

“Faith to Go or Devil’s Work” – Social Media Acceptance in Taboo-Related Usage Contexts

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Abstract. Beyond their ubiquity, social media have fundamentally changed the nature of social, economic, and communicative pathways in modern societies. Communication and information with digital media are present everywhere and at any time. Social media overcome physical as well as mental borders and are increasingly incorporated in our private lives. While there is a substantial body of knowledge about the usage of social media in public or working areas, yet, there are also uncovered fields. Religious applications delivered by social media are one of the unlighted areas of mobile application development within the last years. In contrast to their low publicity in research stand a high number of various applications for any number of persuasions. Using a qualitative pre-study and a quantitative survey, this study gains insights into personal perceptions of using religious applications and the acceptance by believers and non-believers.

Keywords: Mobile application · Acceptance · Religion · Social media

1 Introduction

In the last decade, the cross-media move and the media change conquered all private and professional fields. Social media and their rapid penetration in the digital media landscape in the last years have evolved to substantial communication means in many parts of business and cover a wide range of different professional contexts [1]. Recent studies are, for example, concerned with the question how knowledge and professional information exchange can be accomplished with social media [2, 3]. Also individual factors shaping the using habit were under study and the need of social media specific communication etiquettes [4]. Increasingly, social media also gained attention in sensible areas, as e.g. health monitoring [5] and care [6].

Although social media did not stop at any usage context, there remains a blind research-spot [7]. On the one hand, electronic media and the church work well together. The affiliation between church and media has been a topic of public and church internal discussions even before the introduction of TV broadcast of church services in the 1950s [8–11]. Analogously to the medial change of that time, a new one is approaching now. The rapidly progressing mobile services range from the “Pope app,” which has

been officially launched by the Vatican, to various watchword and confession apps. Thus, (non-)believers can be awoken by the peal of bells of St. Peters Basilica, study the watchwords of “iLosungen” by the Moravian Church during breakfast, and use “Confession: A Roman Catholic App” in the evening to confess the sins committed that day by working through a list of questions and then receiving a penitential prayer suggested for atonement. The sinners then can use “Ramadan Times” or “iQuran” whose services offer pointers about mealtimes in different time zones. Additionally, Arabic translations of suras and their recitals are provided. A digital call commemorates the five daily prayers and gives the proper orientation. This navigation-based support also allows finding halal restaurants close by. Muslims as well as Christians can find the closest house of prayer even during vacations or business trips.

On the other hand, faith and church are a no-go for social media. Historically, churches lag behind in adopting and using novel technology. Already in the early 1950s, church officials of both Catholic and Protestant denominations questioned personal participation as well as the sensational and mysterious character of a worship service or mass during broadcasts. Social media has been no different. Though there is an impressive number of biblical apps, the walkover of electronic devices into church contexts is slow if present at all, at least in Germany. Most churches have failed to effectively integrate social media, even though they represent the most effective means to establish communities, connect persons living remotely, and provide a social backdrop which is especially important facing the demographic change that leads to increasingly more older and solitary people that need to be integrated.

2 Related Work

So far, research into the topic of religion and spirituality from the HCI-perspective has been done only sparsely, cf. [7]. There are thousands of apps available¹ that offer support or guidance to believers, non-believers, and anybody with access to such apps, i.e., smartphone or tablet users. The available apps have been summarized and/or introduced in a few works, e.g., [7, 12, 13]. This shows that these apps are of interest, even to scholars. The focus of this paper is the motivation to use and acceptance of such apps, a topic that, to our knowledge, has not yet been studied to a larger degree.

Bellar focuses on the use of religious and spiritual apps by Evangelical Christians in the US [14], but does the motivation to use these apps differ depending on type of religious affiliation? After all, there are apps for all the major religions available on iTunes, e.g., [12, 15]. What is the motivation behind using religious apps and what are possible hindrances?

According to [16], the phenomenon of “digital religion” dates back as early as the 1980s. With the emergence of the Internet and its spreading availability, discussion platforms with religious topics at their center were established [14]. This was followed in the 1990s with websites, mailing lists, and even online parishes [14, 17]. Yet it is only in recent years that the topic earned some more interest in the academic field with

¹ In all studies we found, the search results for available religious apps were obtained from iTunes and therefore do not necessarily include apps for android phones.

a couple of forerunners that provided comprehensive introductions into the topic, e.g., [17–20], especially concerning mobile technologies.

Although the Internet is still the basic backbone of information, the new, mobile technologies provide the opportunity to gain access virtually everywhere and at any time. But with smaller devices, the running programs have to be adapted accordingly. This is what most research into mobile applications has been about, the technical aspects of these programs [14, 15].

However, Campbell et al. [15] provide another approach to religious apps in their attempt to classify the available apps on iTunes. Expanding on [21], they offer 11 categories, for example, prayer, focus/meditation, sacred textual engagement, religious social media, or religious games that arrange religious apps based on their main purpose. On a broader scale, this leaves two groups of apps: those meant to enhance religious practice, e.g., prayer or sacred textual engagement, and those that have religious content such as games or religious social media.

In accordance with this distinction, this paper offers insight into what kind of apps someone with or without religious affiliation would use and why. Although there are many religions and considerable numbers of apps available for each [15], our study focuses on the adoption behavior and the reasons for (non)using religious apps, contrasting Christian and Muslim believers or non-believers.

3 Method

This research followed a two-step procedure by using the focus-group method and an online survey. On the base of the focus group results, items of the questionnaire were developed.

3.1 Qualitative Insights: Focus-Group Approach

In the first step, we consulted two focus-groups, one with five, the other with six participants between the ages of 21 and 56. There were seven men and four women of whom four were affiliated with and seven active participants in a religion. Of the latter, three were Christians, and four Moslems. Participants discussed their attitudes and requirements for mobile phone usage. Beside general questions, we asked for their religious affiliation, their technological expertise, and what they expect from a religious application. As general factors we observed that people participating in religion know about religious apps, but their usage is in an observation period and the believers reported to be very aloof about these kind of applications. Most importantly, for the majority religious applications should be flawless. It comes as no surprise that non-believers did not know much about religious apps and they were quite distant and reserved towards religious applications.

Summarizing, we transferred the following factors as central content into the online survey: religious affiliation, impact of religion in everyday life, participants' attitude towards technology in general, usage behavior, and the reasons and requirements for using religious applications.

3.2 Quantitative Insights: Questionnaire Approach

The questionnaire was divided into five main parts:

(1) *Demographic variables*: The first part included questions about demographic data as well as information about religious education, piety, and attendances and activities at church in the last 3 months.

(2) *Knowledge about and attitude towards religious applications*: The second part dealt with relatedness and affiliation to religion and knowledge about religious applications as well as the general attitude towards values.

(3) *Moral concepts*: The third part used Likert-scales to evaluate general value judgment.

(4) *App use*: The fourth part of the questionnaire dealt with apps in general. The participants were asked about their usage frequency as well as the number of apps they use. We inquired what kind of application the participants would like to use in the context of religion and if there are contexts or areas for which the participants cannot imagine the use of an application at all.

(5) In the last part, we investigated the participants’ *control beliefs* when dealing with technology [22].

3.3 Participants

A total of N = 388 respondents participated in this survey, aged between 14 and 67 (M = 24.8; SD = 7.1). The gender distribution was quite symmetrical, with 47.9 % women (N = 186) and 52.1 % men (N = 202). The number of religious participants and atheists is almost equal with 58 % believers (N = 225) and 42 % atheists (N = 163). Among the group of religious participants (N = 225), 69.3 % were Christian (N = 156) and 24.4 % Muslim (N = 55); the remaining 6.3 % stated a different affiliation that was counted as “other” (N = 14). The ratio of men (N = 74) and women (N = 82) among the Christians was almost equal with 47.4 % male Christians and 52.6 % female. Among the Muslims, the gender ratio was not as symmetrical with 72.7 % female Muslims (N = 40) and only 27.3 % male Muslims (N = 15) participating.

4 Results

First of all, the participants were divided into three groups according to their religiousness. Thus, for further analyses, the three groups Christians, Muslims, and Non-Believers (Atheists) were distinguished.

4.1 Do “Religious Groups” Differ in Their Intent to Use Apps?

The questionnaire surveyed the intention to use a total of 26 apps. Four of them were characteristically Christian, 11 were Muslim oriented, and another 11 apps were independent of a specific religious affiliation.

In order to answer the question which of the three groups shows the highest interest in using religious apps, the 11 religion-independent apps were summed up as “intention to use-score” for each participant. One-way ANOVA with post hoc-analysis (LSD) revealed that Muslims, on average, show the highest intention to use the apps ($M = 3.2$; $SD = 2.5$). In contrast, Christian people would use, on average, 1.7 ($SD = 2.3$) apps whereas non-believers show the lowest intention to use ($M = 1.1$; $SD = 2.4$). Post hoc-analysis revealed that all three groups differ significantly from each other ($F(2,326) = 13.5$; $p < 0.00$). In Fig. 1 descriptive outcomes are illustrated.

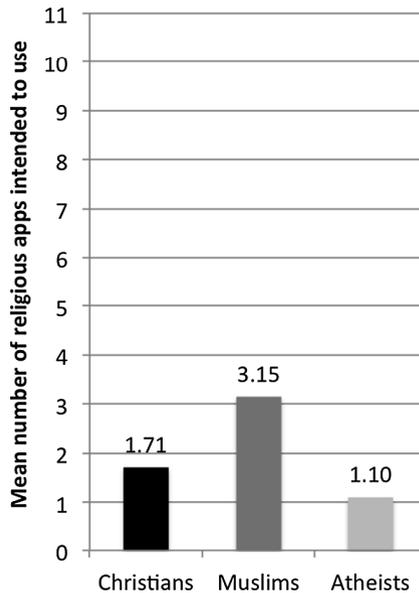


Fig. 1. Intention to use (religious-independent apps) (evaluation: 0 = certainly not; 3 = definitely yes).

4.2 What Kind of App Do the Specific Groups Use?

In a further step, we analyzed the intention to use religious apps for Christians and Muslims in more detail. Figure 2 gives a descriptive overview of the percentage of participants of the respective group who intend to use one of the specific apps. For each of the groups, the religious-specific apps are presented additionally. Thus, Fig. 2 shows 23 apps for Muslims (left side, black) and 15 for Christian people (right side, gray).

All in all, Muslims would like to use more religious and religion-independent apps than Christians. While both of them, Christians (39.3 %) and Muslims (69.2 %), would like to use apps with a holiday calendar function, there are only 3 other applications which both of them can imagine to use: “quizzes about religion” (Muslim: 45.1 %; Christians: 22.1 %), “information on religious taboos” (Muslim: 40.4 %; Christians: 24.8 %), and apps about “history of the sutra/Bible” (Muslim: 36.5 %; Christians: 27.6 %).

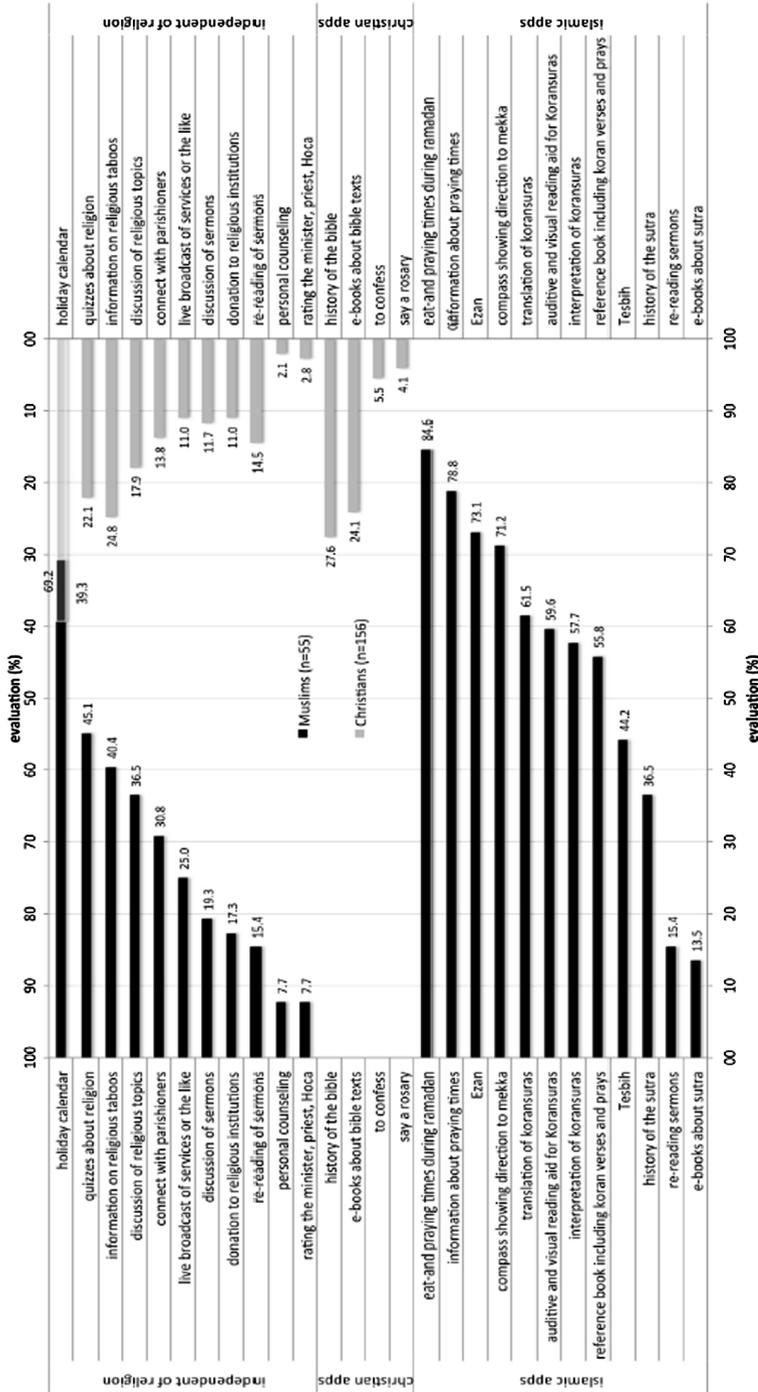


Fig. 2. Relative frequency of intention to use religious apps (in percent)

Neither Muslims (7.7 %) nor Christians (2.8 %) considered “rating the minister, priest, hoca” or to get a “personal counseling” (Muslims: 7.7 %; Christians: 2.1 %). Apps to get or exchange information were appreciated more by Muslims than Christians: “discussion of religious topics” (Muslims: 36.5 %; Christians: 17.9 %), “connect with parishioners” (Muslims: 30.8 %; Christians: 13.8 %). The specific religious apps for Muslims with the highest scores were assistance-apps, which supplied “eat- and praying-times during Ramadan” (84.6 %), “information about praying times” (78.8 %) in general, and initialized the call for praying “Ezan” (73.1 %). While Tesbih, the Muslim rosary, would be used by 44.2 % Muslims, only 4.1 % Christians could imagine to use an app for saying a rosary.

4.3 Using Motives

Participants’ general attitudes towards religious application usage were quantitatively assessed, using four items (4-point Likert scale, 0 = full rejection, 3 = full agreement, see Table 1).

Table 1. Items regarding general attitudes towards religious application usage

“Yes, I would use apps based on religion... (0 = full rejection 3 = full agreement)
... because they give fast and convenient access to information about religion”
... because I am not dependent on the schedule of church and mosque times”
... because I think it’s great that religion is accessible to me due to technology”
... because it gives me the opportunity to deal with religion in my own private circle”
... because I can read/listen [to] the liturgy any time”
... because I don’t have to walk all the way to church”
... because the church should be up-to-date in a technology way, too”

MANOVA comparisons of the two religious groups revealed a significant difference in agreement to 6 of the 7 statements ($F(7,185) = 9.5; p < 0.001$). In general, Muslims, on average, show a higher approval to reasons militating in favor of using the apps than Christians; the statement that the church should be technologically up-to-date is though not rated differently by both groups. Based on a scale ranging from 0 to 3, scores higher than 1.5 can be seen as approval of a specific reason. Therefore, we can conclude that Muslims would use religious apps because they provide “fast religious information” ($M = 1.9; SD = 1.1$), offer the possibility to “practice religion with technology” ($M = 1.7; SD = 1.2$), and practice “religion in private environments” ($M = 1.8; SD = 1.2$) as well as “re-reading sermons” ($M = 1.5; SD = 1.1$). In contrast, Christians show no approval of any of the reason, which is expressed by means <1.5 for each of these 7 statements.

Having a closer look, MANOVA analyses revealed no significant findings for gender and religion group concerning all seven statements ($F(7,185) = 1.4; n.s$). For this reason, gender effects were analyzed separately in each group. Whereas in the Christian group there were no differences between men and women, Muslim men and women differed in their approval of some of the statements ($F(7,44) = 3.97; p < .001$).

From Fig. 3 it can be seen that Muslim women would use religious apps because they like the fact that technology makes religion feasible (M = 1.9; SD = 1.2), they prefer re-reading of sermons (M = 1.6; SD = 1.3) and practicing religion in a private environment (M = 1.8; SD = 1.2) as well as getting fast religious information (M = 2; SD = 1.1). In contrast, Muslim men mentioned only two reasons. They like practicing religion in a private environment (M = 1.7; SD = 1.1) and getting religious information fast (M = 1.7; SD = 0.9) by using religious apps.

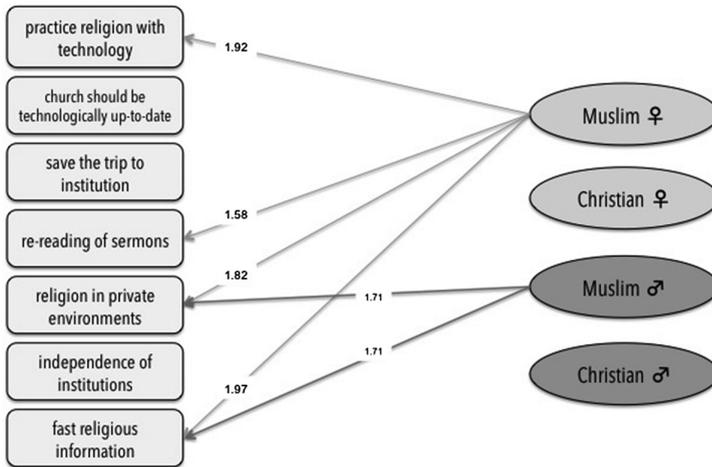


Fig. 3. Intention of use social media in different religions

4.4 Usage Barriers

Participants’ general attitudes against religious application usage were quantitatively assessed, using five items (4-point Likert scale, 0 = full rejection, 3 = full agreement, Table 2).

Table 2. Items regarding general attitudes against religious application usage

No, I would not use apps based on religion... (0 = full rejection 3 = full agreement)
... because it’s not possible to transmit religions through technology
... because it doesn’t get you in the right mood
... because I am generally not interested in these apps
... because I cannot be sure that the information is correct
... in any case

Do Muslims and Christians differ in their reasons against using religious apps? MANOVA revealed that both religious groups have different objections to using religious apps ($F(5),184) = 6; p < .001$). In general, Christians show higher approval of reasons against using religious apps in 4 of the 5 statements. The only exception is the

statement of possible inaccuracy of information provided by apps, which Muslims ($M = 1.4$; $SD = 0.9$) state a stronger agreement to than Christians ($M = 0.9$; $SD = 0.9$). Figure 4 shows the reasons against application usage in a religious context by religious group.

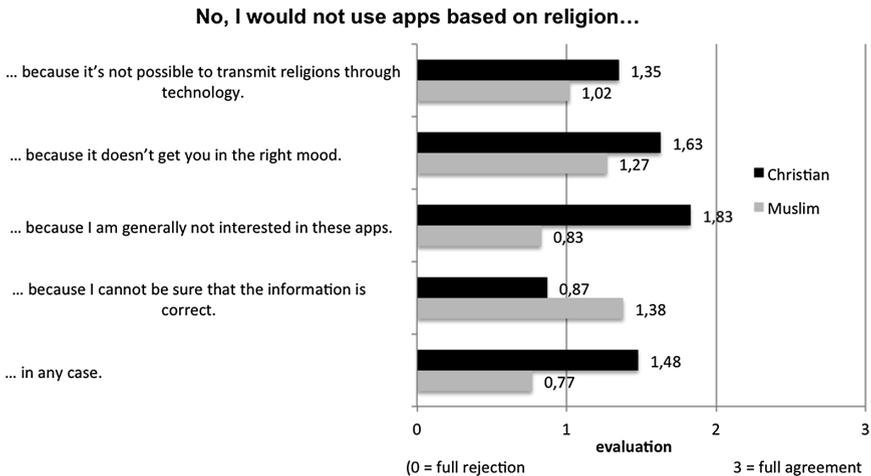


Fig. 4. Reasons against using religious applications

Christians mentioned that they are “generally not interested in these apps” ($M = 1.8$; $SD = 1.3$) and added “in any case” ($M = 1.5$; $SD = 1.2$); in their perspective it is not possible to transmit religions through technology ($M = 1.4$; $SD = 1.1$) and it would not “get you in the right mood” ($M = 1.6$; $SD = 1.1$).

5 Discussion

Due to the qualitative pre-study, the focus on the quantitative online survey was to construct a map of acceptance of social media in tabooed usage contexts, in this case between the faithful and atheists, furthermore, between Muslims and Christians. Understanding that technology acceptance is not merely “black and white,” but rather an attitude towards technology that is formed by pro- and contra-using arguments we quantified the uncertainty borders of social media usage in the religious context.

More specifically, we examined the perceptions of application usage in taboo-related contexts by people of different religious affiliations. In a first step, we addressed a random sample of different religions and ages, including both, believers and non-believers, in order to reveal prevailing knowledge and attitudes towards religious applications.

Overall, 27 religious applications were selected (with religion-independent, typically Christian and typically Muslim character). The participants’ intention to use the religious apps and their assumptions about the use of these specific apps were assessed.

The latter was related to the hypothesis that the faithful are more interested in religious applications than atheists.

Outcomes revealed that Muslims, Christians, and non-believers show a broad range in the intention to use those apps. On the one hand, non-believers reported to have only a marginal intention to use, followed by Christians with a slightly higher intention, but Muslims showed the highest intention to use religious applications on their smart phones.

When it comes to the evaluation, it was found that the three groups of applications (religion-independent, typically Muslim and typically Christian) related to four categories. We tested applications with information character (e.g., “information about religion,” “information about religious taboos,” “holiday calendar”), many with participation or interaction character (“quizzes about religion,” “discussion about religious topics,” “connect with parishioners”), some, especially typically Muslim application with assistance character (“eat- and praying times during Ramadan,” “compass showing the direction to Mecca,” “Ezan”), and a few with private interaction (“say a rosary”/“tesbih”). First of all, Christians and Muslims would use applications information as well as participation & interaction applications. Neither of them showed any intention to use private interaction applications like getting a “personal counseling” or “rating a minister, priest, hoca.”

Incidentally, it is noteworthy that the Islamic religion, in contrast to the Christian religion, own structures and rules for everyday life that are very affine to mobile phone applications. By asking for motives to use such applications, there is a significant difference between Christians and Muslims. In general, Muslims show, on average, a higher approval towards the reasons for using the apps than Christians; the statement “because church should be technologically up-to-date” is not rated differently by the groups.

We can conclude that Muslims would use religious apps because they provide “fast religious information,” offer the possibility to “practice religion with technology,” and practice “religion in private environments” as well as facilitate the “re-reading sermons.” In contrast, Christians show no approval of any of the reasons.

Additionally, in the Christian group were no differences between the evaluations by men and women, whereas Muslim men and women differed in their approval to some of the statements. Muslim women reported to be much more opened to religious social media - approving two more reasons to use religious apps than men. Furthermore, it is observable that while Muslims show a high intention to use apps, acceptance turned out to be conditional: they conceded that they would not use apps based on religion if they cannot be sure that the information that they provided is correct. This is the only reason for Muslims against using religious apps. In contrast, Christians mentioned much more reasons against such applications and their use. The most important reason was that they generally are not interested in religious applications and that they do not use them in any case. The Christians supposed that this way of religious activity would not get them in the right mood for worship or prayer. Once again, this could be based on the structure of each religion and their rituals in everyday life.

In conclusion, we consider as key results that Muslims and Christians differed in their intention to use and in their reasons for or against using mobile phone applications in taboo-related contexts. Despite the high numbers of intention to use religious apps, Muslims display a lot of skepticism toward the content of religious applications.

6 Future Research

Naturally, the research here was only a first step into the understanding of how and why religious apps could be useful and accepted across different confessions. Future studies have to investigate whether these perceptions are limited to Muslims and Christians, as examined here, and to what extent these attitudes change by including other religions. Finally, future research has to find out in what ways the acceptance of religious application usage differs when the cultural upbringing and (non)believers in other countries of other countries are taken into consideration. Different from the approach here in which a random sample of participants was surveyed, another interesting approach could be to specifically form user profiles out of different extents of religious faiths that would (a) not use and (b) would use social media and to undertake ethnographic studies in which the natural usage of religious social media during the day would be captured. This would allow a more natural understanding in which situations mobile apps could be useful and accepted. Furthermore we also plan to include priests as another important group and their perspective on the usage of digital media in the religious context. On a first sight it could be assumed that religious professionals could have a reluctant attitude towards digital media as they might fear that the digital media could increasingly replace themselves, on the other hand it could be the other way round that religious professionals could strongly support digital media usage in order to bring more younger people to faith and church.

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