

PRELIMINARY STUDY ON THE EFFECTIVENESS OF THE PROTOTYPE ELECTRO SADJADDAH AS A TOOLS FOR HELPING A DISABLED PEOPLE

Saharuddin Bin Talib¹, Aishah Binti Saim², Johan Lela Andika Bin Johan Budiman³

¹ *Department of Electrical Engineering, Polytechnic Sultan Salahuddin Abdul Aziz Shah, 40150 Shah Alam, Selangor*

² *Department of Electrical Engineering, Polytechnic Sultan Salahuddin Abdul Aziz Shah, 40150 Shah Alam, Selangor*

³ *Department of Electrical Engineering, Polytechnic Sultan Salahuddin Abdul Aziz Shah Selangor 42700 Shah Alam, Selangor*

ABSTRACT

This study is to identify the effectiveness of the prototype Electro Sadjaddah as device to help disabled people especially in categories half blind or blind people during their prayer. This is a preliminary study and data was collected through questionnaires which contains two main sections. A total of 20 respondents from Islamic Center, Politeknik Sultan Salahuddin Abdul Aziz Shah are participated in this study. Results showed that respondents' interest has increased by 95% when using Electro Sadjaddah. The result show that this prototype can help disabled people to perform the prayer.

Keyword: Effectiveness, Electro Sadjaddah

I. INTRODUCTION

The development of the Electro Sadjaddah prototype is designed to help the disabled people in blind category during their prayer. It also can used for those people who like camping or travelling. The construction of this device based on compass tool which detects the direction of the north. Then HMC 6352 provides an output and send to Arduino Uno for processing. Arduino Uno programming are calculate the direction of Qiblah. After compiler, this device will produce the sound to attract the customer.

II. OBJECTIVES OF THE STUDY

Specifically, the objectives are to:

- a. Identify the stage of Electro Sadjaddah requirement for the disabled people?
- b. Identify the acceptance of Electro Sadjaddah for the Muslims?

III. STUDY QUESTIONS

Through this study, researchers tried to find answers to the following questions:

- a. What is the the stage of Electro Sadjaddah requirement for the disabled people?
- b. What is the acceptance of Electro Sadjaddah for the Muslims?

IV. LITERATURE REVIEW

For Muslim it is obligatory to perform five times solah throughout the day and the night. All the Muslim's need the direction of Qibla before performing prayers.

“From whencesoever Thou startest forth, turn Thy face in the direction of the sacred Mosque that is indeed the truth from the Lord and Allah is not unmindful of what ye do”

(Surah al_Baqarah: Verse 149)

According to the traditional Muslim view, the Qibla originally faced the Noble Sanctuary in Jerusalem. This Qibla was used for over 13 years, from 610 CE. Seventeen months after the Islamic prophet Muhammad’s 622 CE arrival in Medina. William Montgomery Watt (1974)

Some people are not familiar to use a compass or maps to find a direction of Qibla. According to Norliza Morban (2009) by developing a device as known as Electronics Travel Aid (ETA) With Compass and Qibla Finder Using HMC6352. ETA are using magnetic sensor as a direction and PIC18F452 as a controller.

Determining the direction of Qibla was a central issue and a constant generator of a scientific environment during the Islamic Golden Age, one that required both mathematics and observation. Muslim scientist who contributed works to determine the Qibla direction from any point on the Earth’s surface were: Al-Khawarizimi, Habash al-Hasib al-Marwazi, Al- Nayrizi, Al-Battani, Ibn Yunus, Al-Sijzi, Abu Nasr Mansur, Ibn al-Haytham, Al-Biruni, Nasir al_din al-Tusi, Ibn al-Shatir and Al-Khalili. Moussa, Ali (2011)

V. METHODOLOGY

A. Introduction

The methodology is an important aspect in ensuring the objectives and goals of the research could be achieved as planned. According to Hornby (1985), the methodology is a set of methods used to conduct research on a particular subject of study. Therefore, this section will discuss the methodology of study, sample, instruments, procedures and process of data analysis to answer the research questions.

B. The sample of study

A sample of 20 students Muslims in PSA Islamic Centre at Politeknik Sultan Salahuddin Abdul Aziz Shah. In this study, the instrument used is a survey method that uses a quantitative approach. The questionnaire is consists of three parts. Part A is about the respondents' background. Part B is a questionnaire related to the Electro Sadjaddah. Descriptive statistical methods is used in data analysis in the form of Likert scale. To facilitate the data analysis, the Likert scale is categorize in Table 1. This table is referred to Rahimah's research (2006).

Table 1: Likert scale classification

	Strongly disagree (1)	Disagree (2)	Almost agree (3)	Agree (4)	Strongly agree (5)
Category	Disagree		Agree		

According to Mohd Majid (1990), descriptive method is suitable for research that aims to explain a problem or phenomenon.

VI. FINDINGS

The findings are based on analysis of the data obtained from 20 respondents.

a. Data collection

To facilitate the data analysis, data is collected according to the respondents' background and the requirement of electro sadjaddah for the Muslims.

Table 2:

No.	Item	Frequency		Percentage
		Disagree	Agree	Agree
1.	Electro Sadjaddah is easily to use due to its structure that is user friendly.	1	19	95
2.	Security features on the Electro Sadjaddah are concerned.	3	17	85
3.	The layout of the Electro Sadjaddah attracted me to use it.	2	18	90
4.	Electro Sadjaddah can help disabled people to perform prayer.	1	19	95
5.	Electro Sadjaddah size is suitable for use	4	16	80
6.	Electro Sadjaddah can be used anytime	2	18	90
7.	Electro Sadjaddah is very hardy	4	16	80
8.	Electro Sadjaddah is very helpful to travelers to pray	2	18	90

From the studies that have been conducted show that item no. 1 and no. 4 are interconnected with a percentage 95% whereas the lowest percentage 80% are coming from item no. 5 and no. 7.

VII. CONCLUSION

From the studies all the respondents agree that the prototype of Electro Sadjaddah are very helpful for the Muslim's to perform their prayer. All the percentage of questionnaires achieved 80% and above for the all items.

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