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The social media use of Muslim women in the Arabian Peninsula: insights into self-protective information behaviours

Abstract

Purpose – to provide insight into the social media related information behaviours of Muslim women within Arab society, and to explore issues of societal constraint and control, and impact on behaviours.

Design/methodology/approach – semi-structured interviews with Muslim women resident within the capital city of a nation within the Arabian Peninsula.

Findings – social media provides our participants with an important source of information and social connection, and medium for personal expression. However, use is constrained within sociocultural boundaries, and monitored by husbands and/or male relatives. Pseudonym accounts and carefully managed privacy settings are used to circumvent boundaries and pursue needs, but not without risk of social transgression. We provide evidence of systematic marginalisation, but also of resilience and agency to overcome. Self-protective acts of secrecy and deception are employed to not only cope with small world life, but to also circumvent boundaries and move between social and information worlds.

Research limitations/implications – findings should not be considered representative of Muslim women as a whole as Muslim women are not a homogenous group, and Arabian Peninsula nations variously more conservative or liberal than others.

Practical implications – findings contribute to our conceptual and practical understanding of digital literacy with implications for education programmes including social, moral, and intellectual aspects.

Originality/value – findings contribute to our conceptual and practical understanding of information poverty, evidencing structural inequalities as a major contributory factor, and that self-protective information behaviours, often considered reductive, can also be expansive in nature.

Keywords information behaviour, information poverty, Muslim women, women’s studies.

Paper type Research paper

1. Introduction

This paper provides insights into the social media related information behaviours of Muslim women within Arab society. Studies of Muslim women’s use of social media in western society identify an important role for access to everyday information, social connection, personal expression, and positive portrayal of often stereotyped Muslim identity (e.g. Islam, 2019). However, there are limited comparative studies reporting from within Arab society. This perspective is important as sociocultural factors are known to influence peoples’ information behaviours (e.g. Savolainen, 1995; Wilson, 1997); and whilst there is some evidence of similar social media use as western peers, there is also some evidence of sociocultural constraints and control in Arab society (e.g. Kaposi, 2014; Vieweg and Hodges, 2016; Abokhodair and Vieweg, 2016). This study sought to explore such issues further, and from the important and underrepresented perspective of Muslim women themselves.

2. Background

Muslim women as a study group

It is outwith the practical scope of this paper to comprehensively discuss Muslim women as a study group, and to reflect all perspectives and population groups (Muslim women not being a homogenous group, and some Arabian Peninsula nations being more conservative or

liberal than others); however, it is nonetheless important to contextualise this study.

In broad terms, Arab society is considered authoritarian, collectivist, and patriarchal. Privacy, reputation and honour are important values that govern everyday social norms and behaviours, and can be particularly conservative for women extending to strict gender segregation and dress conventions. Across the Arabian Peninsula various constitutional reforms have advanced the economic, political, and social rights of women, and in recent years there has been a significant increase in women attending university and in employment, but employment rates are still low relative to men (World Bank, 2020), and in some countries, political and social rights remain limited (e.g. Al Alhareth et al., 2015; Tripp, 2020). Personal status laws (family law) can also discriminate against women, with Tripp (2020) reporting that the rights of women in many Arab nations are often indistinguishable from those of children. Tripp argues that, "The equation of women with children is suggestive of the status of minors who are not accorded full citizenship, but rather, are in need of protection and special consideration" (2020, p.216). In several Arab nations, personal status laws also provide women with limited protection from domestic abuse (Human Rights Watch, 2017). For further background reading on Arab society and women's rights, see recent reviews by Darhour and Dahlerup (2020), and Yassin and Hoppe (2019).

Previous studies examining women's use of social media within Arab nations

There are limited previous studies providing insight into women's use of social media within Arab nations, and few focused solely on women. To date, no studies have been undertaken from an information behaviour perspective; and whilst insights can be drawn from other disciplines, some studies, involving both male and female participants, provide no breakdowns by gender (e.g. Al Jenaibi, 2011; Mohamed and Ahmad, 2012; Al Omoush et al., 2012). We focus below on the most relevant previous empirical studies providing insight into Muslim women's use of social media in Arab society, drawing from across Human Computer Interaction, Cyberpsychology, Media, Middle Eastern, and Women's Studies to do so.

Rajakumar (2012) explored how gender, class, and ethnicity affect Qatari women's (n100) use of social media. Conducted via survey, the study provides no demographics and limited empirical data, but reports factors of identity and privacy influencing social media use. Rajakumar reports that the majority of participants posted no images of themselves (including veiled images) due to concerns over "where their photos would end up or by whom they would be seen" (2012, p.130). Rajakumar describes these behaviours as a "form of protection" and as "an active and conscious choice to circumvent any negative attention that may result in sanctions against their other social choices" (2012, p.130). Rajakumar reports no conflict or complaint amongst participants regarding such self-censorship, apart from one participant who commented, "I would love to put my own photo in my [Facebook] profile, but somehow I feel it's not socially acceptable" (2012, p.132). Rajakumar argues that rather than interpreting "faceless Facebook profiles" as evidence of unwanted control and restriction, such profiles can be considered as "a demonstration of agency" that provides Qatari women with valued privacy, and "control over a critical aspect of how their identity is accessed and understood by other users" (2012, p.133). In relation, the low reported use of pseudonyms amongst participants (2%) is attributed to participant confidence that their online behaviours conform to social norms.

Almenayes (2014) conducted a survey of the social media use of Kuwaiti university students (n808, avg. age 21), with the majority of participants women (70.4%). Almenayes draws on secularization theory to examine relationships between religiosity (extent of religious observance) and social media use, and positive and/or negative views on social media use; and reports several differences between male and female participants. Female participants are reported to be more likely than males to view social media as an alternative to face-to-face interaction, and to feel more confident when communicating via social media compared to face-to-face communication. Females are also reported to be more likely than males to feel anxious during social media service interruptions, and to be more likely than males to

spend less time with family due to social media use. In relation to religiosity, a negative correlation is reported for the first two variables (i.e. the more religious they are the less likely they are to view social media as an alternative to face-to-face communication, and less likely to view social media as giving them confidence during interactions), and no significant correlations for service disruption anxiety, or time distribution. Further insight is limited by the survey instrument employed and summary statistical reporting of findings; however, Alemenayes posits that the behaviours and preferences exhibited by female participants might be, "A product of the fact that females in a traditional Muslim society are more restricted than males in social life especially when it comes to face-to-face interaction with members of the opposite sex." (2014, p.114). Increased self-confidence amongst females when interacting online is similarly attributed to societal restrictions, with Alemenayes commenting that, "this could be the result of living in a traditional society where females are not accustomed to interacting with people they don't know, especially from the opposite sex" (2014, p.114).

Kaposi (2014) worked with Kuwaiti university students (male and female) over a period of five years to explore the role of social media in their everyday lives, including social interaction and civic engagement aspects. The study, conducted via observation and interviews, includes no participant numbers or demographic data, and limited empirical data; but reports social media as providing young women with a way to circumvent conservative social norms. Kaposi notes that, "There is immense pressure on young people to guard their reputation by obeying social and cultural rules that often seem arcane to them, as well as discriminatory, especially against women.", and that, "The internet offers a way out of what young people feel to be a stifling, suffocating social, cultural, and political environment." (2014, p.6). Kaposi reports social media as providing participants with a "domain of freer expression" (2014, p.9), but whilst reporting participants entering into opposite sex interactions and political debate online, also reports participants as self-censoring their online posts for fear of negative consequences, citing one female participant who described themselves as, "not completely free to express my opinions" (2014, p.9). Issues of surveillance are also discussed, particularly of women, with one female participant describing the posting of their true opinions as "really hard sometimes" due to monitoring by relatives (2014, p.10). Kaposi concludes that "the Internet does seem to serve as a technology of freedom, allowing experimentation with identity, sexuality, and political speech previously unseen in public or semi-public forums", but that, "social, cultural, and political traditions continue to significantly shape young people's uses of the internet in Kuwait." (2014, p.11).

Young et al. (2014), via survey of Iranian women (n253, avg. age 22, majority University educated), explored the use of social media for self-presentation and expression, and in particular, if length of time as a social media user, and online exposure to different cultures and norms, influenced decisions regarding their posting of personal images with or without a hijab. The authors report participants appearing over time (six months) to be slightly less embarrassed and concerned about issues of "improper hijab", and younger participants (age not specified) to be "slightly more likely to upload photos with an improper hijab in the future" (2014, p.319). The authors report that their work "builds on research suggesting that social media affects attitudes and behaviors" (2014, p.319), but depth of insight is limited by the survey instrument employed including no exploration of actual behaviours (e.g. what posted and for whom) and influencing factors. Nor does the study explore participant thoughts regarding the hijab, which for many Muslim women can be both an important symbol of faith, and a fashionable statement of cultural identity (e.g. Williams and Kamaludeen, 2017; Baulch and Pramiyanti 2018). Young et al. (2014) do acknowledge that many Muslim women wear a veil by choice, but with limited further consideration.

Guta and Karolak (2015), via interviews with Saudi Arabian women (n7, age 20-26, university students), explored how Muslim women use social media for expressing their identity, and provides some insight into how they negotiate cultural and societal boundaries online. The authors note that, "Women in the Middle East in general, and Saudi Arabia in

particular, have been portrayed frequently in the Western media as passive, submissive and an oppressed lot.” (2015, p.115), and that such portrayals fail to recognise more active roles. The authors argue that, “The internet creates a space where women have an equal access and they are able to contribute to the public sphere in ways that are not possible outside of the virtual world where they are always regarded as women, being subordinate to men” (2015, p.117). However, whilst providing a positive portrayal of online behaviours, evidence of such behaviours is limited. Further, the authors also report participant behaviours to be influenced by social norms with risk of dishonour and shame “avoided at all cost” (p120), and that this included lack of discussion of controversial issues such as political reform and women’s rights, and described by the authors as “a process of self-censorship” (p.120). The authors also report that several of their participants would only use their first name or a nickname online through fear of negative attention, and that some possessed dual identities. Thus, whilst the authors conclude that, “It is apparent that social media contributed to granting women their voice and agency and destabilized the portrayals of them as victims of longstanding patriarchal oppressive practices.” (2015, p.124); this conclusion is arguably somewhat at odds with several of the reported findings.

Vieweg and Hodges (2016) examined Qatari social media use (including 8 female participants), exploring how participants navigate modernity and maintain tradition online, and providing insight into the management of identities. Drawing upon concepts of participatory and social surveillance, the authors report that participants pro-actively self-manage their behaviours to, “...gain advantage by exhibiting their own agency and power to control what others see and under which circumstances” (2016, p.531). Such behaviour is described by the authors as, “empowering in that it affords individuals agency over self-presentation, and co-construction of collective values and identities” (2016, p.531). Female participants are reported to maintain private accounts limited to family and friends, and in adherence with expectations of modesty, to refrain from posting complete pictures of their faces, either avoiding entirely or limiting to partial images. In relation, one participant commented that her peers largely posted images of “a flower, or some pictures of trips”, and that if they included themselves it would be as a largely unrecognisable figure in the distance (2016, p.532). Another discussed possessing one account for friends, and another for her family, and disclosed that this was common practice amongst her female friends to avoid judgement by family. Another, with one account for both friends and family, discussed using privacy settings to maintain platonic relations with male friends and colleagues not approved of by family members. Similar to Rajakumar (2012), the authors describe such activities as “creative ways” for Qatari women “to express their individual identities and manage their audiences as they work within the expectations of their cultural tradition” (2016, p.534). However, whilst presenting an empowered perspective of surveillance, the authors also note that they “[do not] intend to completely dismiss the traditional conception of surveillance and the role it plays in patriarchal societies. Rather, it is important to recognize that surveillance comprises myriad dimensions” (2016, p.536).

Golzard and Miguel (2016), via observation and interviews, explored how Iranian women (n10) form and maintain personal relationships on social media platforms, including with men. No demographics are provided beyond age range (18-40), and limited empirical data is provided, but the study provides some insight into the role of social media for overcoming social restrictions in the physical space, and the issues that study participants experienced. Participants discussed social media as important for developing relationships and maintaining friendships, and for self-expression. One participant, who posted under a pseudonym, described her blog as “a tool to express feelings and personal desires that are not allowed or tolerated in the ‘real’ world” (2016, p.225) including “sensitive issues such as discriminatory laws against women” (p.225). However, the authors also report that several participants had experienced sexual harassment, threats, and unpleasant comments online. The sources of harassment are not discussed beyond general reference to “strangers” (2016, p.224), but the authors report that such experiences, “discouraged them from sharing their feelings and personal information such as photos or videos” (2016, p.224) and to set

strict privacy settings. The authors conclude that social media provides Muslim women with the opportunity to “overcome the boundaries of physical space, including segregation and gender inequalities” (2016, p.229), but not without risk.

Abokhodair & Vieweg (2016), via interviews, explored privacy factors influencing social media use in Saudi Arabia and Qatar (including 22 women aged 18+). Describing privacy as multifaceted and socially constructed, the authors argue that discussions of privacy in Islamic cultures are too often discussed in relation to western ideals that fail to consider privacy in the Arab Gulf context, and lead to a cultural bias in technology design. Whilst largely focused on issues of culturally sensitive technology design, and providing limited demographics, the study also provides some insight into female social media use and influencing factors. The majority of female participants are reported to maintain private social media accounts in accordance with social expectations, with public accounts described as at risk of “societal and familial backlash” (2016, p.677). Fear of stigma is reported as a common theme, and described as having “more serious consequences for women” (2016, p.678). Similar to Vieweg and Hodges (2016) and Golzard and Miguel (2016), the authors report women as having “finely tuned” privacy settings, particularly in relation to the posting of images, and multiple accounts “for different audiences and purposes” and “different degrees of information disclosure”, much determined by gender (2016, p.678). In relation, one women described her social media use as “under surveillance” by her family (2016, p.679). The use of pseudonyms is also reported, but in general terms and without indication of incidence amongst participants.

In summary, previous studies report social media as providing Muslim women in Arab society with important access to information and social networks that overcome societal boundaries, and in relation, an important medium for self-expression. Some report empowered users and new found freedoms (Rajakumar, 2012; Guta and Karolak, 2015; Vieweg and Hodges, 2016), but the majority also report women variously engaging in self-censorship in adherence with social norms, and whilst described in some studies as acts of agency within sociocultural boundaries (Rajakumar, 2012; Guta and Karolak, 2015; Vieweg and Hodges, 2016), such behaviours are nonetheless restrictive. Issues of surveillance are also reported (Rajakumar, 2012; Kaposi, 2014; Vieweg and Hodges, 2016; Abokhodair & Vieweg, 2016), as are the use of pseudonyms (Rajakumar, 2012; Guta and Karolak, 2015; Golzard and Miguel, 2016). A complex world is thus evident, and one not without significant risk of social transgression. However, depth of insight is limited, in several cases due to low participant numbers and/or limited empirical data (Kaposi, 2014; Guta and Karolak, 2015; Vieweg and Hodges, 2016; Golzard and Miguel, 2016), and in other cases due to the limitations of the survey instruments employed (Rajakumar, 2012; Almenayes, 2014; Young et al., 2014). There is limited exploration of self-censorship beyond non-posting of personal images, and issues of surveillance, whilst reported in four studies, are evidenced in only two, and representing only two Muslim women in total; and use of pseudonyms, whilst reported in three studies, is evidenced in only two, and representing only four Muslim women in total. Further, in each case evidence is limited to either summary statistical count or brief selective quote. It is thus difficult to determine the nature, extent, and impact of any social media restrictions experienced by Muslim women in Arab society. This raised two key research questions:

1. Do Muslim women in Arab society feel that their social media use is restricted, and if so, in what ways, and to what affect?
2. How do Muslim women in Arab society respond to any restrictions in social media use?

3. Methodology

Theoretical framework

Our theoretical framework was provided by Chatman’s (1996) small world theory of information poverty, which provided a framework for further exploring issues of stratification

and surveillance reported in previous studies (see Background), and impact on online information behaviours. Chatman describes an impoverished information state as one in which people (to various degrees):

1. perceive themselves to be devoid of sources of help;
2. are influenced by outsiders who withhold privileged access to information;
3. adopt self-protective behaviours in response to social norms;
4. are mistrustful of the ability of others to provide useful information;
5. withhold their true problems in the belief that negative consequences outweigh benefits;
6. and selectively receive new information in response to their everyday needs.

Four associated concepts (behaviours) are: secrecy (intentional concealment), deception (distortion of the truth), risk-taking (aversion to risk), and situational relevance (focus on immediate utility). Chatman posits that in impoverished circumstances a stratification of information access and use will be evident in a “world on which (social) norms and mores define what is important and what is not” (1996, p.205). Related concerns include issues of social exclusion and social justice (Lloyd, 2013; Britz, 2008), and fundamental human rights including freedom of communication and expression (Britz, 2004).

Whilst much information poverty research has involved economically disadvantaged groups, the theory of information poverty has also been used to more broadly explore the influence of structural inequalities on peoples’ information behaviours. For example, previous researchers have utilised information poverty theory to explore the information behaviours of: young gay men (Hamer, 2003); members of extreme body modification communities (Lingel and Boyd, 2013), young parents (Greyson, 2017), and the mothers of individuals with disabilities (Gibson and Martin, 2019). Such studies, often involving stigmatised groups and/or sensitive topics, draw further attention to the social and cultural dimensions of information poverty; and notably, several also evidence that binary distinctions between the information rich and the information poor can be too simplistic, as people can be simultaneously information poor and information rich when their information needs are viewed holistically (some needs easily met, others not so, and influenced by various economic and sociocultural factors). Lingel and Boyd (2013), discussing contextual and fluid aspects of information poverty, argue that “Information poverty is generated in social situations where norms play out in terms of privilege and marginalisation” (2013, p990). Lingel and Boyd argue that people can be variously privileged and systematically marginalised dependent upon their particular information needs and the social context. This is evidenced in Lingel and Boyd’s work with members of extreme body modification communities who could meet some of their needs more easily than others (for a further example of this duality, see Gibson and Martin’s (2019) work with parents of individuals with disabilities). With regard to our own study participants, as educated members of a high wealth nation with high Internet access and use (see below), they can arguably be considered as privileged; but as women living in a conservative patriarchal society, they can also be considered as systematically marginalised.

It is important to note that whilst guided by Chatman’s (1996) theory of information poverty, our overall approach also incorporated an inductive element (see data analysis below).

Sample

A purposive approach to sampling defined participant inclusion criteria as being a Muslim women and active social media user, and resident within the study zone. The study zone was the capital city of a majority Muslim nation within the Arabian Peninsula (anonymised – see ethics), with fieldwork undertaken at a number of public locations across the city. Internet use within the study zone is limited to general overview for participant anonymity purposes. Across Arab States including Arabian Peninsula nations (and encompassing advanced and developing economies), the proportion of women using the Internet is 44.2% compared to 58.5% of males, and for Arab State women is below global rates of 48% for all women, and for Arab State men, is comparable to global rates of 58% for all men (ITU, 2019). The study zone was within a nation with high relative wealth and low relative unemployment in

comparison to many other Arab State nations, and with a high rate of population Internet use in comparison to many other Arab State nations (and high in global terms). Almost the entire population within the study zone is online, including similar proportions of men and women (ITU 2018a, ITU 2018b).

One co-author of this study is a Muslim women and citizen of the study zone, and conducted fieldwork interviews including the recruitment of participants (discussed below).

Data collection

Our data collection method was semi-structured interviews. Preliminary questions captured demographic data (participant age, occupation, education, marital status, children), and the everyday role of social media in our participants lives (e.g. do you use social media, and if so, what for?). Follow on questions explored potential issues of restricted social media use (e.g. do you feel that your use of social media is restricted in any way?), and in such instances, the nature and source of restrictions (e.g. in what way do you feel restricted?), and impact (e.g. how does this make you feel, what do you do?). Participants were also asked whether or not they used their real identities online. As part of informed consent procedures, all participants understood that they were under no obligation to answer all questions.

Participants were invited to participate via a public post on Instagram. Interviews took place in public urban settings, lasted between 45-60 minutes, and were conducted in Arabic and recorded (subject to participant consents). Interviews were transcribed and translated into English for team analysis (see below).

Data analysis

Qualitative data analysis incorporated both deductive and inductive elements. Thematic analysis followed Braun and Clarke's (2006) approach: data transcription and familiarisation; initial code generation; collating codes into themes; reviewing themes; refining themes; and producing themes. Data was disaggregated into meaningful categories via identification of patterns and regularities through iterative cycles of pattern coding and thematic analysis, involving multiple readings of interview transcripts. Initial start-list codes were based on, but not limited to, Chatman's (1996) concepts of information poverty (e.g. secrecy, deception). Further codes were emergent from data (e.g. social media use, sources of social media restrictions). One author coded with periodic code checking (multiple sample coding) conducted by the second author independent to the first (with reference to interview transcripts), with no notable disagreement in coding to report. Analysis included identification of exemplar quotes (from coded data extracts) for inclusion in this paper to evidence key findings.

Ethical approval

Ethical approval was obtained via Institutional Ethics Committee (author's academic institution), with the study run in strict accordance with institutional guidelines for investigations involving people. Informed written consent was obtained from all participants, who all participated voluntarily. Cognisant to sensitive aspects of this study, all findings and background information that might act as participant identifiers (including specific nation within the Arabian Peninsula) have been redacted and replaced with general entries/explanations.

4 Findings

Participant demographics are provided below, followed by interview findings.

Participants

Our fourteen Muslim women were all resident within the capital city of a Muslim nation within the Arabian Peninsula, and aged between 25-35 (avg. age 30). Twelve of our participants were in employment, one was unemployed, and one was a university student. Twelve participants possessed university graduate qualifications, one was currently completing

1
2
3 university, and one had completed high school. Seven of our participants were married, three
4 were divorced, and four were single. Of the ten married or divorced participants, eight were
5 variously mothers of between 1-5 children.
6

7 *The role of social media*

8 All participants confirmed that they used social media, with the majority describing themselves
9 as very active on an everyday basis. Across all participants the most popular applications
10 were universally identified as Snapchat, Instagram, Twitter, and WhatsApp. Some
11 participants (29%) also used Facebook.
12

13 Participants discussed a variety of reasons for using social media, categorised as:
14 communicating with friends and family; following the latest trends and lives of others including
15 popular celebrities and bloggers; and as an important source of everyday news, health, and
16 travel information. For example, one participant commented:
17

18 I use Facebook, Snapchat, and WhatsApp, mainly to communicate with friends and
19 people whom I know. I use Instagram to communicate with people I don't know. I contact
20 medical doctors to ask anything or to get a piece of advice on something. For Snapchat
21 I follow celebrities, social media bloggers, and fashionistas, to know the latest trends...
22 I am gaining so much information and I love to communicate with people.
23

24 And another:

25 For my Snapchat and Instagram accounts, I follow medical, educational, children's
26 behaviour, cooking, news, and much more. Basically, my main derive from using social
27 media is to know and learn more so I would be a better mom.

28 Social media was also used by some of our participants to communicate with platonic male
29 friends difficult to communicate with in public due to societal constraints. For example, one
30 participant commented:
31

32 The main reason for using these applications is to get in touch with my long-distance
33 friends, especially male friends from college. As you know, our society forbids platonic
34 relationships between men and women, especially for a married woman. As such, it's
35 almost impossible to communicate with male friends in public. You know everybody
36 around here is judgmental and they will treat any contact between men and women with
37 suspicion, even when the meetings are in public.
38

39 In general discussion of social media use several of our participants described social media
40 as extremely important to their lives. For example, one participant described social media as
41 their "main education source" and felt that "without social media we would be living in
42 darkness."; and another described social media "as important as our daily needs" as it
43 provided "...new ways to think, new friends, new opportunities, information and beyond".
44 Another described social media as "my passion I cannot live without". In later discussion (see
45 below), an important medium for personal expression also became evident.
46

47 *Restrictions*

48 When asked if they felt their use of social media was restricted in any way, several of our
49 participants discussed sociocultural boundaries. For example, one commented:
50

51 As a married woman, I am so careful of the people's accounts I follow on Instagram. In
52 the end, we are living in a society dominated by traditions and men, and because I use
53 my real identity for all my social media accounts, I have to respect our society. As such
54 I have to on the safe side of everything I do, especially when posting, or following anyone
55 on social media.
56

57 And another:

58 As a woman here in [country], I feel that there are risks associated with using social
59 media, especially when it's being misused. Social media applications are all about
60

communicating and making online friends. However, woman/girls here are not allowed to have a male friendship because of our Islamic traditions.

Participants discussed various constraints relating to who they followed, what they posted, and who they shared content with. For example, one participant under pressure from her brother, commented:

I switched my account from public to private. I am only allowed to add close friends and family. I also cannot share anything since I promised my brother not to speak about politics, religion, and feminism.

And another:

I don't post any picture of my face showing. This is despite the fact that all of my accounts are private, and I cannot accept any friend requests from strangers at all. I only have close friends and close family members, but what can we do as females in this patriarchal society? We still have to follow its fixed rules despite the fact that we live in a very modern and liberal society.

And another:

I stopped liking pictures on Instagram because of [husband] as sometimes he would ask me why I followed a particular account or why did I like a post. I cannot follow any male's account, even if they are famous public figures. Can you believe this [laughs]?

And another:

Just like any other conservative girl here in our society I don't add any male followers to my accounts. I also don't follow any of them so that I can avoid getting into trouble. It is not because I am afraid of someone I just want to be on the safe side and to avoid doing something wrong that could hurt my son or my father one day.

And another:

I always want to post some pictures of my children and me during our travelling or daily activities, but he [husband] will not allow me to do that. I have to listen to him because our society tells us that a man dominates and not women.

Fear of judgement was also evident in discussions. For example, one participant commented, "I only post public pictures, any quotation from holy Quran since I have many family members on my Instagram account, and I don't want them to judge me", and another that, "I would never add my aunts and uncles to my Instagram account or my Snapchat because of societal judgment".

All participants discussed their social media use as closely monitored by family, and in particular, by husbands and/or male relatives. For example, one participant commented "I feel that I am being watched by my husband, my brothers, or even my cousins", another that "I am watched all the time by my husband", and another that "I am watched by every man in my life". In relation, censorship was also evident. For example, one participant commented:

My husband never allows me to post anything on Snapchat even though my identity on Snapchat is hidden. That goes for my Instagram account as well. He is not that open-minded, to be honest.

The above participant further commented:

I feel that he [husband] is interfering in my life a lot when he tells me what to follow what not to, or what to like and what I cannot. I have to add that on Instagram, and I cannot write or post anything under a public post. This means that I cannot share my thoughts with anyone. I'm too afraid to do that otherwise my husband will be so frustrated and angry. He might even divorce me for doing that.

And as another example, another participant commented:

My husband... dictates the pictures I can post on Instagram or Snapchat. I don't feel comfortable with this part, but what can I do? This is what our society dictates. I am a married Muslim woman, and I must obey what my husband tells me to do.

Unmarried participants discussed similar issues with male relatives. For example, one participant commented:

My brothers do not allow me to download any kind of social media applications... They believe that social media is evil, and it will ruin my mind despite them [brothers] using those apps.

And another:

Recently I stopped using Twitter because my brother was interfering in every tweet which I posted, especially the political and the feminist ones. He told me to stop posting those kinds of messages... for family reasons.... He argued that his male friends would rebuke him and tell him that his sister is a very arrogant and fearless woman... My brother was concerned that I would not get a husband with my outspoken nature. I had to quit tweeting because I was having a horrible time arguing with him.

And another:

My father used to follow me on Twitter when I had my first Twitter account under my real name, and I found it annoying. He would interfere with every single tweet\retweet I shared. The same applied to my cousins because all of them would harass me during any family gathering by reading from my tweets loudly in front of everyone.

Issues of control could also pass from one male to another with marriage. For example, one participant discussed:

Before I got married, my brother would interfere with my daily tweets, and that would also include Instagram activities.... After I got married, my husband interfered, he told me to close all my social media accounts because social media was ruining people's lives.

In contrast to above, one participant discussed new found freedoms with marriage:

My husband is a very open-minded person, and he doesn't care if I use, post anything on social media apps, but my brother does. He used to tell me not to post anything on social media and not to use my real identity... Before I got married my brother watched me all the time.

Several participants discussed the emotional impact of the above surveillance and censorship. For example, one participant, whose use of social media was monitored by her husband, commented that they were, "afraid of posting any personal pictures without my husband's permission". Another, who had been accused by her husband of bringing shame on her family by posting a picture of herself on a work trip abroad, commented "I think all that was so pathetic, and I hated my husband's mentality since then". Another, whose posts are monitored by her husband, commented, "I don't feel comfortable and trusted". Two participants discussed surveillance as contributory factors to divorces. For example, one described their marriage as a "miserable situation" because "I was raised not to be watched, or judged, and certainly not controlled by anyone". They further commented, "I don't blame my ex-husband for having this kind of mentality; I blame society and how he was raised". Similar emotions were expressed by unmarried participants regarding male relatives. For example, one participant censored by her brother commented, "It is frustrating and annoying for a [university degree redacted] graduate and feminist woman, but I do not have a choice. The horrible patriarchy rules our lives in the name of religion"; and another, monitored by her father and cousins, commented, "I hope this stupid male-dominated mentality will fade one day."

Responses to restrictions

The majority of our participants discussed concealing aspects of their social media use from husbands and/or family to counter unwanted surveillance and circumvent sociocultural boundaries. Five of our fourteen participants (36%) revealed possessing accounts under a pseudonym. Several discussed these pseudo accounts as an important outlet for the expression of personal thoughts and feelings. For example, one participant commented:

I prefer spending more time on Twitter as opposed to the others [Instagram, Snapchat] because I don't use my real identity there. Therefore, I can say whatever I want without

any judgment from my family or friends. For the other social media applications, I only put my first name, so no one will know exactly who I am.

And another participant commented:

I have a pseudo account which I have used since I was an undergraduate student, and I am not planning to shut it down just because I got married. I have my little secrets with my old friends from that account, so I am keeping it because I never stopped [redacted creative pursuit]. On that fake account, I am living the life that I feel I should be living. I express my feelings, especially [redacted creative pursuit] through that fake account.

Some also discussed using pseudonym accounts to maintain contact with platonic male friends. For example, one participant commented:

I have graduated from the University of [redacted], which is a mixed-gender university, and I had many male friends back then. I still have a relationship with them but unfortunately, through my [other] fake-name account. I will keep communicating with them that way because my husband will never agree on me having a friendship with male friends.

The majority of our participants with pseudo accounts also discussed maintaining parallel real-name accounts. One discussed using her real-name account to maintain a public persona, commenting:

I am not allowed to share my personal feelings in it, I usually repost some religious stuff because my husband, as well as the entire family, is following me. I need this account only to keep the decent image of me as a married woman although I don't believe that this account is the real me.

The above description contrasts with their description of their pseudo account. They commented, "On that fake account, I am living the life that I feel I should be living".

Several other participants not using pseudo accounts (i.e. using real name accounts), discussed concealing aspects of their social media use from partners and relatives through careful management of account privacy settings in order to control who views what, and to limit risks. For example, one participant commented "I do feel that I am under risk, especially if I leave the notifications on. Therefore, I turn them off so no one can know with who I am in contact with"; and another that, "I don't save my pictures and videos to my Snapchat memory. I only save them to my phone so that I can avoid any unexpected circumstances". Another participant commented:

For my Snapchat account, I don't post anything to my story because I have added my cousins, my male friends, father, and my siblings. Since I don't want to be judged if I decided to post a picture, I just observe my friends accounts and watch others snaps. On the other side I send private messages to whom I want instead of letting everyone see my story. One day if I decide to post my story, I would block all the male followers, and just allow females who must be my close friends and family.

Another participant, completely forbidden to use social media by her father and brothers, discussed downloading and deleting social media apps from her phone on a daily basis:

I go to the University with [redacted]. When [I arrive] at 9:00 AM, I download each one of them [social media applications] and at the end of the day, on the way home I delete them all. I repeat this five day a week.

The above participant further commented that "As an educated woman, I find using social media platforms so helpful and full of life", but that she comes from a "very old-fashioned home" with brothers who believe that "women and girls should be controlled by the men throughout their lives". She further commented that "I hope to finish school as soon as possible, so I can get a job, get married and finally be free from my socially retarded family".

Finally (with regard to responses to restrictions), a small number of our participants (two) described their use of social media as entirely in accordance with social norms and boundaries. One commented:

I don't feel any risks associated with my usage of social media... because I know my boundaries and I know what to post what should not be posted.... In the end, we are living in a society dominated by traditions and men, and because I use my real identity for all my social media accounts, I have to respect our society. As such I have to be on the safe side of everything I do, especially when posting, or following anyone on social media.

And the other commented:

There isn't any kind of risks when you respect your image representing a modest Muslim woman, who I am. When using social media apps, I always observe decency because I live in a Muslim country. We must respect public opinion, follow our community roles and traditions.

5. Discussion

Our Muslim women participants are all active everyday social media users with the most popular applications Snapchat, Instagram, Twitter, and WhatsApp, and to a lesser degree, Facebook. Our participants discussed a variety of reasons for using social media: communicating with family and friends including platonic male friends difficult to communicate with elsewhere; following the lives of others; and as an important source of everyday news, health, and travel information. Our findings are consistent with previous studies of Muslim women's social media use in Arab society (see Background). More notable are our findings regarding the importance our participants placed on social media use. For example, one participant commented that without social media they would be "living in darkness", and another described social media as something that they "cannot live without". With regard to why social media is so important to our participants lives, beyond broader access to information and social networks, social media provides our participants with an important outlet for the expression of personal thoughts and feelings not felt to be expressible elsewhere due to sociocultural constraints. In motivational terms (i.e. human motives/needs), there is evidence of an important contribution to the meeting of both physical and psychological deficiency needs, and intellectual and creative growth needs (Maslow, 1943).

Our findings regarding the important role of social media in information impoverished circumstances are similar to those found in studies of other population groups. For example, Hamer's (2003) work with young gay men coming-out, Bronstein's (2014) work with people affected by obsessive compulsive disorder, and Hasler et al's (2014) work examining the role of online groups for the expression of critical and hidden information needs. A common theme across study groups (and shared with our own) are reports of people unable or hesitant to express their needs and/or obtain useful information elsewhere, with much attributed to issues of marginalization and stigma. In such impoverished circumstances, Hasler et al (2014) note that the Internet can, "transcend geographical and social constraints" (2014, p.25) and "provide an opportunity for people who feel they have no other options available to express these information and support needs" (2014, p.35).

The important role of social media for personal expression amongst Muslim women in Arab society is touched on in a small number of previous studies (Kaposi, 2014; Young et al., 2014; Golzard and Miguel, 2016), but with limited evidence and depth of insight. Our findings provide new insights into this fundamental human need, and in relation, evidence of control and constraint within the home. All our participants discussed their social media use as monitored by family, and in particular, by husbands and/or male relatives. Our findings also provide new insights into the nature and extent of surveillance experienced by Muslim women in Arab society, and issues of affect. These insights are discussed below.

With regard to the extent and nature of surveillance experienced, previous studies have either discussed surveillance in general terms without evidence or indication of incidence (Kaposi, 2014;), or provided limited evidence and unclear incidence beyond participants quoted, and representing a minority of women (Rajakumar, 2012; Kaposi, 2014; Abokhodair and Vieweg,

2016; Vieweg and Hodges, 2016). To report surveillance by husbands and/or male relatives as something experienced by all of our participants is thus notable. In relation, we evidence partners and/or male relatives as seeking to actively control (to various degrees of success) what several of our participants can access, discuss, and share online, and with whom; and whilst previous studies have largely discussed such issues in relation to image and gender segregation boundaries, we provide further insight into the impact of surveillance and censorship across several further aspects of everyday life and citizenship. For example, one participant described her brother as “interfering in every tweet which I posted, especially the political and feminist ones”, and eventually refraining from such posts after “horrible” arguments. Our findings provide support for Tripp’s (2020) argument that limited distinction between the rights of Muslim women and children in family law has “the tendency to infantilize them”, and relegate “women to the category of vulnerable people in need of protection” (2020, p.216); for the majority of our participants would appear to be subjected to a form of intimate surveillance by husbands and male relatives more commonly found in parent surveillance of children’s use of social media (e.g. Leaver, 2015).

With regards to insights into issues of affect, our participants described surveillance by husbands and/or male relatives as variously “awful”, “shameful”, and “frustrating and annoying”. Several discussed fear of social transgression and judgement, and several discussed feeling untrusted by partners and relatives. Several also disclosed that surveillance had negatively impacted upon their relationships with husbands and/or male relatives. For example, one described surveillance by her husband as “pathetic” and that she “hated my husband’s mentality since then”; and two participants discussed surveillance as contributing to divorces. Another described their family as “socially retarded”. Significant familial tensions are thus evident.

We also provide new insights into acts of personal agency to overcome social constraints and surveillance. Five of our fourteen participants (36%) disclosed possessing pseudonym accounts, and is notably higher than the two of one hundred women (2%) previously reported by Rajakumar (2012), and two of ten women (20%) reported by Golzard and Miguel (2016). The important role of pseudonym accounts is also evidenced. For example, one participant commented, “On that fake account, I am living the life that I feel I should be living”. Several other participants using true identity accounts discussed carefully managing their account privacy settings to control who views what. There is evidence across accounts (pseudo and real name) of self-protective acts of secrecy and deception, two of the core concepts that define the basis of an impoverished information world (Chatman, 1996).

Such findings have important implications for our understanding of themes of empowerment and personal freedom reported in several previous studies of the use of social media by Muslim women in Arab society. For example, Alemenayes (2014) has previously reported that social media allows Muslim women in Arab society to “interact in real time with anyone they wish to contact” (2014, p.114), and Kaposi (2014) argues that “on the Internet, segregation is impossible to enforce” (2014, p.7), whilst Guta and Karolak (2015) describe the Internet as “an open space with no gatekeepers” (2015, p116), and one where “women have an equal access and they are able to contribute to the public sphere in ways that are not possible outside of the virtual world” (2015, p.117). Whilst the majority of our participants exhibited agency in response to sociocultural constraints; much personal freedom is obtained surreptitiously, and to various degrees, remains constrained. A stratification of information access and use, characteristic of an impoverished information state, is evident; however, if we return to Chatman’s (1996) six propositional statements that describe an impoverished information state, and apply to our findings, a complex world emerges that resists simple binary description of our participants as either information rich or information poor.

With regard to proposition one (devoid of sources of help), none of our participants indicated any need for help, or a lack of sources of help. In contrast, the majority of accounts evidence resilience, independence, and competence to circumvent sociocultural boundaries.

With regard to proposition two (behaviours influenced by outsiders who withhold privileged access to information), this is evident at multiple levels (macro and micro), and most evident in participant accounts of surveillance and control by husbands and/or male relatives.

With regard to proposition three (adoption of self-protective behaviours in response to social norms), this is evident in participant secrecy and deception in pursuit of needs societally disapproved of, including those relating to personal expression, and platonic male friendships.

With regard to proposition four (mistrustful of the ability of others to provide useful information), our participants mistrusted husbands and male relatives, but valued social media as a source of information and social connection, and shared needs online not shared elsewhere.

With regard to proposition five (belief that negative consequences outweigh benefits), whilst all our participants were acutely aware of the risk of social transgression, the majority also appeared risk tolerant. Only a minority indicated conformance to societal constraints.

With regard to proposition six (selectively receiving new information in response to everyday needs), the majority of our participants actively pursued both deficiency and growth needs, and actively sought new networks. Again, only a minority appeared to practice restraint.

In summary, whilst there is evidence of systematic marginalisation and a stratification of information access and use, there is also evidence of resilience and agency to overcome barriers, that contrasts with Chatman's (1996, p197) description of an impoverished information world as "one in which a person is unwilling or unable to solve a critical worry or concern". The majority of our participants appear open and expansive in outlook and information behaviours (as opposed to insular), and risk tolerant in pursuit of needs (as opposed to risk averse), with many needs extending beyond the immediate. Self-protective acts of secrecy and deception are employed to not only cope with small world life, but also to circumvent sociocultural boundaries and move between social and information worlds; but not without risk of social transgression, and appearing dependent upon a broad set of digital literacies extending beyond functional technical skills (discussed further below). In this respect, participants could also be considered privileged in information poverty terms (i.e. possessing the skills and means to circumvent boundaries, access information and social networks, and manage risks), for without such competencies their information and social worlds would be much smaller.

Our findings contribute to our conceptual understanding of information poverty, drawing further attention to structural inequalities as a major contributory factor. Similar findings are reported by Gibson and Martin (2019) in their work with U.S. mothers of individuals with disabilities, who are reported to engage in various defensive and subversive information behaviours in response to "persistent structural problems" and imbalances of power (2019, p.485). Gibson and Martin, reflecting on their findings, and critical of deficit-focused models of information poverty that demonstrate a "narrow focus on individual behaviors, rather than contextual preconditions for those behaviors" (2019, p.479); propose that information poverty be reconceptualized "as an array of self-protective responses to *information marginalization* [that] refocuses blame away from individuals experiencing marginalization, and towards the contextual conditions that create information poverty" (2019, p.485). Gibson and Martin call for further research attention encompassing interrogation of "the values and structures that privilege certain ways of knowing, information seeking, and sharing". (2019, p.486). Our findings contribute to this important call.

Continuing our discussion of our contribution to conceptual understanding of information poverty, our findings evidence that self-protective information behaviours, often discussed in reductive small world terms, can also be employed to expand information and social worlds, with acts of secrecy and deception (and attitudes to associated risks) forming core components of our participants coping strategies. We also evidence that binary classifications of people as information poor or information rich can be too simplistic when information needs are viewed holistically.

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5 **6. Limitations and Further Research**

6 Our findings should not be considered representative of Muslim women as a whole as Muslim
7 women are not a homogenous group, and Arabian Peninsula nations variously more
8 conservative or liberal than others. Our participants were majority University educated, in
9 employment, and urban residents of a capital city within a high wealth Arab nation with a high
10 rate of population Internet use. We thus provide insight into the social media related
11 information behaviours of a particular group of Muslim women within a particular
12 socioeconomic environment, and encourage further studies with further population groups
13 including groups who may not be as digitally literate as the participants in this study (age,
14 education and socioeconomic status being key influencing factors to consider). Beyond social
15 media use and issues of surveillance, further investigation of unmet information needs of
16 Muslim women in Arab society also appears warranted.
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20 **7. Practical Implications**

21 Our findings evidence the role of digital literacy for circumventing sociocultural boundaries and
22 moving between social and information worlds, and managing associated risks; and contribute
23 to our broader conceptual understanding of digital literacy. Beyond functional technical skills
24 often focused on in digital literacy education programmes (Pangrazio et al., 2020), our findings
25 evidence important social, moral, and intellectual aspects of digital literacy, and raise important
26 questions regarding how such competencies and traits are fostered and developed in people.
27 We reserve further discussion of digital literacy aspects for a separate paper.
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31 **8. Conclusion**

32 Social media provides our Muslim women with an important source of information and social
33 connection, and important medium for the expression of personal thoughts and feelings not
34 felt to be expressible elsewhere due to sociocultural constraints. However, use is closely
35 monitored by husbands and/or male relatives who seek to control what our participants can
36 access and discuss online, and with whom; and for our participants, is a source of deep
37 frustration that impacts upon personal freedoms and familial relationships. In response, the
38 majority of our participants possessed pseudonym accounts and/or carefully managed their
39 account privacy settings to limit surveillance and pursue needs, but not without risk of social
40 transgression.
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42 Our findings provide new insights into the nature and extent of restrictions experienced by
43 Muslim women in Arab society, and provides evidence of systematic marginalisation and a
44 stratification of information access and use; however, our findings also evidence resilience
45 and agency to overcome. Self-protective acts of secrecy and deception are employed by our
46 participants to not only cope with small world life, but to also circumvent sociocultural
47 boundaries and move between social and information worlds. Findings contribute to our
48 conceptual and practical understanding of information poverty, evidencing structural
49 inequalities as a major contributory factor, and that self-protective information behaviours,
50 often discussed in reductive small world terms, can also be employed to expand worlds.
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