



ONLINE QUR'ANIC AND ISLAMIC RESEARCH: A STRATEGY BASED ON A COMPENDIUM OF METHODS

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ABSTRACT

This paper intends to comprehend and describe online search tactics for Qur'anic and Islamic material. This is a topic that has gotten little attention in prior studies; thus, this study tries to fill that gap. The collection of data has been approached using a methodology that is a compendium of methods, making use of both quantitative and qualitative approaches. During the course of the study activities, query logs from the Microsoft Live search engine were collected and examined for phrases associated with Islam. The collected data allowed for the derivation of a number of characteristics, including query frequency, word frequency, query length, and session length. Interview data was acquired from twenty-five users who had prior experience surfing the internet for Qur'anic and Islamic resources. This data was gathered to supplement the quantitative data that was collected. The interviews provided a more in-depth understanding of various aspects of information searching, such as search techniques, problems, and perspectives regarding the process of accessing Qur'anic and Islamic information online.

KEYWORDS: *Qur'anic and Islamic information, interactive IR, information seeking, query log analysis.*

1. INTRODUCTION

The use of the internet is growing in popularity because more and more people are turning to it as a platform to disseminate content of a religious nature. Højsgaard and Warburg (2005) It was estimated that there were approximately 51 million religious websites on the internet by the year 2016, all of which were engaging with their respective followers and spreading information to their respective communities. More research has been done to find out all the different ways that religious groups use the Internet to spread their ideas. (Helland, 2000; Dawson & Cowan, 2004; Karaflogka, 2006) Members of religious communities utilize the Internet for a variety of purposes, including networking, seeking guidance, listening to sermons, and even shopping for goods related to their faith. (Helland, 2002; Foltz & Foltz, 2003; Campbell, 2005a; Cheong et al., 2009). The investigation of the connection between religious practice and online activity is a subfield within the discipline of information retrieval that is garnering an increasing amount of attention. (Campbell, 2005b; Krueger, 2005). According to the findings of several studies, one significant aspect of religious activities that take place online is the pursuit of religious information. (Casey, 2001; Larsen & Rainie, 2001; Ho et al., 2008).

According to the findings of a survey conducted by the Pew Internet & American Life Project in 2002, 25 percent of Americans utilized search engines to look up information related to religious topics (Fox, 2002). In a more recent study, Hoover et al. (2004) discovered that 64 percent of the 128 million American online users had used the Internet for spiritual and religious purposes. Specifically, 28 percent of the online users had searched for their own religion, and 26 percent had searched for the religion of others.

According to Dawson (2000), investigating people's search objectives and methods, in addition to the content of religious websites on the internet, is an essential area of investigation. This is corroborated by Jansen et al. (2009), who state that few studies have explored how people search, especially for material linked to religion. This finding lends credence to their claim. It is essential to have an understanding of the individuals who use search engines in order to build systems that will assist people from a variety of linguistic and cultural backgrounds in their search for information that is relevant to religion and culture (Neelameghan & Raghavan, 2005). Nevertheless, the searching procedures and challenges that are especially related to searching for religious material are not the primary focus of the studies that were stated above.

Because of this, and in light of the fact that there haven't been very many user-oriented studies conducted in the field of religious searching up until this point, the purpose of the research presented in this article was to add to the existing body of knowledge on religious searching by investigating search purposes and processes specifically relating to Qur'anic and Islamic information, and also to gain a better understanding of the nature of religious queries that are conducted on the internet.

Both a quantitative approach based on real user-system interactions from a large web search engine and a qualitative method based on interviews with a random sample of users chosen to show the variety of people looking for information on Islam and the Qur'an on the web were used to collect data and inform the findings. (1) a quantitative approach based on real user-system interactions from a large web search engine; and (2) a method based on real user-system interactions from a large web search engine. The findings paint a picture of what people



are genuinely looking for on the internet and of their experiences with web searching at the present time.

The following outline constitutes the paper's structure: In Section 2, we will describe past research that has been done on evaluating patterns of web searching, and in Section 3, we will provide the approach that was utilized to collect data. Section 3 has the datasets and interview data used in the log analysis study. Section 4 looks at the results, and Section 5 gives a summary of the work and ideas for more research in this field.

2. RELATION TO OTHER STUDIES

2.1 Web-searching patterns

Studies of user searching habits have a lengthy history that dates back to the late 1970s, when Bates was one of the first researchers to explore how people search. Bates (1979) was one of the first researchers to look into how people search. Her research investigated how people conduct searches, and she presented a number of different approaches to characterize the search process as a whole. After the availability of web search engines and the rise in popularity of these tools, a great deal of research was carried out to investigate how individuals conduct searches on the internet. Studies such as these were conducted by researchers such as Jansen et al. (1998), Silverstein et al. (1999), Spink et al. (2001), and Baeza-Yates et al. (2005). These researchers investigated how internet users carry out their searches and proposed a variety of search behavior models.

2.2 Islam and the Internet

Research on Islam and the pursuit of knowledge has been the subject of a number of past studies. For instance, Bunt (2003) and Lawless (2004) discovered that the internet contains a wide variety of information pertaining to Islam, such as translations of the Qur'an, recitations of the Qur'an, viewpoints, sermons, fatwas, and conversations. These are geared toward two distinct groups of readers, namely Muslims and those who are not Muslims. Studies have also been conducted to investigate the existence of Muslim and Islamic documents on the internet, as well as the activities that Muslims engage in on the internet in general. (Bunt, 2003, 2004; Adamu, 2002; Brouwer, 2004).

It has been demonstrated that the number of Islamic and Qur'anic websites that may be found on the internet is continually growing (Bunt, 2003). Nevertheless, as Shoaib et al. (2009) point out in their article on our research, when it comes to using keywords to search for verses in the Qur'an, there are three fundamental issues to consider: (1) In the majority of instances, not all of the pertinent verses are recovered; (2) the order in which the retrieved verses are presented does not hold the reader's interest; and (3) some

verses that are not important are also retrieved. According to the researchers Baqai et al. (2009)

"It remains a challenge to reach out to the Qur'anic learner and research community using emerging technologies in order to assist in the creation of better, user-centric means to facilitate the learning of the Qur'an, exploration of the Qur'an, management of the Qur'anic knowledge resources, and retrieval of those resources."

There have been very few studies conducted from the point of view of end users about the actual experiences they have had collecting material linked to Islam and the Qur'an. In general, this is the case. The current research hopes to shed light on this gap in knowledge.

3. METHODOLOGY

A mixed-methods approach was used in order to collect data for the purpose of studying patterns of web searching activity on the internet for information linked to Islam and materials related to the Qur'an (Tashakkori & Teddlie, 2010). This necessitates the utilization of quantitative and qualitative approaches in tandem with one another. In the quantitative study, which can be found in Section 3.1, queries from a significant web search engine were used to investigate various search phrases. The qualitative analysis (Section 3.2) was conducted on the basis of interviews with individuals who frequently search for Islamic and Qur'anic information online. The purpose of these interviews was to learn about the individuals' preferences and levels of success when searching for information online.

3.1 Search Logs

We made use of the Live Search query log that was made public by Microsoft in 2006. This log contains 12,251,068 inquiries that were entered by users based in the United States. The query string itself, a timestamp, the URLs of clicked results, and the click position of items selected by the user are all included in the logs together with a unique identity for each inquiry. From Every inquiry was taken, but the only ones that were extracted were the ones that included Islamic-related phrases in the query string. We used a list of phrases that was created from directories in the Islamic areas of Google, Yahoo!, and DMOZ. These directories were combined with the top 10 religious (Islamic-related) queries that were suggested by Jansen et al. (2009). We collected queries that contained any one of the terms specified in Table 1 or a combination of them. This also contained inquiries with a variety of potential spelling variants.


Table 1. In the query logs, Islamic-related phrases are utilized to categorize requests.

Arabic phrase	Transliteration	Meaning
الله	Allah	the one and only God in Islam. Etymologically, the name Allah is probably a contraction of the Arabic al-Ilah, "the God." The name's origin can be traced to the earliest Semitic writings, in which the word for god was il, el, or eloah, the latter two used in the Hebrew Bible (Old Testament).
فقه	Fiqh	The word fiqh is an Arabic term meaning "deep understanding" or "full comprehension." Technically, it refers to the body of Islamic law extracted from detailed Islamic sources (which are studied in the principles of Islamic jurisprudence) and the process of gaining knowledge of Islam through jurisprudence.
حرام	Haram	In Islamic law, haram refers to any act that God forbids and is one of the five Islamic commandments (Arabic: al-Ahkam al-Khamsa) that define the morality of human action.
مدينة	Madinah	Arabic Al-Madinah, formally Al-Madinah al-Munawwarah ("The Luminous City") or Madinat Rasul Allah ("City of the Messenger of God [i.e., Muhammad]"), is an ancient Yathrib, city located in the Hejaz region of western Saudi Arabia, about 100 miles (160 km) inland from the Red Sea and 275 miles from Mecca by road.
مسلم	Muslim	In Arabic, the word "Muslim" means "one who submits," from the root word aslama, "he resigned." Definitions of Muslim a believer in or follower of Islam.
دين	Religion	The word "Islam" means "submission to the will of God." Followers of Islam are called Muslims. Muslims are monotheistic and worship one all-knowing God, who in Arabic is known as Allah. Followers of Islam aim to live a life of complete submission to Allah.
سوفي	Sufi	A Sufi is someone who believes in the kind of Islam known as Sufism. The spiritual goal of a Sufi is to have a direct, personal experience of God.
عقص	Aqsa	Aqsa is a Muslim girl's name. The name Aqsa means "name of the Jerusalem mosque." It has multiple Islamic meanings. The name is Arabic.
رب	God	Rabb means "Lord of the worlds," which is itself an appositive following the noun Allah. A simple translation of the full sentence is "Praise belongs to Allah, the Lord of the worlds."
كريم	Holy	In Arabic, holy is defined as muqadas: sacred, sacramental, heavenly, sanctifying, hallowing; adjective; taqi: pious, religious, godly, devout, mystic; adjective;
مكة	Makkah	Mecca, Arabic Makkah, also known as ancient Bakkah, is a city in western Saudi Arabia, located inland from the Red Sea coast in the irt Mountains. It is the holiest of Muslim cities. Muhammad, the founder of Islam, was born in Mecca, and it is toward this religious center that Muslims turn five times daily in prayer (see qiblah).
دعاء	Prayer	The most well-known and obligatory act in Islam is the performance of the five daily prayers, which are known in Arabic as salah (often written salat). In the Qur'an, the Arabic word salah means to demonstrate servitude to God by means of certain actions.
الصلاة	Salat	the daily prayer that all Muslims must do because it is one of the five pillars of Islam.
سنة	Sunni	"Sunna" is the Arabic term for the prophet Muhammad's way of life and legal precedent.
وعز	Daawah	is an Arabic word that has the literal meaning of "issuing a summons" or "making an invitation."
الحديث	Hadith	Hadith, Arabic adith ("News" or "Story"), the corpus of the Prophet Muhammad's sayings or traditions, revered by Muslims as a major source of religious law and moral guidance.



الإسلام	Islam	"Islam" means "submission to the will of God." Followers of Islam are called Muslims.
مسجد	Masjid	"Mosque" denotes a Muslim house of worship. The word evolved from the Arabic term "masjid," which means "place of prostration." During prayer, Muslims briefly kneel and touch their foreheads to the ground as a sign of submission (literally, Islam) to the will of God.
نبي	Prophet	A prophet is someone who is thought to have been chosen by God to say the things that God wants people to hear....the sacred name of Islam's Holy Prophet.
مدرسة	School	Madrassa is the Arabic word for any type of educational institution, secular or religious (of any religion), whether for elementary instruction or higher.
تفسير	Tafsir	Tafsir, which means "explanation" or "exegesis" in Arabic, is the study of how to explain the Qur'an, the holy book of Islam, or how to comment on it.
عيد	Eid	Eid al-Adha, or the Feast of Sacrifice, is celebrated by Muslims all over the world as a major holiday for a period of three to four days. The majority of Muslims will attend the special prayers held at different major mosques and Islamic centers in the United States and all over the world.
حج	Hajj	Hajj, also spelled Hadj or Hadj, is, in Islam, the pilgrimage to the holy city of Mecca in Saudi Arabia, which every adult Muslim must make at least once in his or her lifetime. The hajj is the fifth of the fundamental Muslim practices and institutions known as the Five Pillars of Islam.
جهاد	Jihad	The importance of jihad is rooted in the Quran's command to "struggle or exert" (the literal meaning of the word jihad) oneself in the path of God. The Quranic teachings have been of essential significance to Muslim self-understanding, piety, mobilization, expansion, and defense.
مسجد	Mosque	"Mosque" denotes a Muslim house of worship. The word evolved from the Arabic term "masjid," which means "place of prostration." During prayer, Muslims briefly kneel and touch their foreheads to the ground as a sign of submission (literally, Islam) to the will of God.
قرآن	Qur'an	literally meaning "the recitation," which is the central religious text of Islam, which Muslims believe to be a revelation from God (Allah). It is the sacred writings of Islam, revealed by God to the Prophet Muhammad during his life at Mecca and Medina.
شريعة	Shari'ah	Sharia acts as a code for living that all Muslims should adhere to, including prayers, fasting, and donations to the poor. It aims to help Muslims understand how they should lead every aspect of their lives according to God's wishes.
أمره	Umrah	"to visit a populated place" is an Islamic pilgrimage to Mecca (the holiest city for Muslims, located in the Hejazi region of Saudi Arabia).
فتاوى	Fatwa	A fatwa is a legal ruling on a point of Islamic law (sharia) given by a qualified faqih (Islamic jurist) in response to a question posed by a private individual.
حلال	Halal	Halal is Arabic for permissible. Halal food is that which adheres to Islamic law, as defined in the Koran.
كعبة	Ka'aba	a small stone building in the court of the Great Mosque at Mecca that contains a sacred black stone and is the goal of Islamic pilgrimage and the point toward which Muslims turn when praying.
نبي	Muhammad	also spelled Muhammed or Muhamad or Mohammad or Mohammed or Mohamed or in a variety of other ways, is an Arabic given male name literally meaning "praiseworthy."
رمضان	Ramadan	Common greetings during Ramadan include Ramadan mubarak and Ramadan kareem, which mean "blessed Ramadan" and "generous Ramadan," respectively.
شيعه	Shiite	A Shiite is a Muslim who follows specific religious traditions. Shiites are the second-largest branch of Islam, after Sunnis. A Shiite believes that Mohammed's son-in-law, Ali, was his legitimate successor as political and religious leader.
زكاة	Zakat	As one of the Five Pillars of Islam, zakat is a religious duty for all Muslims who meet the necessary criteria of wealth to help the needy.



At least one of the terms discovered in Table 1 was present in at least 2089 of the queries that were examined. The session, the query, and the term are the three levels at which query logs can be evaluated, as proposed by Jansen and Pooch (2001). At the session level, we derived statistics on the number of distinct sessions as well as the average session length, which was calculated based on the number of queries performed during each session. At the level of the inquiry, we determined the number of requests that were made, including any combination of the terms presented in Table 1 earlier (query frequency). At the level of the terms, we determined the total number of terms, the number of unique terms, and the average number of terms returned by each query (query length).

3.2 Interviews

We conducted in-depth, face-to-face interviews with 25 users who were eager to share their experiences searching for Qur'anic literature on the internet. These interviews were recorded and analyzed. Purposive sampling was employed because it was deemed to be the most appropriate method for conducting qualitative research in accordance with the guidelines given by Silverman (2009). Invitations in the form of emails were issued to various organizations, such as Islamic student groups, new Muslim societies (composed of individuals who had converted from other religions), and cultural societies from all across the UK. Invitations were also distributed to parallel organizations and societies through the use of the social networking website Facebook. Several individuals were selected for the interview by making use of a technique that is referred to as "purposive sampling" (Mason, 2002). reflect the wide variety of people who look for knowledge about the Qur'an on the internet.

We asked open-ended questions in order to highlight concerns relating to the search methods and aims of online users, as well as their perceived challenges, degrees of relevance, levels of satisfaction, and areas for desired development. The interviews' transcriptions were dissected for further investigation inductively, with the goal of discovering recurring themes (Boyatzis, 1998).

4. RESULTS

4.1 Examination of Search Inquiry Records

2089 (0.02%) out of a total of 12.2 million inquiries made using Microsoft Live Search included at least one of the phrases linked to Islam found in Table 1. The total number of sessions was 1,220. We then looked at how many queries were submitted by users during a single session (session length) and found that over 65% of users searching for Islamic-related phrases only submitted a single query. Jansen et al. (2009) found that between 61 and 76% of religious and religiously-related searches involve between one and two queries per session, thus their results are consistent with that range. The most questions asked during one session were 12. While the Jansen et al. (2000) study on web search as a whole found an average of 2.84 inquiries per session, our data shows that our average is significantly lower, at 1.72.

We then looked at how many words were used in each query (query length) and found that the most common query length was two terms. There might only be up to 17 terms in your query. In general, 3.14 terms were used in each query on average. Compared to the average web user, who uses 2.16 terms per query (Spink et al., 2001), this is significantly greater.

Table 2: Recent developments in Islamic-related search trends

Queries	Frequency
All queries	12,251,068 (100%)
Queries with Islamic terms (query frequency)	2,089 (0.02%)
Unique sessions	1,220
Terms (total)	5,398 (100%)
Unique Terms	942 (17.5%)
Number of queries per session (session length)	
1 query	795 (65.2%)
2 queries	211 (17.3%)
3 queries	111 (9.1%)
4+ queries	103 (8.4%)
mean (average)	1.72
median	1.00
mode	1.00
Number of terms per query (query length)	
1 term	357 (17.1%)
2 terms	553 (26.5%)
3 terms	454 (21.7%)
4+ terms	725 (34.7%)
mean (average)	3.14
median	3.00
mode	2.00

**Table 3: Top 10 Most Frequent Queries**

Query	Frequency	%
Islam	71	3.40
Koran	36	1.72
Muslim Names	27	1.29
Quran	20	0.96
99 Names of Allah	18	0.86
Islamic Prayers for Repentance	16	0.77
Islamic Calligraphy	16	0.77
Nation of Islam	14	0.67
Qur'an	13	0.62
Islamic Art	13	0.62

We studied the queries that users submitted, and the findings are presented in Table 3, which lists the top ten queries that were submitted the most frequently. The word "Qur'an" can be spelled in three different ways: Koran, Quran, and Qur'an. All three of these forms are included in the top ten most popular search terms that people enter. When added together, these three

questions account for 3.3% of the total number of Islamic-related questions asked online.

In addition, the query phrases were evaluated to determine which terms were used the most frequently throughout all of the searches. Table 4 presents the top 10 terms that are seen most frequently in the text.

Table 4: The 10 terms that occur most frequently in the table (across all queries)

Term	Frequency	%
Islam	608	11.26
Islamic	380	7.04
Muslim	351	6.50
Mosque	93	1.72
Muslims	82	1.52
Koran	75	1.39
Quran	72	1.33
Allah	71	1.32
Names	67	1.24
Halal	54	1.00

From the list of terms in Table 4, the terms "muslim" or "muslims" (8%) and "muslim" are the most often used terms. This was determined by grouping phrases with similar meanings or different spellings of the same word (Muslims), and Koran/Quran (2.7%). This comes in second place, after Islam or Islamic (18.3%), which is the most frequent search term. In general, the distribution of search words follows a Zipfian curve, which can be described as follows: a relatively small set of terms is used rather frequently, while a big collection of terms is quite rarely used (Jansen et al., 2000). It was discovered that the 100 terms that were utilized the most

frequently accounted for 61.8% of the total number of terms, which is a substantially greater percentage compared to the 18–22% that was observed for general web search in the study by Jansen et al. (2000).

4.2 Analysis of data gathered from interviews

The characteristics of the 25 people who participated in the interview are summarized in Table 5. These variables include age, gender, occupation, country of origin, ethnicity, and religion.


Table 5: Characteristics of the representative interview sample

Age range:	21-61 years
Gender:	13 males, 12 females
Occupation:	Student (undergraduates and postgraduates) (11), researcher (5), university Professors/lecturers (2), university faith advisors (2), computer-related Executives (2), Housewives (3)
Country of origin:	Algeria (1), France (1), Germany (1), Indonesia (1), Jordan (1), Kashmir (1), Kuwait (1), Malaysia (3), Morocco (1), the Netherlands (1), Pakistan (3), Philippines (1), Saudi Arabia (1), Sudan (1), Syria (1), and the United Kingdom (6).
Ethnicity:	Caucasian (7), Asian (11), Arab (5), and African (2);
Religion:	Islam [born (18), convert (3)], Christianity (1), Atheism (1), Other (2)

One of the people who was questioned used the French version of Google to look up information about Islam and/or the Qur'an, while the vast majority of those who were interviewed used the English version of Google to look up information about Islam and/or the Qur'an. There were a few people who searched in Arabic using Arabic characters, and the majority of searches were done with English keywords. However, there were a few people who searched in Arabic, using Roman alphabets to spell Arabic keywords. People who were interviewed stated that conducting a search in other languages, such as French, Malay, German, Urdu, or Persian, would provide fewer results in comparison to searching in English or Arabic. More than half of the people who took part in the survey thought that there were insufficient trustworthy websites available in the language of their choosing and that this was an issue that needed to be addressed. Many people are under the impression that the majority of quality links and material can be found in Arabic. Because of this, inquiries conducted in languages other than Arabic would be unable to retrieve the results unless they had been translated into another language. Some of the participants were of the opinion that because certain nations impose restrictions on search engines, many good connections coming from Arabic and Muslim countries are being blocked from Arabic and Muslim countries are being blocked. As a result, "innocent" good links are being hidden.

Although Qur'anic verses, translations, explanations, and recitations were the most searched for items, almost all of the Muslim participants reported that in addition to searching

for Qur'anic information, they would also search for Hadith (sayings and teachings by the Prophet Muhammad), because the Qur'an and Hadith are very closely related to one another. Hadith is the source of the majority of the interpretations for the verses in the Qur'an. The Hadith, on the other hand, are constructed in a manner that is distinct from the Qur'an. The Hadith is a collection of sayings and teachings of the Prophet Muhammad that have been compiled by a number of different people, in contrast to the Qur'an, which only exists in one version and follows a predetermined framework (i.e., chapters and verses). Compilers have different approaches to the structure, hence it varies. Therefore, looking for hadith is more challenging than searching for information in the Qur'an, particularly for individuals who have a limited understanding of hadith. The process of looking for hadith in a language other than Arabic is significantly more difficult. Also, this was recognized as one of the most significant components of searching the Qur'an that has to be improved.

One of the Muslims there put it this way. *"Since many of the verses in the Qur'an contain Hadith that explain their meaning, a person's understanding of the Qur'an would be incomplete without also understanding the Hadith that explain their meaning." The appropriate hadith should be retrieved as a result. as well as the Asbab (revelational events in the Qur'an)."*

Table 6 is a listing of the various other topics that are being looked for.

Table 6: The following is a list of the topics that participants searched for the most.

Term	Meaning
Qur'an	Translation, Tafsir (explanation), Ruqyah (verses to cure illness), motivational verses, miracles of the Qur'an, Asbab-ul-Qur'an (occasions and circumstances of the Qur'an revelation), history, learning the Qur'an, tajwid/tarteel (proper pronunciation when reciting the Qur'an), and how to read the Qur'an are some of the topics that are covered.
Hadith	Hadith and Sunnah (the ways in which the Prophet Muhammad lived his life), translation, sanad (the chain of narration), matn (the wording of the Hadith), and explanation
Islam	Fatwas are religious opinions that are issued by scholars regarding Islamic law. Rulings on current issues, prophets, seerah (historical biographies of prophets), sahabah fiqh (jurisprudence, an expansion under Sharia law), talks, Islamic finance, digitized Islamic books, masa'el (issues and problems), Islam, women and feminism in Islam, Sharia law, and naat are also discussed. Naat are religious songs (poetry that praises the Prophet Muhammad).



In particular for newly educated Muslims and those that already have a large collection of physical copies of the books, the participants cited the following as reasons why they used the internet to search for the topics listed in Table 6: speed and ease of access to many versions of the Tafsirs and Hadiths; access to more collections; and the ability to retrieve more and deeper explanations for Qur'anic verses. They also use the material that they have collected to prepare for their studies, assignments, examinations, or papers. teaching, talks, and sermons; to get the opinions of scholars as possible solutions to problems; for work; out of self-interest or curiosity to learn more or to find the truth about teaching, talks, and sermons; to get the opinions of scholars as possible solutions to problems; for work; for the purpose of improving one's ability to recite or memorize lyrics by listening to them online; To replicate the sounds of the recitation so that non-native speakers of Arabic can hear where they are going wrong There is information about Islam that can be found on the internet. This information can be used to correct any false information, get the full picture of something that may only be remembered in part, talk about or debate issues, and copy verses into their own writings. easily be call isra'iliyyat.

However, the most important concern for individuals who identified as Muslims, as well as for a few people who did not identify as Muslims, was the dependability and integrity of Islamic and Qur'anic websites. This had an effect on When they looked at the search results, the brief descriptions that came along with each result (these descriptions are termed "snippets") did not assist them in determining whether or not the link should be trusted. The only way to determine whether or not a website claimed to be Islamic or Qur'anic was to click on each result and then navigate through the pages of the websites. This required going through a lengthy process, which

was oftentimes very frustrating. Some people would only look at websites that were suggested to them by their academic advisors or their close friends. University links, links from established institutions or organizations, and URLs that end in ".org" are generally seen as reputable by the general public. This is especially true of links that are associated with the names of renowned academics working in the relevant field. The vast majority of Muslims were of the opinion that information that they were already familiar with and that corroborated their prior knowledge was more likely to be judged significant and accurate. However, in some instances, it was realized that in order to establish credibility, one would need to read a number of different parts of a website or visit a website frequently in order to be able to assess the balance and reliability of the website. This was the case because it was recognized that in order to establish credibility, one would need to establish credibility.

When it comes to establishing the veracity of the information, the majority of Muslim participants will compare any Qur'anic verses or Hadith that they have collected with any printed sources that they have on hand. collections, or verify them with a skilled acquaintance, an accessible scholar, or other reliable websites specializing in the Qur'an or Hadith collections. However, there were several non-Muslims who admitted that they would not be able to tell the difference between legitimate Islamic or Qur'anic websites and websites that are not authentic. One of them even believed that there would be no fictitious material about the Qur'an on the internet because it would be a waste of time for anyone to put it there. There were a few Muslims who commented that they would approach the material with caution omitting the verses that are in Arabic Table 7 contains a list of the additional issues and difficulties that the participants raised.

Table 7: Detailed analysis of the interviewees' top concerns and difficulties

Information overload -	Unavailable information
Misleading information -	Incorrect information
Disorganized information -	Too much sectarian information
Low volume of information -	Dissatisfaction with retrieved information

The participants had a variety of opinions on Islamic discussion boards, which were listed and discussed among other sorts of websites. More than half of the participants believed that the information from forums is not reliable because they tend to be more opinion-based; however, a few Muslim participants believed that forums actually give better information because answers in forums tend to be supported with Qur'anic or Hadith references and sometimes by recommended links to further information. Forums may be a one-stop-shop for getting information and assistance on a wide range of topics, including solutions to specific difficulties and suggestions for additional reading on the subject topics.

The majority of respondents identified prior knowledge (of Islam or other topics) as a distinguishing factor between this type of searching and general searching or searching for other topics. and the capacity to precisely specify keywords (whether in the Qur'an or Hadiths) as factors that contribute to the

retrieval of more relevant results. While Google may offer query suggestions when you're constructing your search, you shouldn't assume that these will lead to better or more relevant results. Almost all of the Muslims who took part in the study were concerned that, due to a lack of training or awareness, they were retrieving fake websites without realizing it and having no way to verify their accuracy. As one Muslim participant said,

"In addition, one should come equipped with some past knowledge." People who have limited understanding should inquire with others about which websites are considered to be of high quality, because they would not be able to tell legitimate from fake websites on their own.

The participants offered a variety of recommendations for how to enhance the experience. These include the requirement that we find ways that online users can collectively rate or recommend links that are believed to be authentic with



reliable content or that we figure out how to move good links higher up in search result lists. In addition, there is the requirement that we find ways to move good links higher up in search result lists. Another idea was to establish a governing body that would be responsible for determining whether or not the connections between the Qur'an and Islam are genuine. This section comes to a close with a comment from one of the participants that, in our opinion, does an excellent job of summing up the most important conclusion of this study.

"The challenge here is figuring out how to evaluate your outcomes." How do you determine which of them may be relied upon? "Everyone who is not of the Islamic faith faces the challenge of trying to find something that they can put their faith in." "I don't know who or what I can put my faith in."

5. CONCLUSION

In order to understand how individuals look for Islamic and Qur'anic knowledge on the internet, this study is the first to combine analysis of search engine query records with user interviews. The research found that 12.2 million people used a large general web search engine, and among those searches, there were a significant number of people looking for information related to Islam and the Qur'an. Additionally, the study was able to identify the queries that were used the most, as well as the terms that were used the most frequently in relation to these queries, as well as the different spellings of the Qur'an that were used in the research. The qualitative information that was acquired through interviews was included in this study as a supplement to the quantitative data in order to shed light on the reasons and thoughts that people have for searching the internet for material that is relevant to Islam and the Qur'an.

From a wide-ranging purposive sample, it became clear that a number of important issues were top of mind for the consumers. These included the information's relevancy and reliability, the retrieval of Hadith in reference to the Qur'an, and the language of search queries in relation to the language of the website's content itself. It was also discovered during the interviews that all of the Muslim participants only use the phrases "qur'an" or "quran" in their requests for information pertaining to the Qur'an, but the other participants would also use the terms "koran," "kuran," and coran. Cross-checks between items obtained from the web and printed sources (the Qur'an, Hadith, Tafsir, etc.) or with knowledgeable people are almost always required to avoid retrieving inaccurate information for Muslim participants. Nevertheless, the non-Muslim participants put a greater amount of faith in the outcomes of web searches, and as a result, they did not frequently engage in cross-checking the results.

In the not too distant future, one of our goals will be to do research on specific subsets of internet users who conduct searches for material relevant to Islam and the Quran, as well as users from different regions of the world. world in order to determine whether or not there are differences in searching based on factors such as age, culture, or any other factors, as well as whether or not there are any other distinctions in the

searching behavior and activities among the groups. In addition, additional research is required to determine whether or if searching of this type for religious content differs considerably in any manner from searching of a more broad nature. These kinds of results might be able to inform both the people who develop search engines and the people who produce religious content on the internet.

REFERENCE

1. Adamu, A.U.: *Islam and the Internet*. Weekly Trust (2002), http://www.kanoonline.com/publications/islam_and_the_internet.htm (retrieved July 10, 2009)
2. Baeza-Yates, R., Hurtado, C., Mendoza, M., Dupret, G.: *Modeling user search behavior*. In: *Proceedings of the Third Latin American Web Congress, October 31-November 02, p. 242* (2005)
3. Baqai, S., Basharat, A., Khalid, H., Hassan, A., Zafar, S.: *Leveraging semantic Web technologies for standardized knowledge modeling and retrieval from the Holy Qur'an and religious texts*. In: *ACM Special Interest Group on Artificial Intelligence, Proceedings of the 7th International Conference on Frontiers of Information Technology*. ACM, New York (2009)
4. Bates, M.J.: *Information search tactics*. *Journal of the American Society for Information Science*, 205–214 (July 30, 1979)
5. Boyatzis, R.E.: *Transforming qualitative information: thematic analysis and code development*. Sage, London (1998)
6. Brouwer, L.: *Dutch-Muslims on the Internet: A new discussion platform*. *Journal of Muslim Affairs* 24(1), 47–55 (2004)
7. Bunt, G.R.: *Islam in the digital age: E-Jihad, online fatwas and cyber Islamic environment*. Pluto Press, London (2003)
8. Bunt, G.R.: *Rip. Burn. Pray.: Islamic expression online*. In: *Dawson, L.L., Cowan, D.E. (eds.) Religion Online Finding Faith on the Internet*, pp. 123–134. Routledge, New York (2004)
9. Campbell, H.: *Exploring religious community online: We are one in the network (DigitalFormations)*. Peter Lang Publishing, New York (2005a)
10. Campbell, H.: *Making space for religion in Internet studies*. *The Information Society* 21(4), 309–315 (2005b)
11. Casey, C.A.: *Online religion and finding faith on the Web: An examination on Beliefnet*. *Org.Media Ecology Association* 2, 32–40 (2001)
12. Cheong, P.H., Poon, J.P.H., Huang, S., Casas, I.: *The Internet highway and religious communities: Mapping and contesting spaces in religion-online*. *The Information Society* 25(5), 291–302 (2009)
13. Dawson, L.L.: *Researching religion in cyberspace: Issues and strategies*. In: *Hadden, J.K., Cowan, D.E. (eds.) Religion and the Social Order*. Elsevier Science Inc., London (2000)
14. Dawson, L.L., Cowan, D.E.: *Religion online: Finding faith on the Internet*. Routledge, London (2004)
15. Foltz, F., Foltz, F.: *Religion on the Internet: Community and virtual existence*. *Bulletin of Science, Technology & Society* 23(4), 321–330 (2003)
16. Fox, S.: *Search Engines*. *Pew Internet project data memo*. *Pew Internet and American Life Project* (2002), <http://www.pewinternet.org/reports/toc.asp> (retrieved September 10, 2009)
17. Helland, C.: *Online-religion/religion-online and virtual communities*. In: *Hadden, J., Cowan, D.E. (eds.) Religion on the Internet: Research Prospects and Promises*. JAI Press/ElsevierScience, London (2000)



18. Helland, C.: *Surfing for salvation*. Elsevier Science 32, 293–302 (2002)
19. Ho, S.S., Lee, W.P., Hameed, S.S.: *Muslim surfers on the Internet: Using the theory of planned behaviour to examine the factors influencing engagement in online religious activities*. *New Media & Society* 10(1), 93–113 (2008)
20. Højsgaard, M.T., Warburg, M.: *Religion and Cyberspace*. Routledge, London (2005)
21. Hoover, S., Clark, L.S., Rainie, L.: *Faith online: 64% of wired Americans have used the Internet for spiritual or religious information*. *Pew Internet and American Life Project* (2004), http://www.pewinternet.org/pdfs/PIP_Faith_Online_2004.pdf (retrieved February 17, 2009)
22. Jansen, B.J., Pooch, U.: *A review of web searching studies and a framework for future research*. *Journal of the American Society for Information Science and Technology* 52(3), 235–246 (2001)
23. Jansen, B.J., Spink, A., Bateman, J., Saracevic, T.: *Real life information retrieval: A study of user queries on the Web*. *ACM SIGIR* 32(1), 5–17 (1998) Jansen, B.J., Spink, A., Saracevic, T.: *Real life, real users, and real needs: a study and analysis of user queries on the web*. *Information Processing and Management* 36, 207–227 (2000)
24. Jansen, B.J., Tapia, A., Spink, A.: *Searching for salvation: An analysis of religious searching on the World Wide Web*. *Religion* 40(1), 39–52 (2009)
25. Karaflogka, A.: *E-religion a critical appraisal of religious discourse on the World Wide Web*. Equinox, London (2006)
26. Krueger, O.: *Methods and theory for studying religion on the internet: Introduction to the special issue on theory and methodology*. *Heidelberg Journal of Religions on the Internet* 1(1), 1–7 (2005), <http://www.ub.uni-heidelberg.de/archiv/5822> (retrieved March 9, 2009)
27. Larsen, E., Rainie, L.: *Cyberfaith: How Americans pursue religion online*, p. 21 (December 23, 2001)
28. Lawless, A.: *Islam on-line: Adapting to the digital age*. *Three Monkeys Online Magazine* (2004), <http://www.threemonkeysonline.com/als/Islam%20on%20the%20net.html> (retrieved February 10, 2009)
29. Mason, J.: *Qualitative researching*, 2nd edn. Sage, London (2002) Neelameghan, A., Raghavan, K.S.: *An online multi-lingual, multi-faith thesaurus: A progress report on f-thes*. *Webology* 2(4) (2005)
30. Shoaib, M., Nadeem Yasin, M., Hikmat, U.K., Saeed, M.I., Khyal, M.S.H.: *Relational WordNet model for semantic search in Holy Quran*. Paper Presented at the International Conference on Emerging Technologies, ICET 2009 (2009)
31. Silverman, D.: *Doing qualitative research*, 3rd edn. Sage, London (2009) Silverstein, C., Henzinger, M., Marais, H., Moricz, M.: *Analysis of a very large Web search engine query log*. *ACM SIGIR* 33(1), 6–12 (1999)
32. Spink, A., Wolfram, D., Jansen, B.J., Saracevic, T.: *Searching the Web: The public and their queries*. *Journal of the American Society for Information Science and Technology* 52(3), 226–234 (2001)
33. Tashakkori, A., Teddlie, C.: *Sage handbook of mixed methods in social & behavioral research*, 2nd edn. Sage, London (2010)