

**AN ETHICAL EVALUATION OF CITIZEN JOURNALISM ON  
INSTAGRAM IN BRUNEI DARUSSALAM**

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بِسْمِ اللَّهِ الرَّحْمَنِ الرَّحِيمِ

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# **SUPERVISION**

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ON INSTAGRAM IN BRUNEI DARUSSALAM**

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## **ABSTRACT**

### **AN ETHICAL EVALUATION OF CITIZEN JOURNALISM ON INSTAGRAM IN BRUNEI DARUSSALAM**

Citizen journalism; the act of participation and involvement of the citizens in the journalism field has become predominant by the presence of social media such as Instagram. Problems develop when there are unverified viral messages spreading amongst the public. Since the social media allows users to express their opinions, biased opinions may cause harm and disrupts the harmony of the society or community. These can cause misinformation, resulting in confusion or misunderstandings. The purpose of this paper is to determine how Bruneian citizen journalists participate in citizen journalism, to investigate the Islamic ethical practice and the factors contributing to the act, in order to design and develop a mobile application prototype of a guideline in Islamic ethical practice in citizen journalism. The effectiveness of the mobile application prototype is also determined. This study uses mixed method approach, begins with qualitative for the first three objectives then quantitative to measure the effectiveness. A purposive sampling with interviews and document analysis were used for the qualitative method while a questionnaire was used to collect from a simple random data sampling. It was found that Bruneian citizen journalists commonly reshare information using the Instagram stories, discuss matters with their audience using Instagram stories and privately, and share their opinions through Instagram stories. They practice Islamic ethical conduct where they gather information from reliable sources and aware of the contents of viral messages. If they happen to share the wrong information, they practice accountability. Factors contributing to citizen journalism include citizen's responsibility to inform others and social interaction. As a product from this research, the data obtained from the interviews and the questionnaire were used as part of the requirement analysis for the mobile application prototype development.



## **ABSTRAK**

### **PENILAIAN ETIKA JURNALISME WARGA DI INSTAGRAM DI BRUNEI DARUSSALAM**

Wartawan warga; tindakan penglibatan dan penyertaan warga dalam bidang kewartawanan telah menjadi dominan dengan kehadiran media sosial seperti Instagram. Masalah berkembang apabila terdapat mesej viral yang tidak disahkan menyebar di kalangan orang awam. Ini boleh menyebabkan penyebaran maklumat salah yang menyebabkan kekeliruan atau salah faham. Tujuan kertas kerja ini adalah untuk menentukan bagaimana wartawan warga Brunei menyertai dalam kewartawanan warga, menyiasat amalan etika Islam dan faktor-faktor yang menyumbang kepada tindakan tersebut, untuk mereka-bentuk dan membangunkan prototaip aplikasi mudah alih bagi panduan dalam amalan etika Islam dalam kewartawanan warga. Keberkesanan prototaip aplikasi mudah alih juga ditentukan. Kajian ini menggunakan pendekatan kaedah campuran, bermula dengan kualitatif kemudian kuantitatif untuk mengukur keberkesanannya. Persampelan bertujuan bagi temu bual dan analisis dokumen digunakan untuk kaedah kualitatif sementara soal selidik digunakan untuk mengumpul data rawak mudah. Didapati bahawa wartawan warga Brunei biasanya mengedarkan semula maklumat dan berkongsi pendapat mereka melalui *Instagram stories*. Mereka mengamalkan etika Islam bilamana mereka mengumpul maklumat dari sumber yang boleh dipercayai dan peka terhadap kandungan mesej viral. Faktor yang menyumbang kepada kewartawanan warga termasuk tanggungjawab untuk memberitahu orang lain dan interaksi sosial. Sebagai produk daripada kajian ini, data yang diperoleh dari temu bual dan soal selidik digunakan sebagai sebahagian daripada analisis keperluan untuk pembangunan prototaip aplikasi mudah alih.

## ملخص البحث

### تقييم أخلاقي للصحافة المواطنة على إنستغرام في بروناي دار السلام

الصحافة المواطنة، أصبحت مشاركة واشتركت المواطنين في مجال الصحافة سائدة بفضل وجود وسائل التواصل الاجتماعي مثل إنستغرام. تنشأ المشاكل عندما ينتشر رسائل فيروسية غير متحققة بين الجمهور. حيث يتيح للمستخدمين وسائل التعبير عن آرائهم، قد تتسبب الآراء المتحيزة في إلحاق الضرر وتعكير صفو المجتمع أو المجموعة. ويمكن أن يؤدي ذلك إلى نشر معلومات خاطئة مما يؤدي إلى الارتباك أو التسبب في سوء الفهم. ويهدف هذا البحث إلى تحديد كيفية مشاركة الصحفيين المواطنين البرونايين في الصحافة المواطنة، ودراسة الممارسات الأخلاقية الإسلامية والعوامل المساهمة في هذا الفعل، من أجل تصميم وتطوير نموذج لتطبيق الهاتف المحمول لإرشاد الممارسات الأخلاقية الإسلامية في الصحافة المواطنة. ويتم تحديد فعالية نموذج التطبيق المحمول أيضاً. وقد استخدم هذا البحث نهجاً مختلطاً، بدأ بالنهج النوعي للأهداف الثلاثة الأولى ثم النهج الكمي لقياس الفعالية. وقد تم استخدام عينة منتقاة بشكل عمدة مع المقابلات وتحليل الوثائق للنهج النوعي، في حين تم استخدام استبيان لجمع البيانات من عينة بسيطة وعشوائية. وقد تبين أن الصحفيين المواطنين البرونايين يشاركون المعلومات عادة عن طريق مشاركتها على قصص إنستغرام، ويناقشون المسائل مع جمهورهم باستخدام قصص إنستغرام.

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# CHAPTER ONE

## INTRODUCTION

### 1.1 Introduction

Living in the Industrial Revolution 4.0 era, people are forced to adapt the idea of digitising almost everything, from work to household to everyday life. The media specifically related to journalism is no exception. Traditional media such as television and newspaper are gradually evolving, converging into a more simplified medium. Media convergence is a necessity in today's world, and thus people have no choice but to use it (Yuniarti et al, 2020). The journalism industry undergoes a huge change with the declining number of readers as digitalization takes over – what used to be passive consumers back then now have become contributors of comments, opinions and even competition; instead of a one-way communication of disseminating news and information, journalism has evolved into a two-way communication (Long, 2014). The citizens, with their curiosity and dissatisfaction of the one –sided story from the professional media, demand more, searching for the possible information they can get from different perspectives.

Thus, there is a rise of an alternative media called ‘participatory journalism’ (Willis & Bowman, 2003) or sometimes called ‘citizen journalism’, where the citizen can ‘participate’ in the role of disseminating information. Willis and Bowman in their book ‘We Media: How audiences are shaping the future of news and information’ defined citizen journalism as the act of an individual or a group of people involved in the process of collecting, analyzing and disseminating information independently in order to provide relevant information that the public needs. The rise of the digital platforms in the world of emerging internet helps enhance the participatory culture of the society, providing a platform for more freedom in expressing oneself, encouraging them to form their own community with similar interests.

As citizen journalism is acknowledged in most parts of the world, media agencies adopted the new media by providing platforms where the public can write or upload the information they gathered firsthand (Nah et al, 2020). This is where they crowd-source the information to be filtered before they release the information back to the public. Other debates surrounding this phenomenon include the conflicting perception of professional journalists towards citizen journalists; in their ethical conduct, roles and impact they bring to the society.

## **1.2 Background of the study**

In South Korea, citizen journalism was first celebrated when a renowned organisation, OhmyNews opened its online site for the public and about 26,000 registered to become citizen journalists. This is an example of collaborative media work between the citizen and the professional media, where the public are free to share information, taking part in commenting on the professional news agency stories as well as contributing images or videos in which journalists are absent during a certain event (Kang, 2016).

During the September 11 event, many witnesses recorded the unfolding event before them and shared these recordings to social media and blogs platforms, leading to assumptions and ‘conspiracies-theories’ to flourish amongst the people; despite helping the professional journalists to collect their resources accordingly. Blogs and social network platforms are tools that the public make use for easy information sharing especially today in the age of digitalization. The access to these social network platforms makes anybody a ‘journalist’, who could easily share and publish their own thoughts (Mind Matters Consultant, 2021). Anybody can write about what they love, or comment on a particular issue with the help of the blogs and social media, but with too much information that is now mixed with personal opinions and biases, with less knowledge on ethical conducts; makes the people think of which one to believe.

According to Brunei Darussalam Information Communications Technology (ICT) Household Report 2019 by AiTi, Brunei residents are more familiar with these top three social media platforms: Whatsapp, Facebook and Instagram. They are used daily at 94.6% for Whatsapp, Facebook 60.6% and 57.6% for Instagram. With the population being mostly digitally literate and having access to tools that connect them to the internet, they are easily able to create social media accounts (AiTi, 2019).

Instagram is one of the social media sites that are popular among Bruneians (AiTi, 2019). It is a social network that offers visual communication to its users, hence an easy-to-use media platform; whether for commercial use, for personal ‘blog’ or for media or information dissemination. People can also choose whether to just see the photos or images uploaded, or read the captions accompanying them. This comes with a consequence of a high rate of trending or sprouting information across the nation, despite the information being true or otherwise. For example, in September 2021, Borneo Bulletin, the local newspaper agency; reported that a woman was charged by the court for making a false statement via a video that later spread and caused public alarm (Borneo Bulletin, 2021).

Another example regarding ‘viral’ videos or images on the social network platforms is during January 2021, where there was a report on another false statement being circulated to warn the public that there was a Covid-19 outbreak in one of the districts in Brunei. It would have been helpful information for people to be aware of, but the fact that it was neither verified nor true, is already breaching the Islamic principles of good character and attitude. Without the awareness of the significance of Islamic ethical practice particularly in journalism, ethical conduct is easily jeopardized.

### **1.3 Statement of Problem**

Numerous articles have mentioned the rise of citizen journalism, trying to define the phenomena and the role it plays in the journalism field. Researchers and even professional journalists conjecture about the roles and credibility of citizen journalism. From their research, citizen journalism plays the role of the public’s participation in the process of informing one another while also expressing their opinions. The presence of citizen journalism invokes questions on its credibility; comparing them with the role of professional journalists, including their ethical conduct. Throughout the ongoing debates around the world, journalists or media agencies begin to accept the phenomena and adapt to the situation, mostly by creating citizen journalism platforms where the public are allowed to write and disseminate information through these platforms, as there is a great need of platforms which can control the types of information disseminated to the public.

The study on citizen journalism in Brunei setting is more concerned on the ethical practice, particularly in the Islamic perspective as Brunei is a nation that holds the Islamic Malay Monarchy (Melayu Islam Beraja) philosophy. It is a blend of the teachings of Islam as the country's official religion, their Malay language and culture, and the system of monarchy with the Sultan as the true ruler (Sharbawi & Mabud, 2021). However, there is insufficient knowledge on citizen journalism behaviour studied in Brunei setting, let alone on the Islamic ethical practice. The closest studies that discuss on Islamic ethical practice are those studied in Malaysia and Indonesia, where Islam is the major religion.

Though there is a lack of study in Brunei, citizen journalism is easily observed through everyday encounters on social media platforms. Social media encounters witness the dissemination of less accurate information, forwarded without verification or true source. It could be the assumptions of individuals or merely opinions. This may lead to misinformation for those on receiving ends, especially for those who do not bother to read and investigate more on the news or topic of discussion. Providing proofreader for surveillance purpose in the social media platforms may take a huge effort, but with proper guidance and awareness on basic ethical Islamic values, those disseminating and on the receiving ends may learn to decide what to do with the information.

The comment sections of the social media platform, on the other hand, provides a space for the public to express their opinions, but more often than not, it is observed that these comment contributors voiced out opinions which are highly likely to be biased. These vocal opinions may surface not only in the comment sections, but also written on their own individual social media platform. Biasness potentially divides the nation, hence the need to check for biasness in the information received or disseminated.

The negligence in this ethical area of citizen journalism generates the lack of awareness and accountability amongst the public. Moreover, with the access to Instagram application, and the simple functions on Instagram; makes disseminating information convenient by anyone, anywhere. Overtime, the platform is overused, leaving the ethical practice behind, let alone the Islamic values. Thus, the need to educate the public about the Islamic ethical practice when participating in citizen journalism, especially that Brunei has Islamic roots in the nation's philosophy as well as the people's beliefs.

#### **1.4 Research Objectives**

In light of the trending occurrence of individuals actively playing the role of information contributors in Brunei, this research aims:

1. To determine how Bruneians participate in citizen journalism on Instagram
2. To investigate how Islamic ethical conducts are practised in information dissemination amongst Brunei citizen journalists
3. To analyse the factors that contribute to the act of citizen journalism in an individual
4. To develop an interactive mobile application prototype for a guideline on citizen journalism act in Brunei
5. To evaluate the effectiveness of the mobile application prototype

#### **1.5 Research Questions**

From the research objectives, the research will later answer these research questions:

RQ1: How do Bruneian citizen journalists participate in citizen journalism on Instagram?

RQ2: How do Bruneian citizen journalists practice Islamic ethical conduct in citizen journalism?

RQ3: What are the factors that contribute to citizen journalists to perform citizen journalism?

RQ4: What can be done to increase the awareness and education on Islamic ethical practice in Brunei citizen journalism?

RQ5: How effective is the mobile application prototype in educating about Islamic ethical practice in citizen journalism?

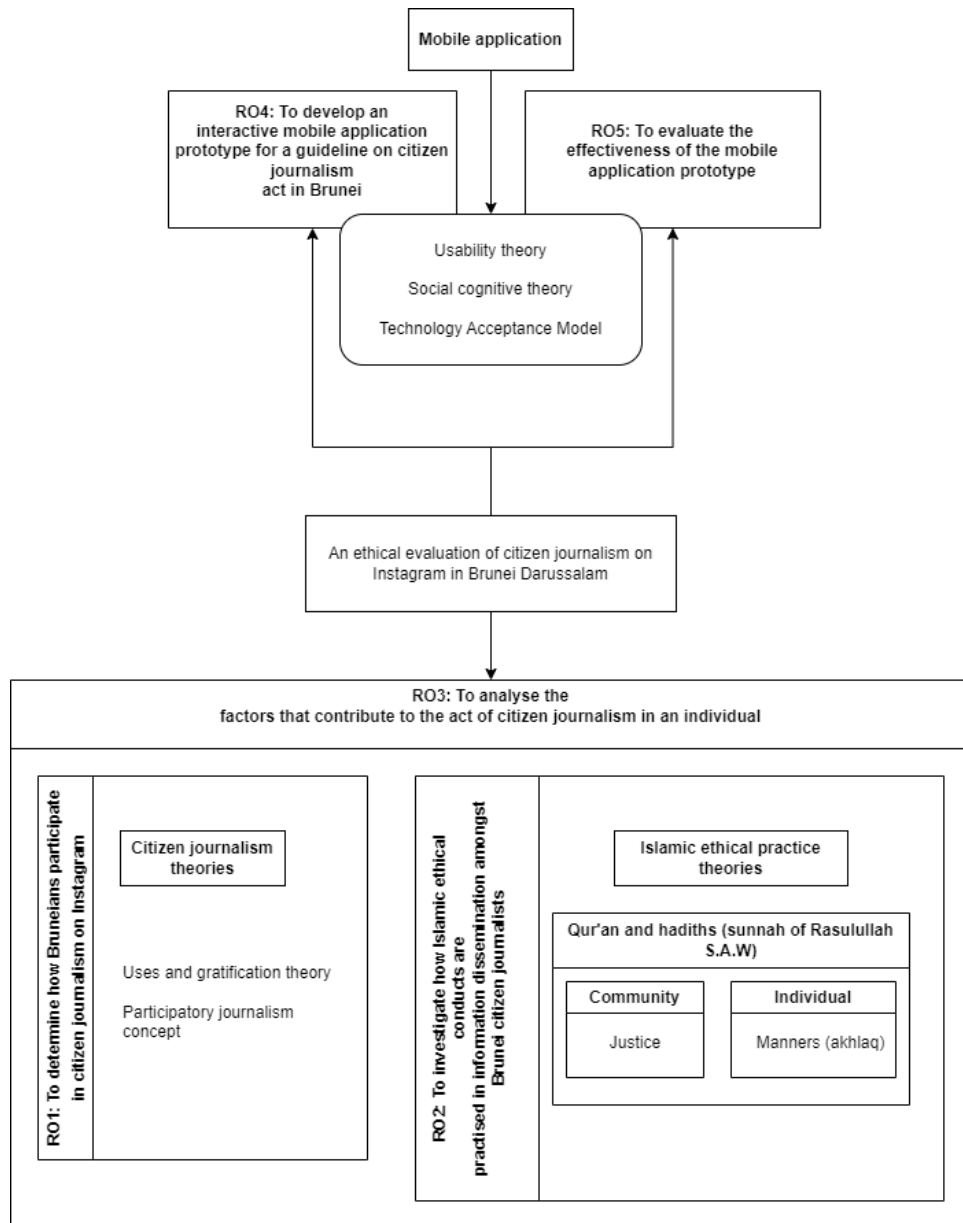
## **1.6 Research Hypothesis**

The research hypothesis are as follows:

H<sub>1</sub>: There is a significant relationship between understanding of Islamic values social media handling and the usage of the mobile application prototype.

H<sub>0</sub>: There is no significant relationship between understanding of Islamic values in social media handling and the usage of the mobile application prototype.

## **1.7 Theoretical Framework**



**Figure 1.0.1** Theoretical framework

### 1.7.1 Islamic Ethical Practice

Islam does not only exist as a religion, but it also acts as the way of life of the believers.

*“...We sent down the Book to you which makes everything clear...”* (the Qur’an, surah An-Nahl verse 89)

The Qur’an is a manual or guide for the believers, and the most significant of the guides is the ethics. Islamic ethics are rooted in the teachings of the Qur'an and the Hadiths, which provide guidance on the proper conduct for individuals and communities. According to Islamic ethics, individuals must act in accordance with the



will of Allah, and follow the example set by the Prophet Muhammad (peace be upon him). Hence the Islamic ethical practice is based on the Qur'an and Sunnah.

Ethics in Islam goes back to the source of ethics, which is *al-akhlaq (manners)*. The primary concern in ethics is the concept of differentiating between the 'good' and the 'bad', as well as 'the right' and 'the wrong' (Ramadan, 2018). In Islam, virtue ethics and personality ethics are not separable, as Islamic ethics integrate both behavioral and psychological sides (Malik, 2011). It reflects *akhlaq (manners) & adab (etiquette)* - these two terms overlapped to produce the notion of 'proper conduct', of positive action and virtue. A hadith reported by a companion, Abu Hurayra mentioned that the Messenger of Allah (peace be upon him) said,

*"I was sent to perfect good character."* (Sahih Al-Albani, Musnad Ahmad)

This hadith emphasizes that ethics is vital in values and conduct; both individually (manners) and in the community (justice). Community ethics refer to the just and fair treatment of all members of society, regardless of their background or social status. This includes promoting social justice, equity, and fairness in all aspects of life, including politics, economics, and social relations (Mazrui & Shariff, 2001).

On the other hand, individual ethics refer to the manners and behaviours that Muslims should adopt in their daily lives. These include honesty, humility, patience, forgiveness, compassion, and respect for others. Individual ethics are closely tied to Islamic spirituality, and involve developing a strong relationship with Allah through acts of worship and service to others (Mazrui & Shariff, 2001).

In the context of citizen journalism, Islamic ethics can guide the behaviour of citizen journalists and ensure that their actions are aligned with the principles of justice and fairness. For example, citizen journalists can adhere to Islamic ethics by seeking out diverse perspectives, reporting on issues of public concern, and avoiding the spread of misinformation and harmful content (Ali, 2016).

Therefore, Islamic ethics are an important component of Muslim identity and provide guidance on both individual behaviour and community relations. By incorporating Islamic ethics into citizen journalism practices, Muslim citizen journalists can contribute to the creation of a just society. For this research, adherence to Islamic principles is the foundation and the basis for ethical behaviour of citizen journalism in Brunei.

### **1.7.2 Citizen Journalism from Uses and Gratification Theory**

The behaviour of people when posting and uploading contents on the social media, is explained by the uses and gratification theory. Uses and gratification focuses on the gratification of audience in the content they are attracted to, according to their satisfaction and psychological needs. Communication and reaching their ultimate needs are both basic life aspects that humans crave (Addison et al, 2020). These are found in the daily activities in one's social media platforms where people are now connected with others around the globe via internet. The interactivity amongst users gives a sense of belonging, encouraging them to participate more in their quest to seek social recognition or acceptance.

Uses and Gratification Theory is also relevant to the study of citizen journalism. Uses and Gratification Theory posits that individuals actively select and use media to satisfy their needs and desires, rather than being passive recipients of media messages (Katz et al., 1974).

In the context of citizen journalism, Uses and Gratification Theory suggests that people are motivated to engage in citizen journalism because it allows them to fulfil their needs for information, participation, and self-expression. By participating in citizen journalism, individuals can satisfy their desire for personal fulfilment and community engagement (Delli Carpini & Williams, 2001).

Research has shown that individuals who engage in citizen journalism are often motivated by a variety of factors, including a desire to share their knowledge and expertise, to participate in civic activities, and to challenge mainstream media narratives (Eberwein et al., 2019).

According to Chuang (2015), he described how people use social media; mainly for pleasure, social interaction and achievement. Gratification is obtained from their participation of the media they use. Whiting (2013) reviewed seven themes from which gratifications are gained during social media usage. Social interaction, information seeking, passing time, entertainment, relaxation, communicatory utility and convenience utility are some of the themes that were discussed. The top 2 reasons why people use social media are the social interaction and information seeking (Whiting, 2013).

According to the respondents in the previous study, social media gives them social life that created opportunities for them to meet different types of people, despite it being virtually and not face-to-face. In terms of information seeking, respondents used social media to learn on deals, products, businesses and self-education. It is where they usually learn new things. Thus, uses and gratification theory is essential in providing the theory and motivations of citizen journalism activities.

### **1.7.3 Mobile application: Usability theory**

One of the many theories in software development is the usability theory. Usability is the competence of a software product to be understood and learnt well by its users. Two notable ideas and guideline in usability are that of Krug's and Nielsen's.

Nielsen's (1993) book "Usability Engineering" presents a five-stage model of usability engineering that provides a comprehensive framework for designing and evaluating user interfaces. The five stages are requirement analysis, design, prototyping, user testing and maintenance.

Requirements analysis involves gathering information about the users, tasks, and environments that the technology will be used in. The goal is to identify the users' needs and requirements and to ensure that the technology is designed to meet those needs.

In the design stage, the design of the user interface is developed based on the requirements identified in the previous stage. The design should be focused on usability, with the goal of making it easy for users to accomplish their tasks. Next stage is prototyping. In this stage, a prototype of the user interface is developed to test and refine the design. The prototype should be interactive and allow users to perform tasks and provide feedback.

User testing phase involves testing the prototype with actual users to evaluate its usability and identify any usability issues. User testing can involve a range of methods, such as usability testing, cognitive walkthroughs, and empirical evaluations. The final stage, maintenance, involves maintaining and updating the user interface over time to ensure that it continues to meet the users' needs and remains usable.

Throughout each stage of the model, Nielsen provides specific techniques and guidelines for optimizing usability. For example, in the designing stage, he recommends using consistency, simplicity, and visibility to make the user interface more practical.

Another framework that closely relates with usability is the ADDIE model. The ADDIE model is a framework used in instructional design to create effective learning experiences for learners. In the context of usability, the ADDIE model is used to guide the design and development of user interfaces that are intuitive, easy to use, and meet the needs of the target audience. The analysis phase involves identifying the goals and objectives of the user interface, as well as the needs, characteristics, and preferences of the users. This information is used to inform the design phase, where designers create prototypes and mock-ups of the user interface that align with the identified goals and user needs.

The development phase involves building the actual user interface based on the design prototypes and specifications. The implementation phase involves deploying the user interface and ensuring that it is available to the intended users. Evaluation phase involves testing the user interface to assess its effectiveness, identify areas for improvement, and gather feedback from users for future design reference (Faulkner, 2003).

#### **1.7.4 Mobile application: Social cognitive theory**

Social cognitive theory is a theoretical framework that focuses on the reciprocal interaction between individuals, their behaviour, and their environment (Bandura, 1986). This theory has been used to explain a wide range of human behaviours, including technology adoption and use (Venkatesh & Bala, 2008).

When applied to mobile application development, social cognitive theory suggests that users' behaviour and perceptions are influenced by a variety of factors, including their prior experiences, beliefs, attitudes, and the design and functionality of the application itself. For example, a mobile application that is easy to use and provides clear feedback can increase users' belief in their ability to use the application effectively (Bandura, 1977). Additionally, social cognitive theory suggests that users' behaviour can be influenced by their social and cultural norms, as well as the norms of their online communities (Hsu & Lu, 2004).

To develop mobile applications that are effective and user-friendly, designers and developers can apply social cognitive theory to better understand users' needs and behaviours. This include conducting user research to understand users' prior experiences and beliefs, as well as designing applications that are easy to use and provide clear feedback as suggested by Venkatesh and Bala (2008). Also, designers can consider the social and cultural norms of their target audience and incorporate features that align with these norms.

### **1.8 Significance of the study**

This research is aimed to contribute to the studies of journalism in Brunei as there are limited sources and huge gaps in literature. The Islamic aspect of this study may provide beneficial knowledge for those seeking to choose citizen journalism as their career path in the future, and provide guidance especially in its ethics.

This research is also aimed to encourage youths to take part in citizen journalism, contribute something that benefits the society – but with the right attitude and ethical conduct, especially that aligns with Islamic values and Brunei's identity MIB (Islamic Malay Monarchy).

The final outcome of this research, which is to build a suitable guideline on Islamic ethical practice in citizen journalism in mobile application prototype form, will help raise awareness and educate the public, especially the youths, on decision making when facing or performing citizen journalism on any social media account.

### **1.9 Research Scope**

In this research, the study will take place in Brunei Darussalam. Brunei Darussalam has the national identity concept of Malay Islamic Monarchy, with Islam being the official religion. Brunei also aims to be a 'Negara Zikir' (Zikr Nation), which means Islam is practised not only as religion but as a way of life of Bruneians. The Malay and Monarchy system should be based on Islam or possess the Islamic values in them. As for the social network platform, this study is mainly focusing on Instagram, as Instagram is a social media platform that uses visual communication. On Instagram, people usually share images or photos or even videos, accompanied by captions; an

easy method to get a message across, to captivate people’s attention hence an easy platform for citizen journalists to use.

According to Azlan Othman Borneo Bulletin (2021), a local news agency; Brunei ranks second highest globally in Instagram usage, where it reaches 70.5% of the population. Not only Brunei is ranked the second highest in Instagram usage, Brunei is also the highest in internet penetration with mobile phones as the choice of gadgets that the residents are able to subscribe to, exceeding the total population by 136%. Instagram is better accessed from mobile phones, hence, being one of the most-used social media platforms in Brunei that allows citizens to update or keep updated with current issues on the spot, from wherever they are located.

The mobile application prototype development, on the other hand, was only limited to the early stage of application development, which is requirement analysis and designing of the mock-up, using a cloud-based online designing platform Canva. Below is the Gantt Chart of the timeline for the project:

YEAR	2022											2023		
Activities Month	M	A	M	J	J	A	S	O	N	D	J	F	M	
Identifying problem of research	■													
Identifying important functions required in the mobile application prototype		■												
Reading literature review		■	■	■										
Construct interview questions					■									
Validate interview questions					■									
Gathering user requirements through						■								
Planning of mobile application prototype						■	■							
Designing mobile application prototype							■	■	■					
Construct questionnaire										■				
Gathering feedback from early users using questionnaire											■			
Analyze data from interviews and												■	■	
Thesis Writing												■	■	

Figure 1.0.2 Gantt Chart of the research timeline

### 1.10 Research Limitation

The mobile application development was only limited until the designing stage; hence it is non-functional. Due to time constraint, and limited knowledge on programming or technical development, the best option was to design a mobile application mock-up from a designing platform, but with added links on each button in order to make it

clickable. However, the clickable mock-up can only be accessed and function on a virtual phone.

### **1.11 Definitions of Key Terms**

For the purpose of this study, the following terms have been defined as such:

**1.11.1 Citizen journalism:** The act of a citizen or a group of citizens playing an active role in disseminating information processes, including collecting of information and analysing the information, in order to provide reliable, independent and relevant information that the others in the community requires.

**1.11.2 Citizen journalist:** A person, who actively contributes information and brings about the concerns of the community or encourages the community to participate in social activities; on any social network platform. They are usually unpaid and untrained in journalism.

**1.11.3 Professional journalist:** A person who has a journalism background or is trained in journalism. They are paid, and usually work for media agencies.

**1.11.4 Journalism:** Information shared in the form of writing, photography and videography, usually of the public's general interests, for example, current issues the public is facing.

**1.11.5 Ethics:** Moral principles that manage citizen journalist's behaviour while conducting citizen journalism. In this study, it refers to ethical conduct according to the Islamic values that concur with the standard code of ethics in journalism for Brunei.

**1.11.6 Information dissemination:** Information disseminated in the form of texts, images and videos that are used to sow and scatter principles, opinions, ideas.

### **1.12 Organisation of the study**

The chapters in this research paper are organised as follow:

Chapter 1: Introduction

This chapter discusses on the background of the study, problem statement, research objectives and questions, theoretical and conceptual frameworks, significance of the study and research scope.

## Chapter 2: Literature Review

Literature review elaborates more on the topic of research, from the past studies' perspectives.

## Chapter 3: Methodology

The research methodology is explained in this chapter. It begins with the research design, research framework in the form of a flowchart, sampling procedure, instruments used, data collecting methods, data analysis, reliability and validity, pilot study and research ethic.

## Chapter 4: Design of Prototype

In this chapter, the mobile application prototype is explained in details.

## Chapter 5: Findings

This chapter focuses on the results and findings from the methodology carried out.

## Chapter 6: Discussion and Conclusion

This chapter concludes the research findings.

### **1.13 Conclusion**

This chapter concludes the overview, background of study, the problem statement, research objectives and research questions. They are followed by the theoretical framework, conceptual framework of the study, then the significance of this study, research scope definition of key-terms to be used in this research, and lastly the organization of this research paper. The next chapter will look into the literature review of the study.



## **CHAPTER TWO**

### **LITERATURE REVIEW**

#### **2.1 Introduction**

This literature review will discuss more in-depth the theoretical framework of Islamic ethics as well as the conceptual framework of citizen journalism. The section will then cover the discussion on how citizen journalism is related with Islamic values and ethical conduct. Both the theoretical and conceptual framework will be discussed after.

#### **2.2 Islamic Ethics**

Islam is descended upon the mankind as Allah's mercy. It serves not only as a religion but also a system or way of life of a believer. The Qur'an provides a manual, which covers all aspects of life, most of them touching significantly on ethics. Ethics in Islam can be referred to as the good values based on the Islamic teachings (Aidaros et al, 2013) and traces back to *al-akhlaq (manners)*, as the concern for ethics revolves around differentiating between the 'good' and the 'bad' or determining the 'right' from the 'wrong' (Ramadan, 2018). The same definition of Islamic ethics being referred to as *akhlaq* is also mentioned by Rahim (2013), although the definitions of *akhlaq* or Islamic ethics have long been mentioned by Muslim scholars such as Al-Farabi, Al-Ghazali, Ibn Miskawayh and Al-Razi; in which they refer as the state of the human soul which defines the characteristics of the human being (Rahim, 2013). A deeper understanding and reading of the Qur'an and the *sunnah* (Prophetic traditions) reveals a number of ethical values in every matter through stories and subjects concerning worship (*ibadat*) or social affairs (*mu'amalat*). By basing their actions on the Qur'an and the *sunnah*, a society is saved from the reckless behavior of its people, because it is a natural weakness

of human beings to have the tendency in making decisions that they find convenient for them regardless of whether it is right or wrong.

### **2.2.1 Ethical theories**

Several Western scholars had developed theories regarding ethics, with the question of what makes something ‘good’ or ‘bad’, or what is defined as ‘right’ and ‘wrong’. Some of the theories that surfaced are relativism theory, divine command theory, utilitarian theory, egoism theory, deontology theory and virtue ethics theory. Relativism theory suggests that there is no universal truth on the principles of ethics and it depends on each society. But this theory is rejected by Islam as some cultural ethics may be against the Islamic principles. The idea of divine command, meanwhile, is that what is perceived as ‘ethically right’ is what God commands us to do; while ‘ethically wrong’ is what God forbids us from doing. Utilitarian theory is when ‘ethically right’ means the action results in greater consequences when compared to other means. This theory is also being rejected by Islam because consequences is the only basis.

Another theory is egoism theory where an action is considered ‘ethically right’ when it promotes self-interests - which is against the teachings of Islam as Islam teaches us altruism, to help others and being just. Deontology theory, on the other hand, suggests that everyone must accept a ‘universal ethical actions and people are obliged to act according to rules. This however, is rejected because there is no clear source of this universal ethical rules when in Islam, the only source of ethical rules is the Islamic principles. Last but not least, the virtue ethics theory. This theory focuses on what makes a good person rather than focusing on what makes a good action, therefore, there are specific virtues that people should possess, but this is also rejected as the only basis is the virtue. In the Islamic perspective, only the divine command theory is accepted while most of Western societies reject this theory (Aidaros et al, 2013).

While the Qur’an is the source of Islamic principles, Prophet Muhammad (peace be upon him) was sent as an exemplary of these principles, that mankind should follow (*sunnah* - Prophetic traditions). As mentioned in a hadith narrated by Ahmad, the Prophet said, “I was sent to perfect good character.” Therefore, one should look up to

the Prophet to know how the ethics are applied. Ethics itself is a broad topic, hence this study will only be limited to the area of journalism (and photojournalism). Some of the theories that surfaced are relativism theory, divine command theory, utilitarian theory, egoism theory, deontology theory and virtue ethics theory. Relativism theory suggests that there is no universal truth on the principles of ethics and it depends on each society. But this theory is rejected by Islam as some cultural ethics may be against the Islamic principles. The idea of divine command, meanwhile, is that what is perceived as 'ethically right' is what God commands us to do; while 'ethically wrong' is what God forbids us from doing.

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### 2.2.2 Photojournalism in Islam

Photographers are potential agents of good. A good photographer will not leave these two values: honesty and trustworthy. Honest in doing work, and trustworthy in recording, capturing and disseminating images especially in journalism. Photos and truth are inseparable elements that bring the *haqq* (right) stands firmly on earth. In the book *Fotografi Gaya Mukmin - Panduan Fikah Seni Foto (Photography Mukmin Style - A Fiqh Guide On the Art of Photography)* by Ustaz Azhar Idrus and Imran Burhanuddin (2016), the book discusses about the Islamic jurisprudence on the field of photography, photojournalism included. In this book, photos selections (with different genres) are supported by *ahadith* (plural of hadith - sayings of the Prophet) and the Qur'an as the evidence of them being allowed in Islam as well as discussions on each genre of photography from Islam's perspective.

While photo taking seems trivial, in Islam, accompanying the action with ethical conduct is more acceptable. Having ethical conduct in photo-taking acts as a guide for adherence to the Islamic principles. One should start photo-taking with the right intention; to spread good and invite people to do good, not as a tool to spread false news, slander or degrading Islam, races or the nation. When capturing photos or videos, one should maintain their morals and boundaries, especially when they are surrounded by the public, Muslims or non-Muslims, men or women. Morals are highly recommended by the Prophet in one of his *hadith*, "Fear Allah wherever you are, follow a bad deed with a good deed and it will erase it, and behave with good character towards people." (At-Tirmidhi, 1987).

Exemplary *akhlaq* mirrors an individual's heart, hence the significance in maintaining morals. Regarding photography that involves both genders, Islam does not restrain its believers from socializing with opposite gender, however, boundaries should still be kept. The book also explains the importance of understanding the concept of *dakwah* (preaching) in the form of photography. *Dakwah* does not only concern those with religious background, but it also applies to all believers, in whatever art form they

can contribute. Again, without good *akhlaq*, *dakwah* will barely reach the public's heart. But to have good *akhlaq*, one should maintain their relationship with God, which also means safeguarding their prayers. After all, *akhlaq* is assumed to be the good relationship between the Creator (*Khaliq*) and His *makhluk* (creation), and between the *makhluk* (creation) and fellow *makhluk* (Rahim, 2013).

To conclude, Islam provides a guideline for all acts to be done ethically, according to its divine principles. The Qur'an acts as the manual and guideline for the believers to act according to the divine commands, while Prophet Muhammad (peace be upon him) is the exemplary in good characters, hence the believers are expected to follow the *sunnah*. Similar principles are applied to photo-taking or any visual-recording, whereby one must maintain good behaviour and intention during the process and when socializing, as well as instilling the mindset of including it as an act of *ibadah*.

## **2.3 Journalism**

Bowman and Willis (2003) define journalism as "the process of gathering, assessing, creating, and presenting news and information to an audience" (p. 4). They argue that journalism serves several important functions in society, including informing citizens about what is happening around them, providing a forum for public debate, and holding power accountable. They also note that journalism has undergone significant changes in recent years due to technological advancements, shifting economic models, and changing audience expectations. Despite these changes, the core principles of journalism such as accuracy, neutrality, and independence, remain as important as ever.

### **2.3.1 Digitalisation of journalism**

Journalism study is a broad topic to be discussed. It evolves into more branches along with the technological era the world is revolving in. From being only in the newspaper, journalism adapts by integrating technology in their existence. As the technology continues to grow, the number of readers tends to decrease. Instead of just reading,

people wanted to hear or see at the same time; which then transformed them into the form of radio, television, and the latest, being online. Online journalism, or widely known as digital journalism (Salaverría, 2019) started during the surfacing of the World Wide Web, where most newspapers began to change platforms, from offline to online. One of the most significant changes was the concept of providing a space for the readers, or the public, to comment, and offered ways for the public to participate in contributing newsworthy information; a trend that is known as crowdsourcing (Salaverría, 2019; Howe, 2006).

Most popular tools for digital journalism are the World Wide Web, tablets as well as mobile phones. It is due to the popularisation of smartphones with easy access to social media applications inside the phone, which gives birth to mobile journalism, also known as *mojo* (Salaverría, 2019). This is supported by Data Reportal of January 2021; the percentage of the population that are mobile phone users have reached 66% of the total global population, and the amount of internet users and social media users almost tally to the amount of mobile phone users, at 50-59%; similar to the data for Brunei Darussalam, where the percentage of population that are both mobile phone users as well as social media users reached up to 129% and 99% respectively.

Digitalisation leads journalism to branch out into more dynamic areas, however, for this research's purpose, the focused types are mobile journalism, photojournalism and Islamic journalism. Mobile journalism results from the accessibility of smartphones and good cameras for photojournalism to also surface. On the other hand, Islamic journalism uses this digitalisation to its advantage to further flourish, by engaging in *da'wah* activities while adhering to journalistic methods and rules.

### **2.3.2 Definitions of the term citizen journalism**

The term citizen journalism is used conversely with several terms such as participatory journalism, user generated content, user created content and amateur journalism. No matter what it is called, the idea of this new genre of journalism is civic participation.

Citizen journalism as defined by Bowman and Willis (2003) is the act of a citizen or a group of citizens taking an active role in information dissemination processes, including the collection and analyzing the information, in order to provide reliable, independent and relevant information that the others in the community require. It encourages fellow community citizens to take part in communal decision making and activities. Citizen journalism is more often related with the theory of public sphere by Habermas (Nah & Chung, 2020; Hamilton 2012; Rodrigues & Braham, 2008), whereby the access to express public opinions, about matters of general interests, by the citizens, is formed - later building collective actions. In this process, the media such as television, newspapers and the Internet all serve as the public sphere to disseminate information (Rodrigues & Braham, 2008).

In a simpler term, Jay Rosen defined citizen journalism as “when the people, formerly known as the audience, utilise the press tools in their possessions to inform one another.” (Rosen, 2008). The accessibility for these ordinary citizens to phones and cameras come in handy when they happen to be witnesses for events that unfold in front of them - thus helps in relaying information to their community without further delay due to news being filtered by some editors.

To put it simply, citizen journalism refers to the phenomena when the public utilise their phones and cameras, and the access to the internet, to disseminate information among them.

### **2.3.3 Development of citizen journalism**

Citizen journalism is relatively recent in the journalism field especially during the aftermath of the great tsunami event in the Eastern Asia in 2004 or even during the September 11 event in 2001, due to the expansion of the Internet, but it seems the idea of citizen taking part or participates in the professional media process had primarily emerged in the West long before that (Hajek & Stefanikova, 2014; Allan, 2014). In contrast to the argument that citizen journalism only appeared during the expansion of the Internet in the 2000s, Hamilton (2008) mentioned that the emergence of this type of journalism dated back to the beginning of media production where there was a

significant distinction between professional writers and amateur writers. This was supported by Griffen and Foley (2004) that it was during the time when amateur writers had been engaged in the work of professional media as readers, viewers, comments/letters and opinions contributors as well as competitions against the professional news agencies.

In 2008, China saw the first uprising of citizen journalism in their tightly controlled media or journalism industry during the Wenchuan earthquake. The earthquake of 8.0 Richter Scale, was first reported by citizens before professional journalists. The urgent news was relayed on a citizen journalism platform. Soon after, the platform was bombarded by multiple news and information in the form of photos and videos; all telling their first-hand experiences witnessing the event. It was also from the citizen journalism platform, that professional news agencies and media collect their resources after checking for the authenticity and credibility (Nip, 2009). This ‘crowdsourcing’ method is deemed cheaper by most professional media agencies as they can gather more information from people despite the geographical obstacles; they do not even have to pay for staff as citizen journalists usually contribute to the platform voluntarily (Bowman & Willis, 2003; Deuze, 2009)

Although citizen journalism may come in handy for some professional media agencies that adopt the idea of crowdsourcing and see the positive side of citizen journalism; its presence sets a debatable issue among professional journalists. These professional journalists disagree on calling or labelling citizens as journalists, who are usually untrained in the journalism knowledge; thus, building a boundary that differentiates their status of professionalism (Deuze, 1997; Long, 2014; Hong, 2014). Despite the chaos that citizen journalism has caused in the journalism industry, especially among the professional journalists, Rosen (1997) argued that if only the root cause of citizen journalism is eliminated, we will only know journalism. Journalism exists within a culture, most of the time more local. If the public finds no useful information from the journalism of the local, no stories it can share, or nothing that it recognizes as its own - which then results in public journalism; then the local journalists



have failed as journalists, even if they follow the professional code. That is what the public want from their journalists, and what the public journalism depicts now.

One of the most prominent theories is the concept of "participatory journalism," which suggests that citizen journalism can lead to a more participatory and democratic form of journalism. According to this theory, the rise of citizen journalism can empower individuals and groups who were previously excluded from traditional media to participate in the creation and dissemination of news and information (Bowman & Willis, 2003).

Another theory related to citizen journalism is the concept of "gatekeeping," which refers to the role of media gatekeepers in determining what news and information is disseminated to the public. Citizen journalism challenges the traditional gatekeeping function of professional journalists and allows for a more diverse range of perspectives and voices to be heard (Hermida, 2010).

Finally, the "networked journalism" theory emphasizes the collaborative and networked nature of citizen journalism. According to this theory, the rise of digital media and social networks has enabled citizen journalists to connect and collaborate with each other, as well as with professional journalists, to produce and distribute news and information (Bruns & Highfield, 2012).

### **2.3.3.1 Social media platforms**

Social media is one of the platforms where citizen journalism flourishes. For years, social media such as Facebook, Instagram and Twitter, has attracted researchers to study their impact to every aspect; from media to commercial and social aspects (Salaverria, 2019). These platforms provide the services or features that encourage the citizens to discuss freely, not only among the citizens, but it also allows them to reach unapproachable individuals such as the elites (Wibawa, 2020). Instagram, has features such as Instagram stories where users can repost or post their short-lived contents, as the stories only stay for 24 hours. Citizen journalists take advantage of this feature to

express their opinions, as well as raise certain issues they see worth discussing using interactive sub-features such as the Q&A sticker in the Instagram stories. Instagram is also a tool used by both the media and the citizens to post their visual contents or behind-the-scenes, for engagement purposes (Vázquez-Herrero et al, 2019). The visual content they share is more often significant in community building, identity formation as well as a sense of belonging (Frissen et al, 2017).

Another significant feature Instagram is known for; is the use of hashtag, where users just click on the hashtag to explore the topic. Citizen journalists usually use this feature to spread awareness on their topics of interest. Other features such as the Comments sections, Like, Share buttons; seem to make it easy for citizens to play the role as journalists, with or without the knowledge of journalism.

### **2.3.3.2 Uses and Gratification**

The social media platform is a popular tool that utilizes the uses and gratification theory. As social media connects people from around the world, sense of belonging is stronger in those who are rather keen to communicate online than face-to-face. Thus, the important component of human's needs is satisfied with the presence of social media. Uses and gratification underwent refining process from the 1950s up until the 21<sup>st</sup> century with similar concepts. Generally, media audiences seek entertainment, relaxation and leisure from the content they consumed.

Previous research on audience behaviour described that the media use is discriminative and is driven by one's interactive needs and expectations from the media content they chose. It was also suggested that people seek media contents that they can relate, and are involved with (Ruggiero, 2000).

Research has found that individuals use social media for a variety of gratifications, including social interaction, entertainment, self-presentation, information seeking, and identity exploration (Lin & Lu, 2011; Papacharissi & Rubin, 2000). Social media platforms such as Facebook, Twitter, and Instagram provide opportunities for

users to connect with others, share information and opinions, and express themselves creatively. These platforms also offer a range of features, such as messaging, sharing, and commenting, that allow users to interact with others and engage with content in different ways.

Moreover, social media allows individuals to engage in citizen journalism, a form of participatory journalism where users contribute news content (Bowman & Willis, 2003).

According to a study by Kim and Lee (2011), individuals who use social media for news consumption have different motivations for doing so. For example, some use social media to obtain breaking news or to follow events in real-time, while others use it to obtain news from a variety of sources or to interact with others about news topics. The study also found that individuals who engage in citizen journalism on social media do so to share news and information with others, to express their opinions, and to participate in the public discourse (Kim & Lee, 2011).

Another study by Lee and Ma (2012) examined the motivations of individuals who contribute to citizen journalism on social media platforms. The study found that contributors were motivated by factors such as the desire to share information, to help others, to express themselves, and to enhance their reputation (Lee & Ma, 2012).

In summary, the uses and gratifications approach provide insights into the motivations behind social media usage and citizen journalism. This can also be a factor that contributes to the act of citizen journalism in an individual.

## **2.4 Islamic values in journalism**

Now that we are clear with the role of citizen journalists, where they represent their community or the public; disseminating information of general interests without filtering them may go against the ethical code of journalism, especially in the Islamic context. For example, a citizen witnesses an accident and records it in the form of a video. This video reveals the identity of the victim as it has not been censored before it

is spread around, thus increasing the chances of false speculations and assumptions as well as absence of empathy for the victim's family who may receive this video along the chain. The situation is already against the code of ethics on truth and altruism.

However, the credibility of citizen journalists may not be all negative; they can still contribute to a positive support system towards the community where certain situations may be overlooked by the media agencies. Again, this is where the Islamic values in journalism is significant; what presents in the journalistic professional code of ethics, are also present in Islam.

Islamic journalism, or some call it da'wah journalism, each have their own definitions and contexts. Da'wah (preaching) is the responsibility of every Muslim; it is wise for Muslims to take advantage of digital journalism (which includes citizen journalism) as one of the platforms to spread da'wah (Bahri, 2016).

#### **2.4.1 Fundamental Islamic values in journalism code of ethics**

Islamic ethical conduct is an important aspect of citizen journalism that emphasizes the principles of honesty, fairness, and justice. According to Al-Maliki (2017), Islamic ethical conduct in citizen journalism is grounded in the concept of "*amar ma'ruf wa nahi munkar*," which translates to "enjoining what is right and forbidding what is wrong." This principle emphasizes the importance of promoting ethical behaviour and discouraging unethical conduct.

In order to adhere to Islamic ethical conduct, citizen journalists must ensure that they are reporting accurate and truthful information, respecting the privacy and dignity of others, and avoiding any form of bias or discrimination. They must also strive to promote positive social change and address issues of injustice and oppression.

Al-Maliki (2017) further emphasizes that Islamic ethical conduct requires citizen journalists to be accountable for their actions and to seek forgiveness for any mistakes or wrongdoing. This includes being open to feedback and criticism, as well as taking steps to rectify any errors or misrepresentations in their reporting.

#### **2.4.1.1 Balance**

As discussed before in the Islamic ethics subtopic, ethical conduct is important as a guidance for one's action. One of the obvious relationships between journalism and the teachings of Islam is the ethics (Steele, 2011). While the Society of Professional Journalists' Code of Ethics include seeking truth, minimising harm, acting independently, resisting the attempts of biasness and being accountable (Crichton et al, n.d), the code of ethics in journalism are similar to that of the religion's goal: to pursue justice, to aid the poor, to combat corruption and to ensure equal distribution of wealth among the society (Omar, 2009). Balanced in every aspect, journalism in Muslim-majority regions in the Southeast Asia, for example, are expected to have just or unbiased stories (Steele, 2011).

#### **2.4.1.2 Verification**

Another fundamental value that journalists are expected to follow is verification. In Islam, the similar principle of verification is present in the form of *isnad*, which is the process of verifying the chain of transmission of the Prophet's words and deeds in *hadith* (Steele, 2015).

The Qur'an says in Surah Al-Hujurat (49), verse 6: "O you who believe! If some transgressor brings you news (that requires taking action), verify it carefully (before you believe and act upon it), lest you harm a people in ignorance and then become regretful for what you have done." In another surah and verse (17: 36), God also commands the believers not to judge or act upon knowledge that even they cannot confirm on its authenticity. The knowledge or information they get must be verified by true reports or witnesses, and must not arise from false reports or an individual's opinion.

### **2.4.1.3 Truth**

Whether it be journalists or citizen journalist; both must adhere to the principle of disseminating only truth. Although citizen journalism usually focuses on expressing opinions and concerns relating to the community, truth-seeking individuals are what drives citizen journalism in the first place. Citizen journalism is often considered of lesser credibility by most professional journalists due to the fact that they have the freedom to create or disseminate information without being restricted by editors. This sometimes bears misinformation or fake news, spread without thinking twice of the consequences.

As citizen journalism is also categorised as a branch of journalism and gained its significance in the new media era (Hamilton, 2012), it is safe to say that the code of ethics for journalism is also applied to citizen journalism. This is in response to the definition agreed upon by most researchers in the citizen journalism field: citizen journalism is defined as ‘the act of a citizen, or a group of citizens, playing an active role in the process of collecting, reporting, analysing and disseminating news and information. The intent of this participation is to provide independent, reliable, accurate, wide-ranging and relevant information that a democracy requires.’ (Willis & Bowman, 2003). Hence, citizen journalists with Islamic identity shall oblige to the intention of keeping the information they shared as accurate as possible.

To conclude, disseminating information with the intention to be the voice for the public in discussing matters that are not addressed by the media agencies, is considered as Islamically ethical in terms of finding justice for people and uncovering truths. However, it can easily turn unethical when information is misleading on top of failure in verification; which is the case if first-hand information (in the form of texts, images and videos) are spread without being filtered or analysed properly, thus leading to false statements.

## **2.5 Mobile application development**

The ADDIE model is a widely-used instructional design framework that provides a structured approach to the development of effective learning experiences. The acronym ADDIE stands for Analysis, Design, Development, Implementation, and Evaluation, which represents the five phases of the model.

When it comes to mobile app prototype development, the ADDIE model can be an effective guide to ensure that the app meets the intended learning objectives and user needs. In the analysis phase, the app developer needs to identify the target audience, their needs, and the learning objectives of the app. This requires a careful examination of the context in which the app will be used, including the technology requirements, user preferences, and accessibility needs.

In the design phase, the developer needs to create a detailed design plan for the app, including the interface design, navigation, and content structure. This involves mapping out the user flow, designing the app screens, and creating prototypes for user testing.

The development phase is where the actual coding of the application takes place, and the design plan is transformed into a functional one. In this phase, the developer would conduct frequent testing to ensure that the application is functioning as intended and that it meets the user requirements.

In the implementation phase, the app is launched and made available to the target audience. This involves marketing and promotion of the app to the intended audience, and making the app available for download on application stores. Finally, in the evaluation phase, the developer should conduct a thorough evaluation of the app's effectiveness in meeting the intended learning objectives and user needs. This may involve user surveys, user testing, and feedback from users to identify areas for improvement.

### **2.5.1 Usability**

Usability refers to the human interaction with technology. It is how a software product is able to be used and understood by the user. The attractiveness of the software is also inclusive in usability. Two theories that are popular in usability are the Nielsen's and Krug's. Krug (2005) wrote in his book that aims to aid software developers to instil the idea of making the user think less when using their software products. Nielsen (1999), on the other hand, focused on emphasizing heuristics in usability that combined the conflicting perceptions of engineers and graphic designers. Engineers stress the importance on following the precise rules, while the graphic designers or the creatives are keen on keeping the aesthetics of the product.

Usability is considered a critical factor in determining the success or failure of an application. Users expect mobile applications to be easy to use, intuitive, and responsive, and if an application fails to meet these expectations, users are likely to abandon it (Nielsen, 2012). Not only it is important for user satisfaction, but also for achieving business goals such as increased engagement, retention, and revenue. Good usability leads to positive word-of-mouth recommendations and increased adoption of an application.

According to Zhang, Adipat, and Wu (2005), "user-centered design is the process of designing a mobile application from the perspective of how it will be understood and used by a human user". This process involves identifying the needs of the user and designing the application accordingly. User needs can be determined through a variety of methods, including surveys, focus groups, and user testing (Zhang et al., 2005).

Therefore, it is crucial that usability should be considered throughout the entire mobile application development process, from initial design to post-release evaluation.



### **2.5.2 Social Cognitive theory**

Social cognitive theory is a theoretical framework that has been widely used in the study of human behaviour and decision-making. According to this theory, human behaviour is influenced by a combination of environmental, personal, and behavioural factors (Bandura, 1986). In particular, social cognitive theory theorises that individuals learn through observation and imitation of the behaviour of others (Bandura, 1977). According to this theory, people learn by observing others and the consequences of their actions, and they adjust their behaviour accordingly. Social norms, defined as the shared expectations and beliefs of a group, can also influence behaviour. Social support, another important factor in social cognitive theory, can be defined as the resources and assistance provided by others that help individuals achieve their goals (Bandura, 1986).

Social cognitive theory has been applied to a wide range of research topics, including health behaviour, substance abuse, and technology adoption. For example, several studies have used social cognitive theory to explore factors influencing the adoption and use of technology, including mobile applications. In the area of mobile application development, social norms may refer to the accepted practices and expectations within a particular community of users. While the social support may refer to help and encouragement provided by other users, such as through feedback and collaboration.

The role of social factors in mobile application adoption and use has been widely studied. Venkatesh and Davis (2000) proposed the Technology Acceptance Model (TAM), which posits that perceived usefulness and perceived ease of use are key determinants of technology adoption. However, the model was later expanded to include social influence, which refers to the impact of social factors on technology adoption (Venkatesh et al., 2003). This includes both subjective norms, or the perceived expectations of others, and social support, or the perceived assistance provided by others.

Self-efficacy has been found to be an important predictor of user behaviour, including the decision to download and use a particular application (Venkatesh & Davis,

2000). This was also taken from one of Bandura's theories of self-efficacy, where an individual believes of their ability to perform a given behaviour successfully, or an outcome expectation after they perform the given behaviour. When applied to the mobile application development, similarly, outcome expectation influences the users' behaviour by affecting perceived usefulness and ease of use (Venkatesh & Davis, 2000).

Research has shown that social features can play an important role in encouraging adoption and use of mobile applications. For example, a study by Huang and Benyoucef (2017) found that social influence positively impacted users' intention to adopt a mobile payment application. Similarly, a study by Nistor and Mocean (2017) found that social factors, including social norms and social support, were significant predictors of mobile health application adoption among older adults.

In addition to social norms and social support, other social factors may also be important in mobile application development. For example, perceived trust in the application and in other users can influence adoption and use (Venkatesh et al., 2003). Perceived enjoyment, or the extent to which using the application is enjoyable, can also play a role (Venkatesh & Bala, 2008).

### **2.5.3 Technology Acceptance Model (TAM)**

The Technology Acceptance Model (TAM) is a theoretical framework that seeks to explain how individuals adopt and use new technologies. TAM posits that perceived usefulness and perceived ease of use are the two primary determinants of user acceptance and adoption of technology (Davis, 1989). Perceived usefulness refers to the degree to which an individual believes that a particular technology will enhance his or her job performance or overall productivity, while perceived ease of use refers to the degree to which an individual believes that a technology is easy to use and requires little mental effort.

In the context of mobile application development, TAM is a useful tool for understanding and predicting user acceptance and adoption of mobile applications.

Mobile applications are software programs designed to run on mobile devices such as smartphones and tablets, and they have become an integral part of daily life for millions of people worldwide. However, not all mobile applications are equally successful, and many fail to gain widespread user adoption. By using TAM to guide the development of mobile applications, developers can design applications that are more likely to be accepted and adopted by users in the long run.

According to Venkatesh and Davis (2000), there are four key constructs of TAM: perceived usefulness, perceived ease of use, attitude towards using, and behavioural intention to use. These concepts are interconnected, and they influence each other in a recurring manner. Perceived usefulness and perceived ease of use are the two main determinants of attitude towards using, which in turn influences behavioural intention to use.

When applied to mobile application development, developers can use TAM to guide the design of mobile applications that are perceived as useful and easy to use by potential users. By conducting user research and testing, developers can gain insights into what features and functionality potential users find most useful and how they prefer to interact with the application. Developers can also identify potential barriers to adoption, such as complex user interfaces or difficult-to-use features, and design the application to address these concerns. While the Technology Acceptance Model (TAM) has received significant attention in the literature and has been widely used in the context of technology adoption and acceptance, some authors have criticized certain aspects of the model.

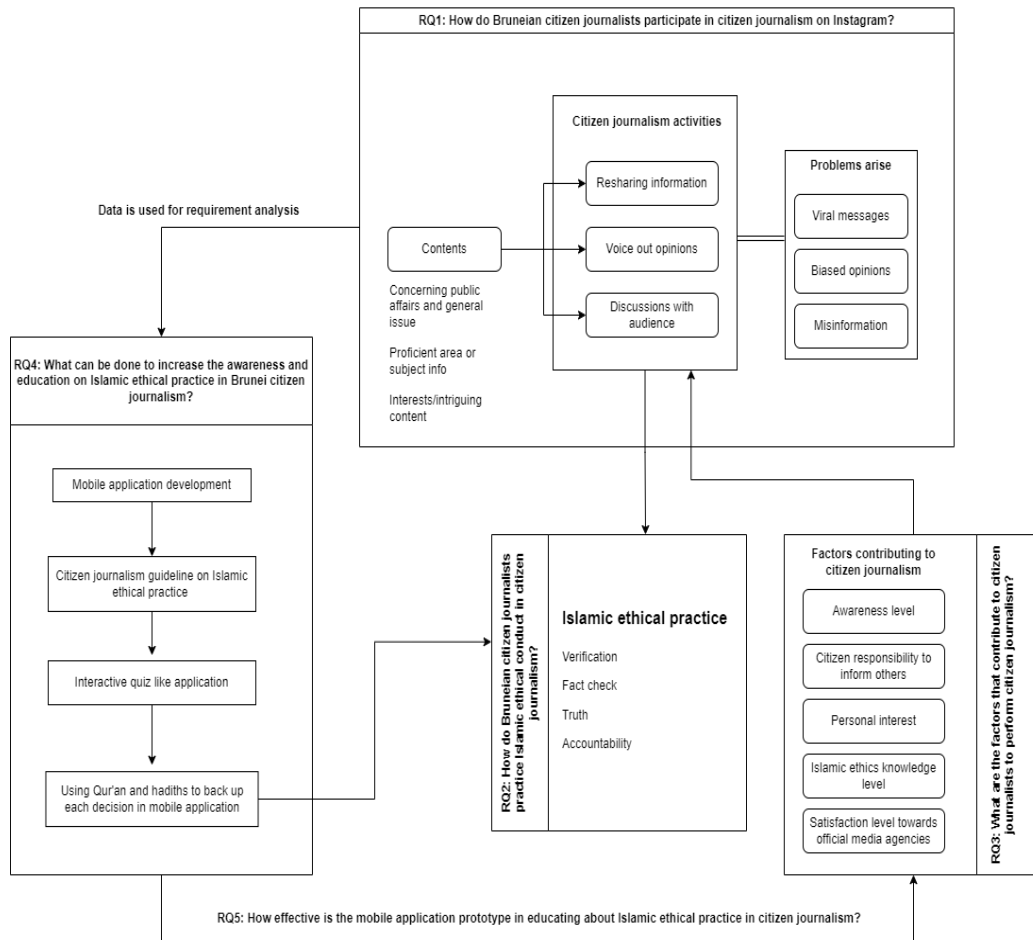
One critique is that TAM focuses primarily on individual-level factors and does not adequately consider the influence of social and environmental factors on technology adoption and use (Venkatesh et al., 2003). This has led some researchers to propose extensions to TAM, such as the Unified Theory of Acceptance and Use of Technology (UTAUT), which incorporates social and environmental factors into the model (Venkatesh et al., 2003).

TAM does not account for the role of affect and emotion in technology adoption and use. Some researchers have proposed that affect and emotion can significantly influence user behaviour and decision-making related to technology adoption and use (Venkatesh & Bala, 2008).

Despite these critiques, TAM remains a widely used and influential model for understanding technology adoption and use, including in the context of mobile application development. By considering the limitations of TAM and incorporating insights from related models and research, developers can design mobile applications that are more likely to be accepted and adopted by users.

## **2.6 Conceptual Framework**

The conceptual framework of this research study is shown in Figure 2.0 below:



**Figure 2.0.3** Conceptual Framework

The main points of this research revolve around the 3 key points; Islamic ethical practice, citizen journalism and mobile application development. The conceptual framework above relates one research question to another to provide a whole new concept, from the supporting statements and concepts from literature review.

Social media platforms encourage their users to create contents in order to stay relevant amongst the internet users. These contents can be concerns of the citizens towards a public affair, general issues, subjects of interests, information on the area that each individual is proficient at or even intriguing contents that trigger their sense of emotions. These contents activated the citizens' desire to disseminate information, hence the emerging citizen journalism activities (Lee & Ma, 2012). They disseminate

information by resharing information, expressing their opinions and then discussing about certain matters with their audience or with each other. Problems develop when there are viral messages spreading amongst the public, and are usually unverified. Since the social media allows users to express their opinions, biased opinions may cause harm and disrupts the harmony of the society or community. These also cause misinformation, resulting in confusion on whether the information is true or false.

RQ2 mentions about the way Islamic ethical conduct may be practised in citizen journalism. Citizens can reshare information, express their opinions and discuss certain matters with their audience, as long as they incorporate the main Islamic values in their citizen journalism or social media activities. The main Islamic values are verification, fact check especially before they share information, truth and accountability.

In RQ3, factors contributing to citizen journalism are determined. From the literature review, most common motivations behind citizen journalism involves personal interest, citizens' duty or responsibility to inform others and their satisfaction level towards the official media agencies, as suggested by Whiting (2013). Which means, if they are dissatisfied on certain matter being informed to the public, the citizens may as well gather information themselves. Other factors include awareness level on the potential problems emerging from citizen journalism activities, and the level of their Islamic ethics knowledge.

By having the data from RQ1, RQ2 and RQ3, a mobile application prototype on guideline for Islamic ethical practice in citizen journalism can be developed. The guideline takes a form of interactive quiz-like application that allow users to think when provided with scenarios regarding citizen journalism activities, and learn about Islamic ethical practice at the same time. The prototype would use Qur'an and the hadiths as well as some Muslim scholars' sayings to argue or support each decision made.

## **2.7 Conclusion**

This chapter gathered the information from the past studies and literatures that relate to citizen journalism, Islamic ethical practice and mobile application development. Ethical theory that revolves around the Islamic ethics were based on the *Qur'an* and *Sunnah*, which is a wholistic approach even to photojournalism areas. The chapter expanded to the development of citizen journalism in which was described mostly as public's participation in the media and assumed the role of journalists as they already have the tools in their possession to gather and disseminate information.

The Islamic values in journalism are similar to the standard code of ethics in journalism: balanced or unbiased, truth, verification of information and the individual's accountability. As a foundation of mobile application prototype development, three main foundations used are the usability theory, social cognitive theory and technology acceptance model. In these theories, it is important to have designs, application features practicality and user needs in a mobile application so as to attract users into using the mobile application longer. The next chapter will look into the research methodology of this research.

## CHAPTER THREE

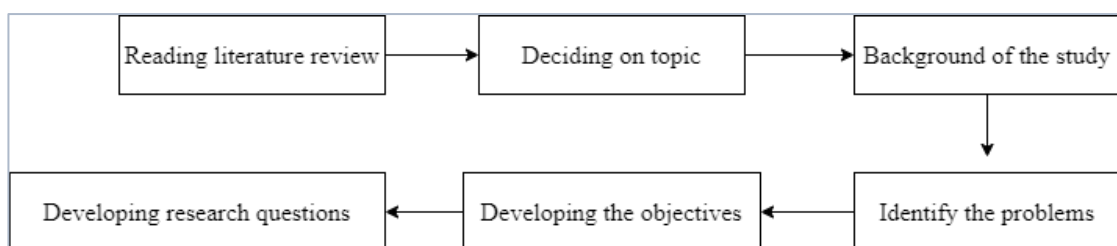
### RESEARCH METHODOLOGY

#### 3.1 Introduction

Chapter 3 explains in detail the research methodology for this study. The subtopics are organized in following order: Research design, research framework that is described in the form of a flowchart, sampling procedure, instrument used, validity and reliability, pilot study, data collecting methods, data analysis then research ethics.

#### 3.2 Research framework: Flowchart

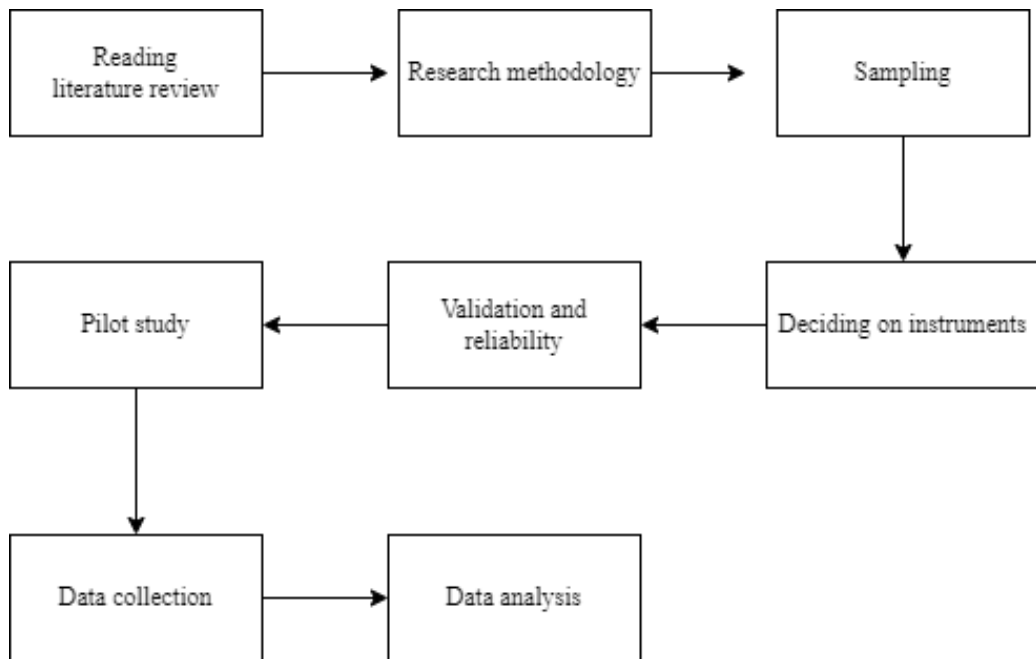
The research process is described in the form of flowcharts and are divided into phases. Figure 3.1 shows the flowchart of Phase 1 of the research process:



**Figure 3.0.1** Flowchart of Phase 1 research process

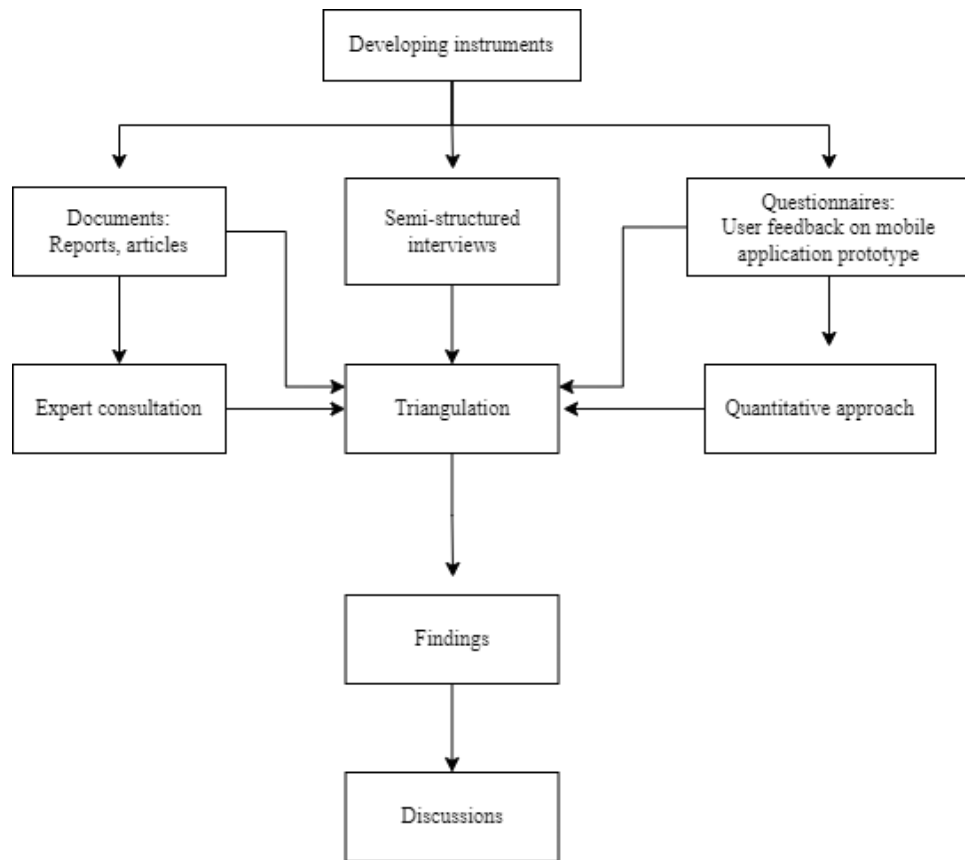
The Phase 2 of research process is as following:





**Figure 3.0.2** Research framework Phase 2

For Chapter 3 Research Methodology, the framework will be:



**Figure 3.0.3** Research framework for Chapter 3

### 3.3 Research Design

Research can be carried out in either qualitative and quantitative, or a mix of both in the form of mixed methods. Qualitative methods allow an in-depth descriptive exploration on targeted issues, and produce different kinds of knowledge in the field compared to quantitative research (Polkinghorne, 2010), while quantitative involves numbers and statistics. Quantitative incorporates closed ended questions (hypotheses) compared to qualitative approach that often involve open ended questions (Creswell, 2009).

#### 3.3.1 Qualitative Data Collection

Qualitative methods, involves a diverse range of methods, including interviews, focus groups, observation, and document analysis. The choice of methods is guided by the

research question and the nature of the phenomenon being studied. As applied in this study, the nature of research question 1,2 and 3 are rather specific and need in-depth answers. Thus, semi-structured interview was used for the first three questions. The process of data collection and analysis in qualitative research is iterative and ongoing. In this case, data collection proceeded for a while, until the data collected reached a point of saturation. As for the data analysis in a qualitative research, coding and thematic analysis are common techniques used. These techniques involve identifying patterns and themes in the data and grouping them into categories, which was also the data analysis method for research question 1 until 3.

Triangulation, member checking, and peer debriefing are some of the strategies that can be used to enhance the credibility and dependability of qualitative research (Braun & Clarke, 2013). This study used interviews, document analysis, questionnaire and also expert validation for triangulation. Overall, qualitative research methods are a valuable tool for exploring complex human behavior, experiences, and attitudes.

### **3.3.2 Quantitative Data Collection**

Quantitative method on the other hand, refers to a set of research techniques that use numerical data and statistical analysis to test hypotheses and draw conclusions about a population. Quantitative research typically involves data collection techniques such as surveys, experiments, and quasi-experiments. Data collection often involves using surveys, experiments, and other structured data collection methods. It also relies on statistical analysis to identify patterns and relationships in data, hence there a quite a number of statistical techniques such as t-tests, ANOVA, regression analysis, and factor analysis.

This research is using mixed method, with the first until the third research questions being answered using qualitative approach, and fifth research questions answered in quantitative approach. The first until third objectives are mostly exploratory as experiences from samples are most usually non-identical to each other

(Hammarberg et al, 2016). By using qualitative methods, we are able to delve more into the participants' experience, opinions or beliefs on the topic. The effectiveness of the mobile application prototype, however, is measured in a quantitative manner, using cross-sectional research approach. This means data were collected from different individuals in a single point of time. Cross-sectional research design is much cheaper and more practical compared to longitudinal study (Thomas, 2022). The table below shows the summary of the overall research approach for each research objectives:

**Table 3.0.1** Summary of the overall research approach for each research objectives

No.	Research objectives	Research approach	Sampling	Instruments
1.	To determine how Bruneians participate in citizen journalism on Instagram	Qualitative	Purposive	Semi-structured interview
2.	To investigate how Islamic ethical conducts are practised in information dissemination amongst Brunei citizen journalists	Qualitative	Purposive	Semi-structured interview
3.	To analyse the factors that contribute to the act of citizen journalism in an individual	Qualitative	Purposive	Semi-structured interview
4.	To develop an interactive mobile application prototype for a guideline on citizen journalism act in Brunei	Mobile application development		
5.	To evaluate the effectiveness of the mobile application prototype	Quantitative	Simple random sampling	Questionnaire

Research objective 1 is to determine how Bruneians participate in citizen journalism on Instagram. This research objective used qualitative approach, using

purposive sampling and semi-structured interview as the instrument to collect data. Research objective 2 is to investigate how Islamic ethical conducts are practised when citizen journalists in Brunei disseminate information, while research objective 3 analyses the factors contributing to citizen journalism. For both 2 and 3, they used the same approach as research question 1 which is qualitative, and were also using semi-structured interview in a purposive sampling.

An interactive mobile application prototype as an Islamic ethical guideline were developed and the process are described in Chapter 4. For research objective 5, which is to evaluate the effectiveness of the mobile application prototype, quantitative approach was used, with sampling being a simple random while the instrument decided was a questionnaire.

### **3.4 Sampling procedure**

#### **Qualitative Method**

Qualitative research uses non-probability sampling techniques, which means that the selection of participants is not based on randomization. Instead, purposeful sampling techniques to select participants who can provide valuable information related to the research questions (Palinkas et al., 2015).

The sampling method for this study is purposive sampling. The criteria for locating participants for their citizen journalism activities are stipulated below, generally defined by the participants' Instagram activities:

1. Citizen journalists, whose posts on Instagram are usually used to disseminate information that are deemed newsworthy or public current issues, either by photos or videos.
2. Citizen journalists who use the feature on Instagram (stories), to reshare and repost posts from other accounts that they deemed worth to share.

It is a nature of a case study to focus on a single unit or multiple units to gain deeper insights on the topic discussed (Baboucarr & Soaib, 2014), while according to Kruger (1988) and Morse (1994), the rule of thumb for qualitative research sample size – case study, in particular, is at least one, but it can be more. The increase in sample size adds to the depth and thoroughness of the information gained. Hence, cases are gradually selected, until the data required reach a saturation point.

There are a few saturation concepts in qualitative research; data saturation and theoretical saturation. Both aim to ensure that the data collected is sufficient to support the findings. Data saturation refers to the point at which collecting additional data will not yield any new information or insights about the research topic. In other words, data collected is enough to cover all the key themes and concepts related to the research question or objective. Data saturation is typically assessed during the data collection process, and it is often achieved when there is redundancy or repetition in the data.

Theoretical saturation, on the other hand, refers to the point at which a comprehensive and coherent understanding of the research phenomenon has been developed, and the new data collected no longer contributes to the development of new concepts or theories. Theoretical saturation is typically assessed during the data analysis process, and it is often achieved when the researcher has developed a subtle understanding of the research topic and can no longer identify any new themes or concepts (Charmaz, 2006). Creswell (2013) and Merriam (2009) both defined theoretical saturation as a point in data analysis where no new themes or categories are identified.

As for this study, the total sample were 5 excluding one that was chosen as the pilot study respondent. This was because at the fifth interview, the data collected were becoming saturated as it was noticed that most of the answers acquired from the respondents were becoming repetitive. Theoretical saturation was also reached when the data collected was enough to build an understandable concept of the Islamic ethical practice in citizen journalism.

## **Quantitative Method**

In quantitative research, sampling is a crucial component because it is often impractical to study the entire population, and sampling helps researchers to collect data efficiently. Quantitative research often uses probability sampling which involve randomly selecting participants from a population.

Probability sampling methods include simple random sampling, systematic sampling, stratified random sampling, and cluster sampling. Simple random sampling involves selecting participants randomly from a population, while systematic sampling involves selecting every  $n$ th participant from a population. Stratified random sampling is dividing the population into subgroups based on specific criteria, such as age or gender, and then selecting participants randomly from each subgroup. Cluster sampling, on the other hand, divides the population into clusters or groups and selects a random sample of clusters, followed by randomly selecting participants from each cluster (Lavrakas, 2008)

For the research objective 5, simple random sampling was used. The population for research objective 5 is the latest population of Instagram users in Brunei, which was 319,900 in early 2022 (Kemp, 2022).

Using Krejcie and Morgan (1970) sample size calculator, the minimum number of necessary samples to meet the statistical constraints is 384, which means 384 or more measurements or surveys are needed to have a confidence level of 95% that the real value is within  $\pm 5\%$  of the surveyed value. The number also coincides with Krejcie and Morgan table where  $N$  (the population) = 300,000 and  $s$  (sample size) = 379.

## **3.5 Instruments**

### **3.5.1 Qualitative: Interview**

One of the research instruments to be used is semi-structured in-depth interviews. Interviews are reckoned to be the most suitable method in gaining details of the inside

story of the participants, their beliefs, experiences and opinions with regards to the topic (Easwaramoorthy & Zarinpoush, 2006). Targeted samples - the citizen journalists, were sent messages via Instagram's Direct Message (DM) or telephone numbers. They were explained about the research project and asked for their participation in a face-to-face interview or virtual interviews. If participant opts for virtual interview, it would be using Google Meet, a video-call application that is widely used by Bruneians. Face-to-face interview, however, is most opted as it helps researchers to make use of the sensory and it will provide more data by observing the behaviour of the interviewees (Valenzuela & Shrivastava, n.d).

Once they responded and agreed to participate in the interview, they were given a preview of a set of predetermined questions derived from the literature review to be asked during the interview, and a consent form as verification that this study is a legit research study from the university. During the interview, the whole process was recorded with participants' consent, by using a mobile phone camera or using a screen record application in the laptop used. Their audios were also recorded using mobile phone to ensure that the audios have back-up for transcription in case videos' audios are unclear, for example, from background noise. The questions for the semi-structured interview are attached as Appendix A. The semi-structured questions were divided into themes for easier reference during data analysis. The themes include general questions regarding demographic and Instagram use, image and videos selection, information dissemination, Islamic education background, opinions, awareness, accountability and the last, journalistic training.

### **3.5.2 Qualitative: Documents**

Other instrument includes documents. Documents were used in combination with other research methods to provide a more comprehensive understanding of the citizen journalism phenomenon. Reports regarding citizen journalism (Appendix B), written law from the book of Attorney's General Chamber (AGC) website on the punishment



of disseminating false information (Appendix C) and news articles from local sources (Appendix D) relevant to the research topic were also included.

### 3.6 Quantitative: Questionnaire

Research objective 5 measures the effectiveness of the mobile application prototype, which is quantitative in nature. In quantitative research design, questionnaire is a common instrument used other than experiments and tests. A questionnaire provides a numeric description of trends, attitudes and also opinions of the population being studied. As a result, a researcher is able to generalize or make claims concerning the population (Creswell, 2014).

To obtain data, a questionnaire was created using an online surveying platform, Google Form. A questionnaire was chosen due to its economically friendly approach and faster data turnaround. Questions in the questionnaire were carefully composed, being broken down construct by construct. There were 5 constructs altogether, 6 including demographic questions. It uses Likert Scale, a rating scale to measure attitudes, opinions or behaviours of participants (Bhandari & Nikolopoulou, 2023). It consists of a statement, followed by a series of five answer statements where 1 indicates ‘Strongly Disagree’, 2 indicates ‘Disagree’, 3 being ‘Neutral’, 4 indicates ‘Agree’ and 5 as ‘Strongly Disagree’. Respondents choose the option that best corresponds with how they feel about the statement.

Construct A is about the demographic of participants and also general questions that relate to their usage of social media. The table below shows items included in Construct A:

**Table 3.0.1** Questions asked in Construct A

Items	Key words
A1	Gender
A2	Age

A3	Current employment
A4	Level of Islamic education
A5	Frequentness of using Instagram
A6	Social media platform most active
A7	Usual place to obtain info

For Construct B, the theme is knowledge on citizen journalism. This construct measures participants' knowledge and awareness on the term citizen journalism. It also aims to deduce if the participants understand what is meant by citizen journalism, whether they realise if they also participate in citizen journalism. The items in Construct B are as follows:

**Table 3.0.2** Construct B: Awareness of Citizen Journalism

Items	Key words
B1	Aware of Citizen Journalism
B2	Know Citizen Journalism
B3	Familiar with Citizen Journalism, sometimes participate
B4	Viral message – example of citizen journalism
B5	Citizen journalism seen more through social media
B6	Commenting – part of citizen journalism
B7	False information spread easily
B8	People know more from viral message
B9	Able to understand problems of citizen journalism after using mobile app prototype
B10	Understand list of activities in mobile app prototype as part of citizen journalism

Construct C consists of items under knowledge on Islamic values. Islamic values here is general and intends to learn whether participants incorporate the Islamic values in their day-to-day routine, especially when handling social media.

**Table 3.0.3** Construct C: Knowledge on Islamic values

<b>Items</b>	<b>Key words</b>
C1	Understand Islamic values include good <i>akhlak</i>
C2	Islamic values should be incorporated in daily life actions
C3	Islamic values – include in daily social media handling
C4	In Brunei, Islam is way of life
C5	Knowledge Islamic values considered above average
C6	My hadith knowledge is good
C7	My Qur'an verses knowledge is good
C8	Qur'an verses used in the mobile app prototype were chosen accordingly
C9	Hadiths used in the mobile app prototype were chosen accordingly
C10	Qur'an and hadiths used in the mobile app prototype relatable to situations given

Construct D focuses on awareness on Islamic values in citizen journalism, which carries the questions concerning participants' accountability and actions towards morally or ethically challenging information they received.

**Table 3.0.4** Construct D: Awareness of Islamic values in citizen journalism

<b>Items</b>	<b>Key words</b>
D1	Posting info on IG to inform public is citizen journalism activity
D2	Think of consequences after sharing/posting info
D3	Check for truth before sharing
D4	If viral info received is untrue, stop sharing
D5	Verify info before resharing
D6	Aware that sharing unverified info is against Islamic values
D7	Reposting info that I am not sure of is against Islamic values
D8	Need to research info source before sharing it
D9	Voice out opinion publicly on social media
D10	Share sensitive images or info

Construct E shows items under ‘level of Islamic religious education’, to observe if Islamic religious education may impact the participants’ understanding of the Islamic ethical practice in disseminating information.

**Table 3.0.5** Construct E: Level of Islamic religious education

Items	Key words
E1	Knowledge on Islamic values often shared
E2	Islamic ethical values instilled at young age
E3	Islamic values in self – result from MIB principle
E4	Can recognise if someone’s post is ethically right or wrong
E5	Reminding using Qur’an on Islamic ethical conducts is essential
E6	Ethical values best learnt from Qur’an and hadiths
E7	Basic religious study education sufficient to practice Islamic ethics in citizen journalism
E8	Guideline on ethical practice in citizen journalism required to raise awareness
E9	This mobile app prototype can be used as awareness tool
E10	Mobile app is suitable to educate younger generation on Islamic ethical conduct in citizen journalism

The last construct is User Experience, where it refers to the user feedback on the mobile application prototype. Before participants answer the questionnaire, they were given a link to the mobile application prototype design to try. The prototype design is accessible on a virtual phone, but the buttons are clickable, hence, participants were able to try the prototype first before they answer.

**Table 3.0.6** Construct F: User experience

Items	Key words
F1	Opening theme is clear
F2	Font size readable
F3	Good choice of colours used
F4	Easy to navigate through

F5	Icons are easily recognised
F6	Design is attractive enough
F7	App improves understanding on Islamic ethical practice in citizen journalism
F8	Understand mobile app prototype's purpose
F9	Interactive mobile app prototype
F10	Relevant illustrations

The questions on Google Form can be found in Appendix E. The next section will elaborate more on the reliability and validity of these instruments.

### **3.7 Reliability and validity**

Reliability and validity are two important concepts in research methodology. Reliability refers to the consistency and stability of the measures used in a study. It is the degree to which a measure produces consistent and stable results over time and under different conditions. Reliability can be assessed using various statistical methods, such as Cronbach's alpha. A high level of reliability ensures that the results obtained from a research instrument are accurate and dependable.

Validity, on the other hand, refers to the accuracy and truthfulness of the results obtained from a research instrument or tool. It is the extent to which a measure accurately captures the concept it is intended to measure. A high level of validity ensures that the results obtained from a research instrument are measuring what they are supposed to measure (Devellis, 2016).

Validity in qualitative research refers to the degree to which the research findings accurately represent the phenomenon being studied. To ensure the validity of the research, triangulation method was employed. In triangulation method, different data collections were used. In this study, other than interviews, document analysis was also a part of the triangulation process as well as expert's validation on the topic citizen journalism and ethical conduct and questionnaire. Other validation process includes

peer debriefing, where individuals who have no interest in the project take part in reviewing and assessing the methodology and findings of the research.

As for reliability, it relates to the consistency and stability of the findings. Creswell & Creswell (2018) suggested that the methods for finding the reliability for qualitative research are more or less the same as the validity methods. In the context of this study, the use of triangulation enhances the reliability of the qualitative data collection and analysis procedures for research objectives 1 until 3. Triangulation helped confirm the findings by cross-checking them against other data sources, such as document analysis and social media posts.

To ensure the validity and reliability of a quantitative data, the instrument used must align with the objective of measuring the constructs. For this study, the only research objective that uses quantitative approach is research objective 5, which is to evaluate the effectiveness of the mobile application prototype being designed. Since the study used questionnaire for data collection method, the reliability of the questionnaire was measured using Cronbach's Alpha, which measures the consistency of the instrument used.

Cronbach's Alpha test was run on the data using SPSS (Statistical Package for the Social Sciences) software. Below is the Cronbach's Alpha value for the pilot test:

<b>Reliability Statistics</b>	
Cronbach's Alpha	N of Items
.864	50

**Figure 3.0.1** Cronbach Alpha value for pilot study

The rule of thumb for interpreting the alpha for Likert Scale is as follow:

Cronbach's alpha	Internal consistency
$\alpha \geq 0.9$	Excellent
$0.9 > \alpha \geq 0.8$	Good
$0.8 > \alpha \geq 0.7$	Acceptable
$0.7 > \alpha \geq 0.6$	Questionable
$0.6 > \alpha \geq 0.5$	Poor
$0.5 > \alpha$	Unacceptable

**Figure 3.0.2** Cronbach's Alpha values

In this case, the Cronbach's Alpha is 0.864, which falls into the "Good" consistency. This means the pilot study questionnaire was sufficient to measure the objective and for a much-improved questionnaire to be delivered. More on pilot study will be discussed in the next sub-heading.

### 3.8 Pilot study

Pilot study, also known as the feasibility study or pre-test before carrying out the whole research is fundamental in one study. It tested out the feasibility of the instruments being used, in order to produce a reliable and valid study (Edwin et al, 2002). Edwin et al tabulated the importance of carrying out a pilot study, some of them are:

- 1) It helps in designing the research methodology
- 2) Assessing whether the research approach is workable or realistic
- 3) Developing adequacy of the instruments used
- 4) Evaluating the sample frame, whether the sampling is adequate or effective
- 5) Aids in training the researcher in the research process

In this research, 2 pilot studies were executed as a test of the instrument used. One pilot study was used for research objectives 1,2 and 3, which is mainly to investigate and identify the citizen journalism activity on Instagram in Brunei

Darussalam. One participant was chosen to answer a structured interview with 27 sets of questions (see Appendix A), by passing the questions via text message. Participant answered by typing down the answers. The structured interview was not done in face-to-face situation; hence a limitation was bound to present.

The answers to the interview questions were typed in a brief manner. Although the data gained are able to give an insight on the citizen journalism activity of a citizen journalist in Brunei, the insight was not as in-depth as expected. The body language whilst answering the interview questions was also missing. In an in-depth interview, participant's body language may give a subtle sign (Miles & Huberman, 1994).

The second pilot study was executed for the quantitative part of the research, which is the research objective 5. A total of 30 participants took part in the questionnaire. Although there is no significant rule for determining the minimum sample size for a pilot study in quantitative research, some researchers suggest that a pilot study should include a minimum of 30 participants to ensure the validity and reliability of the data obtained (Leon, Davis, & Kraemer, 2011; Thabane et al., 2010). Other researchers suggest that sample size for pilot studies should be at least 10% of the sample size of the main study (Julious, 2005). Ultimately, the sample size for a pilot study should be large enough to allow for initial analysis of the research question, but small enough to minimize the cost and time required for data collection and analysis.

### **3.9 Data analysis**

#### **3.9.1 Qualitative: Thematic analysis**

In analysing the data collected through interviews and document analysis, a thematic analysis approach was used. This approach involved identifying patterns or themes within the data and grouping them together based on similarities. This process then proceeds to several steps including coding the data, grouping the codes into themes, and refining the themes until a clear picture of the data emerges.



First, the data from the interviews and document analysis were transcribed. Then, the data were coded by assigning labels to each section of the data that corresponds to a concept or idea that relates to citizen journalism, Islamic ethical practice and factors contributing to citizen journalism. Coding the themes were done manually, however as data need to be included under other larger themes with subs, a qualitative tool was used to help quicken and automate the open coding procedure. The tool NVIVO is a collaborative qualitative analysis software that allows researchers to import, organize, connect and explore their data to reveal significant insights from their qualitative data faster (*Need to Know More About NVivo?*, 2023).

Next, the codes were grouped together based on similarities to form broader themes. For example, codes related to the activities on Instagram for citizen journalism were grouped together under a theme of "Uses of Instagram". Similarly, codes related to any ethical conduct were grouped together under a theme of "ethical considerations". This process was iterative, with themes refined and revised as necessary to ensure that they accurately reflect the data.

Finally, the themes were organized into a flow, a narrative that tells the story of how Bruneians participate in citizen journalism on Instagram, how Islamic ethical conduct is practiced in information dissemination amongst Brunei citizen journalists, and the factors that contribute to the act of citizen journalism in an individual. This involved identifying patterns within the data, drawing connections between themes, and presenting the findings in a clear and concise manner, either in the form of descriptions or flowchart.

In this study, research objective 1 until 3 used thematic analysis, in which the themes from each respondent were compiled into nodes in NVIVO software. Open coding then proceeds to axial coding where linkages between the themes in one construct were synthesised. The next step was to further link the synthesised codes to other constructs' synthesised codes, until the relations area clear to be coded into selective coding.

The process of qualitative data analysis can be time-consuming, but it is essential for uncovering complex stories that lie within the data. It allows for deeper understanding of the research topic and can provide insights that would be difficult to obtain through quantitative methods alone.

### **3.9.2 Quantitative: Statistical analysis**

SPSS (Statistical Package for Social Sciences) is a powerful statistical analysis software commonly used by researchers in social sciences to perform various analyses.

For research question 5, data collected from the questionnaire were analysed by using Descriptive Statistics and Chi Test. Descriptive statistics provide a summary of the characteristics of a dataset. These include measures of central tendency mean, median and mode, however median is most used and significant in this study. SPSS provides a range of descriptive statistics options, including frequency tables, histograms, and box plots. To show the visualisation of the percentages for each Likert Scale in each item, pie charts were used.

The Chi-Square test is used to determine whether there is a significant association between two variables (Field, 2013). In this case, Chi-Square test is to evaluate the effectiveness of the mobile application prototype in educating about Islamic ethical practice in citizen journalism.

To conduct the Chi-Square test, data on the effectiveness of the mobile application prototype, such as the number of users who found the application helpful, the number of users who agreed that their understanding of Islamic ethical practice in citizen journalism increase after using the application, were gathered. The variables used in this data analysis are items under Construct 6 (user experience), an item under Construct 3 (knowledge on Islamic values) which is ‘Islamic values should be included in daily social media handling’ and also item from Construct 4 (Islamic values in CJ) ‘I am aware that I need to research the source of the information first before sharing it around’. To find only 2 variables, the median for each construct was computed. As a

result, the 10 items from Construct 5 have one median, while the item from Construct 3 and 4 has one median.

After finding median for both variables, both medians were transformed to Log10 values in order to compute the Chi-Square test. The independent variable here is Construct 5 (user experience) while the dependent variable is median from Construct 3 and 4.

Once data was gathered, Chi-Square test was to determine whether there is a significant relationship between the use of the mobile application prototype and an increase in understanding of Islamic ethical practice in citizen journalism. If there is a significant relation, it can be concluded that the mobile application prototype is effective in educating users about Islamic ethical practice in citizen journalism.

### **3.10 Research Ethic**

Informed consent was obtained from all participants, and they were assured of their right to withdraw from the study at any time. Participants' anonymity and confidentiality ensured, and their personal information are protected. The data collected will be securely stored and disposed of appropriately after the research is completed.

### **3.11 Conclusion**

This chapter had discussed the methodology of this research. This study used mix method approach, allowing for a deeper understanding of Islamic ethical practice in citizen journalism, and also to triangulate the findings. Research objective 1 until 3 employed qualitative approach, by having purposive sampling before conducting semi-structured interview that was chosen as the instrument. All three objectives utilized thematic analysis to analyse the findings, but before that, a pilot study that involved one participant was conducted.

Research question 5, on the other hand, employed quantitative approach, with simple random sampling and questionnaire as the instrument. A pilot test of 30 samples was conducted to test the reliability of the questionnaire, in which the Cronbach's Alpha test resulted in 0.86. The data was then analysed using Chi-Square test to determine which of the two hypotheses ( $H_0$  and  $H_1$ ) is accepted. The next chapter will discuss the development of mobile application prototype for Research Objective 4.

## **CHAPTER FOUR**

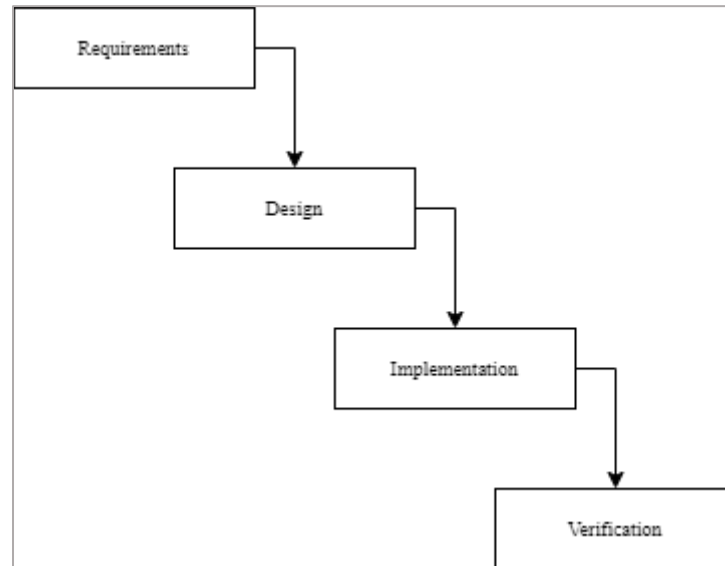
### **DESIGN AND DEVELOPMENT OF MOBILE APPLICATION PROTOTYPE**

#### **4.1 Introduction**

This chapter will cover the overview of the design and development phase of the proposed mobile application prototype named 'BWN CJ'. It starts with the description of the mobile application prototype, system analysis and design, then to project prototype and demonstration where each button and keys in the mobile application are described. Images and screen shots of the mobile application display screens will be provided.

The system development model used in this project is the Waterfall method, which was used back in the 1970s until 1990s. It was the first model created before being replaced by other latest models such as Agile that is widely used by today's software developers. As this project is a prototype for a beginner in the software development area, Waterfall method is the simplest and most straightforward for a small project (Trunkett, 2020).

In this Waterfall method, phases are broken down vertically into a step-by-step phase, starting with requirement analysis, planning, design, implementation, verification (testing and deployment) and then maintenance. Although, in this project, the prototype is limited and focusing on the system requirements. The Waterfall method diagram is shown as below:



**Figure 4.0.1** Waterfall method process taken from virtasant.com (2020)

## **4.2 Description of prototype BWN CJ**

BWN CJ is an acronym for Begawan Citizen Journalism. Begawan is taken from the name ‘Bandar Seri Begawan’, Brunei Darussalam’s capital, which is also significant to Brunei itself. The mobile application aims to educate the public, especially the young generation, on the Islamic ethical practice when performing citizen journalism.

The mobile application displays a series of interactive quiz-like sets of questions that user answers according to what they think best. There is no right or wrong answer, but each decision or answer is backed up by verses from the Qur’an and the hadiths (Prophetic sayings) that tells user why certain decision or act is ethically right or wrong from the Islamic perspective. The ‘Start Guideline’ is the most significant part of the mobile application prototype in which user is able to navigate through a list of citizen journalism acts.

In this mobile application prototype, the functions of each button are specified to cater to the user’s understanding. The buttons are all necessary. The home button is not specified; however, a user can return and back to the beginning by clicking a three-

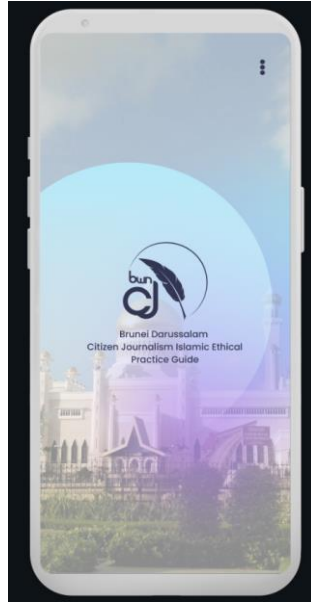
lines icon that users are familiar in some applications and choose their desired directions.

#### **4.2.1 Purpose**

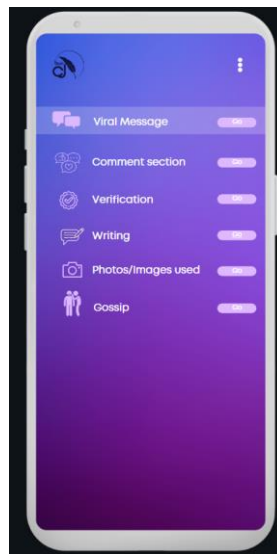
This mobile application prototype is designed to fulfil the need for a guideline in citizen journalism that reflects the Islamic ethics of a user.

The guideline comes in a form of a quiz, with two options each. These two options are derived from the literature review that mentioned the concept of good Islamic ethical practices. A questionnaire was done to evaluate the awareness and knowledge of the public on citizen journalism, in which the average answer is more towards 'Neutral' on the Likert Scale. This shows how the public is still unfamiliar with the term citizen journalism and the problems that arise from it. Hence, this acts as a requirement for the development of this mock-up mobile application that is able to increase the public's awareness on citizen journalism.

The development of this mobile application prototype aims to increase user's or the public's awareness on citizen journalism acts that do not reflect the Islamic ethical conducts. Most people perform common citizen journalism acts without realizing that the acts are against the Islamic ethics. Other than that, the hadiths and the Qur'an verses used in the mobile application prototype aims to help increase user's knowledge, especially in backing up the acts for evidence.



**Figure 4.0.1** The opening theme display of the mobile application prototype



**Figure 4.0.2** The start of the guideline in the form of a list of common citizen journalism act themes

#### **4.2.2 Intended Audience**

The prototype was designed for general public, but more focused on those who practice citizen journalism in their free time. The use of social media and the act of citizen journalism interconnected with each other. One challenge of citizen journalism is the difficulty in controlling and pinpointing which individuals are involved in this type of reporting. With the ease of access to online platforms and the lack of editorial oversight,



anyone can publish and share information, regardless of their credibility or expertise (Thurman & Fletcher, 2016).

Thurman and Fletcher (2016) suggest that this lack of control over who is involved in citizen journalism can lead to issues with accuracy, credibility, and ethical standards. They note that while citizen journalism has the potential to provide valuable perspectives and information, there is a need for greater scrutiny and verification of sources and content. Thus, the general public is targeted, especially the youths as they are digitally literate and also heavy user of social media platforms.

#### **4.2.3 Intended Use**

The mobile application prototype is intended to be used as an education tool that can interact directly with the public. Instead of a guideline that offers texts on one single website page, the public can read and learn at the same time by interacting with the application. In the cognitive behavioural theory, the second assumption of cognitive behavioural theory suggested that a person's thought intercedes the way they respond to environmental signals (Antonio et al, 2012). From the literature review, a person is able to learn from a verbal instructional model, in which a behaviour is described and explained (Nabavi, 2012). In this case, the mobile application is best used as an education tool that helps people to understand more on citizen journalism and increase their knowledge on the Islamic ethical part.

#### **4.2.4 Scope**

BWN CJ mobile application prototype focuses mainly on the social media platform Instagram. As for the platform, this prototype is only designed for virtual mobile phone and can only be accessed by using a cloud-based designing website called 'Canva', in which one could design prototypes using templates provided. The prototype may also be designed from scratch according to one's creativity. The cloud refers to servers that provide storage for data, that also improve their security and stability (Marco, 2022). Cloud based application data is stored in a cloud infrastructure, where it is also possible to store the data on a device. This cloud infrastructure is able to allow the application to function offline, and gets automatically updated once device is online again. This way, users or clients can use the application on any internet-connected device wherever they

need them (Khodukina, 2022). Canva is considered as a SaaS (Software as a Service) as customers or users can access through this application via device application or through a website.

It is a popular design tool used to create prototypes for websites, mobile applications, and other digital platforms. However, since it is a design tool rather than a development platform, Canva is not typically used to build functional prototypes that can be tested and used by end-users. Hence, this prototype is not functional and was used primarily to test the design and user experience of the application.

#### **4.2.5 User Needs**

According to Zhang, Adipat, and Wu (2005), "user-centred design is the process of designing a mobile application from the perspective of how it will be understood and used by a human user" (p. 2). This process involves identifying the needs of the user and designing the application accordingly. User needs can be determined through a variety of methods, including surveys, focus groups, and user testing (Zhang et al., 2005). For this prototype design, a questionnaire was carried out, in order to collect data on the public's familiarity and awareness of citizen journalism. This questionnaire was used as a foundation on what kind of citizen journalism act should be included in the list of 'Start Guideline' in the application prototype so that user can relate to them when using the prototype.

#### **4.2.6 Assumptions and Dependencies**

One of the major assumptions is that the application will be used primarily by Bruneian users who are active on Instagram. The prototype assumes that users have a basic understanding of ethical conduct and that they are willing to engage with the guidelines provided in the application. Another assumption is that the mobile application will be accessed on smartphones and that users have a reliable internet connection or mobile data.

The dependencies for the mobile application prototype include the availability of technological infrastructure, such as smartphones, internet connectivity, and the necessary software and hardware components required for the application to function

effectively. The success of the application prototype also depends on user acceptance and engagement with the guidelines provided, which can be influenced by factors such as the user interface, usability, and perceived usefulness of the application.

#### 4.2.7 Definitions and Acronyms

**Table 4.0.1** Definitions and acronyms used in the mobile application prototype

<b>Terms used</b>	<b>Definitions</b>
BWN CJ	Begawan (Brunei Darussalam) Citizen Journalism
Viral message	The message that is being shared around and forwarded to the point it becomes a trending message that the community receives and acknowledges.
Comment section	Part of section in a social media where users and audiences are free to drop their comments regarding the posts they are engaged to.
Verification	The process of ensuring the validity of the information received, whether the information is true or otherwise.
Gossip	Rumours or hearsay that are spread around the community.
Captions	The texts that accompany images posted in social media Instagram to describe the image.
Netizens	A slang in this digital era with the meaning of 'internet citizens', thus the short-form 'netizens'.

#### 4.3 Prototype Requirements

In order to develop a mobile application prototype, there are several requirements that need to be considered: functional requirements, requirement analysis and the description of hardware used mainly for pre-development phase.

### 4.3.2 Functional Requirements

**Table 4.0.1** Functional requirement for the mobile application prototype

No.	Functional Requirement
1.	A guideline on citizen journalism: The application should provide a comprehensive guide on citizen journalism for Bruneians.
2.	Islamic ethical practices: The application should integrate Islamic ethical practices in the guideline for Bruneian citizen journalists.
3.	Interactive user interface: To allow users to navigate the guideline with ease.
4.	Accessibility: It should be easily accessible to Bruneian citizens through mobile devices.
5.	Usability: Designed to be easy to use for all Bruneian citizens regardless of their technical expertise.
6.	Feedback mechanism: The application should have a feedback mechanism that allows users to provide comments or feedback on the effectiveness and usefulness of the guideline.

### 4.3.3 Requirement Analysis

Requirement analysis is the process of identifying and defining the needs and expectations of users for a software application. In this case, requirement analysis involves identifying the key features and functionalities that the application must possess to meet the needs of its intended users.

Firstly, key stakeholders who will use the application, such as citizen journalists, news organizations, and media consumers were identified. Next, a questionnaire and interviews with these stakeholders were conducted to gather information on their needs and expectations for the mobile application. By analysing the data collected from these questionnaire and interviews, researcher was able to identify the key features and functionalities that the application should have.

From there, some technical specifications for the application, such as the operating system it will run on and the hardware requirements were defined, although there are limitations concerning this part of the phase. Ideally, the next step was to

develop a detailed requirements document that outlines the functional and technical requirements for the application, as well as any constraints or assumptions that have been made.


As for this study, some feedbacks were collected via text message and oral feedback. Feedbacks include:


- 1) Choices of colour to be bolder and not the same colour all the way through the prototype
- 2) Too much words with less images or illustrations
- 3) Need some videos to be put into the prototype

#### 4.3.4 Description of hardware

The following are the hardware requirements necessary for the development of the project:

**Table 4.0.2** Hardware requirements

No.	Items	
1.	 <b>ASUS TUF Dash F15 FX516PE_FX516PE</b>	
	Processor	11th Gen Intel(R) Core (TM) i7-11370H @ 3.30GHz 3.30 GHz
	Memory	16.0 GB
	GPU	Nvidia RTX 3000 hardware

	Connectivity	Gigabit LAN, Wireless 6 (Intel AX201) 2×2, Bluetooth 5.1
2.		 <p style="text-align: center;"><b>Logitech Wireless Mouse M185</b></p>
3.	Size	99mm x 60mm x 39mm
4.	Weight	75.2 g
5.	Number of buttons	3 (Left/Right-click, Middle click)
6.	Sensor	Smooth optical tracking
7.	Resolution	DPI (Min/Max): 1000±

#### 4.4 Features

In this section, the features of the mobile application prototype in terms of design will be described further. That include the descriptions of logo, choices of colours, screens and buttons.

##### 4.4.1 System Features

As the mobile application prototype was designed using Canva, the system features of the application prototype are limited to visual and design elements, rather than functional ones.

To start, system features are the characteristics of a system that enable it to perform its intended functions. In this case where the mobile application prototype was designed using Canva, these features are limited to the visual and design elements of the application, such as the layout, colour scheme, typography, and graphics.

The mobile application prototype includes features such as a clear and consistent visual hierarchy, intuitive navigation, and visually appealing design elements to enhance user experience. It also includes features to ensure the accessibility of the application to a wide range of users, such as using high contrast colours, and simple user interfaces that are clickable only through the Canva link or application.

#### 4.4.2 Logo



**Figure 4.0.1** Logo of mobile application prototype

The logo has 3 components: the alphabet BWN in lower case, CJ and also a feather pen with half circular ink motion. Below the logo is the full name of the mobile application prototype Brunei Darussalam Citizen Journalism Islamic Ethical Practice Guide.

The name itself is long, hence the acronyms that made up the logo. BWN stands for Begawan, which is significant to Brunei as it is the name of the nation's capital. CJ stands for Citizen Journalism. The feather pen was chosen as part of the logo to signify the activity that citizen journalists most commonly do, which is writing. The trailing ink symbolizes that what they write would certainly leave some marks or trails and would eventually be received by others.






Notice the display of a mosque behind the logo. The mosque is Omar Ali Saifuddien Mosque that is located in the capital of Brunei, Bandar Seri Begawan. It is also an important landmark of Brunei. Other than that, a mosque signifies a holy place in Islam, that also poses as a place for education. Thus, this coincides with the idea of

this mobile application prototype, to educate users on the Islamic ethical practice when performing citizen journalism.

#### 4.4.3 Colour palette and font

The colours for the background of the screen were divided to two colours. First 3 screens used a bright purple with gradient of shades of purple, with the code #7e46cd, #454cc8, #5b1f8b, #280e4d, #8645e3. Using bright and bold colours in a mobile application prototype can help to create a visually engaging and appealing user interface, which can enhance user experience and engagement. The colours can capture the user's attention, while conveying a sense of energy and excitement (Hassenzahl et al., 2010).

**Table 4.0.1** Colour palette of prototype

No.	Colours	Code
1.		#7e46cd
2.		#454cc8
3.		#5b1f8b
4.		#280e4d
5.		#8645e3



The second part of the BWN CJ prototype where the guideline and decision-making begin. The colours for the background were made in a softer and lighter hues. As this part of the mobile application prototype wants to convey messages from the



Islamic perspective and wants to educate the users on particular *Qur'an* verses and *hadiths*, lighter colours were used.

Using softer and lighter colours for a quiz-like decision-making mobile application can create a calm and relaxing environment, which may help reduce stress and anxiety and enhance user engagement. Soft and light colours can also convey a sense of safety and comfort, making users more comfortable and confident in their decision-making process (Choi & Kim, 2016).



**Table 4.0.2** Colour palette of second part of BWN CJ

No.	Colours	Code
1.		#8EB5B2
2.		#8FC2C5

For the buttons used in BWN CJ, there are two colours. Call-to-action buttons were designed in a purple colour that is slightly lighter than the shades used in the first three screens, while the messages with *Qur'an* and *hadiths* verses were designed in a lighter blue colour.

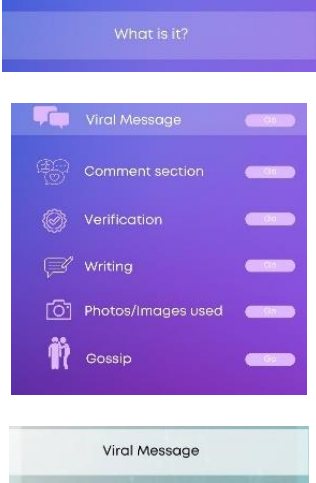

**Table 4.0.3** Colour palette of buttons

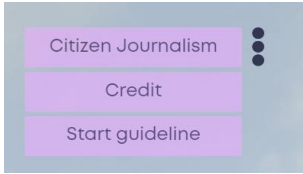
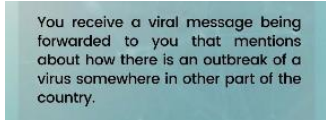

No.	Colours	Code
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1.		#D2AEEC
2.		#BEEFFE

There were multiple fonts used in this prototype, but were kept as minimum as possible to ensure visual consistency for user. The following are the list of fonts and font sizes:

**Table 4.0.4** Fonts used in mobile app prototype

No.	Font and Font size	Screens/buttons used
1.	Mont – 14	<p>Headings</p> 
2.	Mont - 12	<p>Descriptions</p> 


3.	Mont - 9	<p>Home and call to action buttons</p> 
4.	Poppins Medium - 14	<p>scenario</p> 
5.	Poppins Bold – 11.7	<p>Options</p> <p>Decision Islamic knowledge</p> 



#### 4.4.4 Description of each screen



The following table shows the descriptions for each screen in BWN CJ prototype:



**Table 4.0.5** Description of screens in the mobile app prototype



Screens	Descriptions
	<p>The opening display of the mobile application that displays one of the most significant landmarks in Brunei Darussalam, which is the Sultan Omar Ali Saifuddien Mosque. This also shows the Bruneian values first hand, when user opens the application.</p>

	
	<p>This screen explains to users the definition of citizen journalism in the simplest form for their understanding before they proceed with the guideline. This aims to make the user understand the term.</p>
	<p>Credit screen mentions the credits behind the work. For this mobile application prototype however, it was mentioned that this is only a mock-up for this research's purpose.</p>



	
	<p>The guideline screen shows a list of citizen journalism activities commonly done in social media: viral messages, comment section, verification, writing, photos or images used and gossip.</p>
	<p>Viral message screen describes a situation where user is being forwarded a viral message:</p> <p>“You receive a viral message being forwarded to you that mentions about how there is an outbreak of a virus somewhere in other part of the country.”</p> <p>Below the situation are 2 options in which user must choose and click one:</p>



	<p>(1) Forward to another group chat. This message should go viral immediately!</p> <p>(2) Read then check for the information source and verification. Keep the message for yourself.</p>
	<p>The click on either option brings user to evidence from the Qur'an and the hadiths as well as from other known Muslim scholars, to support whether the decision is considered as good or wrong ethical conducts from the Islamic perspective.</p> <p>The supporting verses for the first option decision is taken from Surah Al-Hujurat (49), verse 6: "O you who believe! If some transgressor brings you news (that requires taking action), verify it carefully (before you believe and act upon it), lest you harm a people in ignorance and then become regretful for what you have done."</p>
	<p>The second option brings user to another supporting verse or hadith. The hadith (sayings from the Prophet Muhammad) derived from Sunan Abu Daud:</p> <p>Abu Qilabah reported: The Messenger of Allah, peace and blessings be upon him, said, "It is an evil mount for a man to rely upon what others merely assert."</p>


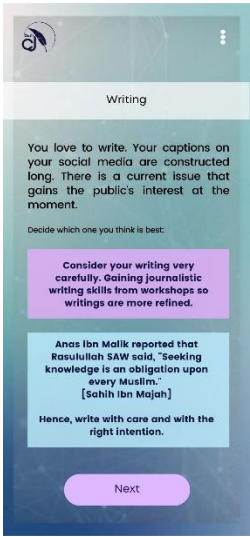
	
	<p>The next section is ‘Comment Section’. The situation mentions the user comes across a news posted by a media agency and feels rather unsatisfied with the headline or the news information. Meanwhile, the comment section of the post is opened for public to drop their comments.</p> <p>2 options that the user needs to decide on:</p> <ol style="list-style-type: none"> <li>1) Let it pass without commenting anything and find out more of the news on the official website/newspaper.</li> <li>2) Drop some sarcastic comments. This way, the right authority can look into the matter that people are unsatisfied of.</li> </ol>
	<p>The first option brings a verse from the Qur’an as supporting evidence that indeed, this decision is the most preferred in Islam:</p> <p>“When there comes to them some matter touching (public) safety or fear, they make it known (among the people); if only they had referred it to the Messenger or to those charged with authority among them, the proper investigators would have understood it from them (directly). Had it not been for the Grace and Mercy of Allaah upon you, you</p>

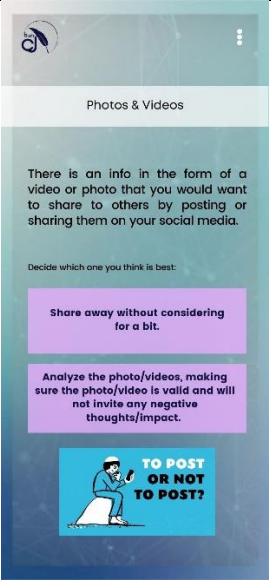

 <p>Comment Section</p> <p>You read a news on the official Instagram page of a media agency and feel rather unsatisfied with the headline. The comment section is open.</p> <p>Decide which one you think is best:</p> <p><b>Let it pass without commenting anything and find out more of the news on the official website/newspaper.</b></p> <p>"When there comes to them some matter touching (public) safety or fear, they make it known (among the people); if only they had referred it to the Messenger or to those charged with authority among them, the proper investigators would have understood it from them (directly). Had it not been for the Grace and Mercy of Allaah upon you, you would have followed Shaytaan (Satan), save a few of you" [al-Nisaa' :83]</p> <p>Next</p>	<p>would have followed Shaytaan (Satan), save a few of you" [al-Nisaa' :83]</p>
 <p>Comment Section</p> <p>You read a news on the official Instagram page of a media agency and feel rather unsatisfied with the headline. The comment section is open.</p> <p>Decide which one you think is best:</p> <p><b>Drop some sarcastic comments. This way, the right authority can look into the matter that people are unsatisfied of.</b></p> <p>The Prophet (Salallaahu Alaihi wa Sallam) said, "Indeed a servant may say a word from which Allah's displeasure is gained and he does not realize it. Allah will put him in Jahannam due to it." (HR. Bukhari)</p> <p>Next</p>	<p>The second option conveys another supporting evidence on why such decision or act may not be the best in Islamic perspective:</p> <p>The Prophet (Salallaahu Alaihi wa Sallam) said, "Indeed, a servant may say a word from which Allah's displeasure is gained and he does not realize it. Allah will put him in Jahannam due to it."</p> <p>This is taken from a hadith narrated by Al-Bukhari (Shameem, n.d).</p>
	<p>Next section talks about verification of the information that user receives. In this situation, an unknown information on medicinal recommendation was received by user via their social media, and user never heard of this information before.</p> <p>2 options below the situational descriptions to be chosen by user:</p>







	<ol style="list-style-type: none"> <li>1) Forward and tell people about it. After all, this info might benefit others' health.</li> <li>2) Verify it with individual of professional credibility; whether this is true or not.</li> </ol>
	<p>If user chooses first option, the decision is backed-up by a hadith (sayings of the Prophet) that aims to make the user think whether the chosen decision is right or wrong in Islam.</p> <p>"It is enough for a man to be considered a liar to for him to repeat everything that he hears."</p> <p>(Sahih Muslim) (Shameem, n.d).</p>
	<p>Second option conveys a saying from a known Muslim scholar, Hasan Al-Basri.</p> <p>“The believer reserves judgment until the matter is proven.” (Ahmad, 2016).</p>

	
	<p>Next is the writing section. In this scenario, user loves to write as this is reflected from the long captions constructed in each post on their social media page. Meanwhile, there is a current issue that gains the public's interest. Hearing this issue, the user is faced with 2 options or decisions:</p> <ol style="list-style-type: none"> <li>1) Write about it; even if it's just a point of view or own opinion.</li> <li>2) Consider your writing very carefully. Gaining journalistic writing skills from workshops so writings are more refined.</li> </ol>
	<p>First option conveys a verse from the Qur'an to user to think back whether the decision is ethically right or otherwise.</p> <p>"Not a word is said except that there is a watcher by him ready to record it." (Surah Qaf, verse 18)</p>

	
	<p>Second option brings up another saying of the Prophet (hadith) that supports the act of gaining knowledge even in writing.</p> <p>Anas ibn Malik reported that Rasulullah SAW said, "Seeking knowledge is an obligation upon every Muslim."</p> <p>[Sahih Ibn Majah]</p> <p>This calls for the act of writing properly with the right intention.</p>
	<p>Next screen shows the situational scenario of using photos and videos in social media.</p> <p>“There is an information in the form of a video or photo that you would want to share to others by posting or sharing them on your social media.”</p> <p>The options user can choose:</p> <ol style="list-style-type: none"> <li>1) Share away without considering for a bit.</li> </ol>

	<p>2) Analyze the photo/videos, making sure the photo/video is valid and will not invite any negative thoughts/impact.</p>
	<p>When user clicks the first option, evidence from Islam's perspective on sharing photos and videos shows.</p> <p>"Proceed with caution. A method based on fiqh called "Sadd Zari'ah" is applied where we need to prevent things that could lead to being unlawful (haram)."</p> <p>"Whoever takes the paths of rebuke, will be rebuked." - Sayyidina Umar RA</p>
	<p>The click on second option brings user to another supporting evidence:</p> <p>Imam al-Syaukani RA said: "What is meant by tabayyun is to examine carefully. What is meant by tatsabbut is to be careful and not hasty, to look with deep knowledge at an event and news</p>

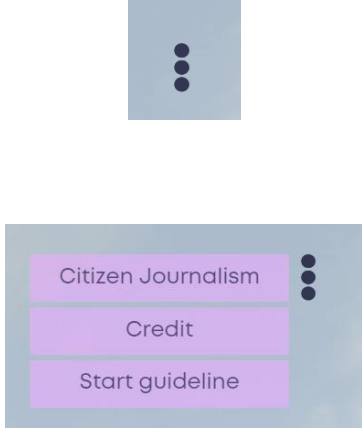
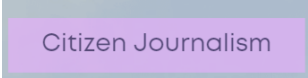
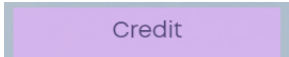
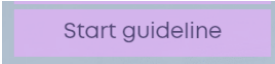

	<p>that comes, until it becomes clear for him. " (Fath al-Qadir, 5/65).</p> <p>"The servant who conceals (the faults) of others in this world, Allah would conceal his faults on the Day of Resurrection" (Sahih Muslim: 2590)</p>
	<p>The last section in the list of citizen journalism activities in the mobile application is Gossips. In the scenario, user caught a news regarding someone on their social media feed. It has become a highly engaging issue amongst the public, specifically the netizens (citizens of the internet).</p> <p>User are to choose 2 options:</p> <ol style="list-style-type: none"> <li>1) Disregard the gossips. After all, you are not sure if it is true or otherwise.</li> <li>2) Join the crowd by reposting about it on your Instagram stories.</li> </ol>
	<p>For option 1, the supporting evidence comes from Surah Al-Hujurat, verse 6.</p> <p>"O you who have believed, if there comes to you a disobedient one with information, investigate, lest you harm a people out of ignorance and become, over what you have done, regretful."</p> <p>(Surah Al-Hujurat, verse 6)</p>

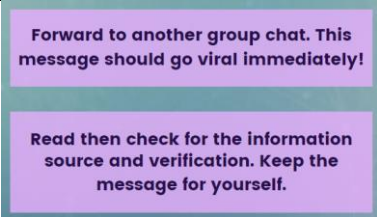
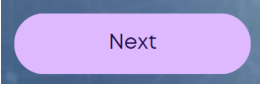
	
	<p>When user clicks the second option, a hadith is provided as the evidence on how the second option may not be the best decision:</p> <p>“It is enough of a lie for a man to narrate everything he hears.”</p> <p>(Sahih Muslim, 5)</p>

#### 4.4.5 Description of buttons

This table shows the buttons used in the mobile application prototype:

**Table 4.0.6** Descriptions of buttons

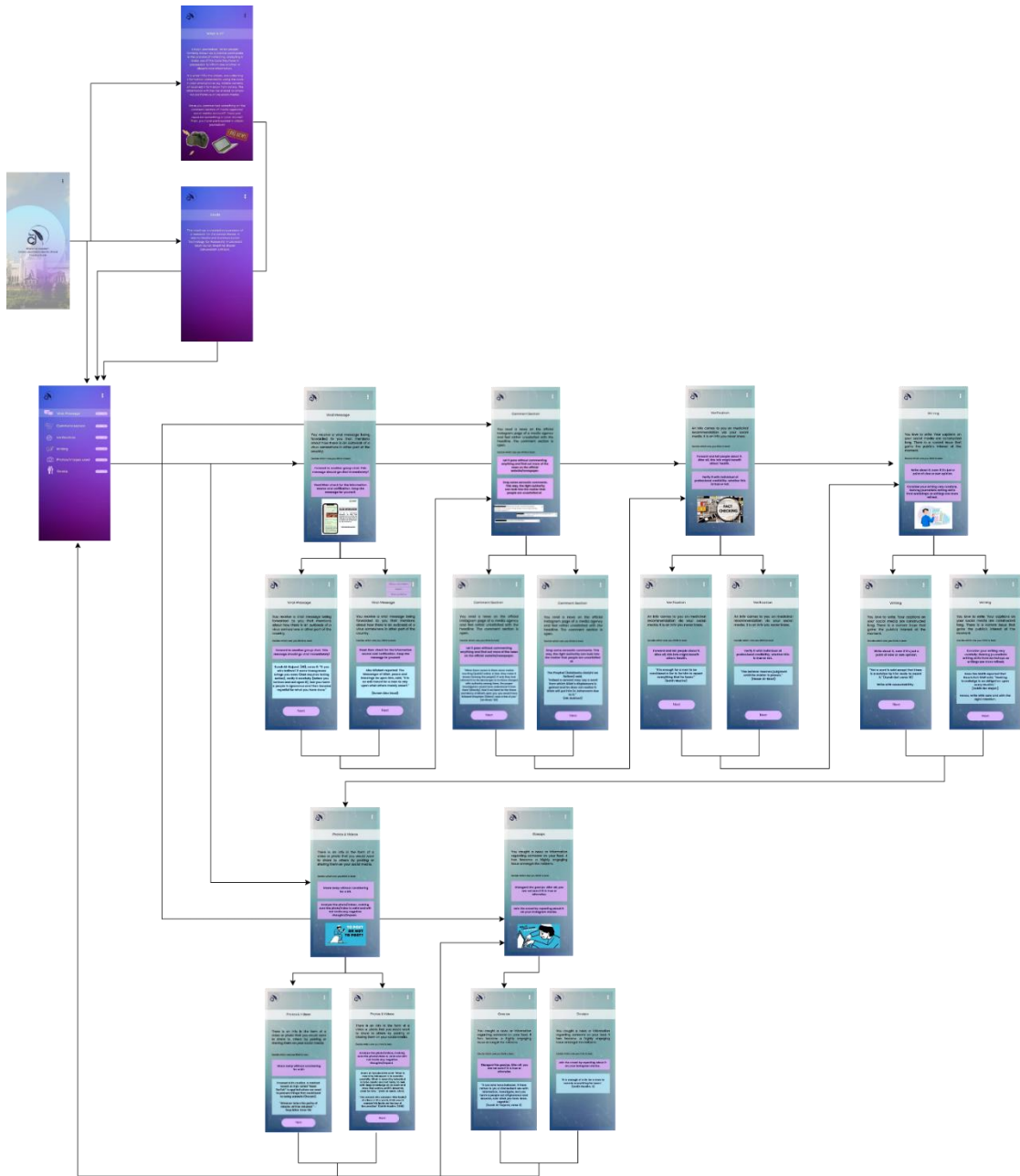
Buttons	Descriptions
	<p>Home button:</p> <p>The three vertical dots at the top right of the screen brings user to choose the three basic menus in case user wants to start over and reset the whole application experience.</p>
	<p>Citizen Journalism button:</p> <p>This brings user to a page that explains to users what is meant by the term 'Citizen Journalism'.</p>
	<p>Credit button:</p> <p>This brings user to a page of who is behind the mock-up design and the purpose of this mock-up design.</p>
	<p>Start Guideline button:</p> <p>This button directs the user to a page of the list of activities in citizen journalism. It is also the main button should user wants to reset in the middle of using the application.</p>
	<p>Go button:</p> <p>This directs user to each activity's page, where user is provided with a situational scenarios of citizen journalism commonly faced by user.</p>
	<p>Decisions buttons:</p>

	<p>Each activity has 2 buttons to choose from. Each decision button leads user to a statement derived from the Qur'an and hadiths (Prophetic sayings) that gives evidence on why each decision is either recommended or should be avoided.</p>
	<p>Next button: This directs user to the next citizen journalism activity.</p>

#### 4.5 Screen Navigation

The figure below provides a visualisation of the mobile application as user navigates through the application. It also shows where one screen will go if user click certain buttons.





**Figure 4.0.1** Screen navigation of the mobile app prototype

#### **4.6 Photos and videos used**

In the mobile application prototype, some photos used were obtained from the Canva images while some were acquired from external source such as Google and Facebook.





As the mobile application prototype was designed using a mock-up template from Canva Pro, the images, elements and videos were also used from this cloud-based designing platform. Canva Pro offers a vast library of images that can be used for designing and customizing graphics. These images include illustrations, photographs,

icons, and other graphics that are categorized by themes, such as business, education, and lifestyle. The Canva Pro images are licensed for commercial use, so users can use them in their professional projects without worrying about copyright issues. Additionally, Canva Pro allows users to resize and edit the images to fit their specific needs. It also offers features such as transparent backgrounds, custom templates, and the ability to upload user’s own images.

Below is list of images used in BWN CJ application prototype that are not included in Canva Pro:

**Table 4.0.10** Images used in the mobile app prototype

No.	Images	Source
1.		Google – Ministry of Health Brunei Darussalam social media account post
2.	<p>██████████ Welcome to Brunei. Land of unexpected treasures. Those papers being buried sooooo long that they become treasures :)</p> <p>██████████ Andang ku sangka udah but surprised it just 10 goals, it could've been more.</p> <p>██████████ Yg penting YAKIN BELARAI...</p>	Screenshots of comments in one of the posts from one of the news agencies in Brunei

3.		Google images
4.		From a website: muslimhands.org.uk
5.		From a website: muslimhands.org.uk
6.		Google image on writing

#### 4.7 Conclusion

In conclusion, BWN CJ mobile application prototype was designed as an interactive decision-making guideline on Islamic ethical practice when performing citizen journalism, especially in social media. This prototype development answered the research question 4: what can be done to increase the awareness and education on Islamic ethical practice in Brunei citizen journalism? This mobile application prototype applied Waterfall method, although for this study, the stages were focused more on the requirements and design. Due to time constraint and lacking of programming knowledge, this prototype could only be designed as a non-functional prototype that can only be accessed through virtual phone. The next chapter will look into the findings of the research.

## CHAPTER FIVE

### FINDINGS OF RESEARCH

#### 5.1 Introduction

In this chapter, the data analysis for both qualitative and quantitative methods are described in details. Qualitative data analysis comes first, then the quantitative method. Each research question is described, using their own instrument.

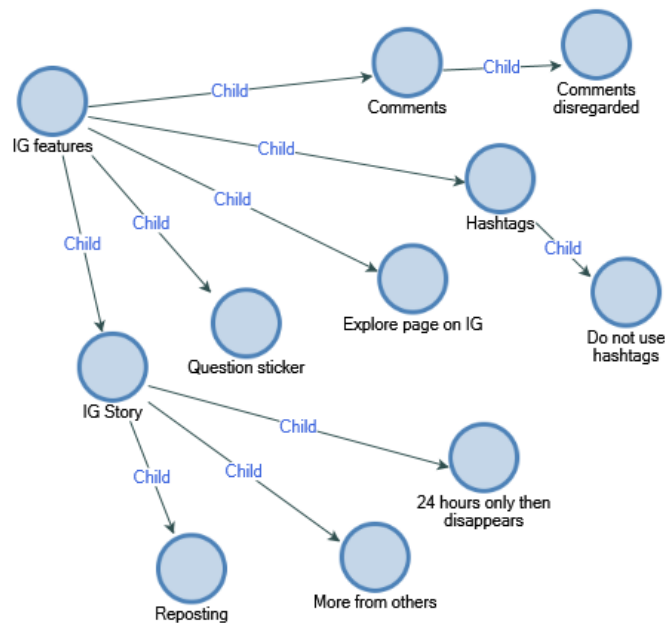
#### 5.2 Research question 1: How do Bruneian citizen journalists participate in citizen journalism on Instagram?

The discussion begins by looking at the first research question. The first research question aims to find out the ways Bruneian citizen journalists participate in citizen journalism on Instagram. The instrument used in this research question is interview, and analyzed using a tool called NVivo, a qualitative data analysis computer software package. The table below shows the themes that emerged from the open coding NVivo:

**Table 5.0.1** Sub-themes 1 'IG features used'

Main theme	Sub-themes	Sub sub-themes	Children Nodes
Citizen journalism participation on IG	IG features used	Instagram stories	Reposting others posts on stories
			More posts from others
			Displayed for 24 hours only then disappear
		Question stickers	
		Explore page on IG	
		Hashtags	Do not use it anymore
		Comments section	

The main theme for RQ1 is the methods of citizen journalism participation on Instagram where the sub theme is 'Instagram features used'. Under sub-sub themes there are Instagram stories, questions stickers, explore page on Instagram, hashtags and also comment sections. The Instagram stories has children nodes under it: reposting others posts, more posts from others, displayed for 24 hours only then disappear. For hashtags, answers from participants are mainly do not use it anymore, hence it is placed under its children nodes. The tree index figure from NVivo is shown below:



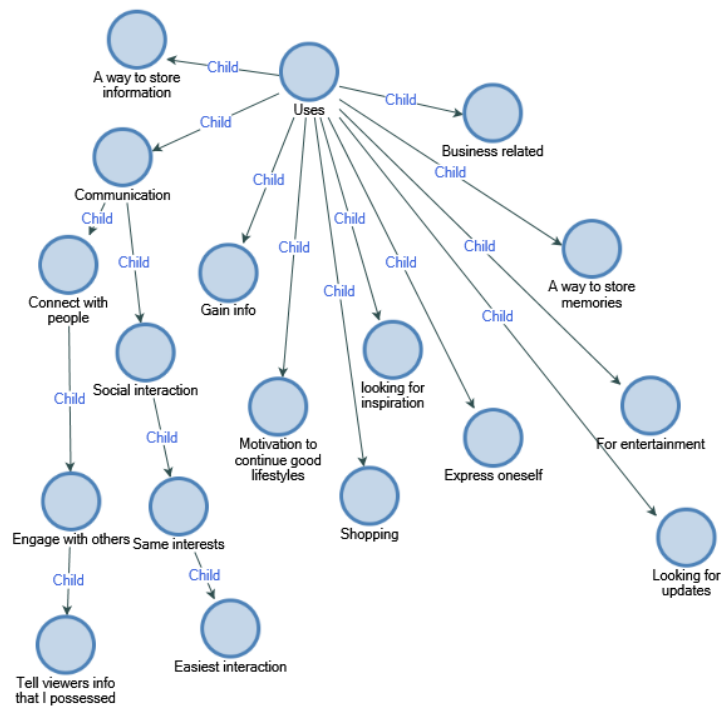
**Figure 5.0.1** Tree index figure on 'IG Features' as in NVivo

**Table 5.0.2** Sub themes 'Uses of Instagram'

Main theme	Sub-themes	Sub sub-themes	Children Nodes
Citizen journalism participation on IG	Uses of Instagram	A way to store information	
		Communication	Connect with people
			Social interaction
		Gain information	
		Motivation to continue good lifestyles	
		Shopping	
		Looking for inspiration	

		Express oneself	
		Looking for updates	
		For entertainment	
		A way to store memories	
		Business related	

Under the sub theme ‘uses of Instagram’, there are sub-sub themes inclusive of: a way to store information, communication, gain information, motivation to continue good lifestyles, shopping, looking for inspiration, express oneself, looking for updates, entertainment purpose, a way to store memories and also business related. Under communication, children nodes are connect with people and also for social interaction. The tree index system for the main theme from NVivo is as below:

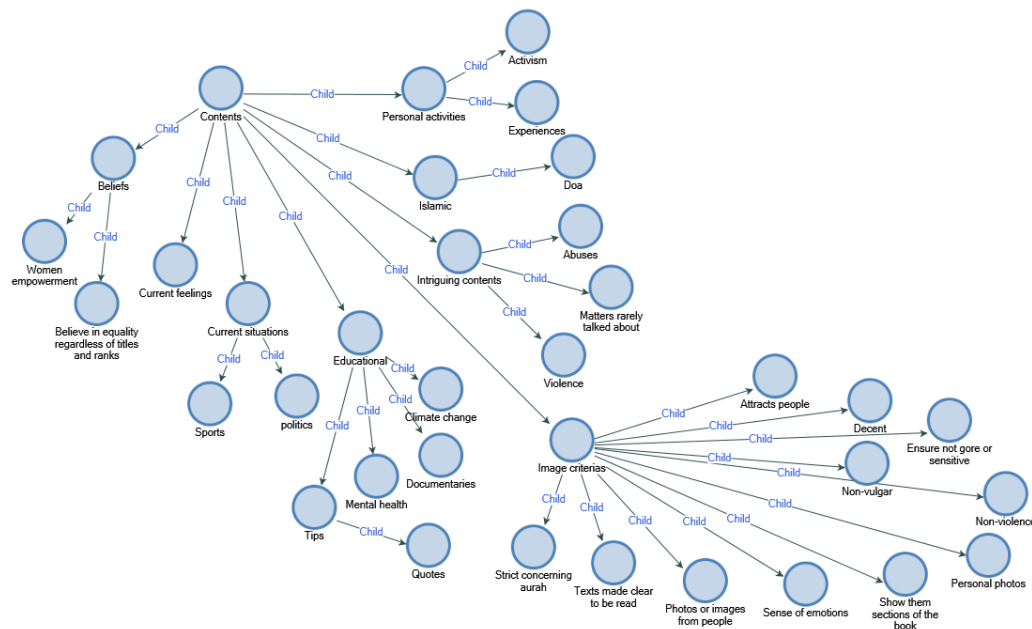


**Figure 5.0.2** Tree index figure of 'Uses of Instagram' from NVivo

**Table 5.0.3** Sub themes of Contents

Main theme	Sub-themes	Sub sub-themes	Children Nodes
Citizen journalism participation on IG	Contents	Personal activities	Activism
			Experiences
		Islamic	Du'a (prayers)
		Intriguing contents	Abuses
			Matters rarely talked about
			Violence
		Image criteria	Attracts people
			Decent
			Ensure not gore or sensitive
			Non-vulgar
			Non-violence
			Personal photos
			Show them sections of the book
			Sense of emotions
			Photos or images from people
			Texts made clear to be read
			Strict concerning awrah
		Educational	Climate change
			Documentaries
			Mental health
			Tips
		Current situations	Politics
			Sports
		Current feelings	
		Beliefs	Women empowerment
			Believe in equality regardless of titles and ranks

Under the sub-themes of ‘Contents’, there are personal activities with the children nodes experiences and activism. Islamic node has *du’a* (prayers) as the children node. Then, there is intriguing contents that include abuses, matters rarely talked about and violence under its children node. For image criteria, the sub-sub themes are attracts people, decent, ensuring the image is not gore or sensitive, non-vulgar, non-violence, personal photos, sections of a book, sense of emotions, photos or images from people, texts made clear to be read and strict concerning *awrah*. For educational node, the children nodes include climate change, documentaries, mental health and tips. Under sub-sub themes current situations include politics and sports. Another sub-sub theme is current feelings and beliefs, where women empowerment as well as believing in equality regardless of titles and ranks fall under beliefs. The tree index diagram from NVivo is shown below:



**Figure 5.0.3** Tree index figure from NVivo under 'Contents'

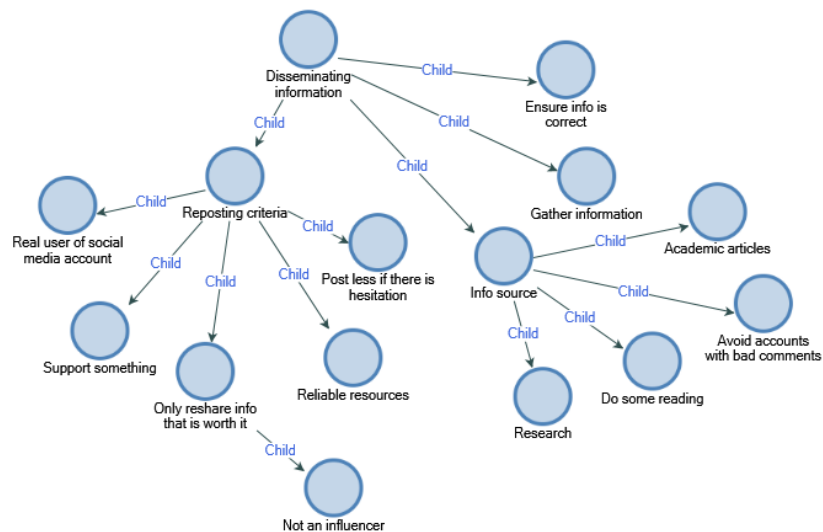
**Table 5.0.4** Sub-theme of “Disseminating information”

Main theme	Sub-themes	Sub sub-themes	Children Nodes
Citizen journalism participation on IG	Disseminating information	Ensure information is correct	
		Gather information	
		Information source	Academic articles



			Avoid accounts with bad comments
			Do some reading
			Research
		Reposting criteria	Post less if there is hesitation
			Reliable resources
			Only reshare information that is worth it
			Support something
Real user of social media account			

Under the main theme ‘Disseminating information’, the sub-themes are: ensure information is correct, gather information, information sources and reposting criteria. The children nodes under information source include: academic articles, avoiding accounts with bad comments, doing some research and reading. Meanwhile, reposting criteria has these children nodes under it: Posting less if there is hesitation, reliable resources, only reshare worth it information, showing support to something and real user of social media account. The tree index diagram from NVivo is shown below:

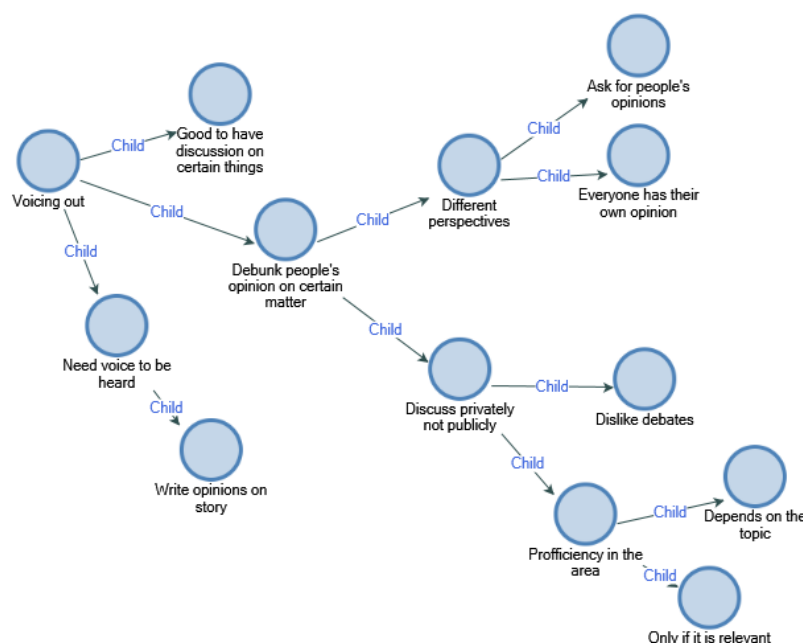


**Figure 5.0.4** Tree index diagram of sub-theme 'Disseminating Information' from NVivo

**Table 5.0.5** Sub themes “Voicing out”

Main theme	Sub-themes	Sub sub-themes	Children Nodes
Citizen journalism participation on IG	Voicing out	Good to have discussion on certain things	
		Debunk people’s opinion on certain matter	Different perspectives
			Discuss privately not publicly
Need voice to be heard	Write opinions on story		

For the sub-theme ‘Voicing Out’, the sub-sub themes nodes are: good to have discussion on certain matter, debunk people’s opinion on certain matter, need voice to be heard. Under debunking people’s opinion, 2 children nodes surfaced: different perspectives and discuss privately not publicly. As for the children node under need voice to be heard, comes ‘write opinions on story’.



**Figure 5.0.5** Tree index diagram of sub-theme 'Voicing Out' from NVivo

### 5.3 Research question 2: How do Bruneian citizen journalists practice Islamic ethical conduct in citizen journalism?

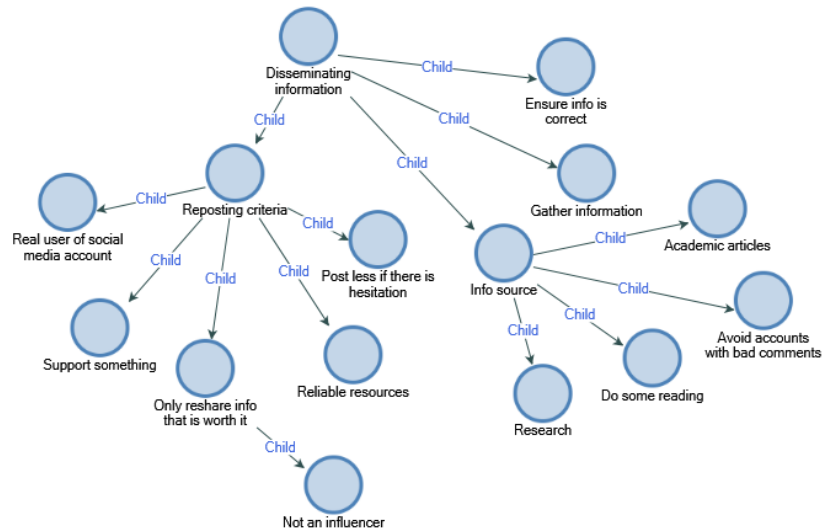
The purpose of the second research question is to get to know how the citizen journalists practice Islamic ethical conduct when performing citizen journalism on Instagram. The data was collected by interviewing individuals who performed citizen journalism, intentionally or unintentionally, then were analysed using NVivo tool. The result recorded in the table below are the themes that emerged from the data collection:

**Table 5.0.6** Sub-theme 'Disseminating information' for Research Question 2

Main theme	Sub-themes	Sub sub-themes	Children Nodes
CJ practice Islamic ethical conduct	Disseminating information	Ensure information is correct	
		Gather information	
		Information source	Academic articles
			Avoid accounts with bad comments
			Do some reading
			Research
		Reposting criteria	Post less if there is hesitation
			Reliable resources
			Only reshare information that is worth it
			Support something
		Real user of social media account	

Under the sub-theme 'Disseminating information', the sub sub-themes are: ensure information is correct, gather information, information sources and reposting criteria. The children nodes under information source include: academic articles, avoiding accounts with bad comments, doing some research and reading. Meanwhile, reposting criteria has these sub-sub themes under it: Posting less if there is hesitation, reliable

resources, only reshare worth it information, showing support to something and real user of social media account. The tree index diagram from NVivo is shown below:

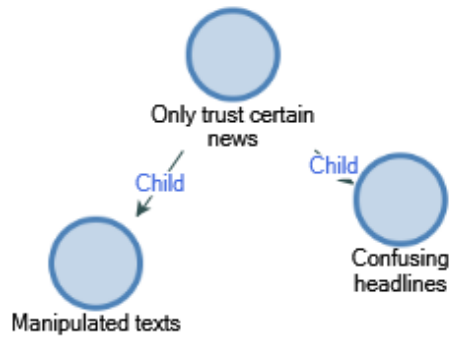


**Figure 5.0.6** Tree index diagram of sub-theme 'Disseminating Information' from NVivo

**Table 5.0.7** Parent Node 'Only trust certain news'

Main theme	Sub-themes	Sub sub-themes	Children Nodes
CJ practice Islamic ethical conduct	Only trust certain news	Manipulated texts	
		Confusing headlines	

Under the RQ2 where the key words are citizen journalists' practice of Islamic ethical conduct, one of the sub-themes is 'only trust certain news'. Under this sub-theme are: manipulated texts and confusing headlines. Below is the tree index diagram from NVivo:



**Figure 5.0.7** Tree index diagram of sub-theme 'Only trust certain news' from NVivo

**Table 5.0.8** Sub-theme 'Viral'

Main theme	Sub-themes	Sub sub-themes	Children Nodes	
CJ practice Islamic ethical conduct	Viral	Actions towards viral photos or videos	Watch photos or videos first	
			Depends on content	
			Against morals	Immoral to spread around
				Not worth the time
				Refrain from forwarding
				Insulting and dehumanizing titles
				Confrontation if info is wrong
			Check the source	Ask someone working in that area
				Checking the comments
				Save the information
				Find the origin and source of information
				Google check for images
				Checking how they talk or post
				Check through relevant authorities

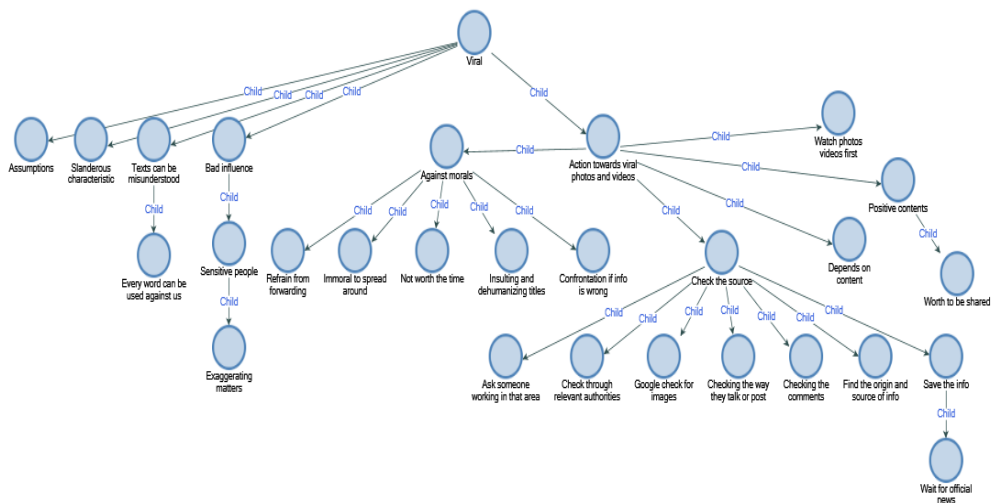
			Positive contents	Worth to be shared
		Bad influence	Sensitive people	Exaggerating matters
		Texts can be misunderstood	Every word can be used against us	
		Slanderous characteristics		
		Assumptions		

Under the sub-theme ‘Viral’, these fall under the sub-sub themes:

1. Actions towards viral photos or videos
2. Bad influence
3. Texts can be misunderstood
4. Slanderous characteristics
5. Assumptions

The sub-sub themes: watch photos or videos first, depends on the content. Under against morals, it will be immoral to spread around, not worth the time, refraining from forwarding, insulting and dehumanizing titles, confrontation if information is wrong. Another sub-sub themes extracted from the data are checking the source, whereby they need to check with someone working in that area, check the comments, save the information for future reference, find source and origin of the information, Google check the images, check how they talk or post and then check through relevant authorities. If the content is positive, it is worth to be shared.

Another sub sub-theme is bad influence, where sensitive people and exaggerating matters fall under its children nodes. Texts can be misunderstood is another sub sub-themes, with every word can be used against us as the children node. The remaining sub-sub themes are slanderous characteristics and assumptions. The tree index diagram from NVivo is shown below:



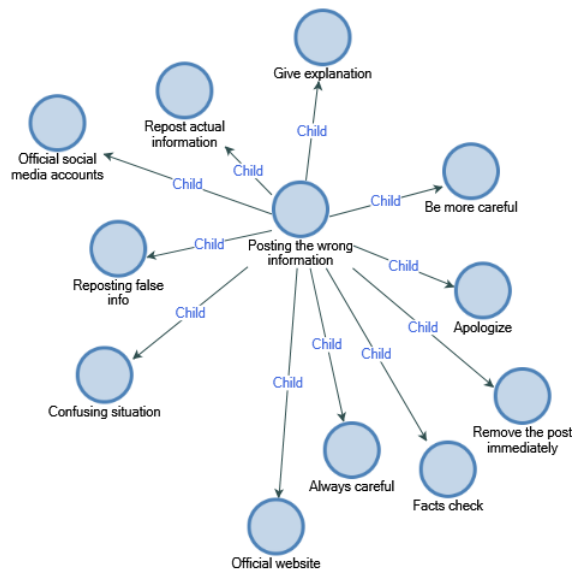
**Figure 5.0.8** Sub-theme 'Viral' tree index diagram from NVivo

**Table 5.0.9** Sub theme 'Posting the wrong information'

Main theme	Sub-themes	Sub sub-themes	Children Nodes
CJ practice Islamic ethical conduct	Posting the wrong information	Reposting false information	
		Remove the post immediately	
		Confusing situation	
		Apologize	
		Repost actual information	
		Give explanation	
		Official social media accounts	
		Official website	
		Facts check	
		Be more careful	
		Always careful	

Posting the wrong information falls under the category of sub-theme. The sub sub-themes include: reposting false information, remove the post immediately, confusing situation, apologize, repost actual information, give explanation, official social media accounts, official website, facts check, be more careful and always careful. Figure 5.2.7

below shows the screen capture from NVivo showing the tree index diagram for this particular sub-theme:



**Figure 5.0.9** Tree index diagram of sub-theme 'Posting the wrong information' from NVivo

#### **5.4 Research question 3: What are the factors that contribute to citizen journalists to perform citizen journalism?**

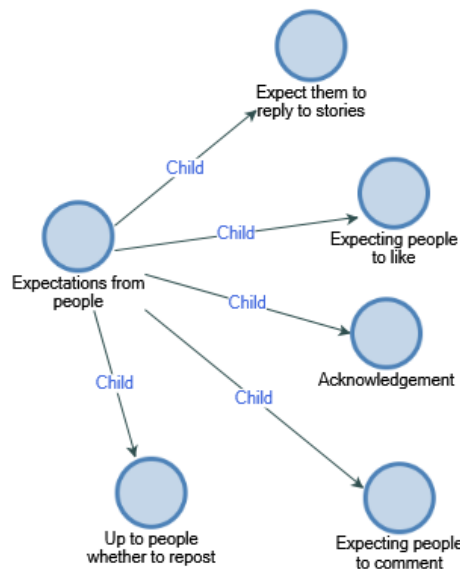
The third research question aims to find out the factors that contribute to the act of citizen journalism. The instrument used to obtain the data for this research question was also interview, and data were analysed by using the qualitative data analysis computer software package, NVivo. The table below shows the first sub-theme that branches out from the main theme 'Factors contributing to citizen journalism':



**Table 5.0.10** Sub-theme 'Expectations from people' under the main theme of factors contributing to the act of citizen journalism

Main theme	Sub-themes	Sub sub-themes	Children Nodes
Factors contributing to CJ	Expectations from people	Expect people to reply to their stories	
		Expecting people to like	
		Acknowledgement	
		Expecting people to comment	
		Up to people whether to repost	

For RQ3, the main theme is factors contributing to citizen journalism behaviour, in which one of the sub-themes is expectations from people. Sub sub-themes include: expecting people to reply to stories, expecting people to like, acknowledgement, expecting people to comment and up to people whether to repost or otherwise. The tree diagram from NVivo is provided below:

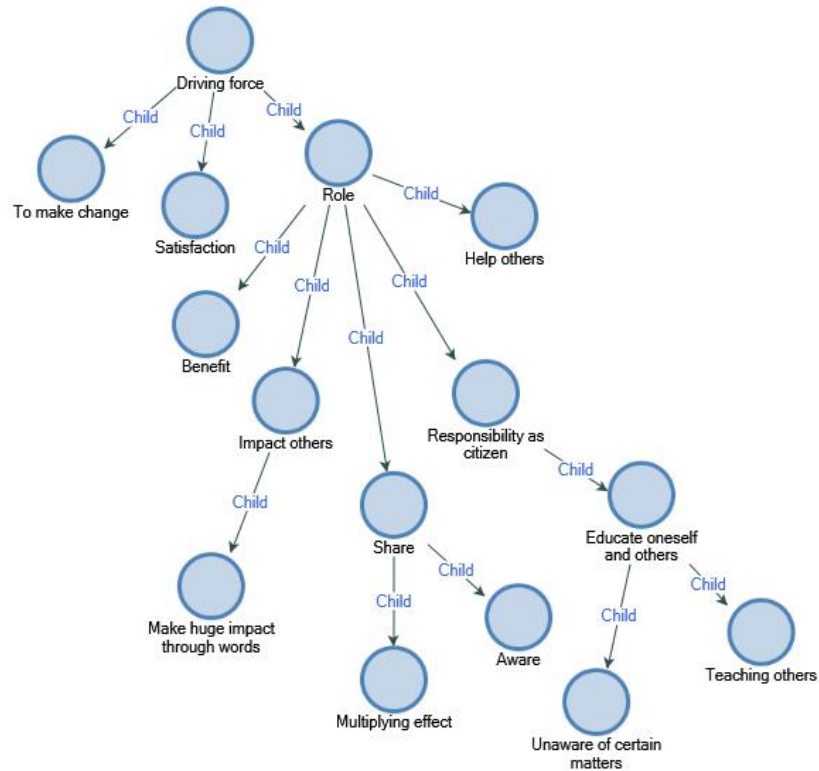


**Figure 5.0.10** Tree index diagram of sub-theme 'expectations from people' from NVivo

**Table 5.0.11** Sub-theme 'Driving Force'

Main theme	Sub-themes	Sub sub-themes	Children Nodes			
Factors contributing to CJ	Driving force	To make change				
		Satisfaction				
		Role	Benefit			
			Impact others	Make huge impact through words		
			Responsibility as citizen	Educate oneself and others		
				Teaching others		
				Unaware of certain matters		
			Share	Multiplying effect		
				Aware		

Under the sub-theme 'Driving Force', these are the sub sub-themes: to make change, satisfaction and role. From 'role', it branches out into several nodes namely benefit, impact others, responsibility as citizen and share. Impact others branches out into a child node 'making huge impact through words.' Meanwhile, responsibility as citizen branches into: educate oneself and others, teaching others, unaware of certain matters. As for share, the sub sub-themes are multiplying effect and aware. Figure 5.3.3 shows the tree index diagram from NVivo:

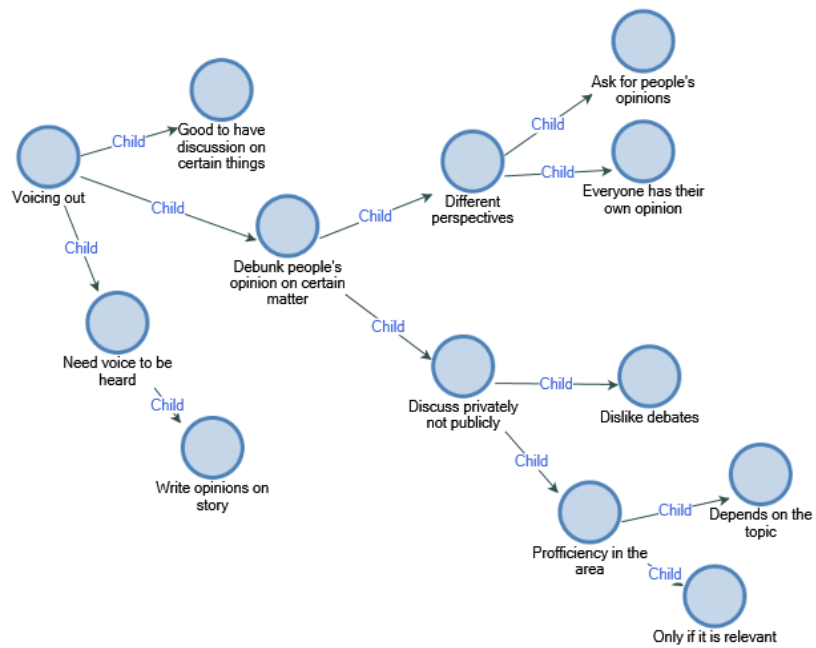


**Figure 5.0.11** Tree index diagram for 'Driving Force' in NVivo

**Table 5.0.12** Sub-theme 'Voicing Out' under factors contributing to the act of citizen journalism

Main theme	Sub-themes	Sub sub-themes	Children Nodes
Factors contributing to CJ	Voicing out	Good to have discussion on certain things	
		Debunk people's opinion on certain matter	Different perspectives Discuss privately not publicly
		Need voice to be heard	Write opinions on story

The sub-theme 'Voicing Out' has sub sub-theme of: good to have discussion on certain things, debunk people's opinion on certain matter and need voice to be heard. Debunking people's opinion branches out into these 2 children nodes: different perspectives, discuss privately not publicly. The need for voice to be heard branches out into writing opinions on stories. The tree index diagram is shown below:

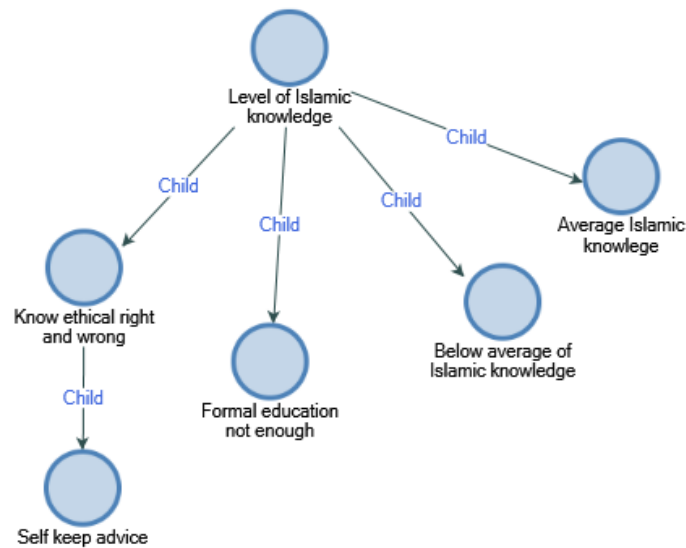


**Figure 5.0.12** Tree index diagram of 'voicing out' taken from NVivo

**Table 5.0.13** Sub-theme of 'Level of Islamic knowledge'

Main theme	Sub-themes	Sub sub-themes	Children Nodes
Factors contributing to CJ	Level of Islamic knowledge	Average Islamic knowledge	
		Below average Islamic knowledge	
		Formal education not enough	
		Know ethical right and wrong	Self-kept advice

The sub-theme 'Level of Islamic knowledge' branches out into several sub sub-themes: average Islamic knowledge, below average Islamic knowledge, formal education not enough and know ethical right and wrong. Know ethical right and wrong has child node 'self-kept advice'. The tree index diagram from NVivo is shown as below:



**Figure 5.0.13** Level of Islamic knowledge in the form of a tree index diagram from NVivo

**Table 5.0.14** Sub-theme 'Journalistic training'

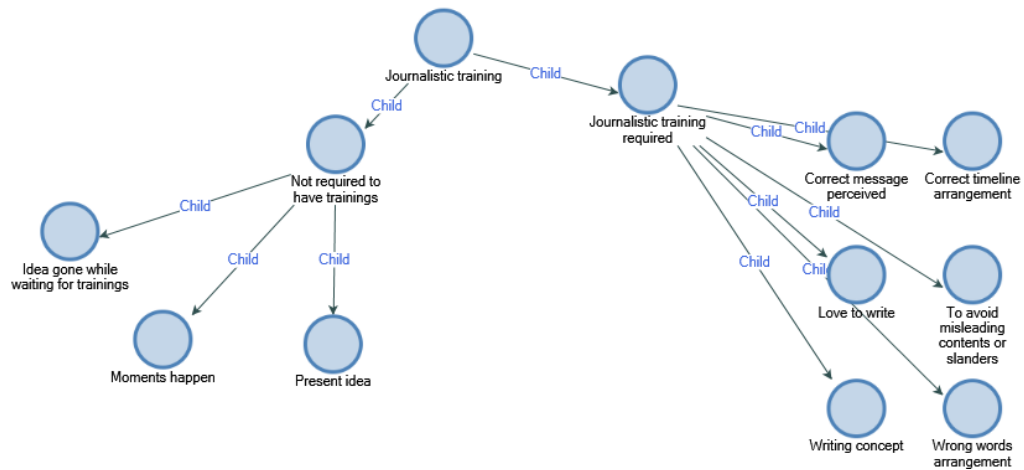
Main theme	Sub themes	Sub-sub themes	Children Nodes
Factors contributing to CJ	Journalistic training	Journalistic training required	Correct message perceived
			Correct timeline arrangement
			Love to write
			To avoid misleading contents or slanders
			Wrong words arrangement
			Writing concept
		Not required to have trainings	Present idea
			Moments happen
			Idea gone while waiting for trainings

Journalistic training branches out into 2 sub sub-themes: journalistic training required and not required to have trainings. Under journalistic training required, the children nodes are:

- 1) Correct message perceived
- 2) Correct timeline arrangement
- 3) Love to write

- 4) To avoid misleading contents or slanders
- 5) Wrong words arrangement
- 6) Writing concept

Under the not required to have trainings, there are: Present idea, moments happen and idea gone while waiting for trainings. Figure 5.3.9 shows the tree index diagram from NVivo:



**Figure 5.0.14** Tree index diagram for sub-theme 'Journalistic training' from NVivo

### 5.5 Research question 5: How effective is the mobile application prototype in educating about Islamic ethical practice in citizen journalism?

Research question 5 aims to find out the effectiveness of the mobile application prototype in educating about Islamic ethical practice in citizen journalism. This research question uses quantitative approach. The questionnaire is divided into 5 themes that concern citizen journalism in general and its ethical conduct and 1 theme on user experience of the mobile application prototype. Each question is presented using a Likert Scale of 1 until 5, where 1 is 'Strongly Disagree', 2 is 'Disagree', 3 is 'Neutral', 4 is 'Agree' and 5 is 'Strongly Agree'.

#### 5.5.1 Knowledge on citizen journalism

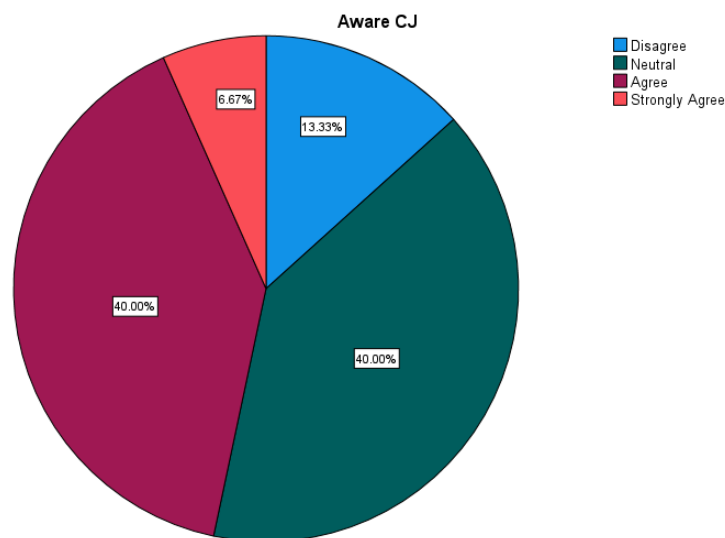
Table below shows the median and the standard deviation of each item in Section B:

**Table 5.0.15** Statistics of Section B

		Statistics									
		Aware CJ	Know CJ	Familiar CJ	Viral Msg eg of CJ	CJ through socmed	Commenting on socmed posts	False Info	Ppl know more info from viral msgs	Able to understand problems from app	Able to understand lists in app as part of CJ
N	Valid	390	390	390	390	390	390	390	390	390	390
	Missing	0	0	0	0	0	0	0	0	0	0
Mean		3.40	3.33	3.07	4.13	4.60	4.10	4.90	4.63	3.70	3.97
Median		3.00	3.00	3.00	4.00	5.00	4.00	5.00	5.00	4.00	4.00
Std. Deviation		.801	.908	1.125	.847	.612	.832	.300	.547	.863	.837
Variance		.642	.824	1.265	.717	.374	.692	.090	.300	.745	.701
Minimum		2	1	1	1	3	2	4	3	2	2
Maximum		5	5	5	5	5	5	5	5	5	5

The median is a measure of central tendency that represents the value that separates the top 50% and bottom 50% of the responses. Here, the median for "Aware of citizen journalism" is 3.00, which means that half of the respondents had a score of 3.00 or higher, while the other half had a score of less than 3.00.

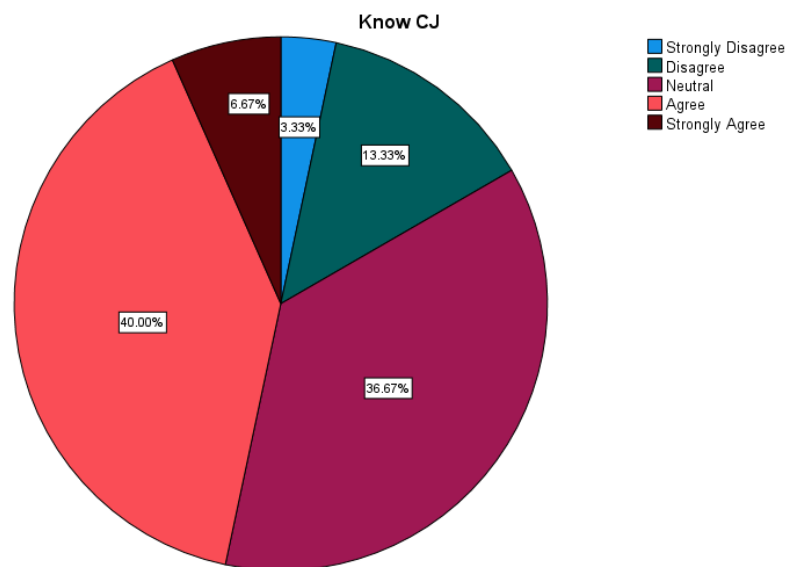
The standard deviation is a measure of variability that indicates how much the responses vary from the mean. The standard deviation for "Aware for citizen journalism" is 0.801, which means that the responses are relatively close to the mean. However, for "False Info", the standard deviation is only 0.300, which means that the responses are more tightly clustered around the mean. Below is the compilation of pie charts according to each item:



**Figure 5.0.15** Pie Chart "Aware CJ"

The pie chart represents the responses participants to a statement regarding their awareness of citizen journalism. The responses indicate that the majority of the respondents had at least some level of awareness of citizen journalism. Specifically, 156 individuals (40%) chose the "Agree" option, and an equal number of respondents (156, 40%) chose the "Neutral" option, indicating that they were neither aware nor unaware of citizen journalism.

A smaller proportion of respondents, 26 (6.7%), chose the "Strongly Agree" option, indicating a high level of awareness. Only 52 (13.3%) individuals disagreed with the statement, suggesting that they had low awareness or no awareness of citizen journalism.



**Figure 5.0.16** Pie Chart "Know CJ"

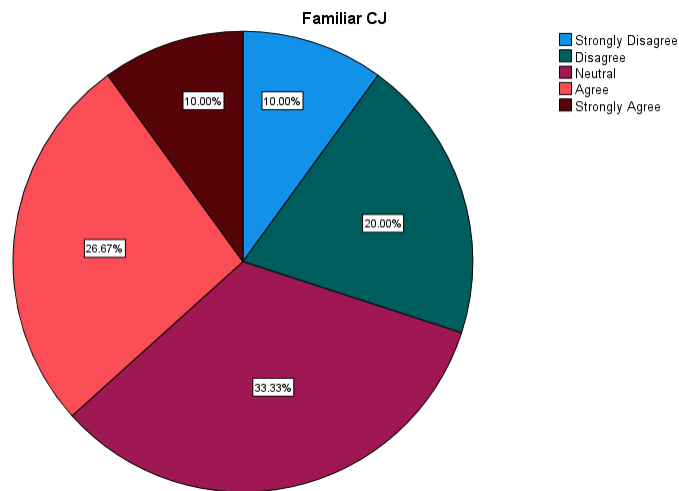
Pie chart above represents the responses of a group of individuals to a statement regarding their knowledge of citizen journalism.

The majority of the respondents had at least some level of knowledge about citizen journalism. Specifically, 156 individuals (40%) chose the "Agree" option, and an additional 26 (6.7%) chose the "Strongly Agree" option, indicating a high level of knowledge.

A significant proportion of respondents, 143 (36.7%), chose the "Neutral" option, indicating neither knowledge nor lack of knowledge. However, a notable portion



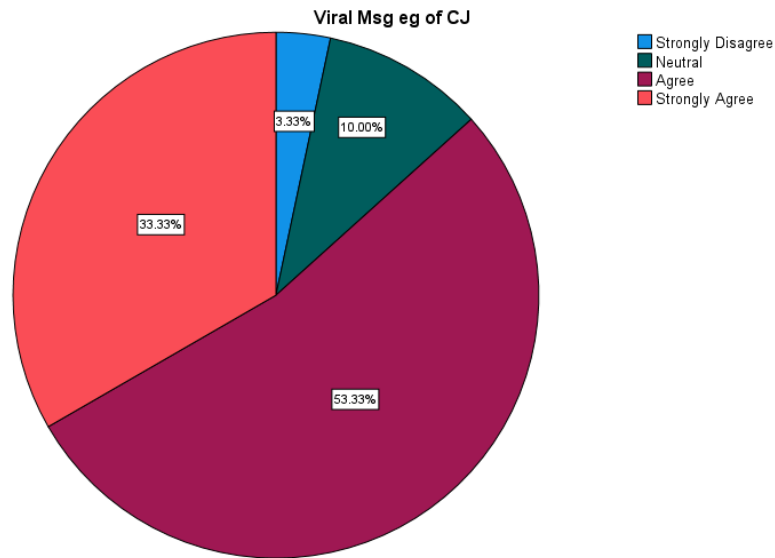
of respondents, 65 (16.7%), chose the "Disagree" or "Strongly Disagree" options, indicating a lack of knowledge about citizen journalism.



**Figure 5.0.17** Pie Chart "Familiar CJ"

Pie chart above shows the responses regarding their familiarity towards citizen journalism. The responses indicate that a significant portion of the respondents, 117 (30%), had a negative level of familiarity with citizen journalism, as they chose either the "Disagree" or "Strongly Disagree" options. A larger proportion of respondents, 130 (33.3%), chose the "Neutral" option, indicating neither familiarity nor lack of familiarity.

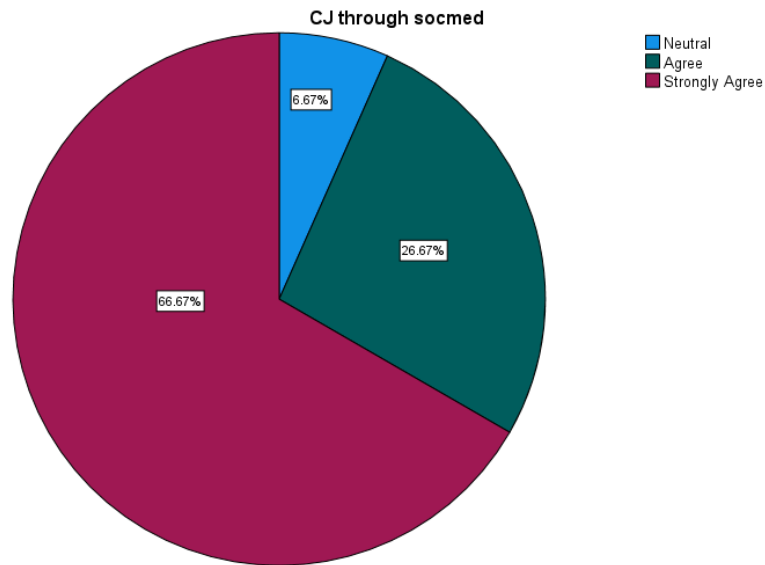
Only 104 individuals (26.7%) chose the "Agree" option, indicating some level of familiarity, while 39 (10%) chose the "Strongly Agree" option, indicating a high level of familiarity.



**Figure 5.0.18** Pie Chart "Viral message an example of CJ"

This pie chart shows the percentage according to the Likert Scale regarding a statement "Viral message is an example of citizen journalism (CJ)". The responses indicate that the majority of the respondents, 208 (53.3%), agreed with the statement about the viral message related to citizen journalism. Additionally, 130 (33.3%) strongly agreed, indicating a high level of agreement.

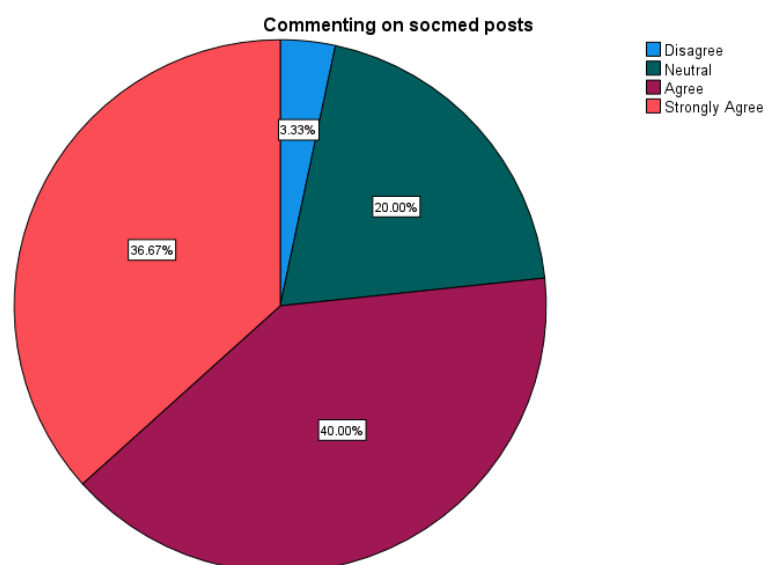
A smaller proportion of respondents, 39 (10%), chose the "Neutral" option, indicating neither agreement nor disagreement. Only 13 individuals (3.3%) chose the "Strongly Disagree" option, indicating a strong level of disagreement.



**Figure 5.0.19** Pie Chart "CJ through social media"

This pie chart shows the percentage according to the Likert Scale regarding a statement “Citizen journalism (CJ) through social media”. The responses indicate that the majority of the respondents, 260 (66.7%), strongly agreed with the statement about CJ through social media, indicating a high level of agreement. Additionally, 104 (26.7%) respondents agreed with the statement.

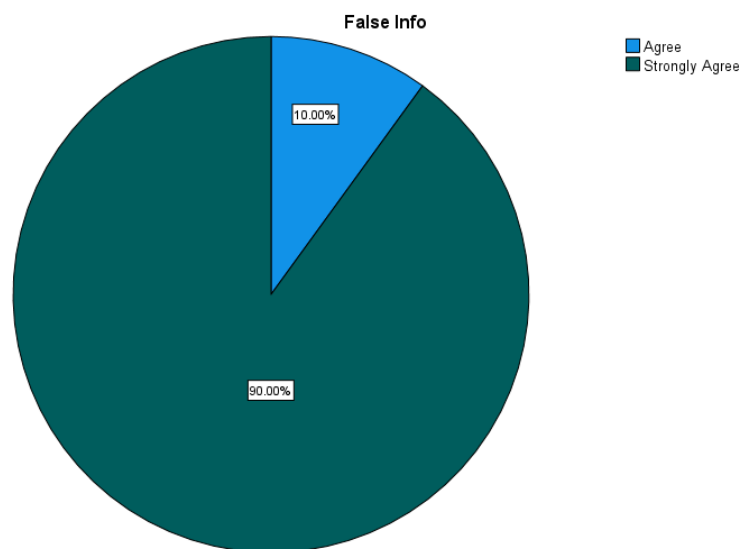
A smaller proportion of respondents, 26 (6.7%), chose the "Neutral" option, indicating neither agreement nor disagreement.



**Figure 5.0.20** Pie Chart "Commenting on social media post"

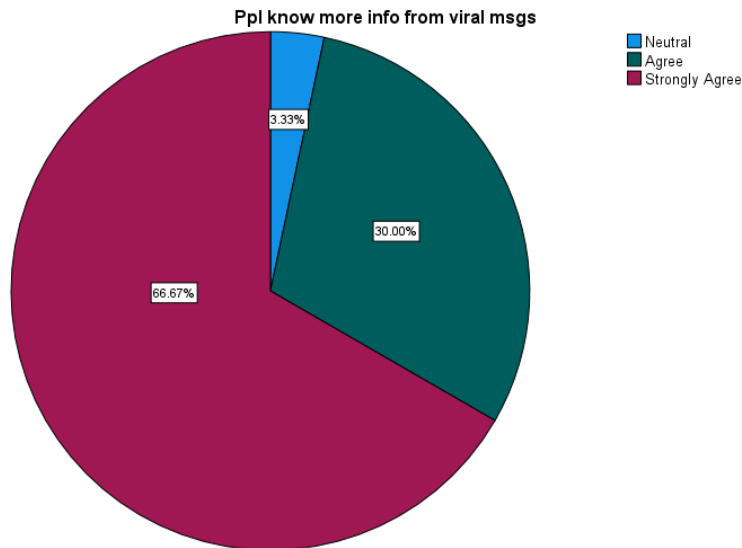
This pie chart shows the percentage according to the Likert Scale regarding a statement “Commenting on social media posts”. The responses indicate that the largest proportion of respondents, 156 (40%), agreed with the statement about commenting on social media posts, indicating a positive attitude towards commenting. Additionally, 143 (36.7%) respondents strongly agreed with the statement.

A smaller proportion of respondents, 78 (20%), chose the "Neutral" option, indicating a neutral stance towards commenting on social media posts. The smallest proportion of respondents, 13 (3.3%), disagreed with the statement about commenting on social media posts.



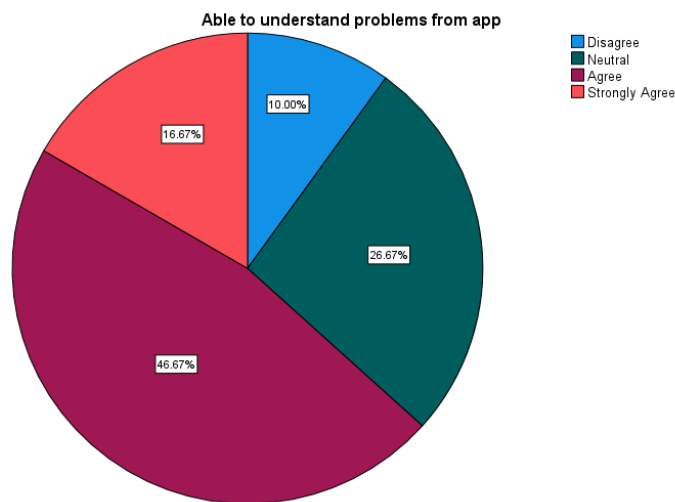
**Figure 5.0.21** Pie Chart "False info"

This pie chart represents the percentage according to the Likert Scale regarding a statement “False information”. The responses indicate that the overwhelming majority of respondents, 351 (90%), strongly agreed with the statement about false information. An additional 39 (10%) respondents agreed with the statement. This suggests that the respondents are highly aware of the problem of false information and perceive it to be a significant issue.



**Figure 5.0.22** Pie Chart "People know more info from viral message"

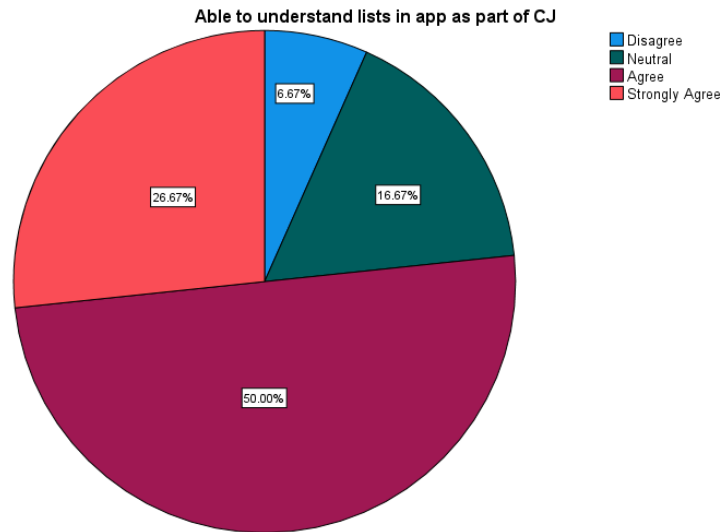
Pie chart above represents the responses of participants regarding a statement “People know more information from viral message”, according to Likert Scale. The responses indicate that the majority of respondents, 260 (66.7%), strongly agreed with the statement about people knowing more information from viral messages. An additional 117 (30.0%) respondents agreed with the statement, while only 13 (3.3%) respondents were neutral.



**Figure 5.0.23** Pie Chart "Able to understand problems from app"

For the statement “Able to understand problems from the mobile application”, 10% of the respondents disagreed that they are able to understand problems from the

application. 26.7% of the respondents were neutral about their ability to understand problems from the application. 46.7% of the respondents agreed that they are able to understand problems from the application. 16.7% of the respondents strongly agreed that they are able to understand problems from the application.



**Figure 5.0.24** Pie Chart "Able to understand lists in app as part of CJ"

Pie chart above represents the responses of participants regarding a statement “Able to understand lists in application as part of citizen journalism (CJ)”, according to Likert Scale. 6.7% of the respondents (26 people) disagreed with the statement. 16.7% of the respondents (65 people) were neutral and did not express agreement or disagreement with the statement. 50.0% of the respondents (195 people) agreed with the statement. 26.7% of the respondents (104 people) strongly agreed with the statement.

From the pie charts, 40% chose ‘Neutral’ when asked if they are aware of the term citizen journalism. Familiar with citizen journalism has seen the highest standard deviation 1.125. 66.7% strongly agreed that citizen journalism is mainly performed through social media. False information has the highest percentage of respondent strongly agree at 90%, with mean being 4.90 and standard deviation of 0.300.

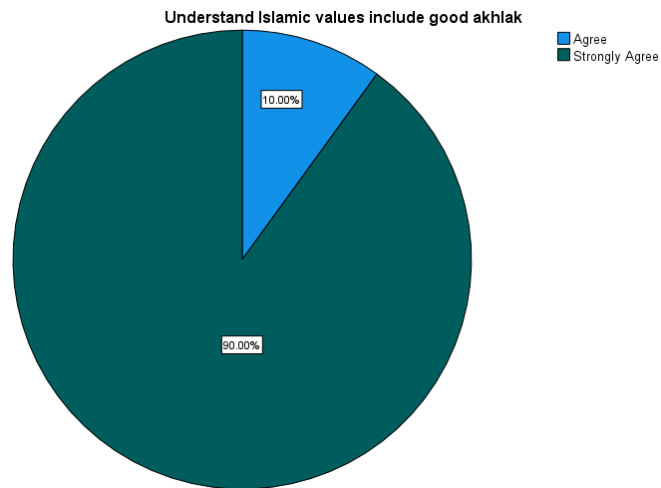
## 5.5.2 Knowledge on Islamic values

Section C is about knowledge on Islamic values. Table below shows the mean and standard deviation of the items in Section C:

**Table 5.0.16** Statistics on Section C: Knowledge on Islamic values

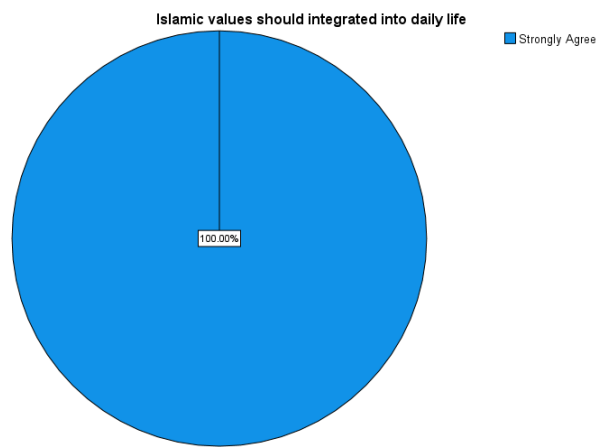
Statistics											
		Understand Islamic values include good akhiak	Islamic values should integrated into daily life	Islamic values should integrated in daily socmed handling	Islam should be a way of life in Brunei	Knowledge Islamic above average	Knowledge hadiths good	Knowledge Qur'an good	Qur'an verses used in app chosen accordingly	hadiths used in mobile app chosen accordingly	Quran and hadiths used in app related to the situations given in the app
N	Valid	390	390	390	390	390	390	390	390	390	390
	Missing	0	0	0	0	0	0	0	0	0	0
Mean		4.90	5.00	4.87	4.90	3.77	2.97	3.20	3.93	3.97	3.97
Median		5.00	5.00	5.00	5.00	4.00	3.00	3.00	4.00	4.00	4.00
Std. Deviation		.300	.000	.340	.300	.804	.949	.910	.574	.483	.605
Variance		.090	.000	.116	.090	.647	.901	.829	.330	.233	.366
Minimum		4	5	4	4	2	1	1	3	3	3
Maximum		5	5	5	5	5	5	5	5	5	5

From the table, the respondents generally have positive attitudes towards Islamic values and beliefs, as indicated by the high mean and median scores for each variable. The variable with the lowest mean score is "Good hadiths knowledge" with a mean of 2.97, indicating that respondents may have less knowledge or confidence in their understanding of hadiths. The variable with the highest mean score is "Islamic values should be integrated into daily life" and "Islam should be a way of life in Brunei", both with a mean score of 5.00, indicating strong agreement with these statements. The standard deviation and variance scores provide information on the variability of responses, with some variables having a higher level of variability than others.



**Figure 5.0.25** Pie chart "Understand Islamic values include good akhlak"

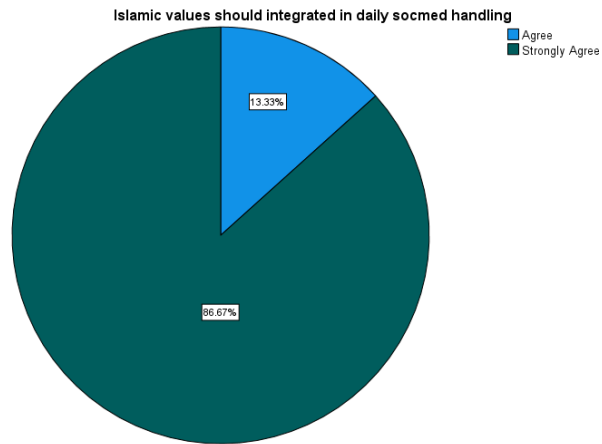
In this survey question, there are two response options: "Agree" and "Strongly Agree." Out of the total 390 respondents, 39 (10%) agreed and 351 (90%) strongly agreed that understanding Islamic values includes having good *akhlak*. Therefore, the majority of the respondents strongly agreed with the statement, indicating a high level of consensus among them regarding the importance of good *akhlak* in Islamic values.



**Figure 5.0.26** Pie chart "Islamic values should integrated into daily life "

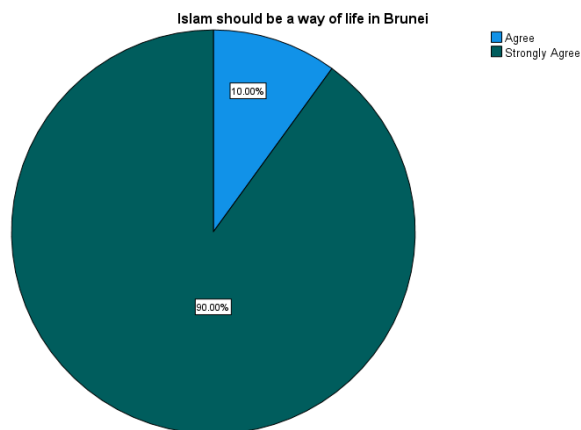
In this case, there is only one response option, "Strongly Agree," and all 390 participants selected this option, resulting in 100% for both the valid and cumulative percentages. This suggests that all participants believe that Islamic values should be integrated into daily life.





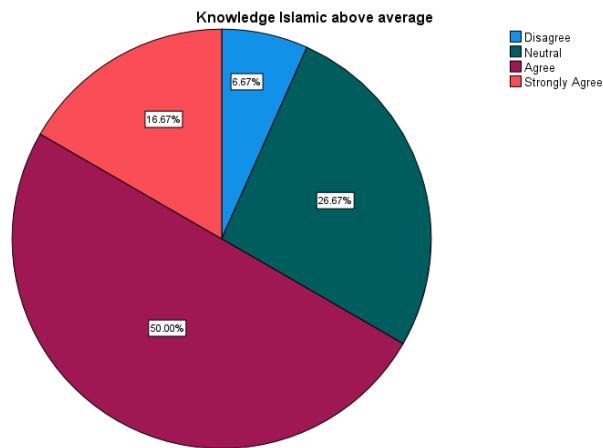
**Figure 5.0.27** Pie chart "Islamic values should integrated in daily social media handling"

This data shows that out of 390 respondents, 13.3% agreed and 86.7% strongly agreed that Islamic values should be integrated in daily social media handling.



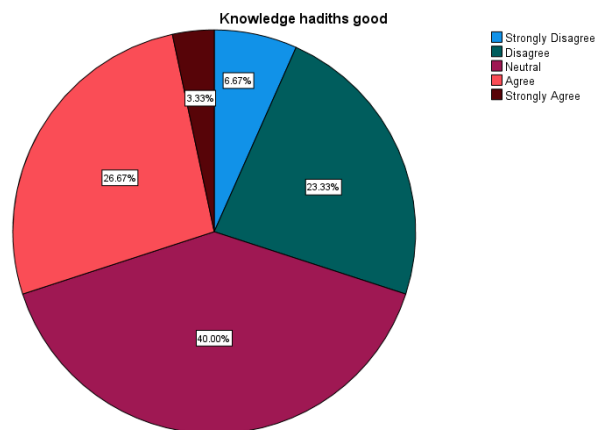
**Figure 5.0.28** Pie chart "Islam should be a way of lie in Brunei"

The data shows that 90% of the respondents strongly agree that Islam should be a way of life in Brunei, while 10% agree with the statement. No respondents disagreed or chose a neutral response.



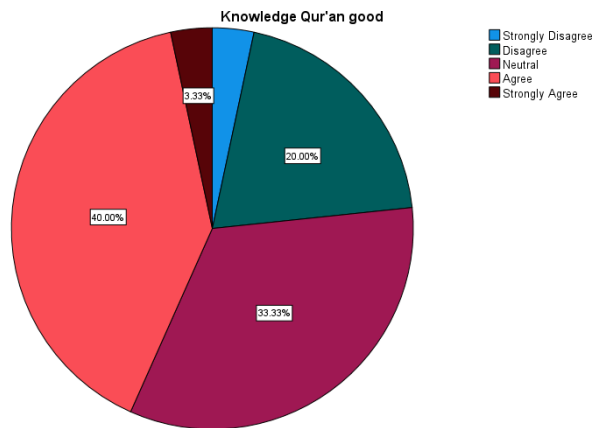
**Figure 5.0.29** Pie chart "Islamic knowledge above average"

Pie chart above represents the percentages according to Likert Scale towards the statement “Islamic knowledge above average”. Out of the 390 respondents, 6.7% disagreed that their Islamic knowledge is above average, 26.7% were neutral, 50% agreed that their Islamic knowledge is above average, and 16.7% strongly agreed.



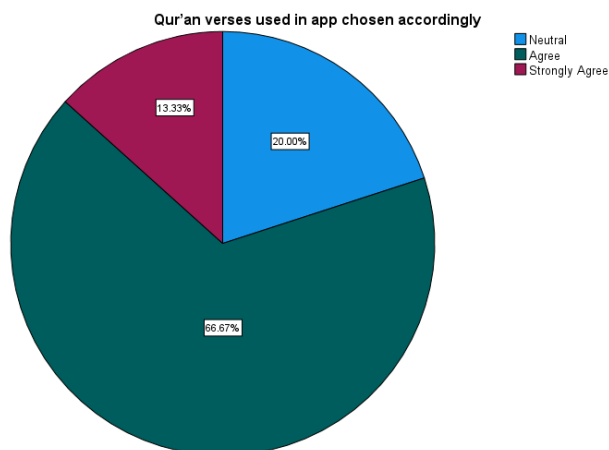
**Figure 5.0.30** Pie chart "Hadiths knowledge is good"

Pie chart above represents the percentages according to Likert Scale towards the statement “*Hadiths* knowledge is good”. Out of the 390 participants, 26 (6.7%) strongly disagreed that knowledge of hadiths is good, 91 (23.3%) disagreed, 156 (40.0%) were neutral, 104 (26.7%) agreed, and 13 (3.3%) strongly agreed. The majority of participants (66.0%) either had a neutral or negative view towards the statement.



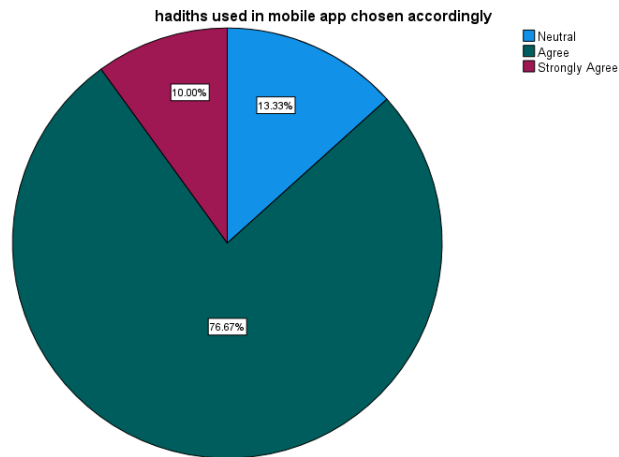
**Figure 5.0.31** Pie chart "Qur'an knowledge is good"

Pie chart above represents the percentages according to Likert Scale towards the statement “*Qur'an* knowledge is good”. 20% of the respondents disagreed that their knowledge of the Qur'an is good, while 40% agreed and another 33.3% were neutral. Only 3.3% strongly disagreed while another 3.3% strongly agreed.



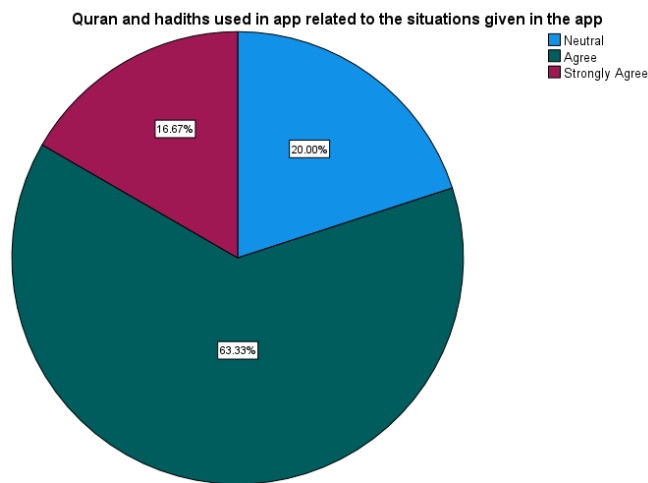
**Figure 5.0.32** Pie chart "Qur'an verses used in app chosen accordingly"

Pie chart above represents the percentages according to Likert Scale towards the statement “*Qur'an* verses used in app were chosen accordingly”. Out of the 390 respondents, 20% of them chose the option "Neutral" which indicates they neither agree nor disagree that the Quran verses used in the app were chosen accordingly. 66.7% of the respondents agreed that the Quran verses were chosen accordingly, while 13.3% strongly agreed with the statement.



**Figure 5.0.33** Pie chart "Hadiths used in app chosen accordingly"

Pie chart above represents the percentages according to Likert Scale towards the statement “*Hadiths* used in app were chosen accordingly”. Of the 390 respondents, 13.3% (52) chose "Neutral," 76.7% (299) chose "Agree," and 10.0% (39) chose "Strongly Agree" to the statement. There were no responses for "Disagree" or "Strongly Disagree." The "Valid Percent" column shows the same percentages, but excludes any invalid responses



**Figure 5.0.34** Pie chart "Qur'an and hadiths used in app are related to the situations given in the app"

Pie chart above represents the percentages according to Likert Scale towards the statement “*Qur'an* and *hadiths* used in app were related to the situation given in the app”. 20% chose "Neutral" while 63.3% agreed and 16.7% strongly agreed that the Quran and hadiths used in the app were related to the situations given in the app.

Under the item ‘Understand Islamic values include good *akhlak*’, all respondents agreed with 90% strongly agree, 10% agree. As for the next item ‘Islamic values should be integrated into daily life’, 100% strongly agreed with the statement. The item ‘Good *hadiths* knowledge’ and ‘Good *Qur’an* knowledge’ showed a variety of answers, which shows in the high standard deviation at 0.949 and 0.910 respectively. Variance are also high at 0.901 and 0.829 respectively.

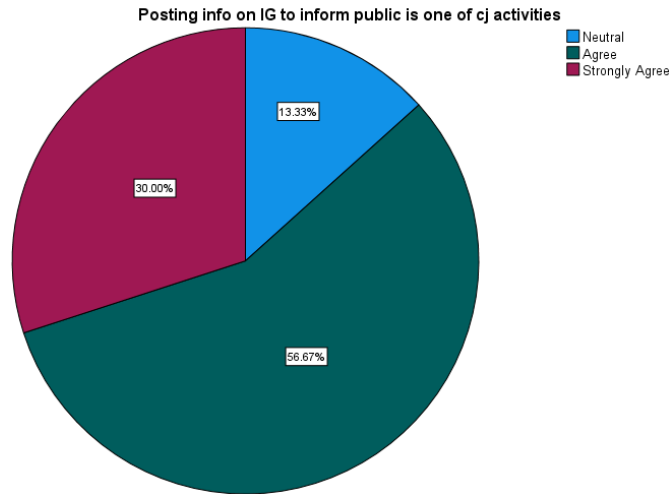
### 5.5.3 Awareness on Islamic values in citizen journalism

Section D surveys the awareness on Islamic values in citizen journalism, which are tabulated below in percentage as well as the mean and standard deviation:

**Table 5.0.17** Statistics on Section D - Awareness on Islamic vales in citizen journalism

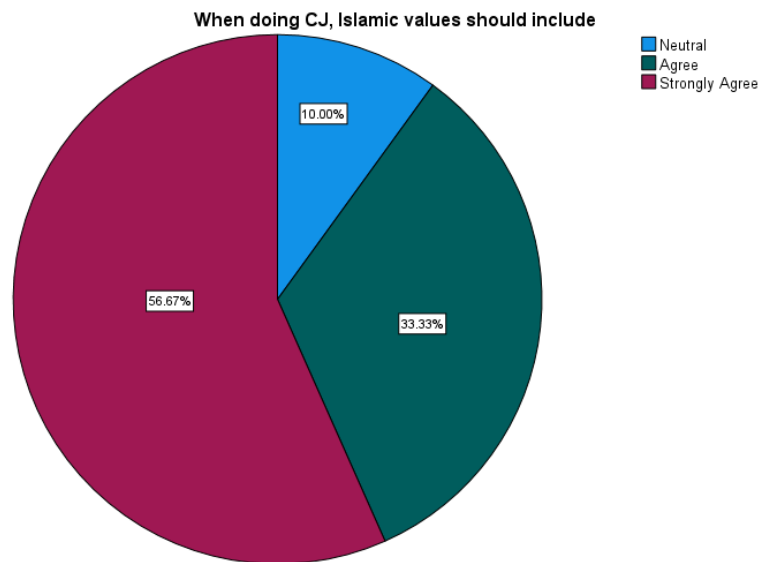
		Statistics										
		Posting info on IG to inform public is one of cj activities	When doing CJ, Islamic values should include	Truth-islamic values consider before sharing info	If viral msg received not true, will not share	Info must verify before sharing	Aware that sharing unverified information is against the Islamic values	Aware that reposting information that I am not sure of, is against Islamic values	Aware that I need to research the source of the information first before sharing it around	I voice out my opinion publicly on social media with respect, without degrading others	Aware that sharing images or videos that may be sensitive to others is against the Islamic ethical values	
N	Valid	390	390	390	390	390	390	390	390	390	390	
	Missing	0	0	0	0	0	0	0	0	0	0	
Mean		4.17	4.47	4.73	4.87	4.87	4.67	4.37	4.57	3.67	4.50	
Median		4.00	5.00	5.00	5.00	5.00	5.00	4.00	5.00	4.00	5.00	
Std. Deviation		.638	.671	.443	.340	.340	.597	.658	.616	1.012	.620	
Variance		.407	.450	.196	.116	.116	.356	.433	.380	1.025	.384	
Minimum		3	3	4	4	4	3	3	3	1	3	
Maximum		5	5	5	5	5	5	5	5	5	5	

For item ‘If viral info is not true, will stop sharing the info’, answers lead to Agree and Strongly Agree, with mean 4.87 and 0.340 standard deviation. Item ‘info must be verified before sharing’ has the same mean and standard deviation as previous item. Voicing out opinion publicly on social media has variety of answers, from 3.3% being strongly disagree to 43.3% agree. Hence, mean is 3.67 and standard deviation reaches 1.012. The percentages from each item are represented in the pie charts below:



**Figure 5.0.35** Pie chart “Posting information on IG to inform public is one of CJ activities”

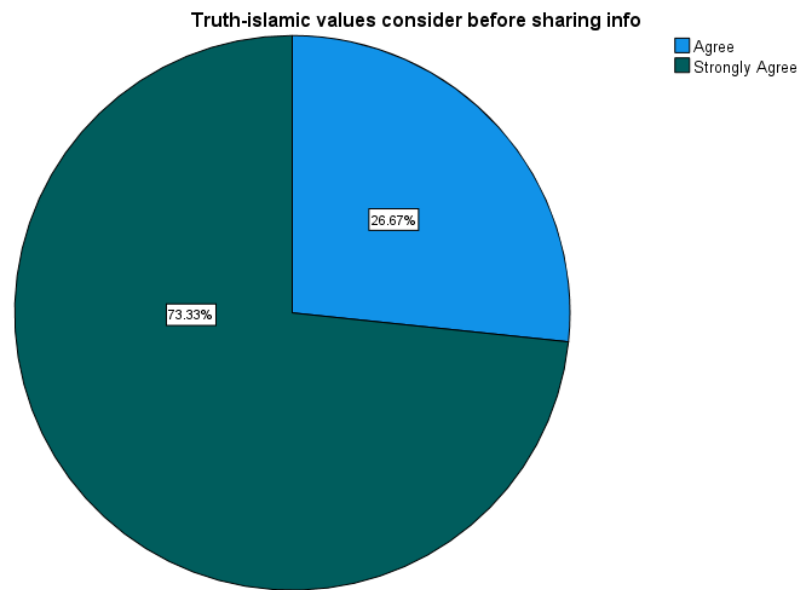
Pie chart above shows the responses regarding the statement “Posting information on Instagram to inform public is one of citizen journalism activities”. Out of the 390 respondents, 13.3% chose the option "Neutral", 56.7% chose "Agree", and 30% chose "Strongly Agree" when asked whether posting information on Instagram to inform the public is one of the activities of a CJ.



**Figure 5.0.36** Pie chart “When doing CJ, Islamic values should be included”

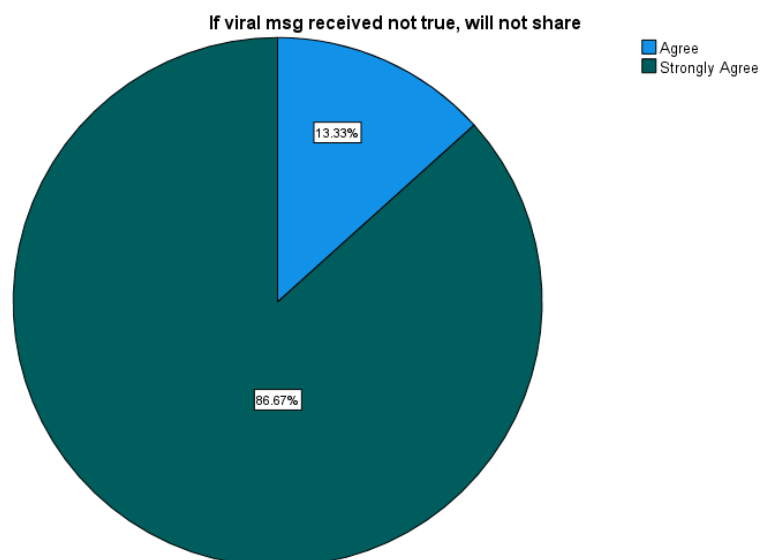
The data shows that out of 390 respondents, 10% chose "Neutral", 33.3% chose "Agree", and 56.7% chose "Strongly Agree" when asked about whether Islamic values should be included when doing CJ. The cumulative percent indicates that all

respondents have answered the question, and 43.3% agreed or strongly agreed that Islamic values should be included in CJ.



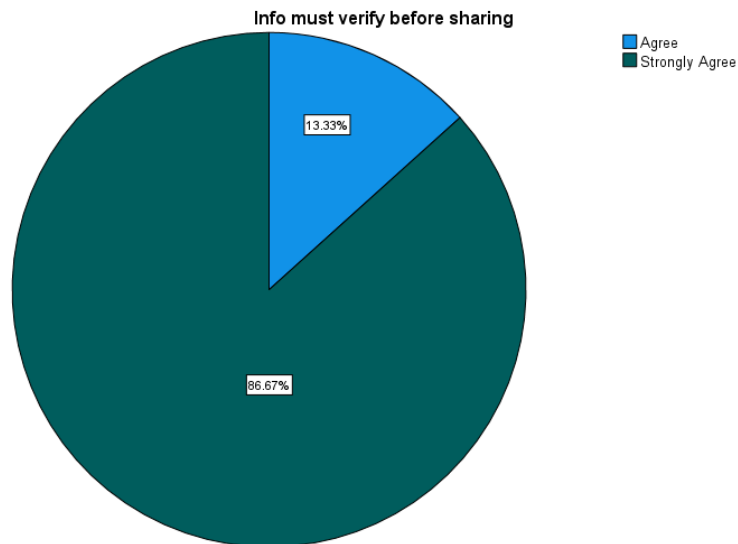
**Figure 5.0.37** Pie chart "Truth – Islamic value considered info before sharing"

The data shows that all respondents answered the question, with 26.7% of them agreeing and 73.3% strongly agreeing that Islamic values should be considered before sharing information.



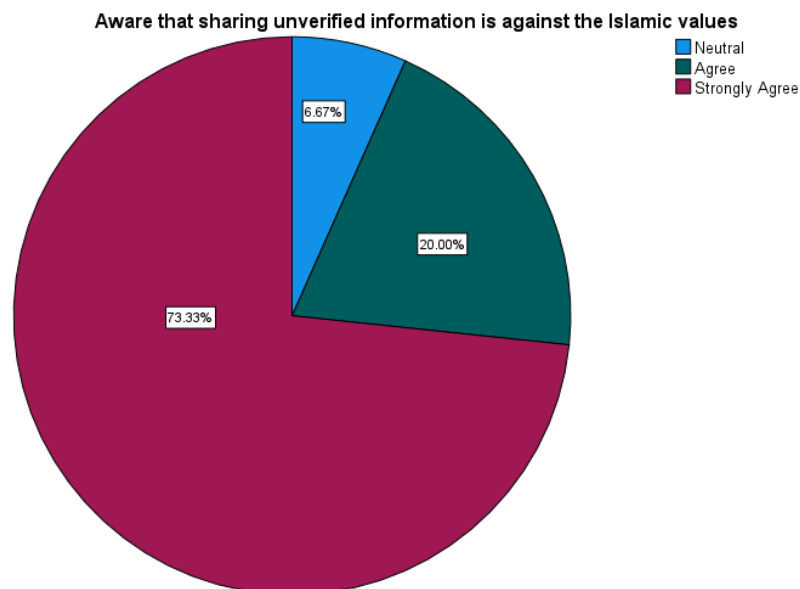
**Figure 5.0.38** Pie chart "If viral message received is untrue, will not share"

The pie chart shows that out of 390 respondents, 13.3% agreed and 86.7% strongly agreed that they will not share a viral message if they find out it's not true. No respondents disagreed or strongly disagreed.



**Figure 5.0.39** Pie chart “Info must verify before sharing”

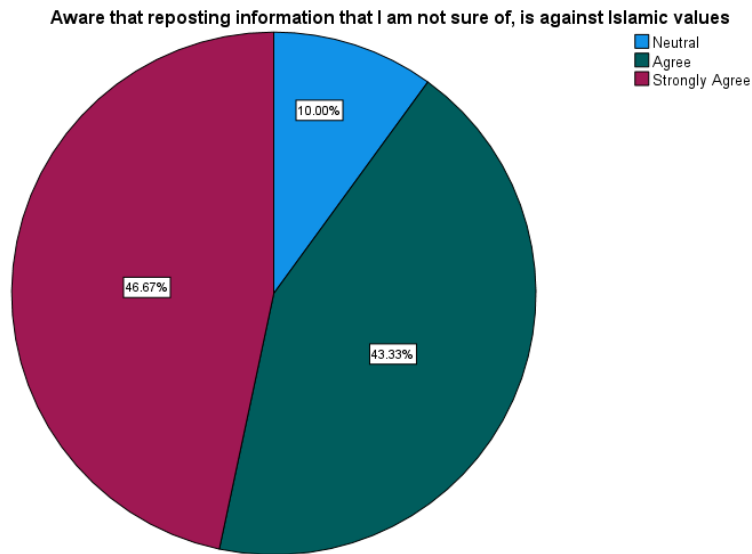
The pie chart shows that out of 390 respondents, 13.3% (52) agreed and 86.7% (338) strongly agreed that information must be verified before sharing.



**Figure 5.0.40** Pie chart “Aware that sharing unverified info is against Islamic values”

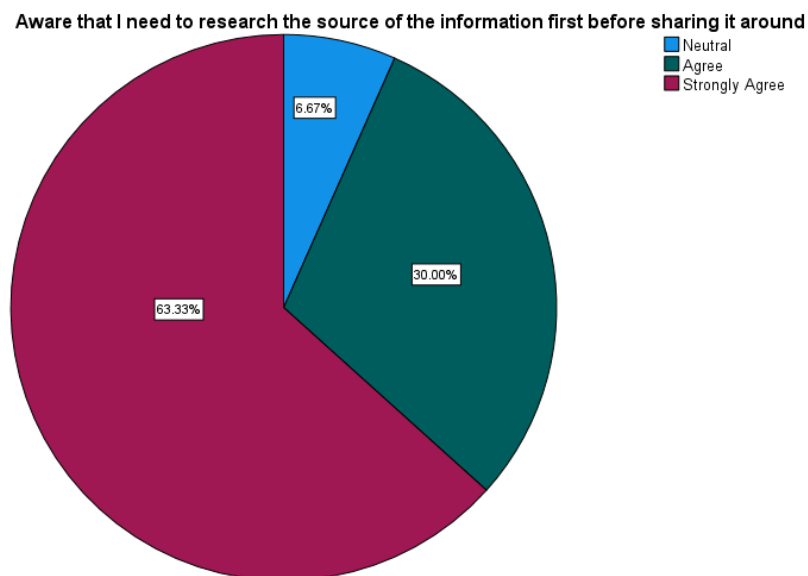
The data shows that out of the 390 respondents, 6.7% chose "Neutral," 20% chose "Agree," and 73.3% chose "Strongly Agree" as their response to the statement "Aware that sharing unverified information is against the Islamic values."





**Figure 5.0.41** Pie chart “Aware that reposting info that I am unsure of, is against Islamic values”

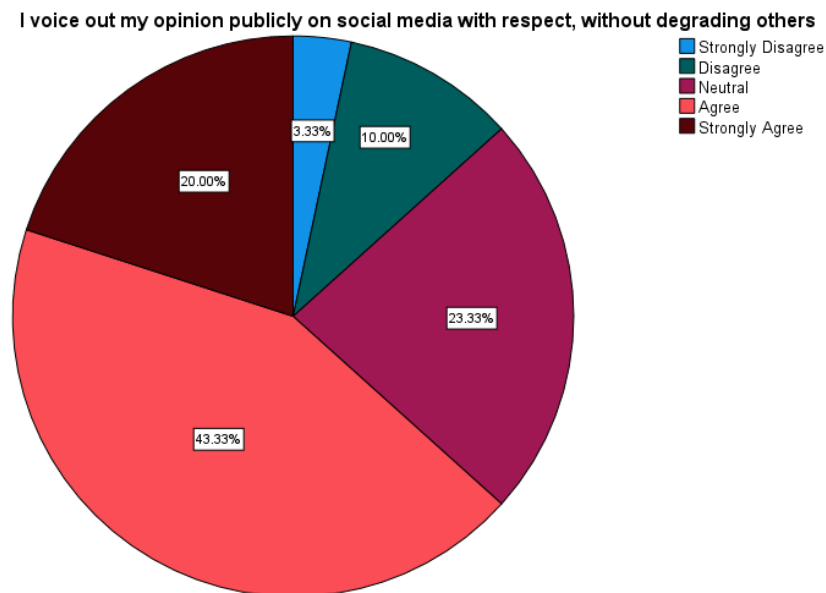
In this survey question, the respondents were asked whether they are aware that reposting information that they are not sure of is against Islamic values. The data shows that 10% of the respondents chose the option "Neutral," 43.3% chose "Agree," and 46.7% chose "Strongly Agree." This indicates that a majority of the respondents (90%) agree or strongly agree that reposting unverified information goes against Islamic values.



**Figure 5.0.42** Pie chart “Aware that I need to research the info source first before sharing it around”

The data shows the responses of the participants regarding their awareness of the need to research the source of information before sharing it. Out of the 390 participants, 26

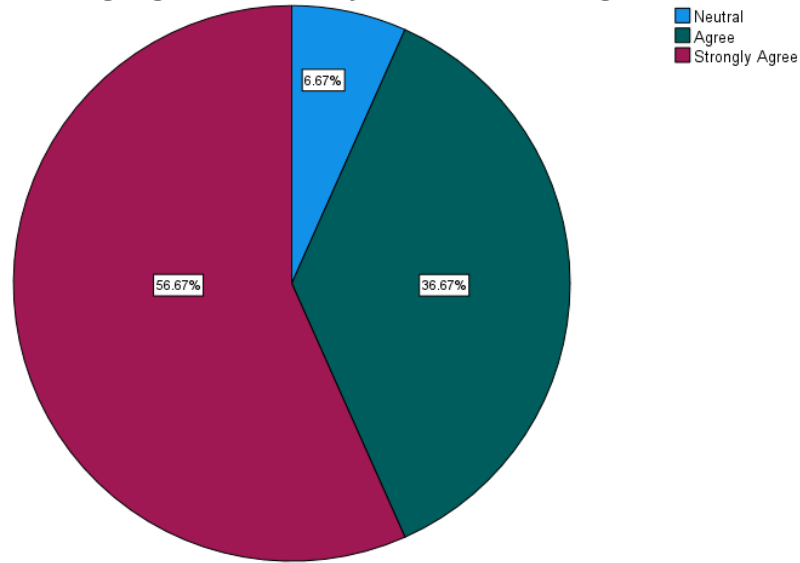
(6.7%) responded neutrally, 117 (30%) agreed, and 247 (63.3%) strongly agreed. There are no participants who disagreed or strongly disagreed with the statement. The majority of the participants (63.3%) strongly agreed that they need to research the source of information before sharing it.



**Figure 5.0.43** Pie chart “I voice out my opinion publicly on social media with respect, without degrading others”

Out of the 390 respondents, 3.3% strongly disagreed, 10% disagreed, 23.3% were neutral, 43.3% agreed, and 20% strongly agreed. The majority of the respondents agreed or strongly agreed with the statement, indicating that they are willing to express their opinions on social media in a respectful manner without resorting to degrading others. However, there is still a significant proportion of respondents who are either neutral or disagree with the statement, suggesting that not everyone feels comfortable expressing their opinions on social media or may not have the necessary skills to do so in a respectful way.

**Aware that sharing images or videos that may be sensitive to others is against the Islamic ethical values**



**Figure 5.0.44** Pie chart “Aware that sharing images or videos that may be sensitive to others is against Islamic ethical values”

The data shows that out of 390 respondents, 6.7% chose neutral, 36.7% agreed, and 56.7% strongly agreed that sharing images or videos that may be sensitive to others is against the Islamic ethical values.

#### 5.5.4 Level of Islamic religious education

Next section is Section E which is the level of Islamic religious education:

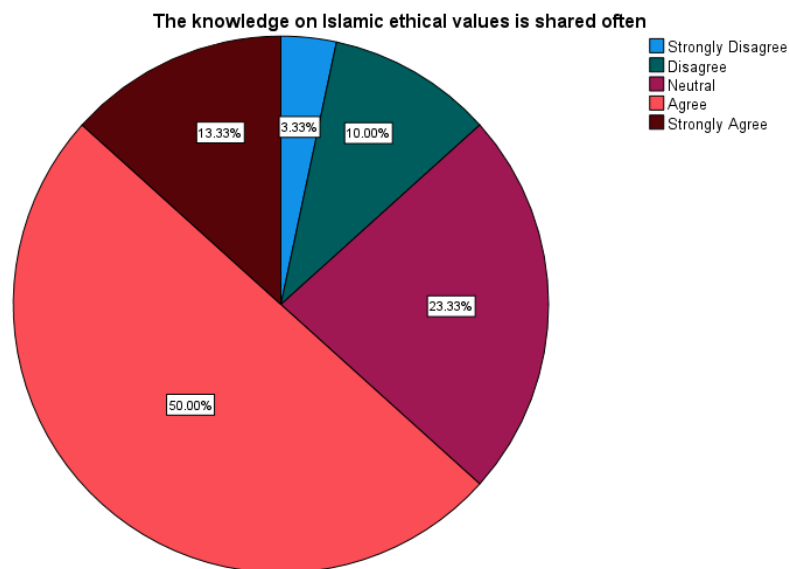
**Table 5.0.18** Statistics of Section E – Islamic religious education

		Statistics									
		The knowledge on Islamic ethical values is shared often	Islamic ethical values were instilled early when I was young	Islamic values in me is a result of the nation's principle Melayu Islam Beraja	I can recognise if someone's post is ethically right or wrong	Reminding the public on the ethical values derived from the Qur'an is essential	Ethical values in Islam are best learnt from hadiths and Qur'an	Basic religious study background is sufficient to know ethical values in practicing CJ	A guideline on ethical practice in CJ is required to raise public's awareness	This mobile application mock-up can be used as an awareness tool	Mobile application is a suitable way to educate the younger generation on Islamic ethical values in CJ
N	Valid	390	390	390	390	390	390	390	390	390	390
	Missing	0	0	0	0	0	0	0	0	0	0
Mean		3.60	4.00	3.80	3.83	4.40	4.70	3.77	4.37	4.43	4.33
Median		4.00	4.00	4.00	4.00	4.50	5.00	4.00	4.00	4.50	4.50
Std. Deviation		.953	.857	.834	.821	.664	.587	1.284	.605	.616	.746
Variance		.909	.735	.695	.674	.441	.344	1.650	.366	.380	.557
Minimum		1	1	1	2	3	3	1	3	3	3
Maximum		5	5	5	5	5	5	5	5	5	5

The mean (average) response for each statement ranges from 3.60 to 4.70, with higher scores indicating stronger agreement with the statement. The median (middle value) for each statement ranges from 4 to 5, indicating that the majority of respondents either

agreed or strongly agreed with each statement. The standard deviation (a measure of variability) ranges from 0.587 to 1.284, with lower values indicating less variability in responses.

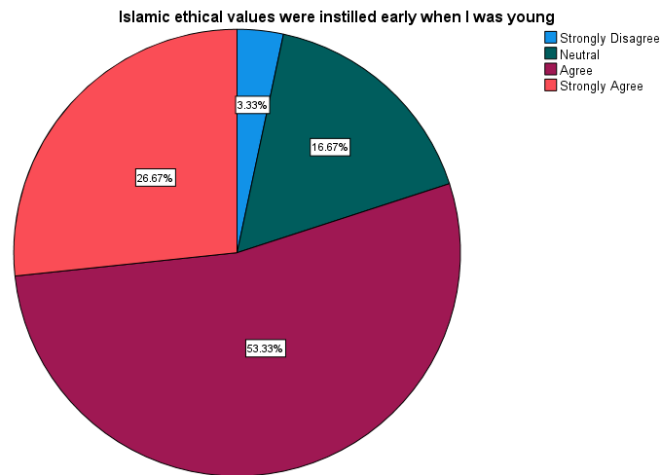
From this table, item that says ‘Islamic ethical values knowledge is shared often’ saw the second highest standard deviation of 0.968 as the answers are scattered across the Likert Scale. The highest standard deviation is 1.305 from item ‘basic religious study background is sufficient to know ethical values in practising citizen journalism’, which also saw variations in answers. Percentages of the Likert Scale from each item are represented by pie charts:



**Figure 5.0.45** Pie chart “The knowledge on Islamic ethical values is shared often”

The pie chart represents the responses of participants to a statement about the frequency of Islamic ethical values knowledge being shared.

Out of the 390 respondents, 52 (13.3%) strongly agreed that the knowledge on Islamic ethical values is shared often, while 195 (50.0%) agreed with the statement. On the other hand, 13 (3.3%) strongly disagreed, and 39 (10.0%) disagreed with the statement. A total of 91 (23.3%) respondents chose the neutral option.



**Figure 5.0.46** Pie chart “Islamic ethical values were instilled early when I was young”

This pie chart represents the responses of 390 individuals to the statement "Islamic ethical values were instilled early when I was young." The following are the percentage of responses for each option: Strongly Disagree: 13 (3.3%), Neutral: 65 (16.7%), Agree: 208 (53.3%), Strongly Agree: 104 (26.7%).

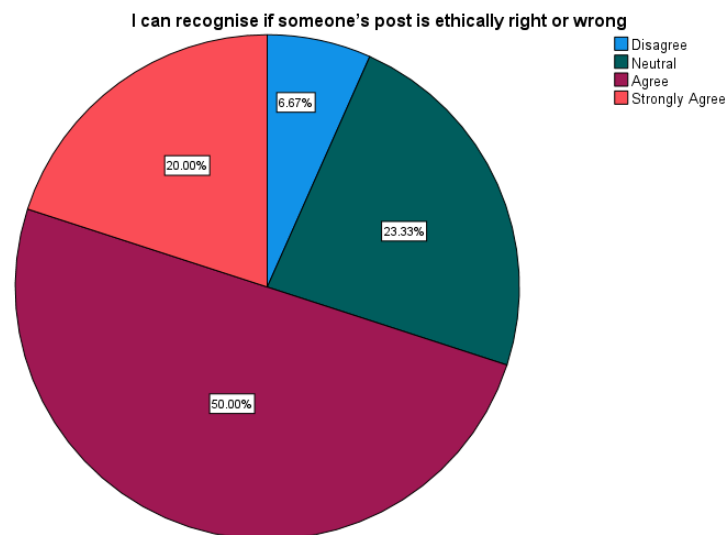
The majority of respondents (80%) agreed or strongly agreed that Islamic ethical values were instilled early when they were young, while a small percentage (3.3%) strongly disagreed.



**Figure 5.0.47** Pie chart “Islamic values in me is a result of the nation’s principle Melayu Islam Beraja”

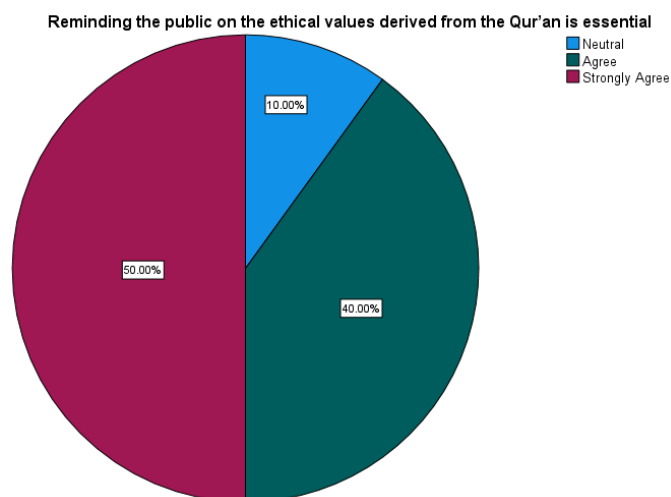
The question asked about the participant's perception of their Islamic values and their relationship with the nation's principle of Melayu Islam Beraja. Out of the total participants, 13 (3.3%) strongly disagreed that their Islamic values were a result of the

nation's principle of Melayu Islam Beraja. 104 (26.7%) participants were neutral, while 208 (53.3%) agreed and 65 (16.7%) strongly agreed that their Islamic values were a result of the nation's principle of Melayu Islam Beraja.



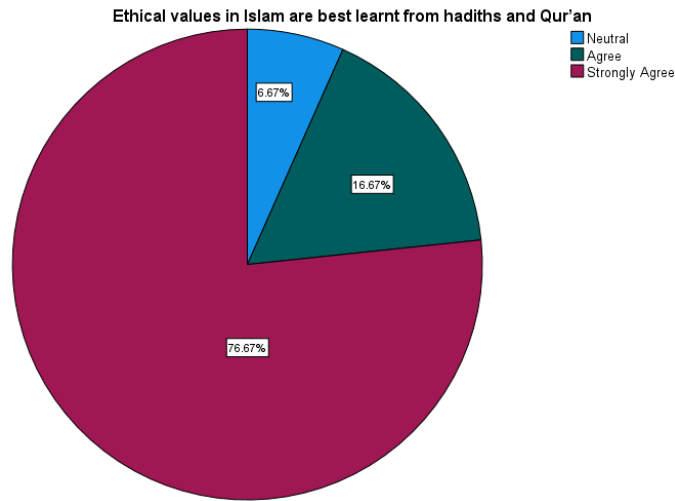
**Figure 5.0.48** Pie chart “I can recognise if someone’s post is ethically right or wrong

This pie chart shows that out of 390 respondents, 6.7% disagreed that they can recognize if someone's post is ethically right or wrong, 23.3% were neutral, 50% agreed, and 20% strongly agreed.



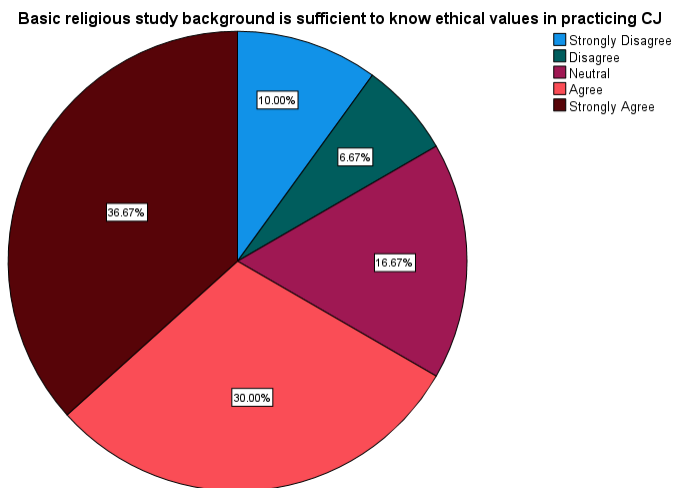
**Figure 5.0.49** Pie chart “Reminding the public on the ethical values derived from Qur’an is essential”

The pie chart shows that out of 390 respondents, 10% of them are neutral, 40% of them agree, and 50% of them strongly agree that reminding the public on the ethical values derived from the Qur'an is essential.



**Figure 5.0.50** Pie chart “Ethical values in Islam are best learnt from hadiths and Qur’an”

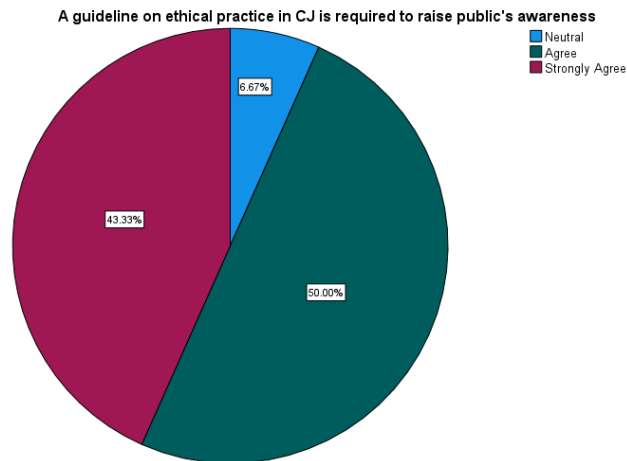
The data shows that out of 390 respondents, 6.7% chose Neutral, 16.7% chose Agree, and 76.7% chose Strongly Agree. This suggests that the majority of respondents believe that ethical values in Islam are best learnt from hadiths and Qur'an.



**Figure 5.0.51** Pie chart “Basic religious study background is sufficient to know ethical values in practicing CJ”

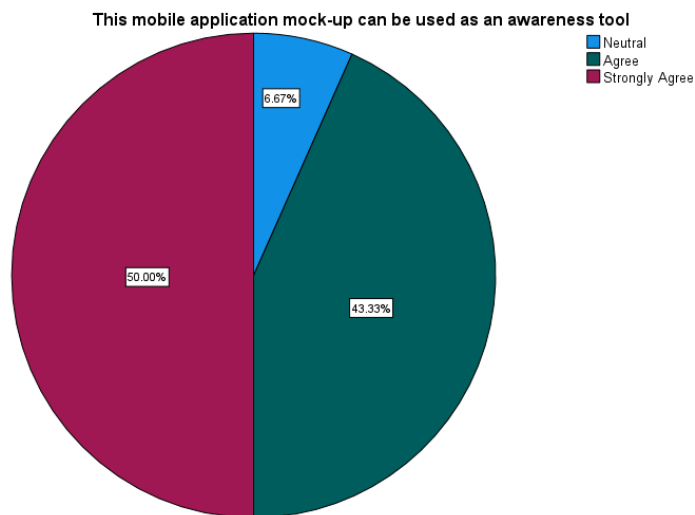
The pie chart shows the responses of the participants on the statement "Basic religious study background is sufficient to know ethical values in practicing CJ." There were 390

responses, with 10% strongly disagreeing, 6.7% disagreeing, 16.7% neutral, 30% agreeing, and 36.7% strongly agreeing. The majority of the participants (67% combined) either agreed or strongly agreed with the statement, while 17% combined disagreed or strongly disagreed, and 16.7% were neutral.



**Figure 5.0.52** Pie chart “A guideline on ethical practice in CJ is required to raise public’s awareness”

This pie chart consists of responses from 390 participants regarding the need for a guideline on ethical practice in CJ to raise public awareness. The responses are categorized into three options: Neutral, Agree, and Strongly Agree. Out of the 390 participants, 6.7% chose Neutral, 50% chose Agree, and 43.3% chose Strongly Agree.

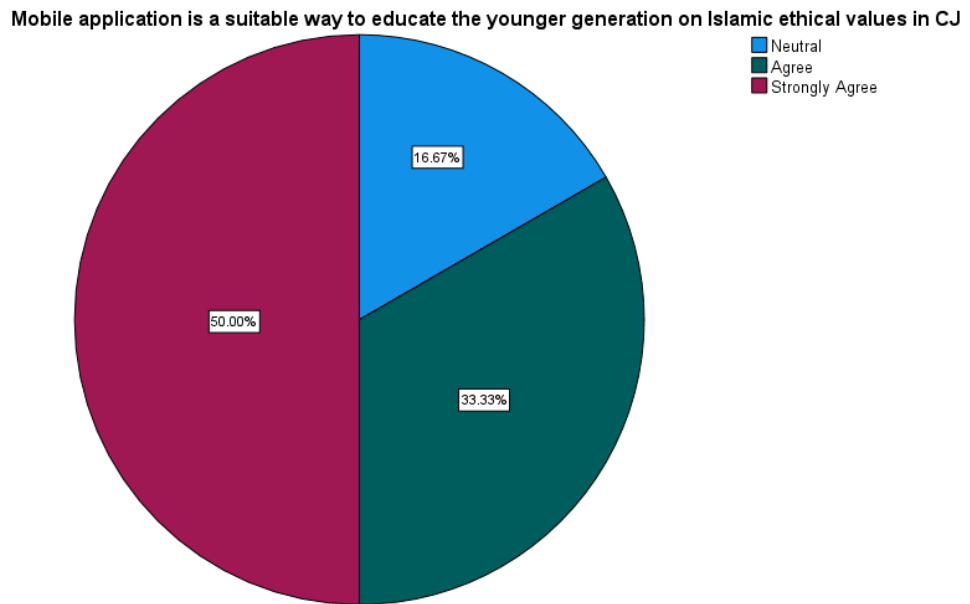


**Figure 5.0.53** Pie chart “This mobile application mock-up can be used as an awareness tool”

The pie chart shows the responses of 390 participants on the statement "This mobile application mock-up can be used as an awareness tool". The majority of the participants



strongly agree (50.0%) with the statement, while 43.3% agree and only 6.7% were neutral. There were no responses indicating disagreement or strong disagreement.



**Figure 5.0.54** Pie chart “Mobile application is a suitable way to educate the younger generation on Islamic ethical values in CJ”

The data is based on responses to a statement about the suitability of a mobile application for educating the younger generation on Islamic ethical values in citizen journalism. The data shows that out of 390 respondents, 16.7% chose "Neutral," 33.3% chose "Agree," and 50% chose "Strongly Agree." There were no respondents who chose "Disagree" or "Strongly Disagree."

### 5.5.5 User experience

Section F tabulated the percentages on user experience:

**Table 5.0.19** Statistics for Section F – User experience

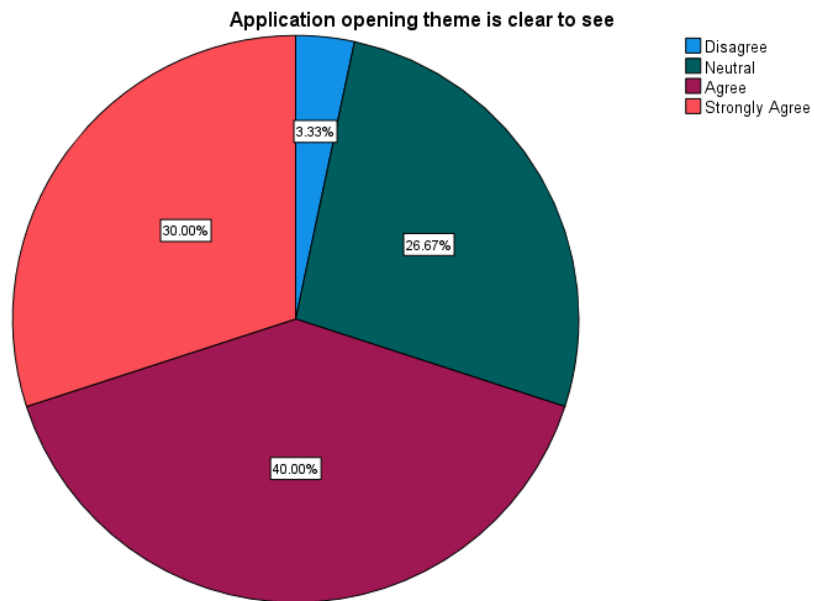
		Statistics									
		Application opening theme is clear to see	Font size of the application is readable	Choice of colours used in the mock-up is good	Application mock-up is easy to navigate through	Icons can be recognised easily	Design of the prototype is attractive enough	App mock-up improves my understanding on Islamic ethical practice in CJ	I understand the purpose of the app	App is interactive	Illustrations used are relevant
N	Valid	390	390	390	390	390	390	390	390	390	390
	Missing	0	0	0	0	0	0	0	0	0	0
	Mean	3.97	3.97	3.87	3.53	3.70	3.53	4.20	4.23	3.63	3.90
	Median	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
	Std. Deviation	.837	.876	.764	1.089	.938	.847	.654	.668	.837	.791
	Variance	.701	.768	.584	1.185	.879	.717	.428	.447	.701	.625
	Minimum	2	2	2	1	2	2	3	3	2	2
	Maximum	5	5	5	5	5	5	5	5	5	5

As for the user experience, different aspects of the application that the participants were asked to evaluate, including the clarity of the opening theme, font size, colour scheme, navigability, recognizability of icons, attractiveness of design, improvement in understanding of Islamic ethical practice in citizen journalism, purpose of the application, interactivity, and relevance of illustrations. The item ‘easy to navigate through’ has scattered opinions, with 3.2% answered Strongly Disagree, 16.1% Disagree, 22.6% Neutral, 38.7% Agree and 19.4% Strongly Agree. Hence, standard deviation is 1.106, which indicates more variability in ratings.

The table shows that, on average, respondents rated the clarity of the application's opening theme as 3.97, the readability of the font size as 3.97, and the choice of colours used in the mock-up as 3.87. The average rating for the ease of navigation through the application was 3.53, and for the recognizability of icons was 3.70. The design of the prototype was rated 3.53 on average, and the average rating for the relevance of illustrations used was 3.90.

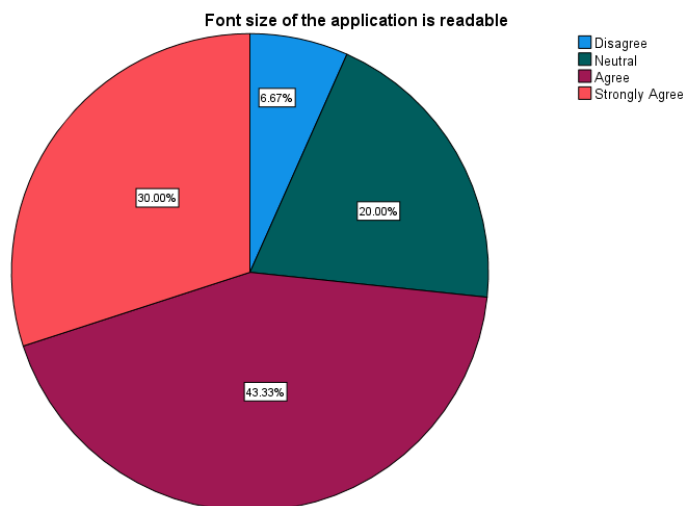
Furthermore, the respondents found the application to be helpful in improving their understanding of Islamic ethical practice in CJ, with an average rating of 4.20. They also understood the purpose of the app with an average rating of 4.23. The application was perceived as interactive, with an average rating of 3.63.

The standard deviation values indicate that there was some variation in the responses for each statement, with the highest deviation of 1.089 for the statement regarding the ease of navigation. The median rating for each statement was 4.00, indicating that the majority of respondents agreed with the statements.



**Figure 5.0.55** Pie chart “Application opening theme is clear to see”

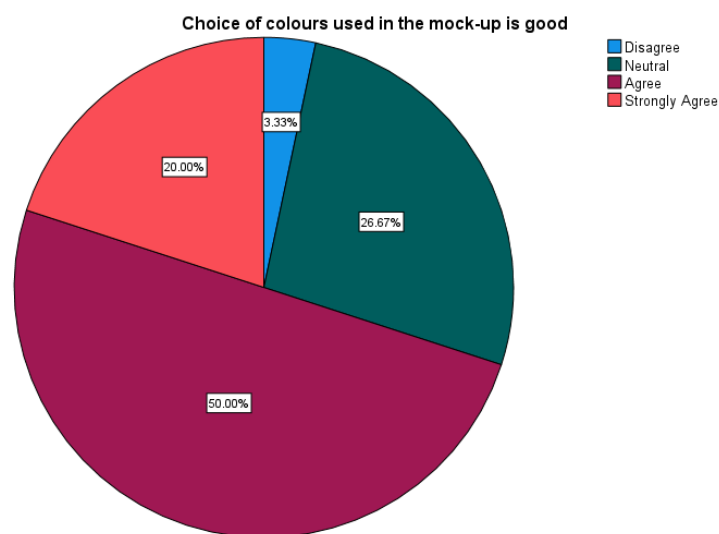
From this pie chart, 13 (3.3%) selected "Disagree," indicating that they did not find the opening theme clear. 104 (26.7%) participants selected "Neutral," indicating that they did not strongly agree or disagree with the statement. 156 (40.0%) participants selected "Agree," indicating that they found the opening theme clear. Finally, 117 (30.0%) participants selected "Strongly Agree," indicating that they strongly believed the opening theme was clear.



**Figure 5.0.56** Pie chart “Font size of the application is readable”

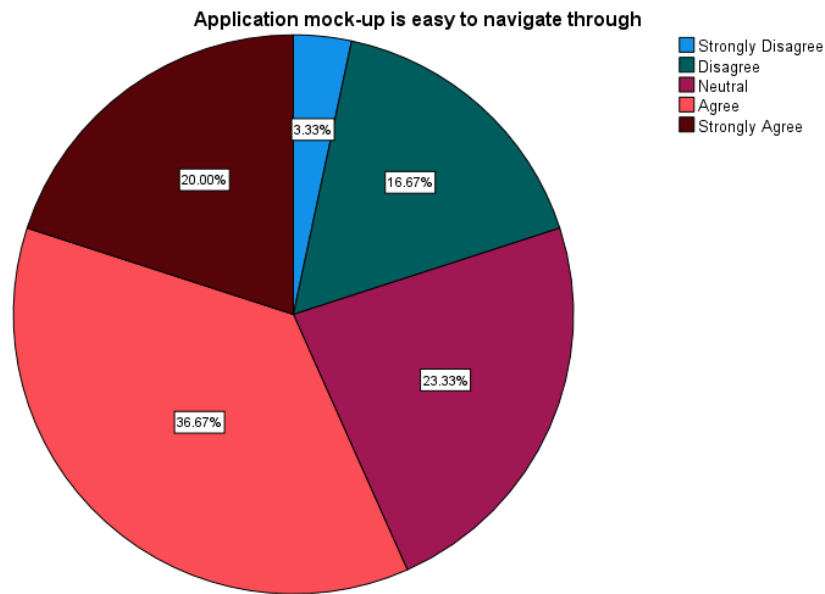
This pie chart represents the responses of participants to a survey question about the readability of the font size in an application.

Out of the 390 participants, 26 (6.7%) selected "Disagree," indicating that they found the font size to be unreadable. 78 (20.0%) participants selected "Neutral," indicating that they did not strongly agree or disagree with the statement. 169 (43.3%) participants selected "Agree," indicating that they found the font size to be readable. Finally, 117 (30.0%) participants selected "Strongly Agree," indicating that they strongly believed the font size was readable.



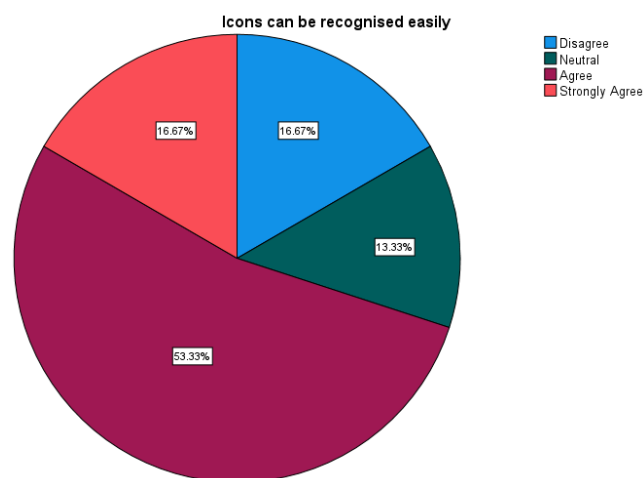
**Figure 5.0.57** Pie chart "Choice of colours used in the mock-up is good"

This data represents the responses of participants to a survey question about the choice of colours used in a mock-up. Of the 390 participants, 13 (3.3%) selected "Disagree," indicating that they did not find the choice of colours used in the mock-up to be good. 104 (26.7%) participants selected "Neutral," indicating that they did not strongly agree or disagree with the statement. 195 (50.0%) participants selected "Agree," indicating that they found the choice of colours used in the mock-up to be good. Finally, 78 (20.0%) participants selected "Strongly Agree," indicating that they strongly believed the choice of colours used in the mock-up was good.



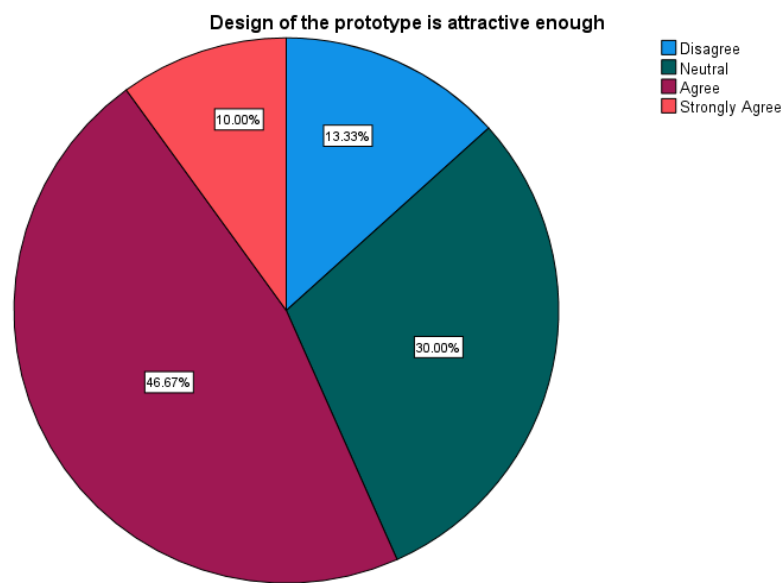
**Figure 5.0.58** Pie chart “Application mock-up is easy to navigate through”

Pie chart above represents the responses of participants to the question about the ease of navigation in the mobile application prototype. 13 (3.3%) selected "Strongly Disagree," indicating that they strongly believed the application mock-up was not easy to navigate through. 65 (16.7%) participants selected "Disagree," indicating that they did not find the application mock-up easy to navigate through. 91 (23.3%) participants selected "Neutral," indicating that they did not strongly agree or disagree with the statement. 143 (36.7%) participants selected "Agree," indicating that they found the application mock-up easy to navigate through. Finally, 78 (20.0%) participants selected "Strongly Agree," indicating that they strongly believed the application mock-up was easy to navigate through.



**Figure 5.0.59** Pie chart “Icons can be recognized easily”

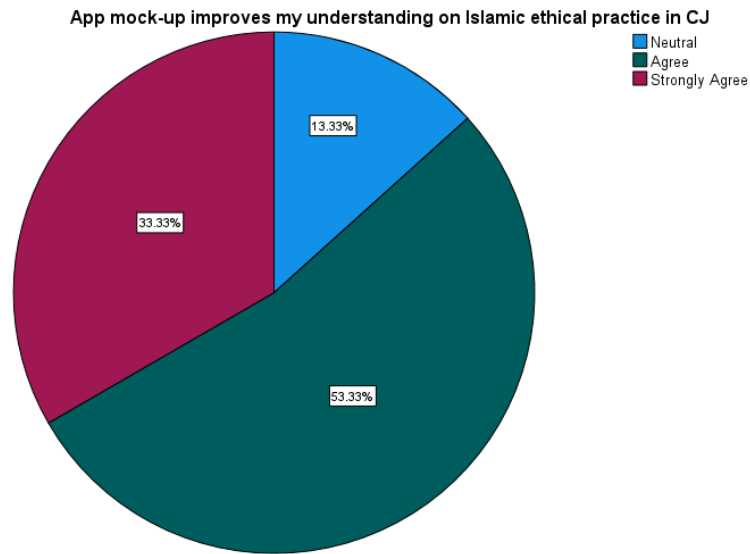
From the pie chart of the item “Icons can be recognised easily”, 65 (16.7%) selected "Disagree," indicating that they did not find the icons in the application easy to recognize. 52 (13.3%) participants selected "Neutral," indicating that they did not strongly agree or disagree with the statement. 208 (53.3%) participants selected "Agree," indicating that they found the icons in the application easy to recognize. Finally, 65 (16.7%) participants selected "Strongly Agree," indicating that they strongly believed the icons in the application were easy to recognize.



**Figure 5.0.60** Pie chart “Design of the prototype is attractive enough”

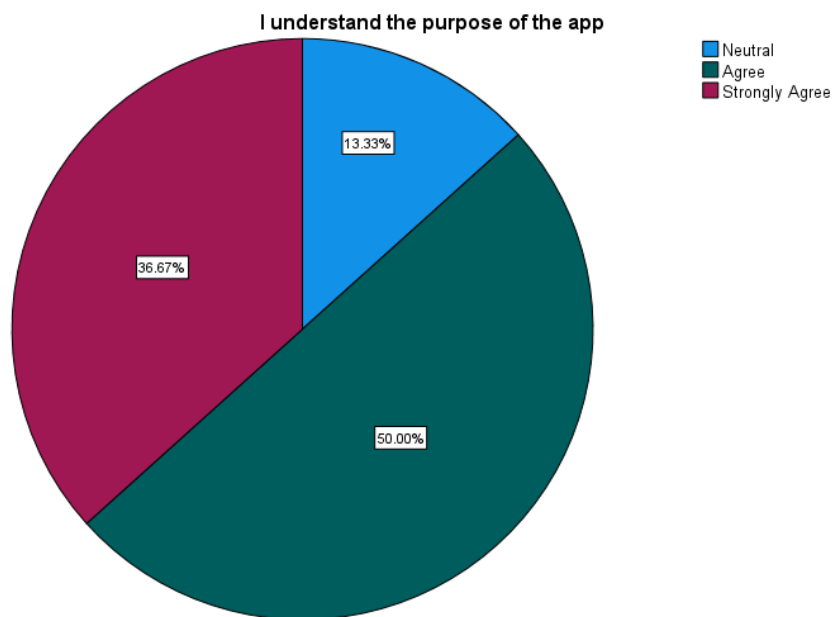
Pie chart represents the responses of 390 participants to the question of the attractiveness of the prototype design.

Out of 390 participants, 52 (13.3%) selected "Disagree," indicating that they did not find the design of the prototype attractive enough. 117 (30.0%) participants selected "Neutral," indicating that they did not strongly agree or disagree with the statement. 182 (46.7%) participants selected "Agree," indicating that they found the design of the prototype attractive enough. Finally, 39 (10.0%) participants selected "Strongly Agree," indicating that they strongly believed the design of the prototype was attractive enough.



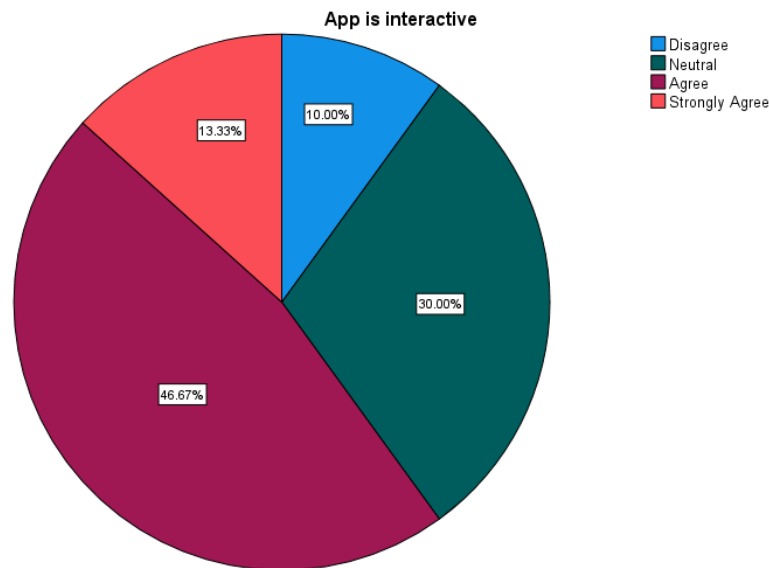
**Figure 5.0.61** Pie chart “Application mock-up improves my understanding on Islamic ethical practice in CJ”

Pie chart above recorded the responses of participants in answering item “Mobile application prototype improves my understanding on Islamic ethical practice in citizen journalism”. Out of the 390 respondents, 13.3% chose "Neutral", 53.3% chose "Agree", and 33.3% chose "Strongly Agree" in response to the statement "Mobile application prototype improves my understanding on Islamic ethical practice in citizen journalism".



**Figure 5.0.62** Pie chart “I understand the purpose of the application”

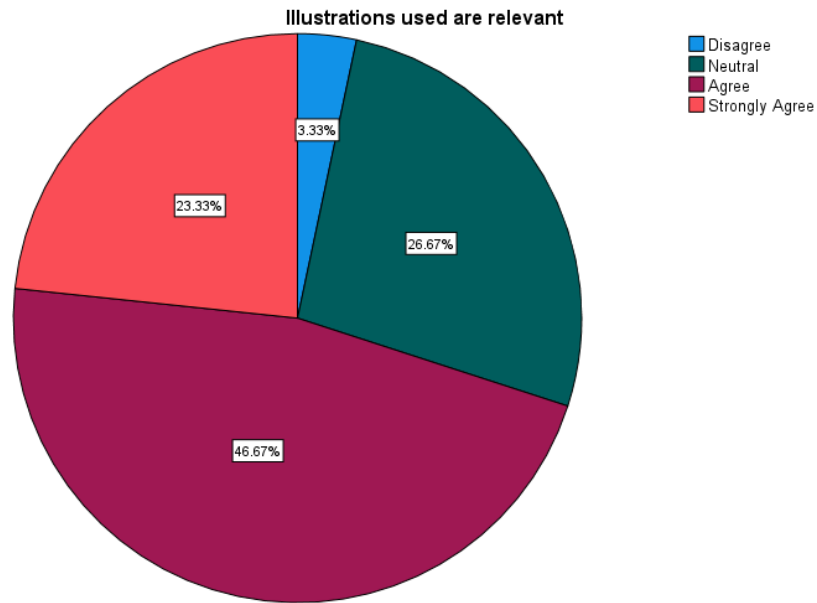
The pie chart shows the responses of 390 participants to a question asking if they understood the purpose of the mobile application prototype. The possible responses were "Neutral", "Agree", and "Strongly Agree". Out of the total number of participants, 13.3% chose the "Neutral" response, 50% agreed that they understood the purpose, and 36.7% strongly agreed. There were no responses in the "Disagree" or "Strongly Disagree" categories.



**Figure 5.0.63** Pie chart "Application is interactive"

Pie chart represents the responses of participants regarding the statement "Mobile application prototype is interactive". Out of the 390 total respondents, 39 (10%) disagreed that the mobile application prototype is interactive, 117 (30%) had a neutral stance, 182 (46.7%) agreed that the mobile application prototype is interactive, and 52 (13.3%) strongly agreed that the mobile application prototype is interactive. The cumulative percent indicates the percentage of respondents up to that point, with 10% disagreeing or having a neutral stance, and 86.7% agreeing or strongly agreeing that the mobile application prototype is interactive.





**Figure 5.0.64** Pie chart “Illustrations used are relevant”

Pie chart represents the responses of participants to a statement regarding the relevance of illustrations used in the mobile application prototype. The majority of the respondents agreed or strongly agreed that the illustrations used were relevant, with 182 (46.7%) and 91 (23.3%) individuals choosing "Agree" and "Strongly Agree," respectively. Only 13 (3.3%) individuals disagreed with the statement.

About one-quarter of the respondents (104, 26.7%) chose the "Neutral" option. The cumulative percentage indicates that, by combining the respondents who chose "Agree" and "Strongly Agree," a total of 76.7% of the respondents agreed that the illustrations used were relevant.

In this research question, Chi-Square test was also conducted. The following figure shows the test result:

<b>Test Statistics</b>		
	Log10RO5Sec F	Log10RO2Sec CD
Chi-Square	306.800 <sup>a</sup>	72.800 <sup>b</sup>
df	5	2
Asymp. Sig.	<.001	<.001

a. 0 cells (.0%) have expected frequencies less than 5. The minimum expected cell frequency is 65.0.

b. 0 cells (.0%) have expected frequencies less than 5. The minimum expected cell frequency is 130.0.

**Figure 5.0.65** Chi-Square Test result

The table presents the results of a Chi-Square test for two variables, Log10RO5SecF and Log10RO2SecCD. Log10RO5SecF derived from Section F of the questionnaire, under the theme “User Experience”, while Log10RO5SecCD derived from Section C, item C3 “Islamic values should be included in our daily social media handling” and Section D, item D “I am aware that I need to research the source of the information first before sharing it around”.

The test statistics include the Chi-Square value, degree of freedom (df), and asymptotic significant values. The Chi-Square value for Log10RO5SecF is 306.800 with 5 degrees of freedom, and the asymptotic significant value is less than 0.001. The Chi-Square value for Log10RO2SecCD is 72.800 with 2 degrees of freedom, and the asymptotic significant value is also less than 0.001. The expected frequencies for all cells are greater than 5, with the minimum expected frequency being 65.0 for Log10RO5SecF and 130.0 for Log10RO2SecCD.

## 5.6 Conclusion

This chapter had described the findings from the data collection, following the sequence of the research questions. Research questions 1, 2 and 3 had the themes filtered out from the interviews and tabulated according to main theme, sub-themes, sub sub-themes and then children nodes. The tree index figures from NVIVO were also included to give a visual representation of the open-coding phase, where we could see the parent nodes branching out into children nodes.

Research question 5, meanwhile, had statistical findings that were represented by descriptive statistics; mean, median, standard deviation, variance, minimum and maximum. The percentages of the responses of each item were visualised by pie charts. Percentages were according to the Likert Scale responses. The last part of the findings was a Chi-Square test, using the median of construct “user experience” and median of variable “Islamic values should be included in our daily social media handling” and “I am aware that I need to research the source of the information first before sharing it around”.

Further elaboration and meaning behind these statistics will be discussed in the next chapter, which is Chapter 6: Discussion and Conclusion.

## **CHAPTER SIX**

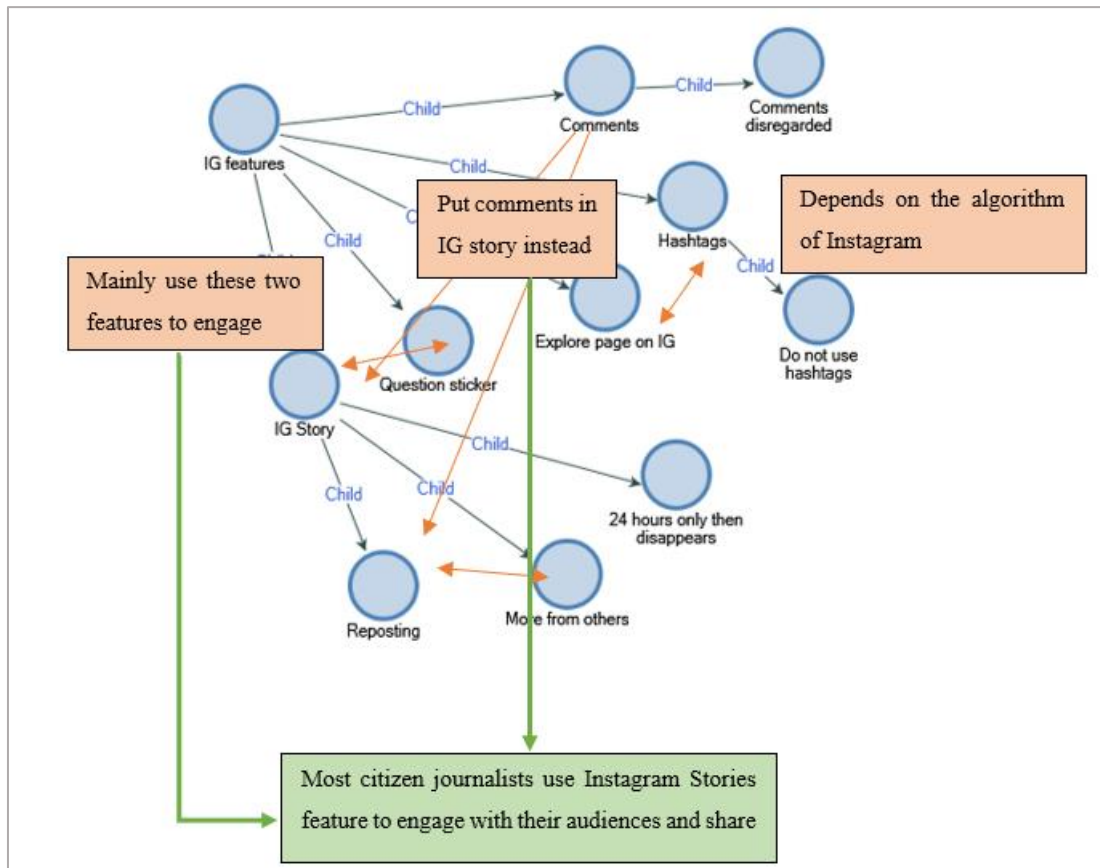
### **DISCUSSION AND CONCLUSION**

#### **6.1 Introduction**

This chapter will discuss the findings from Chapter 5. The findings were further explained and elaborated using references and articles gathered from literature review in Chapter 2 of this research. The output of the discussion will result in the conclusion section in the final part of the chapter. Recommendation for further research will be included as a guideline for other researchers in this industry to explore more possibilities in expanding the job opportunities in Brunei.

#### **6.2 Research question 1: How do Bruneian citizen journalists participate in citizen journalism on Instagram?**

The first research question aims to investigate the ways Bruneians participate in citizen journalism on Instagram. To make sense of the tree index diagram from NVivo, open coding was conducted first before proceeding to axial coding, to relate one item with the others. Axial coding is shown in orange arrows. To summarize and deduct the relationships of the items, selective coding was also conducted and is shown in red arrows. For the first main theme 'Instagram features', the axial coding is coded in orange arrows with orange text boxes, while selective coding is shown in green arrows and green box. Figure 6.1 is as below:



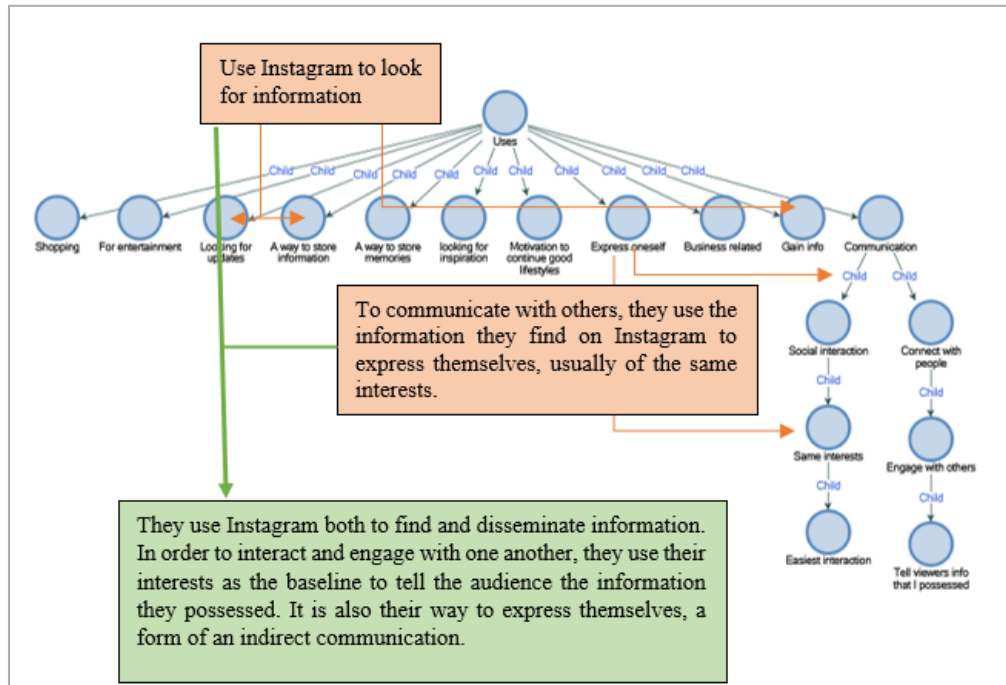
**Figure 6.0.1** Axial coding for sub-theme IG features

On Instagram, respondents use mainly Instagram Stories to engage with their audiences and share information. They do not use hashtags anymore as the hashtags depends on the Instagram algorithm that seems to be difficult to predict and follow. When asked if they park any comments on the comment sections of media agencies’ social media accounts, respondents answered that they do not comment directly on the comment section. Instead, they use the Stories feature by reposting posts from others’ accounts and write their comments on their Stories.

*“Maybe there are other people who need this, others can benefit from that kind of posts, so I tend to reshare..” - R2*

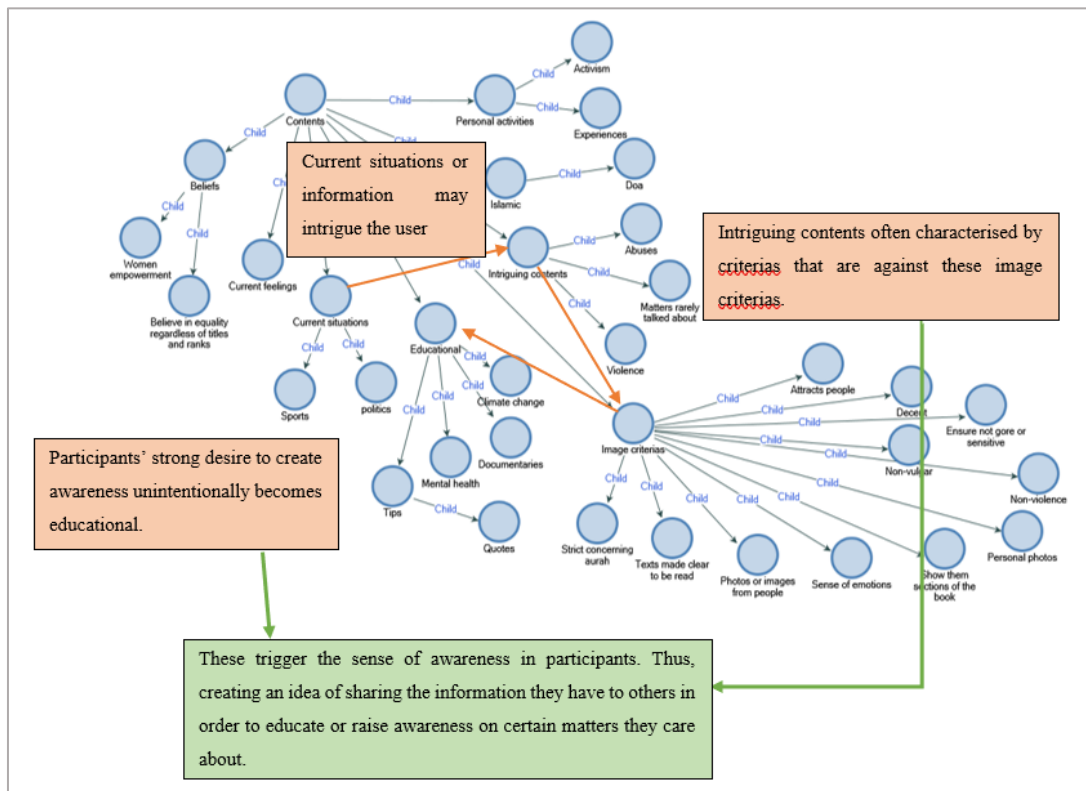
*“Check people’s stories, replying to clients, and watch videos for inspiration. Sometimes the news as well, sometimes. Sometimes I shop on Instagram.” – R3*

The axial coding further expanded when the other sub-themes are related to one another, concluded and elaborated. The other sub-themes are dissected further as below:



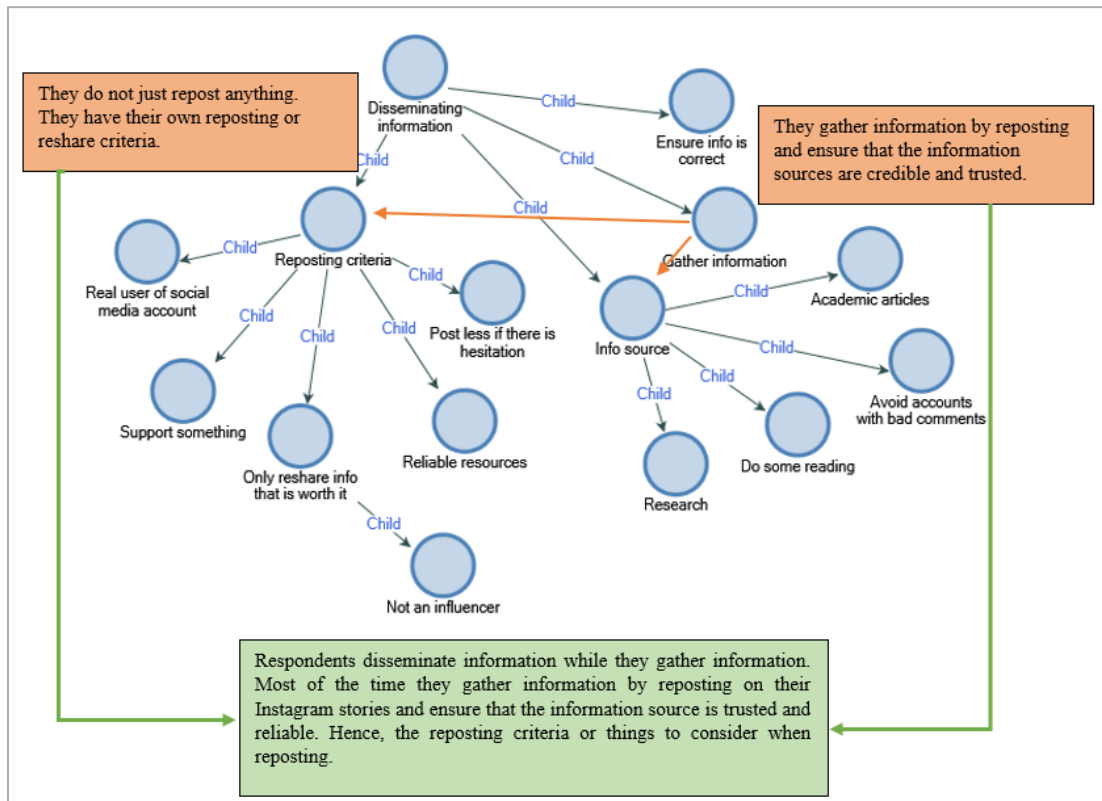
**Figure 6.0.2** Axial coding for sub-theme Uses

For these respondents, Instagram becomes a platform for them to search for information and then disseminate information. In order to engage and interact with one another, they use their interests as the baseline to tell the audience the information they possessed. It is also their way to express themselves, a form of an indirect communication. This conforms with the theme that Whiting (2013) came up with when researching for the reasons people use social media from the uses and gratification perspective. People utilize social media to communicate and interact with others of the same interests. This also supports the gratification study done previously by Ko and Yu in 2019 that suggests that people find satisfaction in watching Instagram Stories by using it to fill their free time, gain pleasure, connect with others, explore new things, and learn new information and skills.



**Figure 6.0.3** Axial coding for sub-theme Contents

As for contents, respondents are easily intrigued by what is happening around them or current issues. Since they do repost as a mean of sharing information, respondents have their own image criteria to be reposted for audience to look at. Intriguing contents often pique their interests that they need to reshare it to others, thus trigger their sense of awareness. Respondents' strong desire to create awareness then unintentionally becomes educational.



**Figure 6.0.4** Axial coding for sub-theme Disseminating Information

As respondents disseminate information, they gather information at the same time. Reposting as their main way to disseminate and gather information, they also tried to ensure that the information received is correct, from credible and trusted sources. They do not just repost anything, rather quite particular with the type of information they want to repost.

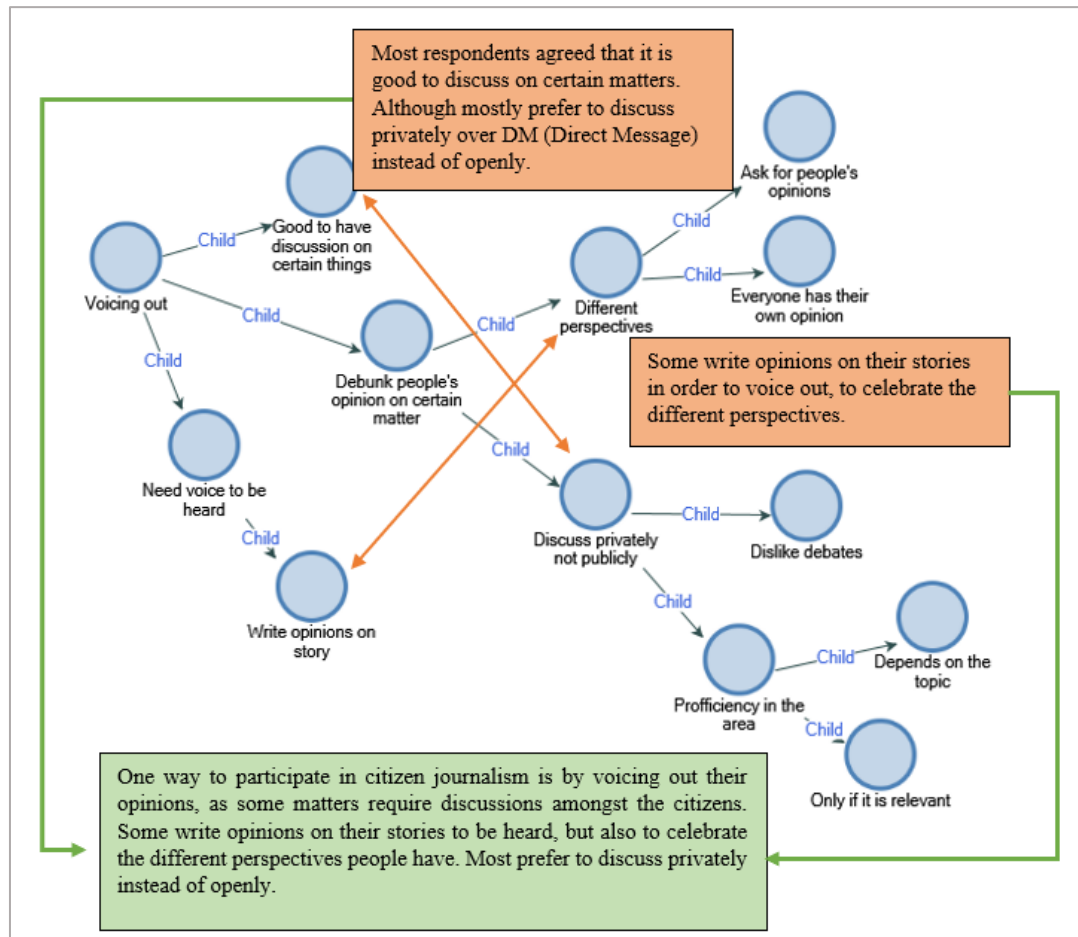
*“Making sure the images/videos do not affect others i.e., Sensitivity issues.” – R1*

*“What relates to current situation (now), tips, what’s happening now but people do not know.” - R2*

*“Whenever someone posts on the Borneo Bulletin, and then there’s someone who’s not wearing a hijab, I wouldn’t repost that. Even if I do post my opinion, I wouldn’t repost that post out of respect for someone. If the title irks me in a way that it sounds dehumanizing or very insulting, I wouldn’t post it. I will just say if you’re curious, you*



*can check the original post/account... For videos, I would ensure that it's not very gore or sensitive.” – R5*



**Figure 6.0.5** Axial coding for sub-theme Voicing Out

One way to participate in citizen journalism is by voicing out one’s own opinion. They agreed that certain matters need to be discussed, however, most prefer to discuss them privately over DM (Direct Message) feature that lets audience or followers communicate with user directly instead of openly debating on their posts. Some however, write their opinions on their Instagram Stories not only to voice out but to also celebrate different perspectives from others. This matches the civic participation study that citizen journalists are motivated to express opinions concerning public affairs and general issues (Nah & Chung, 2020).

To conclude, Bruneian citizen journalists participate in citizen journalism on Instagram mainly by reposting information from other reliable or credible accounts via

Instagram Stories. The contents of information they reshare varies according to their interests however the most common content that they share is that of general current issues or those concerning public affairs. They also take the opportunity to voice out their opinions while they share the information, although some appreciate private discussions over public debate.

Next section will discuss about research question 2 that will answer the question of the Islamic ethical practice in conducting citizen journalism.

### **6.3 Research question 2: How do Bruneian citizen journalists practice Islamic ethical conduct in citizen journalism?**

From the data collection and analysis, it is found that all the participants do disseminate information, intentionally or without them realising. One of the factors that caused them to gather information by themselves is because they do not trust certain news from particular news agencies. Due to the dissatisfaction of what they feel is one-sided information or incomplete information, they tend to collect and gather information they possessed or received instead. Hence, making use of the tools they have in their possession such as phones, laptops and in this case, social media account on Instagram to fulfil the duty of informing one another amongst the public. The particular behaviour of the public regarding this was discussed by Jay Rosen (Rosen, 2008).

*“I gather the information and usually save it...I rarely check news. I don’t trust news, example BBC. They can easily manipulate the texts. Bruneian news, sometimes the words arrangement is wrong. Headlines can be confusing.” – R2*

Here, Respondent 2 explained the reason she decided to gather information instead of putting her trust fully on certain media agencies. Texts are easily manipulated, while the skills to send the message across to audience is important as not to get audience confused. Respondent 3 mentioned that it is the citizen’s duty to inform others on information that others may not be aware of or have little information on. Thus, using Instagram accounts she has to disseminate information.

*“I think it’s important to not only educate yourself, but also to educate others because sometimes people are not aware of these things...” – R3*

As the participants gather information, information source varies from researches they made, academic articles, or certain reliable social media accounts. In this case, the citizen journalists comply with the standard ethics that also conform to the Islamic ethical conducts as per discussed by Omar (2009) where they gather information from reliable sources to seek the truth and being balanced in disseminating information (Steele, 2011)

*“Official websites, and social media accounts.” – R1*

*“Find the origin or source. Not from middle resources.” – R2*

*“I am a full-time student: I read academic articles. I don’t read novels. For Islamic, again I have the resources, a collection of hadiths, softcopy ones for my research purposes. If something is inauthentic, I would search for it. If someone says this is from an authentic hadith, then I ask where they get them from. I check what they told me.” – R3*

*“I check from internet and reliable resources.” – R4*

From the responses when asked about where they obtained their information from, mostly made an effort to do research beforehand in order to obtain true information that they wish to disseminate. They abide by the standard ethical conduct in journalism, in which one should seek truths and check the sources’ reliability (Leighton Walter Kille, 2009)

However, viral information, a trending information that spread fast amongst the citizens, is also one of the sources they get their information from. Viral information comes in two forms: positive contents or negative contents. The action towards viral information depends on the contents that participants receive and whether the information is up or against their own sense of morality. If the content of the viral

information is positive, they reshare it in the hope that others might benefit from the information. If the information is negative with misunderstood texts, the situation gets confusing even for those participants who usually do not share information that might go against their morals. This situation was also experienced by respondents.

*“Fast information and it is the trend nowadays.” – R1*

*“I research first, save it, then make sure it's true. Check the source. I try to talk to those forwarding them, those I know. Tell directly to those who forward if it's wrong. I don't like the viral messages especially when the message is hurting other people in the text.” – R2*

*“If it's against my morals, I would not forward it. Example, last time I received a viral video of a student on Tiktok, and people were insulting them. I felt like it was very immoral of them to spread this around because they're just students. They might not know any better. I hated the comments as well. I watched the video and didn't do anything about it, just pass it by. It's not nice to spread this around. I think it depends on the content also. If it's adorable and positive, I would actually share it.” – R3*

From the responses regarding viral messages, respondent 1 agreed that viral messages are one of the fastest these days. Even so, they are aware of the importance to check first instead of following the flock, which is to forward them without even checking whether they are true or otherwise.

*“Everyone was posting it as well, so it was confusing.” – R5*

This shows how much a viral message that majority of the citizens are resharing and forwarding to inform one another that it gets confusing and misunderstood. As reposting is the main means that citizen journalists use on Instagram for disseminating information, they do outline their reposting criteria. They will only repost information that they think is worth to be shared to others and post less if they have hesitation.

*“If you hesitate, post less on it.” – R2*

*“...To disseminate some information or to reveal the truth. Not all news I would repost. Whatever information worth reposting for me, I will repost.” – R4*

*“More worrying is the fact that some accept the false news without checking proper sources to verify the information. Thus, it could affect social harmony and safety” – D1*

Problem arises when citizen journalists get confused with the information and assume that the information they shared was true. Hence, they are times when even those who are morally-conscientious, tend to post the wrong information. Here are their actions when they post wrong information to show their accountability:

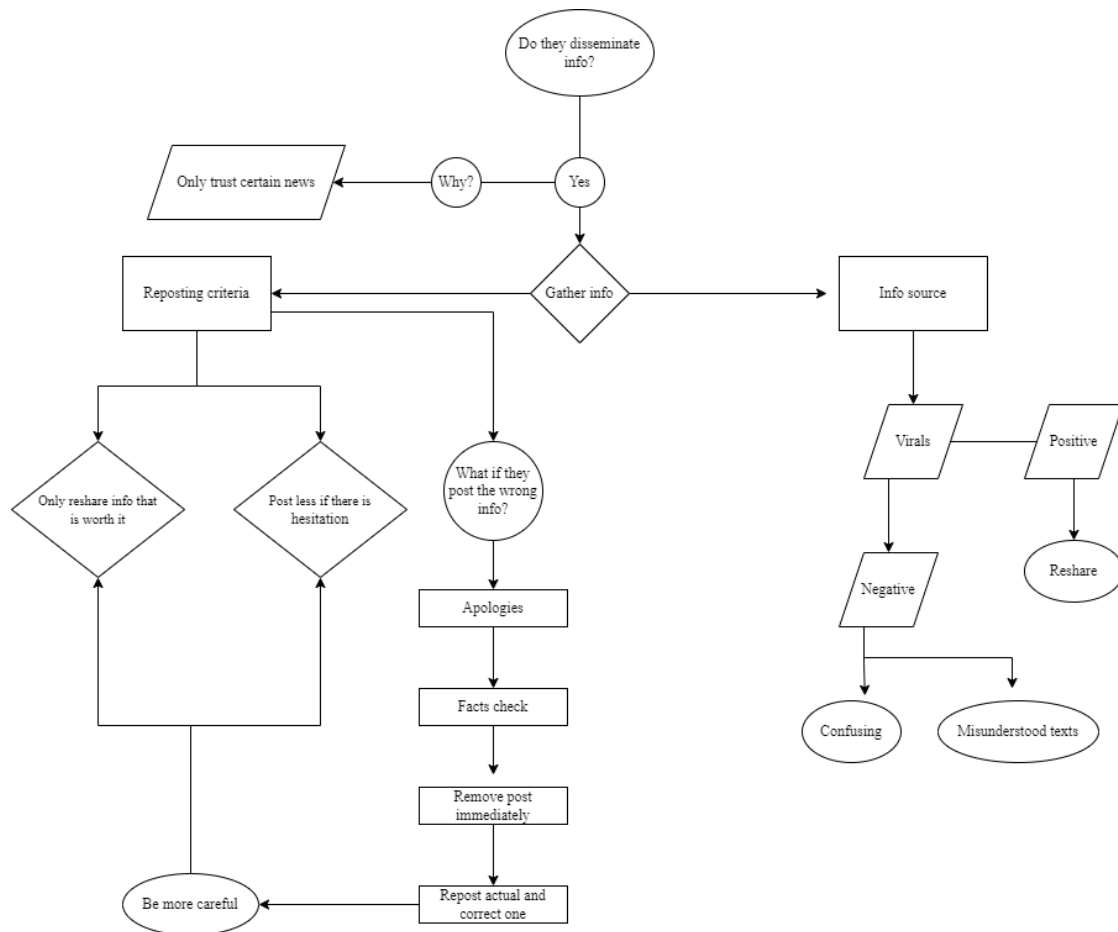
*“I will immediately remove the post and explain / apologize about the whole situation. and I will take responsibility for the misuse of information shared.” – R1*

*“I had this before. Maybe I didn’t understand how it worked. Usually, someone would notice and confront me. So, I repost again the actual one. That’s why I appreciate the private discussion. If it’s from WhatsApp, check again. If possible, apologize. It makes you be more careful. If you hesitate, post less on it.” – R2*

*“This happened to me before. I reposted something but it turned out to be fake. Everyone was posting it as well, so it was confusing. When I checked it, after that there was a post from the actual account saying that the information was false. So I reposted the actual information from the actual account, and said sorry in my story.” – R3*

To show their accountability, they apologize, check their facts again from trusted and reliable sources or from the actual original accounts. Remove the post immediately if they have posted the wrong information then replace it with the correct information. From this experience, they learnt to be more careful when reposting or sharing information on their Instagram platforms, hence only repost information that they think is worth to share and also posting less if they have hesitation on certain matters. From previous discussion of Steele (2015) in approaches of journalism and Islam in the Malay Archipelago which consists of Malaysia and Indonesia, the approach in which Islamic journalism should be honest and true with credible sources in order to

be consistent with Islamic principle of *ammar maa'ruf nahi munkar* or inviting good forbidding evil, are similar to that of the approaches of the respondents especially when they need to be accountable for disseminating less accurate information. For a complete overview of the discussion, Figure 6.2.1 below shows the flow chart of selective coding that answers the research question on how Bruneian citizen journalists practice Islamic ethical conducts information dissemination:



**Figure 6.0.6** Selective coding flow chart that shows how do citizen journalists in Brunei conduct ethical practice in disseminating information.

In conclusion, it is found that Bruneian citizen journalists do practice Islamic ethics while conducting citizen journalism on Instagram to a certain degree. They practice gathering information from reliable sources and aware of the contents of viral messages. However, as much as they are morally-conscious in disseminating only true information, that did not hinder them from sharing false or less accurate information.

When they unintentionally share wrong information, they make haste and immediately act upon it to fix the situation. Thus, teaching them to be more careful when disseminating information.

### 6.4 Research question 3: What are the factors that contribute to citizen journalists to perform citizen journalism?

The third research question determines the factors that contribute to the act of citizen journalism amongst the Bruneians citizen journalists. Below, the open coding themes in blue are further elaborated and discussed in order to form a concept that answers the research question.

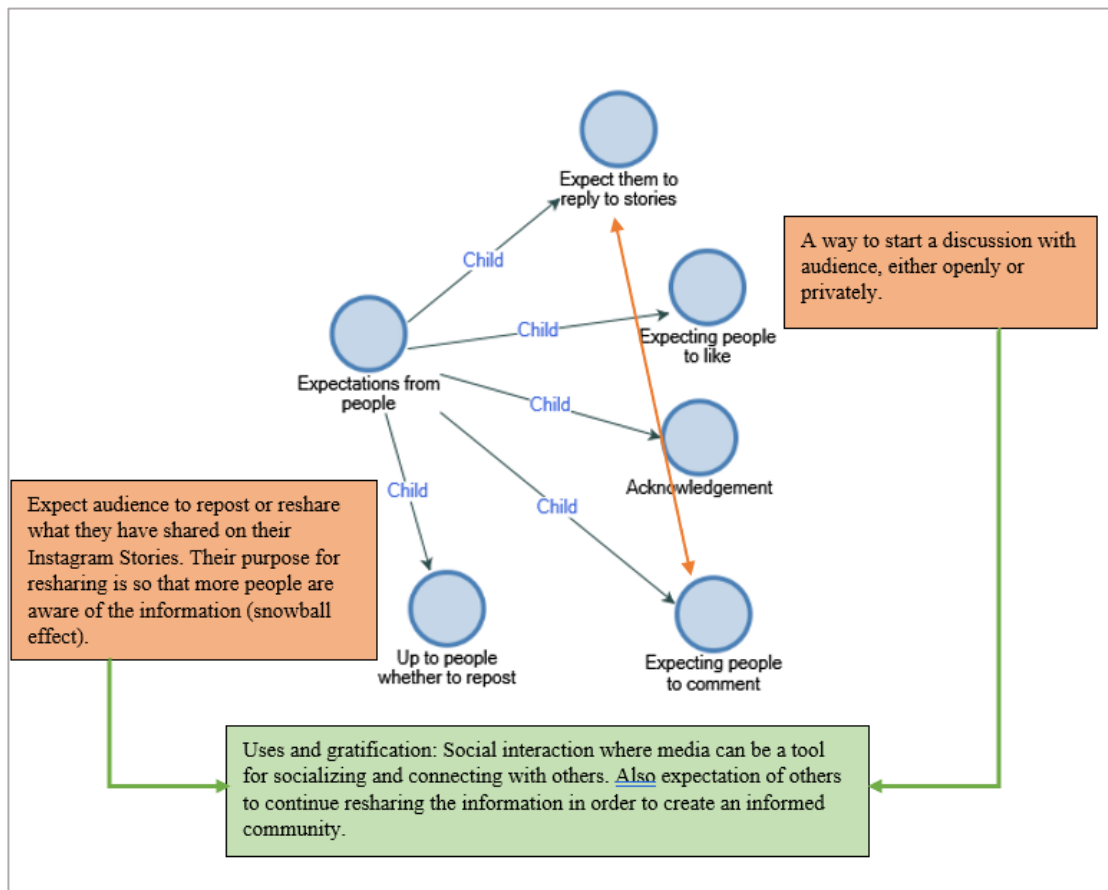
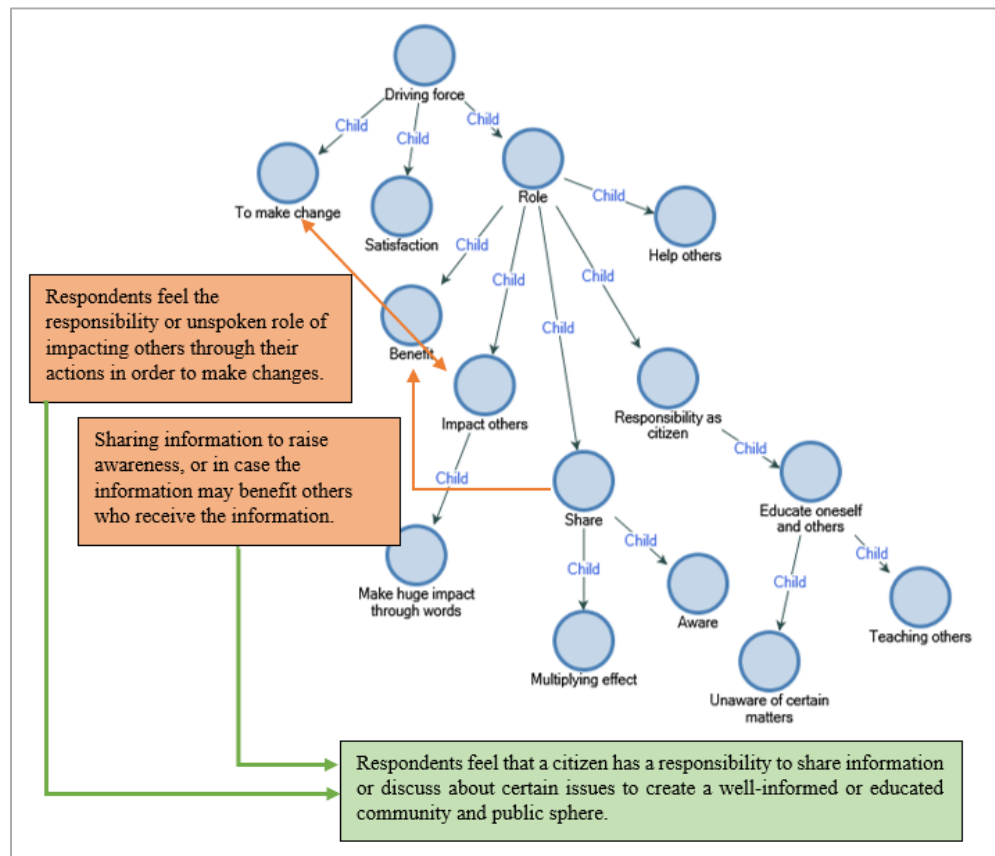


Figure 6.0.7 Axial coding of the sub-theme "expectations from people"

The theme starts with expectations that respondents expect from their audience when they share information, either by posting or by reposting on their Instagram Stories. Most respondents expected the audience to comment or reply on their posts so

they can start a discussion about the topic either openly or privately. When they repost information on their Instagram Stories, respondents expect the audience to further share the information. It is their intention so that more people are aware of the information, in order to get the multiplying or snowball effect.



**Figure 6.0.8** Axial coding of the sub-theme “driving force”

This connects with the uses and gratification theory of social interaction, where media tools are used for socialising and connecting with others (Whiting & Williams, 2013). To create a well-informed community, citizen journalists share information so others can update those who are not aware as well. This relates to the next sub-theme, in which respondents feel that they have an unspoken duty as a citizen to make changes by impacting others through their actions of citizen journalism. The information may also benefit others and raise more awareness among the public.

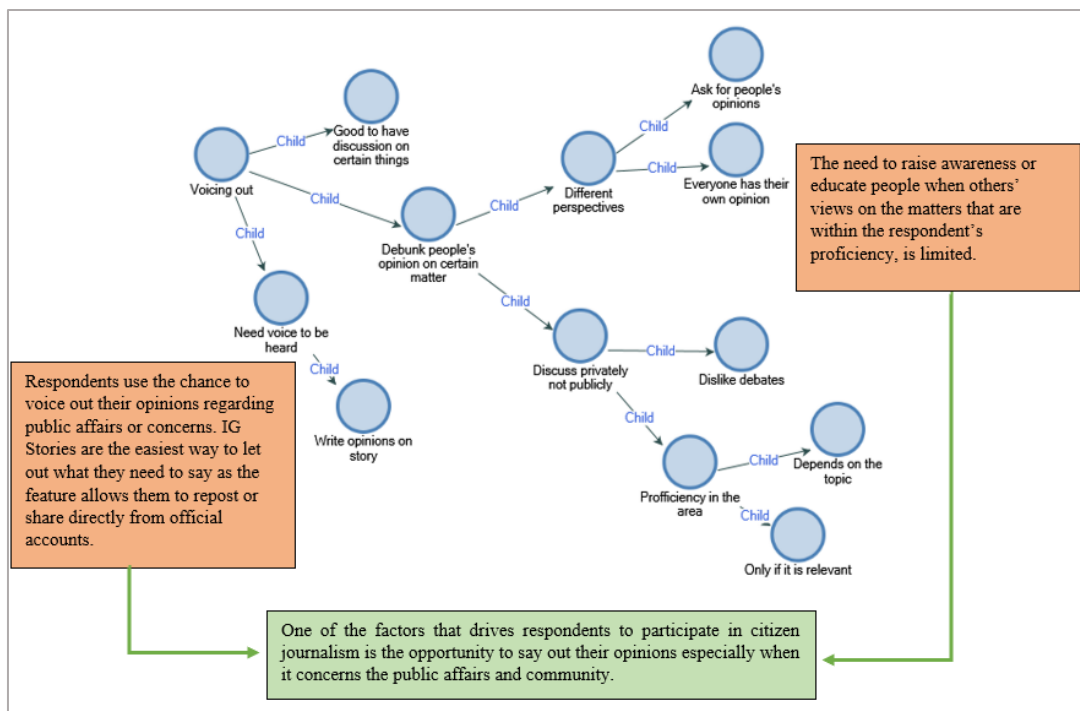
*“I keep wondering if it benefits the people” – R2*



“For me it’s about knowledge, like sometimes I know one side but the other person knows the other side, so I think it’s important for us to engage with each other. Whenever I post something, I would expect them to engage, like they would answer the questions or reply to my stories...” – R3

“Usually, I would think this is interesting, I feel like people need to know about this too, people need to be aware of this. This cannot be silent...So, I post about it, and tell them what I know because it’s kind of like teaching them an awareness. If they’re not aware of it, it won’t spread out...” – R5

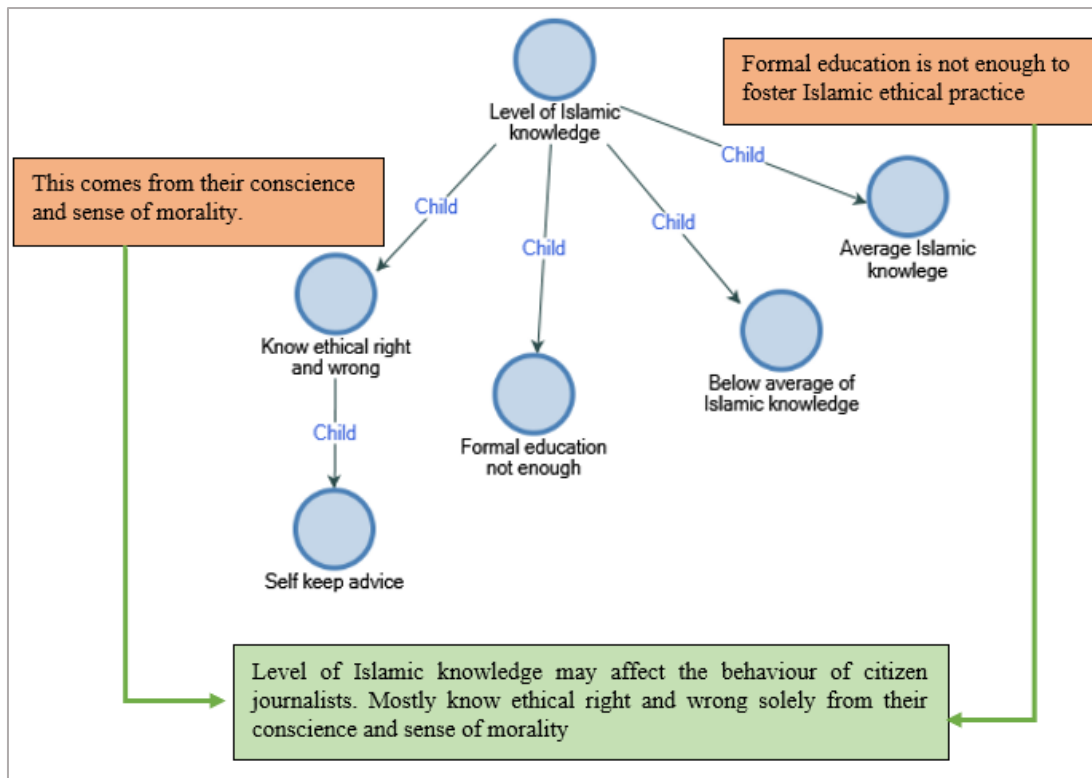
Hence, the main driving force for them to perform citizen journalism is the responsibility to create an educated and well-informed public sphere.



**Figure 6.0.9** Axial coding of the sub-theme “voicing out”

As they disseminate information, respondents or the citizen journalists use the chance to voice out their opinions regarding public affairs or concerns. Instagram Stories is the easiest way to let out what they need to say as the feature allows them to repost directly from official accounts or posts that they want to highlight and discuss.

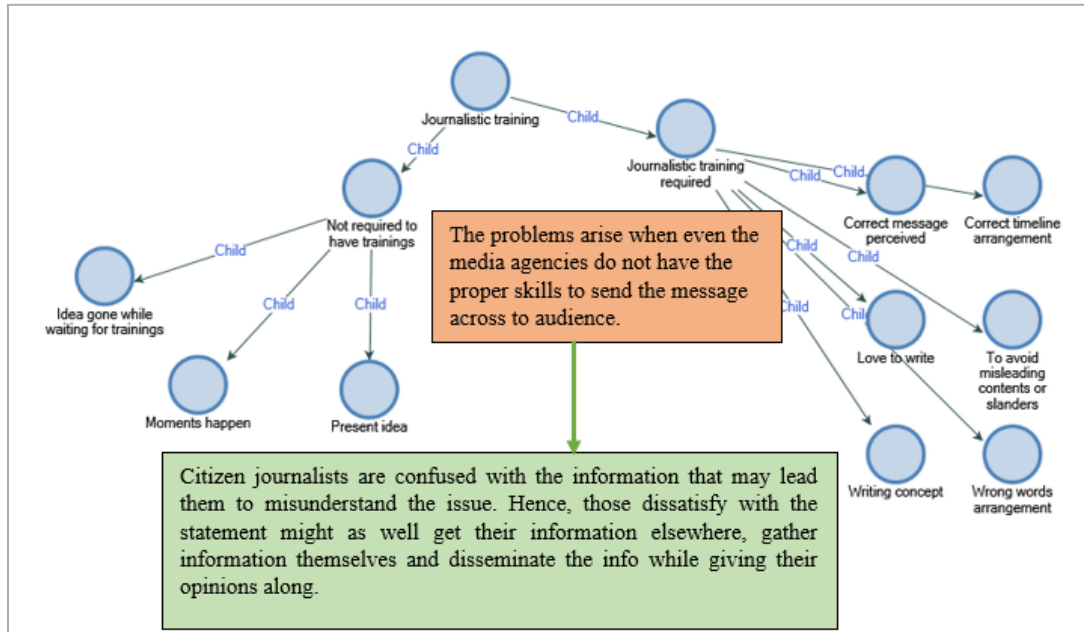
As people have their own proficiency area, it is natural that citizen journalists would want to defend or educate others on what matters to them. Participating in citizen journalism helps them fix or widen others' views on those matters.



**Figure 6.0.10** Axial coding of the sub-theme “level of Islamic knowledge”

Other factors that affect their decision to perform citizen journalism whether positively or negatively, is level of Islamic knowledge that they possessed. As a predominantly Muslim country, Brunei places a high value on Islamic education, with the Ministry of Religious Affairs responsible for overseeing religious education in the country. According to Yusof and Jaidin (2018), "Religious education in Brunei is an important component of the national education system and is considered essential for developing good moral character and civic responsibility."

However, from the respondents' point of views, formal Islamic education is insufficient to instil the Islamic ethical practice in them. Most citizen journalists are able to realise ethical right and wrong, from their conscience and sense of morality. Meaning, more effort in instilling the idea of Islamic ethics onto the younger generation or the youths is required.



**Figure 6.0.11** Axial coding of the sub-theme “journalistic training

Another seemingly minor and unrelated in contributing to citizen journalism is the writing skills of media agencies. The problems arise when even the media agencies do not have the proper skills to send the correct message across to audience. Citizen journalists are confused with the information that may lead them to misunderstand the issue. Hence, those dissatisfied with the statement might as well get their information elsewhere, gather information themselves and disseminate the information while giving their opinions along.

In conclusion, factors that contribute to citizen journalists performing citizen journalism includes their needs of social interaction to engage with one another, their responsibility as citizens to share information in order to create a well-informed and educated community, their need to express their opinions regarding the public affairs. The level of Islamic knowledge especially on ethics also pose a significant effect on why certain citizen journalists behave positively or negatively. Journalistic skills of media agencies also become a factor that encourages citizen journalism when their writing needs improvement in making a clear statement.

Hence, from these research questions, an understanding on the ethical conduct of citizen journalism in Brunei is sought, which helps in designing a mobile application concerning citizen journalism. The effectiveness of the mobile application prototype will be discussed in the next section.

### 6.5 Research question 5: How effective is the mobile application prototype in educating about Islamic ethical practice in citizen journalism?

The fifth research question determines the effectiveness of the mobile application prototype in educating the public on Islamic ethical practice in citizen journalism.

**Table 6.0.1** Statistics on the effectiveness of the mobile application prototype

		Statistics										
		Aware CJ	Know CJ	Familiar CJ	Viral Msg eg of CJ	CJ through socmed	Commenting on socmed posts	False Info	Ppl know more info from viral msgs	Able to understand problems from app	Able to understand lists in app as part of CJ	
N	Valid	390	390	390	390	390	390	390	390	390	390	
	Missing	0	0	0	0	0	0	0	0	0	0	
	Mean	3.40	3.33	3.07	4.13	4.60	4.10	4.90	4.63	3.70	3.97	
	Median	3.00	3.00	3.00	4.00	5.00	4.00	5.00	5.00	4.00	4.00	
	Std. Deviation	.801	.908	1.125	.847	.612	.832	.300	.547	.863	.837	
	Variance	.642	.824	1.265	.717	.374	.692	.090	.300	.745	.701	
	Minimum	2	1	1	1	3	2	4	3	2	2	
	Maximum	5	5	5	5	5	5	5	5	5	5	

The first variable “Aware CJ” measures the extent to which respondents are aware of citizen journalism, whether they are aware of the term citizen journalism or otherwise. The mean value of this variable is 3.40, indicating that on average, respondents have a moderate level of awareness of citizen journalism. The median value is 3, which means that half of the respondents rated their awareness level as 3 or lower, while the other half rated it as 4 or higher. This indicates the most accurate representation of this population, in which most of the public are still ‘neutral’ or unsure of citizen journalism.

The second variable, "Able to understand problems from app," measures the respondents' ability to understand problems that may arise due to citizen journalism, through an app. Respondents were asked to rate their ability on a scale of 1 to 5, with 1 being "not able to understand at all" and 5 being "completely able to understand." The mean value for this variable is 3.70, indicating that on average, respondents have a

moderate level of understanding of problems related to citizen journalism through an app. The median value is 4, indicating that half of the respondents rated their ability as 4 or higher, while the other half rated it as 3 or lower.

The variable "Able to understand lists in application as part of CJ" measures the respondents' ability to understand the list in the mobile application prototype as part of citizen journalism activities. The mean value for this variable is 3.97, indicating that on average, respondents have a moderate to high level of ability to understand that the list in the mobile application prototype is part of citizen journalism. The median value is 4, indicating that half of the respondents rated their ability as 4 or higher, while the other half rated it as 3 or lower, similar to the previous variable.

These results suggest that there is room for improvement in terms of awareness and understanding of citizen journalism and application prototype among the sample population. However, the mean and median values for the "Able to understand list in mobile application prototype as part of CJ" variable indicate that respondents generally have a higher level of ability to understand the activities listed in the 'Start Guide' feature of the prototype as part of citizen journalism compared to their ability to understand the problems that emerge from citizen journalism through the prototype. Below is the compilation of the percentages shown in individual related variables:

**Table 6.0.2** Compilation of percentages for the item "Aware of Citizen Journalism"

		<b>Aware CJ</b>			
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Disagree	52	13.3	13.3	13.3
	Neutral	156	40.0	40.0	53.3
	Agree	156	40.0	40.0	93.3
	Strongly Agree	26	6.7	6.7	100.0
Total		390	100.0	100.0	

**Table 6.0.3** Compilation of percentages for the item “Able to understand problems from application”

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Disagree	39	10.0	10.0	10.0
	Neutral	104	26.7	26.7	36.7
	Agree	182	46.7	46.7	83.3
	Strongly Agree	65	16.7	16.7	100.0
	Total	390	100.0	100.0	

**Table 6.0.4** Compilation of percentages for the item “Able to understand lists in application as part of Citizen Journalism”

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Disagree	26	6.7	6.7	6.7
	Neutral	65	16.7	16.7	23.3
	Agree	195	50.0	50.0	73.3
	Strongly Agree	104	26.7	26.7	100.0
	Total	390	100.0	100.0	

In terms of the Islamic knowledge shared in the application as well as the usage of some arguments and supporting evidence from the *Qur'an* and the *hadiths*, participants generally agreed that the verses chosen to argue or support each decision in the “Start Guideline” feature, were chosen accordingly, meaning, they are relatable and strong argument or supporting evidence. This can be deduced by looking at the mean of the last three variables “Hadiths used in mobile application were chosen accordingly”, variable “Qur’an verses used in the application were chosen accordingly” and the variable “Qur’an and hadiths used in the application related to the situations given in the application” as shown below:

**Table 6.0.5** Statistics of Section “Knowledge on Islamic values” with the one of the variables for Chi-Square Test and other box o the right showing mean of the last three items

		Statistics									
		Understand Islamic values include good akhlak	Islamic values should integrated into daily life	Islamic values should integrated in daily socmed handling	Islam should be a way of life in Brunei	Knowledge Islamic above average	Knowledge hadiths good	Knowledge Qur'an good	Qur'an verses used in app chosen accordingly	hadiths used in mobile app chosen accordingly	Quran and hadiths used in app related to the situations given in the app
N	Valid	390	390	390	390	390	390	390	390	390	390
	Missing	0	0	0	0	0	0	0	0	0	0
Mean		4.90	5.00	4.87	4.90	3.77	2.97	3.20	3.93	3.97	3.97
Median		5.00	5.00	5.00	5.00	4.00	3.00	3.00	4.00	4.00	4.00
Std. Deviation		.300	.000	.340	.300	.804	.949	.910	.574	.483	.605
Variance		.090	.000	.116	.090	.647	.901	.829	.330	.233	.366
Minimum		4	5	4	4	2	1	1	3	3	3
Maximum		5	5	5	5	5	5	5	5	5	5

**Table 6.0.6** Statistics of Section “Awareness of Islamic values in citizen journalism”, with red box being one of the variables in used in Chi-Square Test

		Statistics									
		Posting info on IG to inform public is one of cj activities	When doing CJ, Islamic values should include	Truth-Islamic values consider before sharing info	If viral msg received not true, will not share	Info must verify before sharing	Aware that sharing unverified information is against the Islamic values	Aware that reposting information that I am not sure of, is against Islamic values	Aware that I need to research the source of the information first before sharing it around	I voice out my opinion publicly on social media with respect, without degrading others	Aware that sharing images or videos that may be sensitive to others is against the Islamic ethical values
N	Valid	390	390	390	390	390	390	390	390	390	390
	Missing	0	0	0	0	0	0	0	0	0	0
Mean		4.17	4.47	4.73	4.87	4.87	4.67	4.37	4.57	3.67	4.50
Median		4.00	5.00	5.00	5.00	5.00	5.00	4.00	5.00	4.00	5.00
Std. Deviation		.638	.671	.443	.340	.340	.597	.658	.616	1.012	.620
Variance		.407	.450	.196	.116	.116	.356	.433	.380	1.025	.384
Minimum		3	3	4	4	4	3	3	3	1	3
Maximum		5	5	5	5	5	5	5	5	5	5

From Construct 5, participants generally agreed that when doing citizen journalism, it is important to consider Islamic values, verify information before sharing, and respect others' sensitivity. They also agreed that they have knowledge of Islamic ethical values and can recognize if someone's post is ethically right or wrong. However, they still feel that a guideline on ethical practice in citizen journalism is required to raise public awareness, and they agreed that mobile application can be one of the ways to educate, especially for the younger generations who are now digitally literate. This concurs with one of the key components of Technology Acceptance Model, which is perceived usefulness.

**Table 6.0.7** Statistics of Section “Level of Islamic religious education”

		Statistics									
		The knowledge on Islamic ethical values is shared often	Islamic ethical values were instilled early when I was young	Islamic values in me is a result of the nation's principle Melayu Islam Beraja	I can recognise if someone's post is ethically right or wrong	Reminding the public on the ethical values derived from the Qur'an is essential	Ethical values in Islam are best learnt from hadiths and Qur'an	Basic religious study background is sufficient to know ethical values in practicing CJ	A guideline on ethical practice in CJ is required to raise public's awareness	This mobile application mock-up can be used as an awareness tool	Mobile application is a suitable way to educate the younger generation on Islamic ethical values in CJ
N	Valid	390	390	390	390	390	390	390	390	390	390
	Missing	0	0	0	0	0	0	0	0	0	0
Mean		3.60	4.00	3.80	3.83	4.40	4.70	3.77	4.37	4.43	4.33
Median		4.00	4.00	4.00	4.00	4.50	5.00	4.00	4.00	4.50	4.50
Std. Deviation		.953	.857	.834	.821	.664	.587	1.284	.605	.616	.746
Variance		.909	.735	.695	.674	.441	.344	1.650	.366	.380	.557
Minimum		1	1	1	2	3	3	1	3	3	3
Maximum		5	5	5	5	5	5	5	5	5	5

The last construct, the user experience of the mobile application prototype, received mixed opinions. In usability theory, the fonts, colour choices, the navigation and the whole design play important roles in attracting users to use the application. Here however, there are variety of opinions with regards to the clarity of the opening theme, the font size used, the choice of colours, recognisable icons, attractive design, interactivity of the application prototype as well as the relevance of illustrations used. With the minimum being 2, which indicates the lowest rating or Disagree in the minimum statistic, some participants did not agree with the presentation and the usability of the mobile application prototype.

Despite the mobile application being not as attractive and practical as expected, participants however, thought that the prototype actually improves their understanding on Islamic ethical practice in citizen journalism, and that they understand the purpose the application prototype was designed.

**Table 6.8** Statistics of Section “User feedbacks”

		Statistics									
		Application opening theme is clear to see	Font size of the application is readable	Choice of colours used in the mock-up is good	Application mock-up is easy to navigate through	Icons can be recognised easily	Design of the prototype is attractive enough	App mock-up improves my understanding on Islamic ethical practice in CJ	I understand the purpose of the app	App is interactive	Illustrations used are relevant
N	Valid	390	390	390	390	390	390	390	390	390	390
	Missing	0	0	0	0	0	0	0	0	0	0
Mean		3.97	3.97	3.87	3.53	3.70	3.53	4.20	4.23	3.63	3.90
Median		4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
Std. Deviation		.837	.876	.764	1.089	.938	.847	.654	.668	.837	.791
Variance		.701	.768	.584	1.185	.879	.717	.428	.447	.701	.625
Minimum		2	2	2	1	2	2	3	3	2	2
Maximum		5	5	5	5	5	5	5	5	5	5

In chapter 1, this study has hypotheses that need to be proven. The hypotheses are:

H<sub>1</sub>: There is a significant relationship between understanding of Islamic values in social media handling and the usage of the mobile application prototype.



H<sub>0</sub>: There is no significant relationship between understanding of Islamic values in social media handling and the usage of the mobile application prototype.

The hypothesis being tested is whether there is a significant relationship between understanding of Islamic values in daily social media handling and the usage of the mobile application prototype. The null hypothesis (H<sub>0</sub>) assumes that there is no significant relationship between the two variables, while the alternative hypothesis (H<sub>1</sub>) suggests that there is a significant relationship. The following figure shows the test result computed from SPSS:

Test Statistics		
	Log10R05Sec F	Log10R02Sec CD
Chi-Square	306.800 <sup>a</sup>	72.800 <sup>b</sup>
df	5	2
Asymp. Sig.	<.001	<.001

a. 0 cells (.0%) have expected frequencies less than 5. The minimum expected cell frequency is 65.0.

b. 0 cells (.0%) have expected frequencies less than 5. The minimum expected cell frequency is 130.0.

**Figure 6.12** Test result of the Chi-Square test

The Chi-Square test is used to determine if there is a significant association between two categorical variables. In this case, the variables being tested are the median of user experience data sets and the median of two items, "Aware that I need to research the source of the information first before sharing it around" and "Islamic values should be integrated into daily social media handling." These variables can be seen in Figure xx with the red box.

The test statistic for the Chi-Square test is the chi-square value, which is calculated based on the differences between the observed and expected frequencies of the data. The degree of freedom (df) indicates the number of categories that can vary freely in the data.

The Chi-Square test results show that the chi-square values for both variables are statistically significant at a level of less than .001. This suggests that there is a

significant relationship between both variables, and we can reject the null hypothesis (H0) in favour of the alternative hypothesis (H1).

From this result, it can be deduced that users' attitude towards a guideline for Islamic ethical practice in citizen journalism through mobile application is positive and accepted. It also poses as an effective way to increase the public's understanding of the importance of incorporating Islamic ethical values in social media handling. However, from the usability side of the mobile application prototype, improvements should be made for it to be more interactive, attractive and practical for users to navigate through.

## **6.6 Conclusion**

This mixed-method study of ethical evaluation of citizen journalism on Instagram in Brunei Darussalam has 5 objectives. The first one is to determine how Bruneians participate in citizen journalism on Instagram. The results collected from semi-structured interviews finds themes and similarities that each respondent has, hence thematic analysis was conducted. From the data, Bruneian citizen journalists participate in citizen journalism by disseminating information through reposting feature on Instagram, discussing about matters in a platform account or privately through their Instagram stories and also by expressing their opinions, mainly on the feature Instagram stories.

The second research objective is to investigate how Islamic ethical conducts are practised in information dissemination amongst Brunei citizen journalists. This research objective was also using interview as the instrument to collect data that was analysed with thematic analysis. For this research objective, it is found that they do practice gathering information from reliable sources and aware of the contents of viral messages. If they happen to share the wrong information, they practice accountability and immediately act upon the mistake.

Next is to analyse the factors contributing to citizen journalism. The data was collected using interview and analysed with thematic analysis. In Brunei, the factors that motivate citizen journalists to participate in citizen journalism include social interaction needs to engage with one another, citizens responsibility to share information in order to create a well-informed and educated community, the need to

express their opinions regarding public affairs. The level of Islamic knowledge especially on ethics also pose a significant effect on why certain citizen journalists behave positively or negatively. Journalistic skills of media agencies likewise become a factor that encourages citizen journalism when their writing needs improvement in making a clear statement instead of creating misunderstanding.

The three data sets from research objective 1 until 3 were used as part of the analysis process in designing and developing a mobile application prototype BWN CJ, a guideline of Islamic ethical practice in citizen journalism. This mobile application prototype aims to raise the users' awareness on the importance of Islamic ethical practice when disseminating information and to make users understand on its importance. Due to limited resources, time constraint and lack of programming or related knowledge in building a functional mobile application prototype, the end product of this project is a designed non-functional prototype that can only be accessed on the designing platform.

Although the prototype is non-functional, users were still able to click on the buttons provided and tried navigating through the mock-up, in order to obtain early users' feedbacks on the design and how effective it can be in educating users. Feedbacks were obtained from a questionnaire, hence this research objective is quantitative. Although the feedbacks showed that the usability side need some improvements, it was proven that the mobile application prototype does increase users' understanding in Islamic ethical values that needs to be practiced in their social media handling and citizen journalism included.

## **6.7 Recommendation**

Future researchers who are interested to delve more into this topic, may refer to these recommendations:

- In order to develop the mobile application prototype, it is best to conduct a proper survey to be answered by more respondents. The more data obtained is better to ensure that the prototype can fulfil the user needs.
- More improvements need to be made on the design of the prototype to attract users.

- Factors contributing to citizen journalism can be gathered using questionnaire instead, and analysed using regression method or other suitable methods.
- Gather more respondents to be interviewed to get a richer in-depth information.

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## APPENDIX A

### Semi-structured interview questions

#### General Questions

1. Background of participants: age, job description, place of work, background in previous place of study
2. What do you use Instagram for?
3. How often do you spend your time on Instagram?
4. When you are on Instagram, what do you usually do?

What sort of content do you post on your Instagram?

5. Why do you choose that certain content in your Instagram?
6. How do you engage with your followers?
7. Prompt: Which Instagram features (story, comment, like, stickers on the story etc) do you use often? Why?
8. How do you use the Instagram story feature? Describe the content you usually share in your stories.
9. How do you make use of the hashtags in Instagram?
10. When you feel like sharing information via your Instagram posts, what usually comes to mind? Prompt: What drives you to share the information, perhaps a responsibility or roles of some sort?
11. When you post on your Instagram, what do you expect from your followers?

#### On image/video selection:

12. For image selection, what criteria of image or videos do you post?
13. Where do you get your images from?
14. In deciding which images to post, what do you consider before posting them?
15. When it comes to 'viral' images or videos, what actions do you take when you receive them?
16. How do you verify the source of the image or videos being spread around?
17. What are your objectives when posting selected images or videos?

### **On news dissemination:**

18. What criteria of information do you usually post?
19. Where do you get your information from?
20. What topics of general interests do you find intriguing?
20. Before you post the information you just received, or raise certain issues on your account; what precautions do you take to ensure your collected information is accurate? How do you make sure they are true, and not just based on hearsay?
21. Viral news and information are easily spread nowadays, perhaps faster than the media agencies. Do you think viral news is worth a discussion with your audience? Why?

### **Education**

22. How do you rate your general Islamic education or knowledge?
23. In terms of Islamic ethics (justice, truth, akhlaq/manners), how do you rate your knowledge on this?

### **Opinion**

24. If you have an opinion regarding a public matter, would you voice it on your social media? Why?

### **Awareness**

25. Before these questionnaires, were you aware of what citizen journalism is?

### **Accountability**

26. After disseminating information on your IG or social media, if let's say the information you posted are not verified, a misinformation or maybe just your opinion; how would you react to that? Would you be held accountable for what you have posted? Would you have a sense of accountability when sharing information?

### **Journalistic training**

27. Do you think journalistic training especially in writing, or gathering information is necessary when an individual intends to share information to the public?



# APPENDIX B

## Report concerning Citizen Journalism

### 'FAKE NEWS' IN ASEAN: LEGISLATIVE RESPONSES

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### ABSTRACT

*The research is a legal review based on the documentary research concept by comparing the development of legislative responses to fake news spread in Southeast Asia. Anti-fake news legislation focuses on the transmission of information by electronic means than print media. The analysis is carried out for each of the member states by including a clause-by-clause examination of the legislation and subsequent cases addressing legal issues associated with the laws. Several common factors should be addressed to provide a fairer and more transparent approach, including developing a clear-cut definition of fake news. Two key elements should be met in the definition of spreading of fake news: it should be the intentional spreading of misinformation or disinformation by design. The research suggests it would be better to develop anti-fake news legislation as either a standalone statute or a specific amendment to existing legislation than include fake news in omnibus legislation. Except in the most serious cases, creating, publishing, or distributing fake news illegality should be reduced from a criminal offence to an administrative offence, where the police issue a fine. Given the documented publishing and spreading of disinformation by state actors, their servants and agents, there should be an explicit "fake news" offence associated with the action of such persons.*

**Keywords:** ASEAN, defamation, disinformation, fake news, hate speech, hoax news, legislation, misinformation, social media



## APPENDIX C

### Written law regarding dissemination of false information from Attorney General's Chambers (AGC) website

LAWS OF BRUNEI	
40 CAP. 148	<i>Public Order</i>
False reports and public mischief	
<b>Dissemination of false report.</b>	
<p>34. Any person who, whether orally or in writing or by any other means, spreads false reports or makes false statements likely to cause public alarm or despondency shall be guilty of an offence: Penalty, a fine of \$3,000 and imprisonment for 3 years.</p>	
<i>[S 10/1991]</i>	
<b>Public mischief.</b>	
<p>35. (1) Any person who, whether orally or in writing or by any other means, publishes, or gives to any person, any information which he knows to be false and which tends to give rise to apprehension for the safety of any person or property shall be guilty of the offence of public mischief: Penalty, a fine of \$5,000 and imprisonment for 5 years.</p>	
<i>[S 10/1991]</i>	
<p>(2) Where it is proved that the person charged with an offence against this section published or gave false information, it shall, until the contrary is proved, be presumed that he knew such information to be false.</p>	
Abetment and failure to report offences	
<b>Abetment and failure to report offences.</b>	
<p>36. (1) Any person who abets the commission of any offence against this Act shall be guilty of an offence: Penalty, the same penalty as that provided for the offence abetted.</p>	
<p>(2) Any person who knowing or having reasonable cause to believe that another person is guilty of any offence against this Act, fails to report the same to a police officer, shall be guilty of an offence: Penalty, a fine of \$5,000 and imprisonment for 3 years.</p>	
<i>[S 10/1991]</i>	








## APPENDIX D

### News articles relevant to citizen journalism

**NATIONAL**

# Spreading false news is serious offence, says Information Dept

August 5, 2022

Share     

Rokiah Mahmud

Those spreading false information can be charged under Section 34, Chapter 148 of the Public Order Act, which carries a penalty of imprisonment and a fine if found guilty, according to the Acting Deputy Director of Information Sastra Sarini binti Haji Julaini.

Sastra Sarini warned against the dissemination of false news, reports and statements during a briefing as part of Information Department under the Prime Minister's Office's Personal Contact Programme in Pekan Belait held at the District Emergency Operation Centre (DEOC), Belait District Office, Kuala Belait.

Those found to have disseminated false reports in writing, verbally or through any other channels, or making false statements that can cause public disorder, can be imprisoned for three years and fined BND3,000, she said.

"In this digital era, false news can go viral and spread quickly via various social media platform including WeChat, Facebook, Twitter and Instagram, causing panic and chaos.

"More worrying is the fact that some accept the false news without checking proper sources to verify the information. Thus, it could affect social harmony and safety," she added The acting deputy director said anyone who does or attempts to, or makes preparation to do or conspires with any person to do or utter any words with a seditious intention; prints, publishes, sells, offers for sale, distributes or reproduces any seditious publication; as well as imports any seditious publication, unless he has no reason to believe that it is seditious, can be imprisoned for two years and fined BND5,000 if found guilty as stated under Section 4(1), Chapter 24 of the Sedition Act.

The Personal Contact Programme is part of the Information Department's initiatives to deliver information on current issues, government policies as well as to receive feedback on concerns or actions needed by government agencies.



Borneo Bulletin **borneobulletin** 3m

**FAKE NEWS**

**Please take note that this tweet was not issued by Borneo Bulletin**

Borneo Bulletin Borneo Bulletin  
@borneo\_bulletin

#breakingnews

An ambulance just brought 8 year's old children that confirmed infected by the COVID-19 just now #breakingnews

More detail soon

**Please refrain from forwarding the image**

**Follow our official social media channels for the latest updates**

Send message

## APPENDIX E

### Questionnaire using Google Form

<p>1. Gender:</p> <p><input type="radio"/> Male</p> <p><input type="radio"/> Female</p>
<p>2. Age:</p> <p><input type="radio"/> 18-21</p> <p><input type="radio"/> 22-25</p> <p><input type="radio"/> 26-30</p> <p><input type="radio"/> 31-34</p> <p><input type="radio"/> 35 above</p>
<p>3. Current employment:</p> <p><input type="radio"/> Student</p> <p><input type="radio"/> Employed</p> <p><input type="radio"/> Self-employed</p> <p><input type="radio"/> Unemployed</p>

111

4. Level of Islamic education:

- Primary religious school
- Secondary religious school
- Sixth form/Diploma level
- Undergraduate level
- No official religious education

---

5. Frequentness of using Instagram:

- 1-2 hour
- 3-5 hours
- 6-10 hours
- More than 10 hours
- Less than 1 hour

---

6. Social media platform in which you are most active:

- Instagram
- WhatsApp
- Facebook
- Twitter
- Others

---

7. Usually gain information from:

- Instagram
- WhatsApp
- Facebook
- Twitter
- Others

Construct B: Knowledge on citizen journalism

1. I am aware of the term citizen journalism.

1      2      3      4      5

Strongly Disagree                  Strongly Agree

---

2. I know what citizen journalism is.

1      2      3      4      5

Strongly Disagree                  Strongly Agree

---

3. I am familiar with citizen journalism as I also participate in it sometimes.

1      2      3      4      5

Strongly Disagree                  Strongly Agree

---

4. Viral message is an example of citizen journalism activity.

1      2      3      4      5

Strongly Disagree                  Strongly Agree

5. Citizen journalism activity is seen more through social media platforms such as Whatsapp, Instagram, Facebook etc.

1      2      3      4      5

Strongly Disagree                  Strongly Agree

---

6. Commenting on Instagram accounts of Borneo Bulletin is part of citizen journalism.

1      2      3      4      5

Strongly Disagree                  Strongly Agree

---

7. False information spread easily nowadays.

1      2      3      4      5

Strongly Disagree                  Strongly Agree

---

8. People know more news from viral videos or texts these days compared to from authorised media agencies.

1      2      3      4      5

Strongly Disagree                  Strongly Agree

9. I am able to understand the possible problems arise from citizen journalism after using this mobile application mock-up.

1      2      3      4      5

Strongly Disagree                  Strongly Agree

---

10. I understand the list of activities in the mobile application mock-up as part of citizen journalism.

1      2      3      4      5

Strongly Disagree                  Strongly Agree

### Construct C: Knowledge on Islamic values

11. I understand that Islamic values include good manners (akhlaq).

1      2      3      4      5

Strongly Disagree                  Strongly Agree

---

12. Islamic values should be integrated into our daily life actions.

1      2      3      4      5

Strongly Disagree                  Strongly Agree

---

13. Islamic values should be included in our daily social media handling.

1      2      3      4      5

Strongly Disagree                  Strongly Agree

---

14. Being in Brunei, Islam is a way of life, which includes how we act every time.

1      2      3      4      5

Strongly Disagree                  Strongly Agree

---

15. My knowledge on Islamic values is considered above average.

1      2      3      4      5

Strongly Disagree                  Strongly Agree

16. My knowledge on hadiths is good.						
	1	2	3	4	5	
Strongly Disagree	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Strongly Agree
17. My knowledge on Qur'an verses is good.						
	1	2	3	4	5	
Strongly Disagree	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Strongly Agree
18. The Qur'an verses used to back up the statements in the mobile application mock-up, were chosen accordingly.						
	1	2	3	4	5	
Strongly Disagree	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Strongly Agree
19. The hadiths used to back up the statements in the mobile application mock-up were chosen accordingly.						
	1	2	3	4	5	
Strongly Disagree	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Strongly Agree
20. The Quran and hadiths used in the mobile application mock-up are related to the situations given in the app.						
	1	2	3	4	5	
Strongly Disagree	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Strongly Agree

**Construct D: Awareness of Islamic values in citizen journalism**

21. Posting information (news, facts, current issues, images etc) on Instagram to inform the public is one of citizen journalism activities.

1      2      3      4      5

Strongly Disagree                  Strongly Agree

---

22. When I share some information, I would think of the consequences it may impose after the information is being posted.

1      2      3      4      5

Strongly Disagree                  Strongly Agree

---

23. I would consider check for the truth before sharing information to others.

1      2      3      4      5

Strongly Disagree                  Strongly Agree

---

24. If the viral information I receive is against the truth, I will stop spreading it around.

1      2      3      4      5

Strongly Disagree                  Strongly Agree

---

25. I would verify the information I get by all means before resharing it.

1      2      3      4      5

Strongly Disagree                  Strongly Agree

26. I am aware that sharing unverified information is against the Islamic values.

1      2      3      4      5

Strongly Disagree                  Strongly Agree

---

27. I am aware that reposting information that I am not sure of, is against Islamic values.

1      2      3      4      5

Strongly Disagree                  Strongly Agree

---

28. I am aware that I need to research the source of the information first before sharing it around.

1      2      3      4      5

Strongly Disagree                  Strongly Agree

---

29. I voice out my opinion publicly on social media because everyone's voice matters.

1      2      3      4      5

Strongly Disagree                  Strongly Agree

---

30. I share images or videos that may be sensitive to others.

1      2      3      4      5

Strongly Disagree                  Strongly Agree

Construct E: Level of Islamic religious education

31. The knowledge on Islamic ethical values is shared often.

1      2      3      4      5

Strongly Disagree                  Strongly Agree

---

32. The Islamic ethical values were instilled early when I was young.

1      2      3      4      5

Strongly Disagree                  Strongly Agree

---

33. The Islamic values in me is a result of the nation's principle Melayu Islam Beraja.

1      2      3      4      5

Strongly Disagree                  Strongly Agree

---

34. I can recognise if someone's post is ethically right or wrong.

1      2      3      4      5

Strongly Disagree                  Strongly Agree

---

35. Reminding the public on the ethical values derived from the Qur'an, is essential.

1      2      3      4      5

Strongly Disagree                  Strongly Agree

36. Ethical values in Islam are best learnt from hadiths and Qur'an.

1      2      3      4      5

Strongly Disagree                  Strongly Agree

---

37. Basic religious study background is sufficient to know ethical values in practicing citizen journalism.

1      2      3      4      5

Strongly Disagree                  Strongly Agree

---

38. A guideline on ethical practice in citizen journalism is required to raise public's awareness.

1      2      3      4      5

Strongly Disagree                  Strongly Agree

---

39. This mobile application mock-up can be used as an awareness tool.

1      2      3      4      5

Strongly Disagree                  Strongly Agree

---

40. Mobile application is a suitable way to educate the younger generation on Islamic ethical values in citizen journalism.

1      2      3      4      5

Strongly Disagree                  Strongly Agree



## Construct F: User experience

41. The application opening theme is clear to see.						
	1	2	3	4	5	
Strongly Disagree	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Strongly Agree
42. The font size of the application is readable.						
	1	2	3	4	5	
Strongly Disagree	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Strongly Agree
43. The choice of colours used in the mock-up is good.						
	1	2	3	4	5	
Strongly Disagree	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Strongly Agree
44. The application mock-up is easy to navigate through.						
	1	2	3	4	5	
Strongly Disagree	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Strongly Agree
45. Icons can be recognised easily.						
	1	2	3	4	5	
Strongly Disagree	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Strongly Agree

46. The design of the prototype is attractive enough.						
	1	2	3	4	5	
Strongly Disagree	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Strongly Agree
47. The mobile application mock-up improves my understanding on Islamic ethical practice in citizen journalism.						
	1	2	3	4	5	
Strongly Disagree	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Strongly Agree
48. I understand the purpose of the application.						
	1	2	3	4	5	
Strongly Disagree	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Strongly Agree
49. The mock-up application is interactive.						
	1	2	3	4	5	
Strongly Disagree	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Strongly Agree
50. The illustrations used are relevant.						
	1	2	3	4	5	
Strongly Disagree	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Strongly Agree