wajal* as he is *ar-Razzaq*; He gives wealth to whoever He wants and whenever He wants. Additionally, possession of wealth in Islam is not basically a result of one's hard work, intelligence, or knowledge; instead, wealth is given by Allah to whoever He wishes as a custodian of it. He/she is expected to look over it and spend it wisely for he/she shall be accounted for it on the Day of Judgment. Spending one's wealth on charitable means as well as helping other people in need is one of the teachings of Islam about wealth accumulation and charity.

Even so, poverty is also considered a disaster in Islam, it is a test from Allah Almighty to His servants, Islam encourages people to strive and earn a living via legitimate means and as such, some people thrive and amass a lot of wealth while others struggle to even bring food to their tables need not to talk of other amenities. This is a result of some factors as stated previously.

As for those favored by Allah with wealth and riches, it is compulsory for them to give out a certain amount of their wealth to the less privileged in the form of *sadaqat* and *Zakat*, the former of which is the subject of this research paper. By doing so, the alleviation of poverty can be effectively done as it will breed a generous as well as respective community.

2.4 Previous Studies on *Zakat* and Poverty Alleviation

A lot of work has been done on the impact as well as the role *Zakat* plays in reducing the effects of poverty and betterment of Muslims and even non-Muslims as the case may be. Below are some:

Moshood (2011) conducted a comprehensive re-appraisal of *Zakat* and its role in poverty alleviation, emphasizing its rules and implications. He delved into the meaning and status of *Zakat* in Islam, addressing key aspects such as the causes of poverty, *Zakat* rates, nisab, disbursement procedures, and coverage. Moshood concluded his study with practical recommendations on leveraging *Zakat* to effectively address the challenge of poverty.

In contrast, Ibrahim's (2022) analytical-longitudinal study specifically focused on *Zakat* and poverty alleviation in Nigeria. Unlike some Muslim countries where the central government oversees *Zakat* organization, collection, and distribution, Nigeria's multi-religious background necessitates a

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decentralized approach. State governments, private Islamic organizations, and individuals are tasked with identifying eligible beneficiaries and managing *Zakat* distribution. Ibrahim's research relied on secondary sources and proposed strategies to enhance the management of *Zakat* programs in Nigeria.

Hossain (2012) contributed to the literature with a theoretically dominated empirical study, exploring the analytical justifications for considering *Zakat* as a powerful instrument for poverty alleviation in Muslim countries. The study highlighted *Zakat's* potential to establish peace, prosperity, and socio-economic development for humankind based on rigid justifications. Unlike Moshood and Ibrahim, Hossain's work focused on the broader conceptual framework of *Zakat* as a well-being program.

Abdullahi and Suhaib (2011) shifted the focus to the impact of *Zakat* on the social life of Muslim society. Their research aimed to explicate *Zakat's* significance as an institution and its influence on various aspects of Muslim society. The study emphasized the role of *Zakat* at both individual and societal levels, underlining its vital contributions to the social fabric of Muslim communities.

By comparing these studies, it becomes evident that Moshood, Ibrahim, Hossain, Abdullahi, and Suhaib approach the topic of *Zakat* and poverty alleviation from distinct perspectives, considering factors such as the practical application, regional considerations, theoretical underpinnings, and societal impacts. This diversity of approaches contributes to a nuanced understanding of *Zakat's* multifaceted role in addressing poverty within the context of Islam. Further research could explore the synergies between these perspectives to develop comprehensive strategies for effective *Zakat* utilization across diverse socio-cultural settings.

3. RESEARCH METHODOLOGY

3.1 Research Design

A case study design was used to examine *Zakat* as a tool for poverty alleviation in Jos North Local Government Area of Plateau State, Nigeria. The case study design allows for an in-depth analysis of the local context, as well as a detailed exploration of the experiences and perspectives of different stakeholders.

3.2 Sampling

The study used purposive sampling to select relevant stakeholders who are involved in the collection and distribution of *Zakat*, as well as those who receive *Zakat* assistance. The sample was drawn from different organizations involved in *Zakat* collection and distribution in Jos North Local Government Area, as well as from individuals and households who receive *Zakat* assistance.

3.3 Data Collection

Qualitative data collection methods were used to gather data on the impact of *Zakat* on poverty alleviation. The qualitative data collection methods included in-depth interviews with relevant stakeholders and focus group discussions with *Zakat* recipients.

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3.4 *Zakat* Collection and Distribution and Poverty Alleviation

Arif (2017) asserted the historical effectiveness of *Zakat* in poverty reduction, dating back to the era of the Second Caliph of Islam, Sayyidina Umar bin Khattab (R.A). The study highlighted the significance of proficient *Zakat* management, which, during the rule of Umar ibn Abdul-Aziz (99-101H), led to a noticeable scarcity of eligible *Zakat* recipients. The stages and methods employed in *Zakat* collection and distribution were emphasized as pivotal to its success. Arif underlined the meticulous system of *Zakat* devised by Allah through Prophet Muhammad (peace be upon Him) and its implementation across generations, yielding significant achievements.

Adebayo (2011) addressed the issue of poverty in Nigeria, attributing its root causes to artificial factors such as injustice, transgressions, selfishness, and materialism. The study linked these issues to a flawed education system, particularly in Islamic economics. Adebayo advocated for educational reform to effect meaningful change in Nigeria's economic system.

In interviews with Islamic non-governmental organizations in Jos North Local Government of Plateau State, it was revealed that none of these organizations has a dedicated department or committee solely focused on the collection and distribution of *Zakat*. The interviews also highlighted annual seminars and workshops organized by organizations like *Jama'atul Izalatil Bid'ah wa iqamatis sunnah* for educating individuals on *Zakat* calculation and distribution, especially *Zakat* al-Fitr. However, the specific time frame of this interview is June, 2023.

Regarding *Zakat* al-Fitr, the text emphasized its role in alleviating hunger, particularly during sacred months such as Ramadan and Dhul Hijjah. Interviews with stakeholders involved in *Zakat* distribution by *Jama'atulNasril* Islam provided insights into the gathering of eligible *Zakat* recipients at the Jos Central Mosque gate toward the end of Ramadan. However, the specific time frame of this interview is June, 2023.

In interviews about *Zakat* Mal, both beneficiaries and stakeholders (members of Islamic organizations) revealed that affluent individuals allocate a specific portion of obligatory *Zakat* to economically disadvantaged shopkeepers, often children. This portion is utilized by shopkeepers to initiate small-scale businesses. Interviews with beneficiaries like Kabiru Halilu, involved in the cosmetics and jewelry business, shared how they received initial capital through *Zakat* contributions, contributing to their economic empowerment. However, the specific time frame of this interview is June, 2023.

The Imam Zubairu Charity and Orphanage Foundation, during an interview, disclosed receiving *Zakat* contributions and outlined their allocation to those in need, including orphans. They also mentioned using *Zakat* and Sadaqah for funding education and providing incentives to financially challenged students. The time frame of the interview is June, 2023.

Furthermore, during the *Eid Adha* period, organizations like *Jamaatu Izalatil Bid'ah wa Iqamatussunnah*, Sufi orders like *Tijjaniyya* and *Qadriyya*, and the *Jama'atuNasril* Islam encouraged their members to donate sacrificial animal hides as fidyah. The hides are sold, and proceeds are utilized for constructing schools, mosques, and relevant projects. The time frame of this interview is June, 2023.

4. FINDINGS AND DISCUSSION

The research findings indicate that the prevalence of poverty in Jos North Local Government Area cannot be underestimated, even though this local government area performs relatively better in poverty indicators compared to other regions. Additionally, Various governmental and non-governmental initiatives and programs have been implemented to address poverty in the local government and the broader state context. While some have proven effective, others require restructuring. It is of the findings of the research that it was discovered that there is no established central Shariah body for the collection and distribution of *Zakat* in the local government or the state as a whole. This situation is consistent across most of the 36 states in Nigeria, resulting in individuals and certain religious organizations taking on the task. Furthermore, *Zakat* and Sadaqah have demonstrated efficiency in poverty alleviation and reduction within the local government. They have provided opportunities for the less privileged to initiate small businesses to sustain their livelihoods.

Moreover, Recipients of *Zakat* perceive it as an incentive and a form of relief, particularly given their challenging circumstances. Conversely, those providing *Zakat* view it as a mandatory wealth tax once their assets reach a certain threshold. As for the stakeholders, primarily the institutions involved in collecting and distributing *Zakat*, they regard it as a source of revenue used to support their ongoing charitable activities the findings of this study provide an insight on the role of *Zakat* as a tool for poverty alleviation in Jos North Local Government of Plateau State, Nigeria. The research objectives, which encompassed understanding the extent of poverty, examining the utilization of *Zakat*, identifying challenges in its distribution, measuring its impact, and proposing enhancement strategies, have provided valuable insights into the effectiveness of *Zakat* in addressing the issue of poverty within the specified region.

- **Extent of Poverty**: The research revealed that, like many local governments in Nigeria, poverty remains a pressing issue in Jos North, with a substantial portion of the population living below the poverty line. As a result, there is an urgent need for poverty reduction initiatives, and the relevance of *Zakat* as a potential solution is evident.
- **Utilization of *Zakat*:** The study described the various ways in which *Zakat* is utilized by the beneficiaries in Jos North. A great number of recipients allocate *Zakat* funds to basic needs such as food, clothing, and shelter, which is consistent with the fundamental principles of *Zakat*. As such, it can be said that *Zakat* serves as a crucial source of financial support for the impoverished in the region.
- **Challenges in Distribution**: Despite the potential benefits of *Zakat*, the research identified challenges in its distribution, including issues related to transparency, accessibility, and the equitable allocation of funds because of the non-existence of a standard body established to overlook the distribution of *Zakat*. Addressing these challenges, it is imperative to set up a body that will be collecting the *Zakat* funds

from all of the Muslims in the local government, regardless of their Aqeedah, i.e JIBWIS I, JIBWIS II, Sufi Order, Shi'a, etc. and distribute it to the eligible beneficiaries.

- **Impact of *Zakat*:** The research findings indicate that *Zakat* has a positive impact on the lives of recipients in Jos North as it contributes to improvements in their standard of living and even their small and medium businesses as the case may be. This underscores the potential of *Zakat* to serve as a catalyst for socio-economic development within the community.
- **Enhancement Strategies**: The study proposes a set of strategies like improving transparency in collection and distribution, collaboration with local charitable/Non-Governmental Organizations and even government agencies as the case may be to enhance the efficacy of *Zakat* as a poverty reduction tool. Community awareness campaigns and workshops will also contribute to this in no small measure.

To sum up, this research demonstrates the significant potential of *Zakat* as a tool for poverty alleviation in Jos North Local Government Area of Plateau State, Nigeria. By understanding the extent of poverty, examining *Zakat's* utilization, addressing distribution challenges, and proposing enhancement strategies, we contribute to the ongoing discourse on poverty reduction and sustainable development. However, it is important to recognize that *Zakat* alone cannot completely eradicate poverty; as such, it should be integrated into a broader poverty alleviation framework that includes social, economic, and policy

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interventions. Further research and collaborative efforts are necessary to harness the full potential of *Zakat* in the fight against poverty in the region.

5. CONCLUSION, IMPLICATIONS AND RECOMMENDATIONS FOR FUTURE STUDIES

Undoubtedly, the prevalence of poverty, particularly among the Muslim community in Jos North Local Government Area, cannot be ignored. Despite government initiatives and the involvement of non-governmental organizations, it appears that the approaches employed have been less effective or flawed. *Zakat*, along with other forms of charity like Sadaqah and waqf, plays a significant role in poverty alleviation and various sustainable development projects for the Muslim community. In the case study of Jos North Local Government Area in Plateau State, Nigeria, *Zakat* has a substantial impact on reducing and alleviating poverty. Even though the Muslim population in the region is nearly equivalent to that of Christians and followers of other faiths, making the implementation of Shariah challenging at the local, state, and national levels, this hasn't entirely hindered the collection and distribution of *Zakat*. Instead, this responsibility falls on non-governmental and nonprofit organizations as well as individuals. These organizations encounter various challenges in carrying out their activities, and as a result, the effectiveness of *Zakat* is somewhat diminished compared to if it were overseen by the government. Nonetheless, their efforts have yielded positive results, both in terms of *Zakat* collection and distribution, ultimately reducing the impact of poverty.

The findings can further be utilized to see the development of more effective and efficient poverty alleviation programs that target the immediate and unique circumstances of communities. Furthermore, the research is also a contribution to the academic understanding of the relationship between religious practices, like *Zakat*, and problem-solving like poverty alleviation. The study also bridges the gap between theory and practical, as it can serve as a valuable resource for scholars, researchers, and practitioners with an interest in similar topics worldwide, ultimately promoting a greater understanding of the role of charitable giving in poverty reduction.

The following are some recommendations that can be put in place to boost the effectiveness of *Zakat* funds in poverty alleviation:

- **Enhancing *Zakat* Awareness**: Efforts should be intensified to raise awareness and understanding of *Zakat*, especially among the local population in areas like Jos North LGA. This can be achieved through workshops, campaigns, and seminars aimed at educating people about *Zakat's* principles, significance, efficient collection and distribution methods, and its potential to mitigate poverty.
- **Collaboration for Impact**: Collaboration between local government authorities, non-governmental organizations, and relevant stakeholders is crucial to maximizing *Zakat's* impact on poverty alleviation. Partnerships with microfinance institutions and vocational training centers can harness their expertise and resources effectively.

- **Targeting Vulnerable Communities**: A comprehensive system should be established to identify and support the most vulnerable individuals and families within the local government. This entails conducting needs assessments with the involvement of local community leaders and organizations, utilizing social welfare programs, and directing *Zakat* toward those who are most in need.
- **Investment in Social Projects**: Encouraging the utilization of *Zakat* funds in social investment projects can create sustainable income streams and employment opportunities. Investments in sectors such as agriculture and small-scale industries have the potential to yield long-lasting positive effects on poverty alleviation.

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Interviews

Dr. Mujahid Saidu Hassan Jingir, Chairman, Preaching Committee, Jama'atu Izalatil Bid'ah wa Iqamatussunnah, Plateau State Chapter (13th June, 2023) Personal Communication

Ibrahim Tahir, Media Spokesperson Islamic Movement of Nigeria (IMN), Plateau State Chapter (30th June, 2023) Personal Communication.

Imam Zubair Umar Shehu, Chairman, Imam Zubair Charity and Orphanage Foundation (12th June, 2023) Personal Communication.

Kabiru Halilu Salihu, Trader, Jos North Plateau State (20th June, 2023) Personal Communication.

Mal. Naziru Ibrahim Mushaddid, member, Tijjani Order, Jos Plateau State (14th June, 2023) Personal Communication.

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LAYPERSON'S KNOWLEDGE AND PERCEPTION IN IRRITABLE BOWEL SYNDROME, NORTHERN REGION OF SELANGOR, MALAYSIA

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ABSTRACT

This study aims to assess the knowledge and perceptions of irritable bowel syndrome (IBS) among residents in Rawang, Malaysia, with a focus on identifying potential gaps in understanding. Effective management of IBS requires patients to have a comprehensive understanding of the condition. However, research indicates that individuals with IBS often lack information about various aspects, including frequency, natural history, complications, etiology, side effects, diagnostic procedures, care practices, and the impact of IBS on quality of life. The study employs a cross-sectional quantitative descriptive design, utilizing a survey questionnaire. The sample size of 384 respondents was determined through simple random sampling. Among the 384 participants, 52% were female, and 48% were male. Approximately 46% of participants expressed that IBS is not exclusive to women, while 24% could not accurately identify the gender more susceptible to IBS. Respondents demonstrated recognition of various health problems associated with IBS, yet misconceptions about its development were identified. Around

35.4% believed that a digestive disorder specialist (gastroenterologist) is the best professional to diagnose IBS, with objective tests like colonoscopy deemed necessary for diagnosis. While participants exhibited knowledge of IBS symptoms, numerous misconceptions regarding etiology, the role of healthcare professionals, appropriate diagnostic tests, and associated risks were identified. These misperceptions appear to be incongruent with established standards and practices. The study highlights the need for targeted educational efforts to bridge the knowledge gap among the public regarding IBS.

Keywords: *Irritable Bowel Syndrome, Public, Knowledge, Perception, Symptoms.*

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1. INTRODUCTION

Irritable Bowel Syndrome (IBS) is a prevalent gastrointestinal disorder characterized by unpredictable bowel habits and abdominal discomfort, commonly treated following Rome IV guidelines (Oka et al., 2020). Recent studies (Sherwin, 2018; Sperber et al., 2021), suggest that IBS is associated with heightened nerve sensitivity in the digestive tract wall, impacting nerve-brain interactions. IBS affects women more than men, constituting 15% of the American population, often manifesting before age 40, with some cases dating back to childhood or early adulthood. Post-infectious IBS may develop after a significant upper respiratory infection (Sherwin, 2017).

Despite its prevalence, IBS significantly affects patients' quality of life, presenting chronic digestive discomfort. The global prevalence, estimated at 10-15%, varies, making IBS a widespread health concern (Weiser et al., 2018). The unclear pathogenesis involves factors like altered gastrointestinal motility, visceral hypersensitivity, psychological distress, genetic influences, and intestinal microbiome changes (Simren et al., 2017). Fairbrass (2020) notes that IBS is the most common functional gastrointestinal disease.

Patients often experience mild, moderate, or severe symptoms, with approximately 2.4 to 3.5 million consultations for IBS in the United States alone. Diagnosing IBS takes around two years or more, contributing to its underdiagnosis due to stigma and symptom avoidance (Austhof, 2020; Houte et al., 2019). Positive outcomes hinge on patient understanding of the treatment process, yet IBS patients often lack sufficient information about various aspects of the condition, affecting their quality of life (Sherwin, 2017). Public perceptions of IBS play a crucial role in patients' decision-making, influencing their treatment-seeking behavior. Media platforms and internet forums can enhance patient knowledge and support, fostering self-management and engagement. Digital technologies offer patients a means to connect, share experiences, and access emotional and informational support. The study aims to explore the knowledge and perceptions of IBS among residents in, Rawang, state of Selangor in Malaysia, shedding light on potential gaps in health education and training.

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2. REVIEW OF LITERATURE

Lovell and Ford (2017) conducted a systematic review and meta-analysis, revealing a global prevalence of irritable bowel syndrome (IBS) at 11%. However, this varied significantly based on geographical location, diagnostic criteria, duration of symptoms, ethnicity, and gender. Studies exploring the impact of socio-economic conditions on prevalence are limited, indicating a need for further investigation. Sherwin (2017) acknowledged challenges in determining the global prevalence but recognized IBS as a prevalent health issue, with studies predominantly originating in Europe, Southeast Asia, and North America. The highest prevalence was reported in South America at 21%, and recent research identified a rising prevalence in newly developed Asian nations. Houte et al. (2019) reported varying prevalence between 3% and 22% across different nations, attributing the differences to diverse clinical definitions.

Recent studies reported prevalence rates for IBS ranging from 3.8% to 9.2%, depending on clinical guidelines. Regional variations also exist, with prevalence rates between 1.1% and 45%, highlighting the substantial burden IBS places on healthcare and communities. Regional studies, such as one conducted in Malaysia by Govindarajah et al. (2018), indicated an increasing prevalence among healthcare students globally, including Pakistan, Jeddah, China, Japan, Korea, and Canada. The prevalence of IBS in young Malaysian medical students was reported as 15.8% two decades ago using Rome I guidelines.

Klem et al. (2017) emphasized that IBS affects 7–18% of the global population, with infectious enteritis identified as a risk factor, leading to post-infectious IBS (PI-IBS). PI-IBS risk, ranging from 4% to 36%, persists for over 10 years after the infectious episode. Alzahrani et al. (2018) outlined various risk factors, including gender, genetic history, psychiatric stress, anxiety, mental health problems, dietary habits, and sleep disturbances. Algabr et al. (2018) highlighted poor public knowledge of IBS risk factors, often relying on social media for symptom information, leading to delayed diagnoses and exacerbated conditions.

Lieberson (2019) found that 75% of patients lacked sufficient information during hospital visits about their IBS condition, with physicians providing inadequate explanations. Patients often turned to social media, leading to misinformation and heightened concerns about serious illnesses. Algabr et al. (2018) reported that 82% of the public had poor knowledge of IBS, with incorrect perceptions about its seriousness and impact on quality of life. Levine et al. (2020) acknowledged the complexity of IBS pathophysiology and limited time for patient education during clinic encounters, contributing to patients seeking information on the internet. Overall, public awareness and accurate information dissemination are critical to addressing IBS prevalence, risk factors, and knowledge gaps.

2.1 Theoretical framework

The theoretical foundation underpinning this study is Hochbaum's (1958) Health Belief Model (HBM), designed to elucidate the factors influencing individuals' health-related actions. The HBM focuses on the interplay between beliefs and behavior, offering insights into patients' health-related decisions and compliance with healthcare measures. Key components include perceived susceptibility, severity, benefits, barriers, cues to action, and self-efficacy.

Perceived susceptibility involves an individual's assessment of personal risk, while perceived severity extends beyond medical consequences to consider impacts on work, family, and social life. The decision to engage in health-related behavior is influenced by perceived benefits and barriers. Individuals are likely to adopt health actions if they believe in their susceptibility, perceive the illness as severe, and consider the benefits of action outweighing the costs. In cases of diagnosed illnesses, the model includes acceptance of diagnosis and personal susceptibility estimates. Threat perceptions arise from beliefs about susceptibility and severity, influencing health-related decisions. The HBM posits that individuals evaluate health behaviors based on perceived benefits and efficacy, weighed against perceived costs or barriers, such as pain, inconvenience, or expense.

The HBM aligns with the research objective of raising awareness and promoting well-being. This study applies Hochbaum's model to comprehend the impact of irritable bowel syndrome (IBS) in Rawang, Malaysia. The framework guides the exploration of individuals' willingness and self-initiated changes toward a healthier lifestyle to prevent IBS. It provides a theoretical foundation for understanding how individuals' beliefs shape their health-related decisions, offering valuable insights for promoting health awareness and preventive measures.

3. RESEARCH METHODOLOGY

3.1 Design, Sampling and sample size

A descriptive study design was used in this cross-sectional survey among public in Rawang, Malaysia. This survey is mainly to assess the knowledge and perception level towards irritable bowel syndrome among public. The study's target population, unquantifiable due to the absence of statistics for Rawang, prompted the use of a token system. Using computer-generated randomization, 500 participants received questionnaires.

3.2 Research Instrument

The survey utilized in this study was adapted from Sherwin (2018) with permission. It comprises three sections: an introductory segment explaining the research topic, Section A gathering socio-demographic data, and Sections B and C assessing knowledge and perceptions of irritable bowel syndrome with multiple-choice questions. The questionnaire was bilingual (English and Malay).

3.3 Pilot Study, Reliability and Validity

The pilot study, involving 30 participants, assessed the knowledge and perceptions of irritable bowel syndrome to establish the instrument's validity. Three expert panels (Consultant Gastroenterologist & Physician, Director of Nursing and Assistant Director of Nursing) evaluated the research instruments for content validity. The panel experts were from a selected private medical center where the researcher currently employed.

3.4 Ethical Consideration

Ensure ethical compliance by securing approval from IMU Joint Committee on Research and Ethics (ID BN I/2020(PR-51)). Participants, meeting inclusion criteria, received information about the study's purpose and were guaranteed confidentiality through a consent form distributed alongside the questionnaire via Google Docs before the study commenced.

4. RESULTS

4.1 Demographic Data

Online surveys were conducted based on inclusion criteria, with a total of 500 questionnaires distributed. The number of respondents who opted to participate and completed the questionnaires online was 384, which was 76.8% of the returned rated (Table 1). Among the 384 participants, 52% were females, and 48% were males. The majority fell within the 41 to 50 age group (41%), followed by the 31 to 40 age group (28%). Participants were categorized into Indian, Chinese, and Malay ethnic groups, with 40% Chinese, 32% Indian, and 28% Malay representation. Most of them (60%) completed secondary school education.

Table 1. Demographics of the participants (n=384)

Variables	N (%)
Gender	
Male	184 (48)
Female	200 (52)
Age	
< 30 years old	62 (16)
31 to 40 years old	106 (28)

41 to 50 years old	158 (41)
>51 years old	58 (15)
Race	
Indian	123 (32)
Chinese	153 (40)
Malay	108 (28)
Highest Education	
Primary	38 (10)
Secondary	229 (60)
Tertiary	117 (30)

4.2 Prevalence and Epidemiology

The survey delved into the prevalence of irritable bowel syndrome (IBS) concerning hypertension frequency, with 2% indicating IBS is more common than hypertension and another 2% believing it's more prevalent than colon cancer. A significant portion (46%) asserted IBS doesn't exclusively affect women, while 24% couldn't specify the gender more susceptible to IBS.

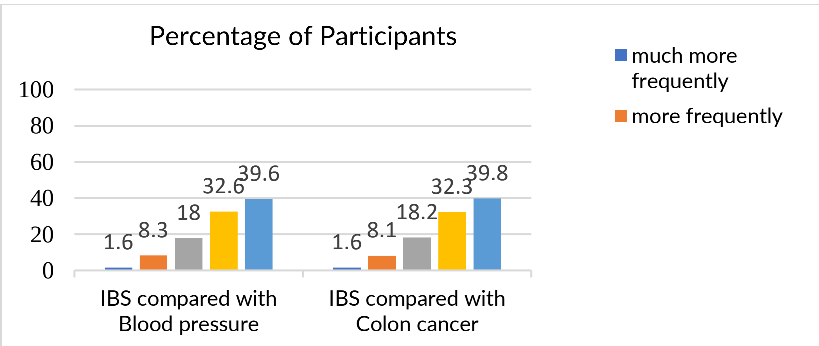

Figure 1. Prevalence and Epidemiology (N=384)

4.3 Natural History

Approximately 36.7% expressed uncertainty regarding whether IBS shortens life, while 26.8% believed it does. Regarding symptom persistence, 35.4% thought IBS symptoms never subside, while 39.8% were unsure of their permanence post-diagnosis.

4.4 Risks associated with IBS

Regarding the impact of IBS on other gastrointestinal disorders, 19.8% believed it heightened the risk of conditions like ulcerative colitis or Crohn's disease. In relation to colon cancer, 18.8% asserted that IBS increased the risk. Additionally, 28.1% thought individuals with food intolerances or allergies were more susceptible to IBS, while 27.1% believed those with food allergies faced an increased risk of developing irritable bowel syndrome (Table 2).

Table 2. Risks associated with IBS (n=384)

IBS changes risk of developing IBD?			
		Frequency	Percent
	Yes, it increases the risk	76	19.8
	Yes, it decreases the risk	93	24.2
	No, there is no change in risk	111	28.9
	Not sure	82	21.4
	I have never heard of these conditions	22	5.7
	Total	384	100.0
IBS changes risk of developing colon cancer?			
		Frequency	Percent
	Yes, it increases the risk	72	18.8
	Yes, it decreases the risk	84	21.9

	No, there is no change in risk	138	35.9
	Not sure	81	21.1
	I have never heard of these conditions	9	2.3
	Total	384	100.0
IBS develop symptoms because they are?			
		Frequency	Percent
	Allergic to different foods	104	27.1
	Intolerant to different foods	108	28.1
	No relationship between IBS symptoms and foods	79	20.6
	Not sure	93	24.2
	Total	384	100.0

4.5 Aetiology

Most common factors which the respondents strongly agree with which will cause irritable bowel syndrome were genetic (16%), upbringing (15%), diet/eating habits (12%), changes in daily routine (11%), aging (10%), environmental (9%), depression (8%), poor medical care (7%), anxiety and behaviour (6%).

4.6 Symptoms

Inquiring about the causes of IBS symptom development, participants were asked whether it was linked to "sensing things differently in the digestive system" or a "motility disorder in the digestive system." About 41.1% remained uncertain about the causes. When questioned about reasons for IBS symptom development, the majority were unsure (39.3%), while others provided incorrect answers (36.5%). Common symptoms

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experienced by those with IBS included bloating (30%), constipation (23%), abdominal pain (21%), diarrhea (14%), and flatulence (12%).

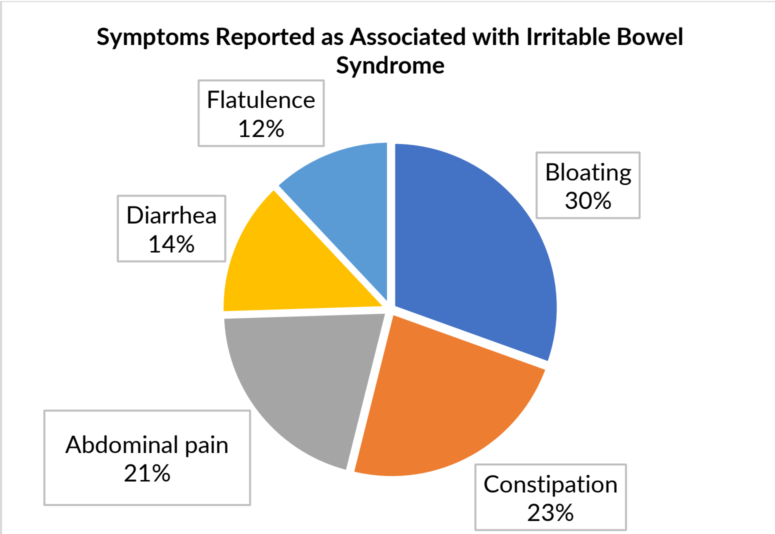

Figure 2. Symptoms reported as associated with irritable bowel syndrome (n=384)

4.7 Mode of diagnosis

Regarding the mode of diagnosis, 35.4% considered a digestive disorder specialist (gastroenterologist) as the most suitable professional for diagnosing irritable bowel syndrome (IBS). Additionally, 28.6% believed that an allergy specialist and 23.4% a general physician could diagnose IBS. When asked about their feelings if they or a significant other received an IBS diagnosis without testing, 38.3% expressed worry, and 27.3% felt uncertain. When participants were questioned about the tests used for diagnosing IBS (Table 3), thirty-one percent were uncertain about the role of objective tests like blood tests, abdominal ultrasound, CT scan, and MRI. Additionally, 33% of participants were knowledgeable about the required tests for IBS diagnosis.

Table 3. Mode of Diagnosis Perceived as Necessary for Diagnosing Irritable Bowel Syndrome (n=384)

Test	True (%)	False (%)	Not Sure (%)
Only a blood test	26.8	36.7	36.5
Colonoscopy	26.3	35.4	38.3
Abdominal ultrasound	39.6	41.4	19.0
CT Scan	40.1	41.7	18.2
MRI	31.3	32.0	36.7
Physical exam	30.2	33.3	36.5
No testing necessary, can be diagnosed by symptoms only	29.9	31.5	38.5

**CT, computed tomography; MRI, magnetic resonance imaging.*

4.8 Treatment

A majority of participants (55.2 %) believe that changing their diet can cure irritable bowel syndrome. Additionally, 36.5% claim that purchasing over-the-counter medications can be a cure, while 39.8% assert that prescribed medications cannot cure IBS. Moreover, 36.5% are unsure whether IBS can be cured by alternative therapies like acupuncture, herbs, and roots. The majority (46.4%) believes that surgery is a cure, and 46.6 percent assert that IBS can be cured without any treatment.

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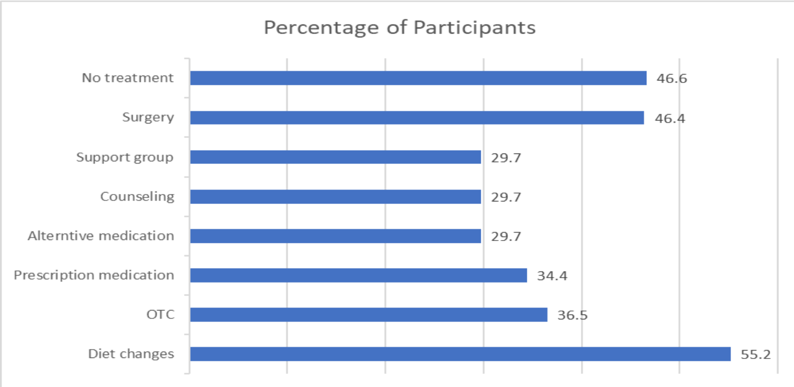

Figure 3. Treatment Thought to Relieve Symptoms of Irritable Bowel Syndrome (n=384)

4.9 Impact of IBS

Lastly, participants were asked if irritable bowel syndrome has been affected personally in someone's life and majority of the participants answered unsure (38.5%) and many said no (32.3%). Regarding the participants' relationship with individuals diagnosed with IBS, the majority (32 percent) indicated they were not close at all. When asked about the potential impact of an IBS diagnosis on various aspects of life, responses included 21.6 percent indicating an impact on home life, 20.3 percent on social activities, 18.8 percent on work life, and 13.3 percent on daily activities like shopping and chores.

5. DISCUSSION

Irritable bowel syndrome (IBS) is a prevalent chronic digestive disorder that significantly impacts patients' quality of life, leading to frequent healthcare visits, increased medical costs, and provider dissatisfaction. Public perceptions, often shaped by social media, contribute to these challenges. Social networks play a crucial role in health decision-making (Siminoff, 2018), making it essential to examine the public's understanding and perception of IBS. This study revealed widespread misconceptions about the natural history, complications, risks, impact, diagnosis, and healthcare importance related to IBS.

In line with the Health Belief Model, individuals tend to trust social media for health information over healthcare visits (Hochbaum, 1958). The research also highlighted a moderate understanding of IBS etiology among the public. While no clear causative factors exist, some identified factors include diet, genetics, and stress. However, the study demonstrated diverse beliefs, including associations with aging, inadequate hospital attention in the past, childhood experiences, environmental exposures, lifestyle changes, and substance use. Despite hypotheses linking these factors to IBS, it's crucial to note that aging showed fewer side effects and reduced prevalence in those over 50 years old (Lovell & Ford, 2017; Shorey et al., 2021).

Public respondents exhibited concerns about IBS leading to severe illnesses, such as inflammatory bowel disease or colon cancer. Some even believed IBS could shorten an individual's lifespan. These perceptions align with patient experiences (Lacy et al., 2017; Levine et al., 2020), emphasizing the need for accurate information dissemination to alleviate unwarranted anxiety (Hu et al., 2021). The study also found public support for food allergies and gluten intolerance as potential risk factors for IBS, reflecting the importance of dietary modifications in managing symptoms.

Clinical assessments for IBS were commonly misunderstood by the public, with many participants advocating for colonoscopies and fewer suggesting ultrasounds. These misconceptions, often propagated through social media, may influence healthcare-seeking behaviors. Clear communication and education on proper diagnostic procedures are crucial to fostering patients' trust in IBS assessments. The study revealed that IBS significantly impacts various aspects of life, mirroring the experiences of diagnosed individuals. While fewer respondents knew someone with IBS, a substantial majority acknowledged the disorder's effects on social, work, personal, and family relationships. Further research is needed to explore functional disability and social media's influence on individuals with IBS. Providing accurate health education can empower the public, promote a healthier lifestyle, reduce stress, and minimize unnecessary healthcare visits driven by misconceptions fostered by social networks.

6. CONCLUSIONS, IMPLICATIONS AND LIMITATIONS

Widespread misconceptions about IBS in the public domain may significantly impact decision-making for those grappling with the condition. Patients' experiences shared on social media platforms could enhance objective research but may also pose challenges in treatment. Raising awareness about the natural course of IBS and the importance of diagnostic testing among both IBS sufferers and their social media networks is crucial for improving self-management and outcomes.

This study's significance lies in pinpointing gaps in public knowledge and perception of irritable bowel syndrome (IBS).

Findings are crucial for nurses aiming to address social media-driven misconceptions, allowing health professionals to deliver targeted and effective education on IBS. The study underscores the necessity of public education initiatives to enhance awareness and understanding of IBS, fostering trust in healthcare providers and promoting positive reputations for nurses and healthcare workers.

The study acknowledges two limitations: a single-center focus with a small sample size of the public chosen for this study. Consequently, quantitative data methodology may not offer a thorough comprehension of knowledge and perceptions towards IBS, unlike qualitative data methodology. Thus, the findings cannot be generalized to populations in other public area, either within or outside Malaysia.

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SUSTAINABLE UTILISATION OF AGROFORESTRY RELATED LAND USE PRACTICES AMONG FARMERS IN AKINYELE LOCAL GOVERNMENT AREA, OYO STATE

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ABSTRACT

The study assessed the sustainable utilisation of agroforestry related land use practices among farmers in Akinyele Local Government Area, Oyo State. A multistage technique was used to select 50 respondents from the study area. A well-structured questionnaire and interview session was used to collect information from the respondents. Frequency distribution and percentages were used to explain the objectives while Chi-square and Pearson Product Moment Correlation used to test hypotheses. The findings showed that most respondents (76.0%) were male, 60.0% were in the age bracket of 41-50 years, married (46%) and farming occupation (96.0%). The benefits most of the respondents derived from the agroforestry related practices include the availability of more source of revenue (96.0%), increased crop yield (90.0%). The utilisation of agroforestry practices enhances income (98.0%), provision of shade for livestock (94.0%) and medicinal herbs (92.0%). The socio-economic characteristics, age (X^2= 10.108, p>0.342) had no significant relationship with sustainable utilisation of agroforestry related land use practices. Benefits derived had significant correlation with sustainable utilisation of agroforestry related practices (r= 0.320, p< 0.023). In conclusion,

there should be formation of cooperative groups and provision of adequate information from extension agents to improve the level of participation of farmers in agroforestry.

Keywords: *Land Use, Other Related Agroforestry Practices, Benefits, Utility Typology.*

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1. INTRODUCTION

Agroforestry defines the aggregation of all land use practices and innovative techniques whereby permanent plants like trees, shrubs, palms and bamboos are deliberately integrated on the same unit of land for multiplication of agricultural crops and/or animal production. It serves as an important tool to increasingly address soil fertility issues in Africa (Glover et al, 2012). According to Barrios *et al*. (2012) when trees are incorporated in crop fields, it often reduces soil erosion, improve water and nutrient cycling as well as increasing both soil organic carbon, activity of soil organisms causing difference in the vegetation cover of the earth. However, agroforestry plays a significant role as an eco-friendly as well as modern farming sustainability in land use practice in the overall farm productivity interest in which combination of food crops, woody perennial trees and livestock on the same land in alternate form or at the same time using scientific management practices will improve the condition of the people economically.

These factors which are overall farm productivity, enrichment of soil through litter fall, maintenance of environment services in terms of climate mitigation, phytoremediation, and protection of watershed and conservation of biodiversity perform vital roles in agroforestry practices. The natural forest policy of thirty-three (33%) forest cover can be achieve through the effective and alternate management of agroforestry practices. Development of sustainable rural production system is possible through various practical knowledge and skills that are derivable from practicing agroforestry.

Benefits accrued to farmers from practice of agroforestry include the positive effect on their livelihood by increasing crop yield as well as increased food security (Akinnifesi et al; 2010; Garrity et al; 2010). Also, according to Luedling *et al*. (2011) agroforestry creates improvement in farmers' ability to deal with the effects of climate change and efficient use of rain that caused by yield stability under rainfed agriculture. Jose (2009) and Nair *et al.* (2009) corroborated that various ecosystem services are provided through agroforestry as benefit to the environment. Adoption of agroforestry practices by farmers might have been a response to ensure sources of sustaining their families. The economic benefit of most of the woody perennial take very long to be realized and this is deterrent to the agroforestry. The objectives of the work were to assess:

A. Socio-economic characteristics of farmers in the study area;
B. Agroforestry related land use practices;
C. Land use benefits derived from agroforestry practices;
D. Other utility typologies of agroforestry practices;
E. Extant factors in agroforestry practices; and

F. Constraints experienced by farmers in agroforestry practices.

2. REVIEW OF LITERATURE

Agroforestry systems are often management of trees and shrubs and utilization of their products. The trees and shrubs create impact on other components in the land use system. Therefore, agroforestry systems are normally characterised by ecological and economic interactions between woody perennials and crops as well as livestock (ICRAF, 1992; Agboola, 1980). Agroforestry has proved to be a very useful means of tackling the challenges of global food production on a sustainable basis to ensure a food secure population (ICRAF, 2000). Agroforestry shares principles with intercropping, both place two or more plant species (such as nitrogen-fixing plants) in proximity and both provide multiple outputs. Therefore, overall yields are higher and single application or input is shared, cost are reduced (Wojtkowski, 2002). Agro-forestry might simply be “tree on farm” hence agro-forestry farm forest and family forest can be broadly understood as the commitment farmers, alone or in a partnership, towards the establishment of forest on their land (Oram, 1993). It enhances sustainable utilization by improving the supply of food and being environmentally friendly (FAO, 1987; Spore, 1995). It has been described as a very old system which has been practiced by farmers, particularly those characterized by low level of technology and resource inputs and mostly in areas believed to be unsuitable for profitable monocropping systems (Sekhwela, 1990).

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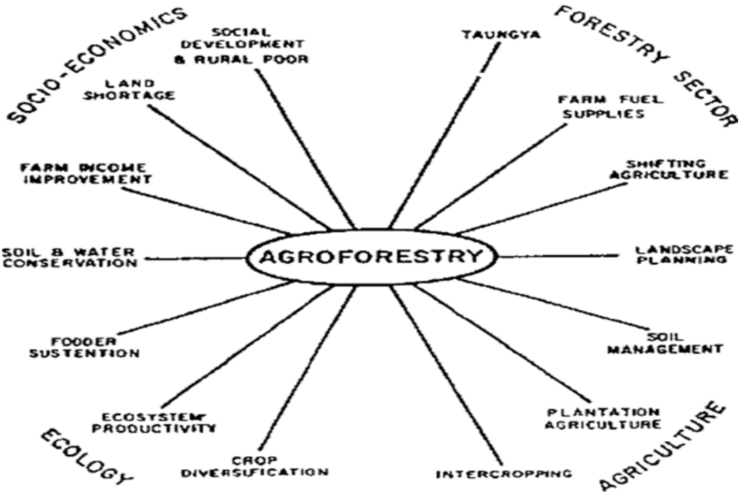

Figure 1. Conceptual Framework of Agroforestry Land Use Practices

3. RESEARCH METHODOLOGY

3.1 Study Area, Sampling Procedure and Sample Size

Investigation into this study was conducted in Akinyele Municipality, Nigeria. The Municipality was established in 1976 in a land area of 464.892 Km^2 on the geographical coordinates of 7 °31′ 42′′ North and 3 °54′ 43′′ East. The Municipality is headquartered at Moniya with twelve (12) wards. The wider land area of the Local Government is covered by rain forest broadly dominated by palm trees and plantain. The vegetation in the local government is classified as crop lands, secondary forest, natural forest, bare land, and built up areas. The type of crops cultivated includes maize, cassava, yam, and vegetables among others.

Akinyele Local Government Area of Oyo state was selected as the study area for this scientific research. The choice of the study area was due to introduction of agroforestry to some wards in the area. Multi-stage sampling technique was employed in selecting five wards, while random sampling was used to select five wards which in turn leads to selection of 10 farmers from each of the wards making a total of 50 farmers that were selected for the study. Questionnaire and interview were employed to elicit information from the selected respondents. Analysis of data collected was done using frequency, percentages for the objectives while Chi-square and PPMC were used to test hypotheses.

This study was conducted in accordance with the ethics committee approval of the Federal College of Forestry, Ibadan with reference code: *FCF2022AEM*.

3.2 Analytical Tools

The analytical tools used for the study were Chi-square and Pearson product moment correlation.

i. Chi-square

$$\chi^2 = \Sigma\left[\frac{(f_o - f_e)^2}{f_e}\right] \quad \text{..............} (i)$$

Where:

χ^2 = Chi-Square.

Σ = Sum total.

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f_O = frequencies of observed nominal variables such as sex, religion, marital status; that is the socio-economic variables and other qualitative variables for the study.

f_e = expected frequencies of occurrence determined from response categories.

ii. Pearson product moment correlation

$$r = \frac{n\sum XY-(\sum X)(\sum Y)}{\sqrt{(n\sum X)^2 - (\sum X^2)(n\sum Y^2)-(n\sum Y)^2}} \ldots\ldots \text{(ii)}$$

Where:

r = correlation coefficient.

n = sample size.

Σ = summation sign.

X = independent variables for the study.

Y = dependent variable for the study, that is; sustainable utilisation.

4. RESULTS AND DISCUSSION

4.1 Socio-Economic Characteristics of Farmers

In Table 1 (See Appendix) majority of the farmers (76.0%) were male while 24.0% were female. Alfred (2001) and Adedotun (2010) in their work corroborated this finding that in most communities in Nigeria male headed households usually had dominance over female headed household. Age category of the respondents falls within the age range of 41-50 years (60.0%). This is an indication that most of the farmers are in their active ages which enable them to participate in agroforestry. The result is in line with Atibioke *et al*. (2012) who noted that most people living in rural areas are married. About 44.0% of the respondents had secondary education while primary education had thirty-two (32.0%) obtained by respondents and twelve percent (12.0%) had tertiary education. The level of education of farmers will directly affect their ability to adapt to change and to accept a new idea, in which case farmers who possess some levels of education are most likely to accept or use new technologies than the ones who do not according to Adekunle (2009). Ninety six percent (96.00%) of the respondents were into farming, which translate that farming is their major occupation. Household size varied; 10% had 1-3 members, 74.0% had 4-6 while 16.0% had 7-9 members. This suggests that more adult members in a household form more family labour force that would perform farming activities and as well as practice of agroforestry.

Table 2 showed that 94.0% of respondents had trees on their farmland. This implies that agroforestry practice would cause an effect in increasing the infiltration and water holding capacity of the topsoil as well as the ability of the soils to capture and use farm runoff as reported by (Kalaba *et al*., 2009). Eighty six percent (86.00%) practiced shifting cultivation, 86.00% of the respondents also engaged in fuel-wood production. This means that most rural dwellers make use of fuel-wood for cooking. This is in line with FAO (2001) which states that rural dwellers make use of fuel-wood as their major source of energy in a natural-based environment. Twenty-one respondents (42.0%) used trees as a windbreak. Windbreak practice helps in controlling the wind. Six percent (6.0%) of the respondents practice alley cropping.

Table 2. Distribution of Respondents Based on Agroforestry Related Land Use Practices (n =50)

Land Use	Practiced	Not Practiced
Taungya	0(0.00)	50(100.0)
Trees on farmland	47(94.0)	3(6.0)
Shifting cultivation	43(86.0)	7(14.0)
Fuel wood production	43(86.0)	7(14.0)
Windbreak	21(42.0)	29(58.0)
Alley cropping	3(6.0)	47(94.0)
Improved Fallow practice	2(4.0)	48(96.0)

Source: Field Survey, 2022.

In Table 3, majority (96.0%) of farmers are of the opinion that agroforestry is of help in deriving more revenue, which brought improvement to socio-economic conditions of farmers. Ninety two percent (92.0%) respondents participated in agroforestry which afford them the benefit of enjoying increased crop yield and variety of crops. Also, 94.0% opined that it serves as sources of raw material such as building materials, medicine, income from fuel-wood, 90.0% of the respondents believe that some other harvested crop serves as a source of food, 74.0% of the respondents use trees as fences on their farmland and to construct farmsteads, houses for goats and sheep. 84.0% of the respondents said it helps in maintaining soil organic matter by providing shade for farmland. The result is in tandem with Nair *et al*., (2007) that agroforestry and its related practices has a great potential to improve soils as compared to arable cropland due to increased rates of organic matter addition and retention, 32.0% of respondents agreed that agroforestry helps in biodiversity, 82.0% agreed that agroforestry and its land use related practices help to improve soil fertility and conservation of soil nutrients with the help of nitrogen-fixing trees and shrubs. Also 66.0% of the respondents used agroforestry related practices to fallow their land, 80.0% of them noted that some of the leaves serve as fodder for their animals while, 82.0% reported that trees on land were adding to their income level. In addition, 60.0% of the respondents accept that agroforestry improves and upgrades the environment. Forest products are used as material for building, as 44.0% of the respondents said that they use the forest product as materials for the building of their houses, farmsteads, pens and which by way of reducing the cost of building incurred by the farmers. Trees on land serves a medicinal purpose, and 72.0% of the respondents affirmed that some of the extraction of the tree back and leaves serves as a medicinal purpose for the treatment of various ailments.

Table 3. Distribution of Respondents Based on Land Use Benefits Derived from Agroforestry Related Practices (n=50).

Land Use Benefits	Yes	No
Availability of more source of revenue	48(96.0)	2(4.0)
Increased crop yield	46(92.0)	4(8.0)
Source of raw materials	47(94.0)	3(6.0)

Source of food	45(90.0)	5(10.0)
Source of fence materials	37(74.0)	13(26.0)
Maintaining soil organic matter	42(84.0)	8(16.0)
Biodiversity	16(32.0)	34(68.0)
Improved soil fertility	41(82.0)	9(18.0)
Use of fallow for crop land	16(32.0)	33(66.0)
Fodders for animals	40(80.0)	10(20.0)
Increased in income	41(82.0)	9(18.0)
Enhancement of environment	30(60.0)	20(40.0)
Forest materials for building	22(44.0)	28(56.0)
Source of medicinal plant	36(72.0)	14(28.0)

Source: Field Survey, 2022.

Table 4 shows that most farmers (72.0%) used trees as windbreakers to bring down the effect of wind which on soils, crops, livestock, wildlife, and people. It also prevents the wind from damaging the structure and crops on the farm. Furthermore, 92.0% of the respondents used tree backs, leaves, and other parts of the tree because they provide traditional means for the treatment of many internal diseases considered difficult to cure. In addition, 98.0% of respondents are of the opinion that agroforestry was utilized as an additional income when trees or its products are harvested. Branches and leaves of some trees can be pruned from the trees and fed directly to livestock. Also 94.0% of the respondents noted that agroforestry serves as fuel and timber. Similarly, 90.0% of respondents used agroforestry for weed reduction that is

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shading by tree and moderation of microclimate could be an important factor in suppressing weeds, 80.0% of them used agroforestry for human nutrition, 94.0% of the respondents harvested as a source of food. 92.0% of the respondents used trees to control erosion, while 80.0% used trees as boundaries for protecting their farmland.

Table 4. Distribution of Respondents Based on Other Utility Typology of Agroforestry Practices among Farmers (n = 50)

Other Utility Typology	Utilised	Not Utilised
Windbreak	36(72.0)	14(28.0)
Medicinal herbs	46(92.0)	4(8.0)
Additional income	49(98.0)	1(2.0)
Shade for livestock	47(94.0)	3(6.0)
Timber stake	47(94.0)	3(6.0)
Reduce weeding	45(90.0)	5(10.0)
Human nutrition	40(80.0)	10(20.0)
Soil fertility enrichment	44(88.0)	6(12.0)
Food(fruits)	44(88.0)	6(12.0)
Soil erosion control	47(94.0)	3(6.0)
Boundary protection	46(92.0)	4(8.0)
Fodders	38(76.0)	12(24.0)

Source: Field Survey, 2022.

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Table 5 shows that 66.0% of farmers stated that age serves as a factor that determines the practice of agroforestry among farmers because young people are more involved due to their ability to acquire and use information on new technology faster than old people (Sonii, 1992). Also, 70.0% of respondents agreed that land ownership affects the feasibility of agroforestry designs and the motivation for adopting agroforestry system or its land use related practices, 76.0% of the respondents affirmed that size of household determines the practice of agroforestry, while 78.0% noted that level of education acquired will also determines the practice of agroforestry. Similarly, 78.0% of respondents are of the opinion that environmental factors such as climate soil, drainage, sunlight, and precipitation will be key to determine the trees, crops, and livestock that can be grown or raised in each area, while 84.0% professed that the level of awareness will determine the level of related agroforestry practices.

Table 5. Extant Factors in Agroforestry and Its Related Land Use Practices among Farmers

Extant Factors	**Yes**	**No**
Age of respondents	33(66.0)	17(34.0
Land ownership	35(70.0)	15(30.0)
Household size	38(76.0)	12(24.0)
Level of education	39(78.0)	11(22.0)
Environmental factors	39(78.0)	11(22.0)
Household income level	40(80.0)	10(20.0)

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Level of awareness	42(84.0)	8(16.0)
Gender of the farmer	31(62.0)	19(38.0)
Year of experience	33(66.0)	17(34.0)
Origin of the farmers	19(38.0)	31(62.0)
Distance of the village to nearest town	26(52.0)	24(48.0)

Source: Field Survey, 2022.

Table 6 (See Appendix) shows the constraints faced by farmers in the study area. It revealed that majority (80.0%) of respondents reported inadequate funds/capital was a major problem faced due to difficulties in buying or renting machines, while 62.0% of them opined that land tenure was a problem because most of them are not the rightful owners of the land and they could not cultivate whatever crop they desire, 74.0% reported poor yield as a major problem, while 78.0% of the respondents said poor soil fertility was a problem. Also, 70.0% of the respondents noted that high incidence of pests and diseases was a major problem, while 66.0% of them non availability of seed and seedlings as a major problem. In addition 58.0% said that climate change was a major problem and it has affected a lot that most of their crops do die off because of change, 54.0% agreed to the fact that they do not have interest but they always like to extend their farm and practice agroforestry more fully if they can get assistance from the government ,58.0% said that their crops are not covered by trees but rather it is protecting their crop from the weather condition, 56.0% of the respondents said insufficiency of plant species is a major problem they face. These findings agreed with the work of both Sangeetha *et al.* (2015) *and* Karshie, *et al.* (2017) where they found that lack of agroforestry seedlings serves as the most critical constraints faced by farmers in adopting agroforestry species.

Table 7 reveals that the socio-economic characteristics age had no significant relationship with the level of utilization of related agroforestry practices. This implies that socio-economic characteristics do not affect utilisation of agroforestry.

Table 7. Result of Chi-square analysis of relationship between respondents and use of agroforestry related practices

Variables	**Chi-square value**	**p-value**	**Decision**
Gender	4.557	0.207	Not significant
Age	10.108	0.342	Not significant
Marital Status	1.087	0.780	Not significant
Religion	0.882	0.830	Not significant
Education	5.289	0.507	Not significant
Occupation	2.112	0.549	Not significant
Years of farming	36.269	0.820	Not significant
Household size	10.016	0.124	Not significant

Source: Field survey, 2022.

Result of table 8 of Pearson Product Moment Correlation analysis shows a significant relationship between the benefits derived from agroforestry or related land use practices and respondents' utilization of agroforestry produce/value ($r = 0.320$, $p < 0.023$).

Table 8. Pearson Product Moment Correlation (PPMC) result of relationship between benefits derived by respondents and their sustainable utilisation of agroforestry related produce/value

Variables	r-value	r-value	Decision
Benefits Derived			
and Sustainable Utilisation	0.320	0.023	Significant

The result in Table 9 shows that there is no significant relationship between the constraints faced and sustainable utilisation of agroforestry produce/values ($r = 0.200$, $p > 0.05$).

Table 9. Pearson Product Moment Correlation (PPMC) analysis of relationship between constraints faced by respondents and sustainable utilisation

Variables	r-value	p-value	Decision
Constraint faced			
and Sustainable Utilisation	0.200	0.163	Not Significant

5. CONCLUSION AND RECOMMENDATION

Married men were in their active age and practiced agroforestry related land use. Farmers engaged in various land use system related to agroforestry practices in the area of study and many of the farmers acquired secondary education, although some still diversified into other occupations outside farming as an occupation. The majority of farmers opined that agroforestry is of immense help in deriving more revenue, which brought improvement to socio-economic conditions of farmers, participated in agroforestry which afford them the benefit of enjoying increased crop yield and variety of crops. Also, they opined that it serves as sources of raw material such as building materials, medicine, and income from fuel-wood.

There should be adequate provision of information through extension agents to farmers as regards the benefits of agroforestry practices in order to increase their level of participation. Government should provide assistance to farmers through the provision of soft loans as a form of incentive and other related technical assistance to enable them actively participate in agroforestry practices. The issue regarding the poor yield from practicing agroforestry should also be looked into with the provisioning of either organic or inorganic fertilizer.

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APPENDIX

Table 1. Distribution of Farmers Based on Socio-economic Characteristics (n= 50).

Socio-economic Variables	Frequencies	Percentages
Gender		
Male	38	76.0
Female	12	24.0
Age (years)		
20-30	1	2.0
31-40	9	18.0
41-50	30	60.0
Above 50	10	20.0
Marital Status		
Single	0	0.00
Married	46	92.0
Divorced	0	0.00
Widow	4	8.0
Religion		
Christianity	31	62.0
Islam	19	32.0
Traditiomal	0	0.00
Others	0	0.00
Educational level		
No forrmal education	0	0.00
Adult education	0	0.00
Primary education	16	32.0
Secondary education	22	44.0
Tertiary education	12	24.0
Occupation		
Farming	48	96.0
Lumbering	0	0.00
Fishing	0	0.00
Hunting	0	0.00
Civil servant	2	4.0
Others	0	0.00
Ethnicity		

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Yoruba	48	96.0
Hausa	0	0.00
Igbo	2	4.0
Others	0	0.00
Farming experience		
5 years below	8	16.0
6-10 years	12	24.0
11-15 years	13	26.0
16-20 years	8	16.0
Above 20	9	18.0
Household size		
< 3	5	10.0
4-6	37	74.0
7-9	8	16.0

Source: Field Survey, 2022.

Table 6. Constraints Experienced by Farmers Practicing Agroforestry

Constraints	Major	Minor	None
Inadequate capital	40(80.0)	10(20.0)	0(0.00)
Land tenure system	31(62.0)	18(36.0)	1(2.0)
Poor yield	37(74.0)	11(22.0)	2(4.0)
Poor soil fertility	39(78.0)	10(20.0)	1(2.0)
High incidence of pest and disease	35(10.0)	14(28.0)	1(2.0)
Non-availability of seed and seedling	33(66.0)	17(34.0)	0(0.0)
Climate	29(58.0)	19(38.0)	2(4.0)
Lack of interest by farmers	27(54.0)	21(42.0)	2(4.0)
Shedding of crops by trees	29(58.0)	19(38.0)	2(4.0)
Limited use of machinery	25(50.0)	24(48.0)	1(2.0)

Lack of chemical	31(62.0)	18(36.0)	0(0.0)
Insufficient plant species	28(56.0)	22(44.0)	0(0.0)
Livestock grazing	6(52.0)	23(46.0)	1(2.0)
High cost of labour	25(50.0)	23(46.0)	2(4.0)
Lack of workers	20(40.0)	27(54.0)	3(6.0)
Fire outbreak	12(24.0)	28(56.0)	1(20.0)
Poor extension Service	2(4.0)	21(42.0)	27(54.0)
Lack of incentives	1(2.0)	21(42.0)	28(56.0)

Source: Field survey, 2022.

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AN EXAMINATION OF THE BIOMETRIC VOTER REGISTRATION SYSTEM IN THE GAMBIA: IMPLICATIONS AND PERCEPTIONS

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ABSTRACT

This study's comprehensive aim was to evaluate the effect of BVR on voter enrolment in The Gambia. Specifically, the study sought to examine the effect of the BVR system on enhancing the transparency and credibility of voter registration in The Gambia, identify and analyse challenges encountered by the IEC in implementing and managing the BVR system, and evaluate the validity of concerns raised by political parties concerning the BVR system and its efficacy in addressing election irregularities. The survey technique was adopted in this study, gathering data through questionnaires and leveraging existing records. Out of a population of 199,957, a sample size of 383 was chosen based on Krejcie and Morgan's (1970) formula. Two hypotheses were raised and tested in this study: The first illustrated a significant but inverse relationship between the BVR system's efficacy and voter registration irregularities, indicating that irregularities diminished as the system's efficacy improved. The second hypothesis revealed a significant yet perfect negative relationship between the challenges faced by the Independent Electoral Commission (IEC) with the BVR system and concerns raised by political parties, suggesting that increased transparency from the IEC decreases political apprehensions. Furthermore, the study revealed mixed perceptions on the validity of concerns raised by political parties *concerning the biometric voter registration (BVR) system and its efficacy in addressing election irregularities in The Gambia. Approximately 30% believed in its ability to rectify past electoral malpractices, while 63% felt political parties had genuine concerns about the system's accuracy. Also, 63% of respondents believed the BVR ensured fair voter representation and reduced voter impersonation. In conclusion, while the BVR system in The Gambia shows promise in enhancing electoral integrity, the mixed views highlight the need for public outreach, system refinement, and increased transparency.*

Keywords: *Biometric Voter Registration, Election, Election Management, Political Parties and Democracy*.

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1. INTRODUCTION

Since its independence in 1965, the Gambia has relied on manual voter registration (MVR) with significant challenges, including multiple registrations and voting frauds (Freedom Newspaper, 2010). These issues persisted until the establishment of the Independent Electoral Commission (IEC), which heeding the call for a more transparent and efficient electoral process, transitioned to the biometric voter registration (BVR) system in 2011 (Freedom Newspaper, 2010).

Globally, biometric technologies, which trace their origins as far back as 500 BC, have found increasing acceptance among Election Management Bodies (EMBs) for voter verification and identification. While its early applications focused on crime identification, today, biometrics spans multiple uses, including electoral processes. By 2014, around 38 low and middle-

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income nations had adopted biometrics for voter registration, with a few African nations, notably Ghana, Kenya, and Nigeria, implementing biometric voter identification (Asante, 2019).

In The Gambia, challenges persist despite adopting the BVR system. The IEC faces accusations from political parties of election mismanagement, including concerns like double registration and inflated voter rolls. While attempts have been made post-2001 to modernise the registration system, inefficiencies continue. The transition to BVR in 2011 aimed to address these challenges. However, the effect of biometric registration on The Gambia's election management needs to be studied more, signifying a clear need for this research.

The primary aim of the study is to evaluate the effect of BVR on voter enrolment in The Gambia. Specifically, it seeks to examine the effect of the BVR system on improving the transparency and credibility of voter registration, identify and analyse challenges encountered by the IEC in implementing and managing the BVR system, and evaluate the validity of concerns raised by political parties regarding the BVR system and its effectiveness in addressing election irregularities.

This research on the effect of biometric technology on voter registration management in The Gambia focuses on the Independent Electoral Commission (IEC), enrolled political entities, eligible voters within KMC, and WANEP (West Africa Network for Peace Building). The study's timeframe covers the period from 2011 to 2022, contingent on the availability of documentation.

2. REVIEW OF LITERATURE

Modern electoral processes often use Biometric Voter Registration (BVR) to develop voter lists. BVR systems use distinct biological and behavioural markers, such as fingerprints and facial scans, to identify individuals (Jain, Ross, & Prabhakar, 2004). This method came into practice to improve upon traditional, often flawed voter registration and counter-election misconduct. A fundamental purpose of BVR is to ensure each voter's distinct identity, eliminating chances of fraud (Alvarez, Hall, & Hyde, 2008).

BVR collects data like photographs and fingerprints, ensuring unambiguous identification (Yang, Wang, Hu, Zheng, & Valli, 2019). Many countries globally have embraced BVR for its potential in upholding electoral credibility. For example, Kenya utilised BVR in 2013 to address previous election irregularities (Cheeseman & Willis, 2016).

However, BVR has issues. Countries encounter high costs, potential technical glitches, security risks, and the need for consistent education about its operation (James, 2011). While BVR can curb registration fraud, it is less effective against other corrupt practices during elections (Nikolova & Marinov, 2017). Also, heavy reliance on such technology might exclude some demographics, especially in areas needing more tech infrastructure.

While BVR promises enhanced electoral integrity, its effectiveness depends on thoughtful deployment, continuous education, and regular assessments.

a. Election

Election is not just a procedural activity but a cornerstone of democratic governance, demanding utmost integrity, transparency, and credibility. Effective election management is pivotal for democratic governance, especially in regions like Africa and The Gambia. The heart of democracy is ensuring honest elections (Lago, 2019; Umar, Olaniyi, Ajao, Maliki, & Okeke, 2019). The adoption of biometrics in elections is growing in developing nations, but concerns about its effectiveness and cost remain (Gelb & Diofasi, 2016). Although democracy indicators improved in Sub-Saharan Africa post-Cold War, challenges like violent, disputed election outcomes persist.

Election Management Bodies (EMBs) face increasing cybersecurity threats, necessitating strong protective measures (Serratosa, 2020). Introducing election technology must adhere to international standards, ensuring transparency, accountability, and result verifiability. The UN's guidelines offer a framework for managing electronic election data (Jacobsen, 2020). The author further stated that access to specific election data by stakeholders, like voters and parties, promotes transparency. The Open Government Declaration underscores the significance of open data in this context.

b. Empirical Evidence

Voter eligibility fraud in the USA suggests a need for a biometric centralised voter database, with Weir (2018) indicating that a lack of a nationwide system might be pricier than expected. Mgovano (2019) advocates for biometrics in enhancing

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Tanzanian elections, though acknowledging challenges like limited infrastructure; this sentiment of questioning the cost-effectiveness of such systems is echoed by Gelb and Diofasi (2016). For broader development, Gelb and Clark (2013) stress the importance of biometrics, noting a significant identification gap in developing countries. However, concerns about the financial implications and sustainability of biometric initiatives in developing nations are raised by Gelb and Diofasi (2016). Thiel (2020) further emphasises the potential benefits of a centralised database system, referencing Ghana's centralisation efforts and the associated security concerns.

Meanwhile, biometrics' effectiveness in combating fraud in Ghana's health sector is discussed by Larkotey, Effah, and Boateng (2021). Lastly, Asante (2019) correlates biometric use with increased voter trust and turnout in Ghana. Overall, the successful implementation of biometrics hinges on transparency, stakeholder inclusion, and adequately addressing associated challenges.

c. Hypotheses

1.) H_0: The introduction of the biometric voter registration system in The Gambia has not significantly reduced voter registration irregularities.

2.) H_0: The challenges faced by the IEC in implementing the BVR system are not associated with the concerns raised by political parties regarding election mismanagement.

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3. RESEARCH METHODOLOGY

In examining the effects of biometric technology on voter registration management in The Gambia, this study adopted survey techniques. Data was sourced directly via questionnaires and indirectly from established records and publications. The questionnaires were curated to capture respondent views on the biometric technology policy's impact to enrich the overall understanding. Based on Krejcie and Morgan's (1970) formula, the study samples 383 participants from a population of 199,957 (IEC, 2016) encompassing diverse stakeholders within The Gambia. Using simple random sampling, 260 eligible voters within KMC, 21 senior and middle management staff of the Independent Electoral Commission (IEC), 90 inter-party committee (IPC) members (5 members from each of the 18 registered political parties in The Gambia), and 12 WANEP management staff were sampled purposefully. The research identifies two pivotal variables: biometric technology (independent) and voter registration management (dependent), aiming to elucidate their interrelationship. Finally, the gathered data were analysed using descriptive and inferential statistics (Simple regression and correlation analysis to test the hypotheses) to draw conclusions in alignment with the study's objectives.

4. ANALYSIS

Of the 383 questionnaires distributed, 318 were returned, accounting for 83%. The remaining 65 questionnaires, representing 17%, still need to be retrieved.

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Displaying Information on the validity of concerns raised by Political Parties Concerning the Biometric Voter Registration (BVR) system and its efficacy in addressing election irregularities in The Gambia.

Table 1 below provides a comprehensive view of the respondents' perspectives regarding the validity of concerns raised by political parties concerning the Biometric Voter Registration (BVR) System in The Gambia, particularly its efficacy in addressing past election irregularities.

On the BVR system's effectiveness in addressing past election irregularities, approximately 30% of the respondents (95) strongly agreed with this notion, whereas nearly 28% (87) disagreed, and close to 24% (75) strongly disagreed. Only around 16% (52) agreed, and a tiny segment (about 3%) were undecided. The mean score for this item is 2.6, which suggests a slightly negative lean, as a score of 3 would represent a neutral stance.

Concerning the authenticity of political parties' concerns about BVR's accuracy, 35% (112) strongly agreed that political parties have genuine concerns, followed by around 28% (89) who agreed. However, roughly 19% (60) disagreed, and 16% (52) strongly disagreed. Only about 2% are undecided. The mean score for this statement is 2.9, slightly below neutral, suggesting a mild agreement with the statement.

Regarding fair representation of all eligible voters by BVR, about 31% (98) of the respondents strongly believe that the BVR ensures a fair representation, and an additional 32% (101) agree. On the contrary, approximately 19% (59) disagreed, 17%

(55) strongly disagreed, while only about 2% remain neutral. The mean score here is 3.4, leaning towards agreement.

On political motives behind parties' concerns vs. genuine system efficiency issues, a combined total of about 40% (127) either strongly agree or agree that the concerns are more politically driven. However, over 35% (113) disagreed, and roughly 23% (72) strongly disagreed with this sentiment, indicating skepticism about the political motivations. Only 2% remain neutral. With a mean score of 2.9, the sentiments here also hover slightly below neutral.

Of the BVR system's impact on reducing voter impersonation, close to 48% (152) of the respondents strongly believe that the BVR system has significantly reduced voter impersonation, while about 15% (49) agree. However, 14% (43) disagreed, and 23% (72) strongly disagree. An insignificant percentage (less than 1%) remains undecided. With a mean score of 3.7, this statement has a more robust agreement than others.

The grand mean score for all items is 3.1, slightly above neutral. This result suggests that, on average, the respondents are mildly optimistic about the effectiveness and relevance of the BVR system in The Gambia.

In conclusion, while respondents generally believe in the potential benefits and effectiveness of the BVR system, there is still a noticeable division in views, especially on the motivation behind the political parties' concerns and the actual efficacy of the system in addressing past election challenges.

Table 1. Respondents' views on the Validity of Concerns Raised by Political Parties Concerning the Biometric Voter Registration (BVR) System and its Efficacy in Addressing Election Irregularities in The Gambia.

ITEMS	SA	A	U	D	SD	Total	Mean
The BVR system effectively addresses past election irregularities in The Gambia.	95 (29.87)	52 (16.35)	9 (2.83)	87 (27.37)	75 (23.58)	318 (100)	2.6
Political parties have genuine concerns regarding the accuracy of the BVR system.	112 (35.22)	89 (27.99)	5 (1.57)	60 (18.87)	52 (16.35)	318 (100)	2.9
The BVR system ensures a fair representation of all eligible voters in The Gambia.	98 (30.82)	101 (31.76)	5 (1.57)	59 (18.55)	55 (17.30)	318 (100)	3.4
Political parties' concerns about BVR are mainly politically motivated rather than system efficiency-driven.	56 (17.61)	71 (22.33)	6 (1.89)	113 (35.53)	72 (22.64)	318 (100)	2.9
The introduction of the BVR system has significantly reduced instances of voter impersonation.	152 (47.80)	49 (15.41)	2 (0.63)	43 (13.52)	72 (22.64)	318 (100)	3.7
Grand Mean							3.1

Source: Fieldwork, (2023).

4.1 Test of Hypothesis One

H_0: The introduction of the biometric voter registration system in The Gambia has not significantly reduced voter registration irregularities.

4.1.1 Simple Regression Empirical Model

To test the hypothesis using a Simple Linear Regression Model, we can set up the model as follows:

Let: Y = voter registration irregularities (VRI) (Dependent Variable) while X = Biometric voter registration system in The Gambia (BVRS) (Independent Variable)

The Simple Linear Regression Model can be as:

$VRI=\beta_0 + \beta_1 BVRS + \epsilon$ ....eq (1)

Where:

- β_0 is the y-intercept (it represents the value of Y when X is 0).
- β_1 is the slope of the regression line (it represents the change in Y for a one-unit change in X).
- ϵ is the error term (captures the variability in Y that X does not explain).

The null hypothesis (H_0) states:

$\beta_1=0$

This means no significant relationship exists between the Biometric Voter Registration System (BVRS) and Voter

Registration Irregularities (VRI) in The Gambia. Suppose the results from the regression analysis indicate that β_1 is significantly different from zero (using a predetermined significance level, usually α=0.05). In that case, we can reject the null hypothesis to accept the alternative hypothesis:

H_a: β_1 is not equal to 0.

This result would imply a significant relationship between the BVRS and VRI in The Gambia.

Table 2. If BVRS affects VRI in The Gambia

Simple Regression Coefficients[a]						
		Unstandardized Coefficients		Standardized Coefficients		
Model		B	Std. Error	Beta	T	Sig.
1	(Constant)	318.000	4.0127		59.890	.000
	Biometric Voter Registration System in The Gambia (BVRS)	-89.040	.032	-.874	-48.221	.000

a. Dependent Variable: Voter Registration Irregularities

Source: Fieldwork, (2023).

The regression table showcases the relationship between The Gambia's Biometric Voter Registration System (BVRS) and Voter Registration Irregularities. When breaking it down:

The constant's coefficient is 318.000, meaning that in the absence of the BVRS, we expect to see 318.000 units of Voter Registration Irregularities.

The BVRS coefficient stands at -89.040. This result means that for every unit increase or improvement in BVRS, Voter Registration Irregularities decrease by 89.040 units. The negative sign indicates an inverse relationship: irregularities reduce as BVRS becomes more effective in The Gambia electoral process.

The significance level (p-value) for the constant and BVRS is .000, well below the commonly accepted threshold of 0.05. This result means the findings are statistically significant and not likely due to random chance.

The standardized coefficient (Beta) for BVRS is -.874. This measures how many standard deviations the outcome (irregularities) will change per standard deviation increase in BVRS.

The data underscores the BVRS's importance in The Gambia's electoral system. The BVRS plays a pivotal role in minimizing voter registration issues, and the stronger the system, the fewer the irregularities. This could indicate a clear direction for policymakers: invest in and optimise the BVRS to ensure a more transparent and credible electoral process.

4.2 Test of Hypothesis Two

H_0: The challenges faced by the IEC in implementing the BVR system are not associated with the concerns raised by political parties regarding election mismanagement.

4.2.1 Correlation

Correlation is a statistical measure that describes the extent and direction of the linear relationship between two variables, as discussed below.

Table 3. Correlations

		The challenges faced by the IEC in implementing the Biometric Voter Registration System (BVRS)	The concerns raised by Political Parties Regarding Election Mismanagement
The challenges faced by the IEC in implementing the Biometric Voter Registration System (BVRS)	Pearson Correlation	1	-1.000**
	Sig. (2-tailed)		.000
	Sum of Squares and Cross-products	3792.917	-3792.917
	Covariance	344.811	-344.811
	N	12	12
The concerns raised by Political Parties Regarding Election Mismanagement	Pearson Correlation	-1.000**	1
	Sig. (2-tailed)	.000	
	Sum of Squares and Cross-products	-3792.917	3792.917
	Covariance	-344.811	344.811
	N	12	12

**Correlation is significant at the 0.01 level (2-tailed).
Source: Fieldwork, (2023).

Table 3 provides a correlation assessment between the obstacles the Independent Electoral Commission (IEC) encounters while adopting the Biometric Voter Registration System (BVRS) and the issues political entities highlight about election mismanagement.

The analysis utilises the Pearson correlation coefficient, which discerns the linear connection between two factors. A coefficient value of -1.000 here indicates that when the IEC faces more challenges in BVRS implementation, concerns from political factions about election mismanagement proportionally decrease. This perfect negative relationship is further reinforced by a p-value of .000, highlighting its statistical significance.

Interestingly, the Sum of Squares and Cross-products and the covariance values, 3792.917/-3792.917 and -344.811, respectively, reinforce this inverse connection between the variables. With data from 12 paired observations, the table suggests that effective problem management and communication by the IEC might reduce political entities' concerns, even when BVRS implementation faces issues.

This seemingly counterintuitive result underscores the complex interplay between technological initiatives in electoral processes and stakeholder perceptions. Effective challenge resolution and transparency by the IEC might bolster political party confidence. This result highlights the necessity for electoral bodies to proactively manage, communicate, and address issues when introducing technologies like BVRS.

Moreover, the outcomes hint at the depth of oversight and attention political groups bestow upon the IEC's activities. The findings also present avenues for more in-depth qualitative investigations into stakeholder perceptions and underscore the significance of context when interpreting these results, as regional sociopolitical dynamics can influence such correlations.

This analysis offers pivotal insights into electoral technological advancements and political party responses in The Gambia, emphasising the importance of open communication, transparency, and effective problem resolution.

5. DISCUSSION

Table 1 showcases diverse views from respondents regarding the Biometric Voter Registration (BVR) System and its implications on the electoral process in The Gambia. The results revealed a division in the respondents' views. About 30% of the respondents firmly believe in the BVR system's ability to rectify past electoral malpractices, while nearly 52% disagreed and strongly disagreed. Given a mean score of 2.6, slightly below the neutral mark, there is a hint of scepticism towards the system's effectiveness. In their study, "Biometric Recognition in Developing Countries," researchers suggest that while biometric systems, like the BVR, promise improved security and accountability, their effectiveness is often contingent upon the infrastructural, socio-political, and operational contexts of a country (Foudil, 2017).

A considerable 63% of respondents agreed and strongly agreed that political parties have genuine concerns regarding the accuracy of the BVR system. The mean score for this item is 2.9, indicating a mild agreement with the sentiment. Gelb and Clark (2013) elucidate that political parties' concerns are often rooted in the potential for system errors, data breaches, and voter exclusion.

A combined 63% (agreed and strongly agreed) feel the BVR ensures a fair representation of eligible voters. With a mean score leaning towards agreement at 3.4, this sentiment resonates well with studies highlighting the role of biometric systems in fostering inclusivity and minimising voter exclusion (Mgovano, 2019).

The data offers an intriguing perspective on the debate over whether the concerns raised are more politically motivated than grounded in genuine system efficiency issues. Approximately 62% of respondents believe this to be the case. However, a nearly equivalent combined percentage (58%) disagreed or strongly disagreed, underscoring a significant divide in public opinion. This dichotomy underscores the complexity of differentiating genuine concerns from politically driven narratives.

Respondents recognised the BVR's value in reducing voter impersonation. A combined 63% (agreed and strongly agreed) believe that the BVR system has considerably reduced this issue. This sentiment aligns with scholarly literature, emphasising biometric systems' pivotal role in combating voter fraud and impersonation (Thiel, 2020). The grand mean score for all items suggests a mild positivity surrounding the BVR system in The Gambia, although nuances in opinions are evident.

For Hypothesis One, the simple regression analysis denotes a significant inverse relationship between the BVRS and Voter Registration Irregularities. This result implies that as the BVRS's efficacy improves, irregularities diminish. These findings corroborate studies emphasising biometric systems' role in enhancing electoral integrity (Akpan & Adagba, 2018).

For Hypothesis Two, the Pearson correlation coefficient indicates a perfect negative relationship between the challenges the IEC faces with BVRS and concerns raised by political parties. This unexpected result suggests that political party concerns decrease when the IEC is transparent about challenges. Transparency in the electoral process has been shown to mitigate concerns and build trust (Asante, 2019).

In conclusion, the introduction of the BVR system in The Gambia has evoked a spectrum of opinions, as reflected in the data. While a general sentiment supports the BVR's potential to improve electoral processes, divisions in views emphasise the importance of public outreach, transparency, and continuous system refinements.

6. CONCLUSION AND RECOMMENDATIONS

Based on the findings, the study advanced the following recommendations:

Given the divided views on the effectiveness of the BVR system, there is a clear need for increased public awareness campaigns. The electoral commission (IEC) should work on elucidating the functionalities, benefits, and limitations of the BVR system to dispel misconceptions.

Considering that the potential effectiveness of the BVR system hinges on the infrastructural context, the government should invest in the BVR system to help strengthen the technological infrastructure supporting the system, ensuring its reliability and integrity.

With many believing that political parties have genuine concerns regarding the BVR's accuracy, engaging in a dialogue with political stakeholders to address these concerns and collaboratively work towards improvements is essential.

Given the unexpected result suggesting increased transparency from the IEC leads to decreased concerns from political parties, it is recommended that the IEC maintain or even heighten transparency levels, consistently updating stakeholders about challenges, developments, and improvements.

The BVR system should undergo regular audits and evaluations to identify and rectify potential vulnerabilities, ensuring it stays updated with the latest technological advancements.

Set up platforms or avenues where citizens can provide feedback on their experiences with the BVR system. This act will provide first-hand information that can be pivotal in making system adjustments and improvements.

Ensure the BVR system continues to foster inclusivity. Special provisions should be made for marginalised groups to ensure seamless registration and voting, reinforcing the democratic principle of fair representation.

Given the positive sentiment about the BVR system's role in reducing voter impersonation, more resources should be directed to reinforce this aspect of the system, ensuring voter fraud continues to decrease.

Establish collaborations with technological and biometric experts for periodic review and upgrading of the system. This act will ensure that the BVR remains robust and is protected against potential breaches.

Provide extensive training to election officers, political party representatives, and other stakeholders on the operational aspects of the BVR system. This action will ensure smoother election processes and reduce misunderstandings related to the system's functionalities.

These recommendations could help harness the full potential of the BVR system in The Gambia and ensure a more transparent, inclusive, and efficient electoral process.

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