Themes of Facebook Status Updates and Levels of Online Disclosure: The Case of University Students

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Abstract

This paper presents an analysis of the status updates generated by Saudi university students on their profiles along with their levels of disclosure. Indeed, this study conducted thematic and quantitative content analyses of profiles of a sample of 50 students to explore the status updates they generated and the types of information they disclosed. Analysis of Saudi university students' Facebook usage revealed 16 distinctive themes of status updates. These themes most often related to communication with friends and discussion of social, religious, and political issues. An analysis of the information disclosed on their profiles also revealed that Saudi students disclosed much of their personal information.

Keywords: online disclosure, Facebook, university students, social media

1. Introduction

Thematic and quantitative content analysis methods were utilised in the current research to gather rich data and form a more complete picture of the reasons why Saudi university students use Facebook. According to Starks & Trinidad (2007), such an approach provides a 'thick description' of the phenomena. In particular, these two methods are utilised to address research objectives: to expand the understanding of the user-generated content within social media platforms by identifying the themes of Saudi students' Facebook status updates and to add to the field of self-disclosure by testing the Saudi students' levels of personal information disclosure.

Fifty volunteers participated. The gender breakdown was roughly equivalent (46% males vs. 54% females). The sample may be characterised as containing more science majors than humanities majors (72%), being more likely to be living with their parents (92%), single (100%) and living in a house with their parents (50%). Both parents were more likely to have a bachelor's degree (48% for the sample for their fathers' education; 44% for the sample for their mothers' education).

This paper focuses on the themes emerging from the status updates, participants' levels of disclosure, and the relationship between the themes of the status updates and the levels of disclosure. The final section presents the conclusion of the research.

2. Status Updates on Facebook Profiles

According to Bhagwat & Goutam (2013), individuals use status updates to share "what is on their minds", to tell others what they are doing, and to gather feedback from friends. Thus, through Facebook status updates, individuals reveal snapshots of their lives (activities and thoughts) via text accompanied by photos, videos, or URL links (Joinson, 2008). The continued availability of these statuses offers a historical written record complemented by images and video, creating a detailed timeline of events (Taprial & Kanwar, 2012).

With participants' permission, the researcher collected status updates from past status updates to which she did not have contemporaneous access. This meant that her presence did not influence the content participants generated and

shared. The thematic content analysis was followed. This type of analysis is recommended because it allows the researcher to be fully engaged and permits themes to emerge from the reading of texts, resulting in a more representative interpretation of results (Anderson, 2007).

Status updates from 50 participants were analysed for an eleven-month period between August, 2011 and June, 2012. A total of 7,928 status updates were generated by the participants during that time. Five categories were used to classify these status updates based on the kind of media they contained: text only, text and a photo, text and a video, text and a URL link, or a photo only. Table (1) represents the distribution of the status updates according to these categories.

Table 1. Distribution of the status updates according to their types

Types of Status Updates	Frequency	Percentage
Text Only	7,672	96.7%
Text and a Photo	39	
Text and a Video	27	3%
Text and a URL Link	167	
Photo Only	23	0.3%
Total	7,928	100%

From Table 1, it can be seen that the majority of the status updates were at least partially textual, with photo-only posts accounting for 0.3% of the posts. This last category included landscape photos (n = 9), photos of babies (n = 8), and followers' photos (n = 6). The photo-only category is excluded from analysis due to its low percentage and the difficulty of determining what the users intended to convey, leaving a total of 7,905 to be analysed. The following section analyses the themes of the status updates and gender differences in themes of statuses.

3. Themes of Facebook Status Updates

The phenomenal growth of social media has led to a significant increase in the amount of user-generated content across its platforms. Such content contains information about individuals' attitudes, perceptions, and opinions about various issues and topics (Dang, et al. 2014). Reviewing the literature reveals that few scholars have investigated the content generated by Facebook users and that their studies have either been limited in scope or have used a deductive top-down approach with predetermined themes. This research, on the contrary, investigated the content of a set of Facebook status updates during a large time period utilising an inductive bottom-up qualitative approach. Sixteen themes emerged from the thematic content analysis of the 7,905 Facebook status updates. Figure 1 summarises the themes. A description of these 16 themes follows.
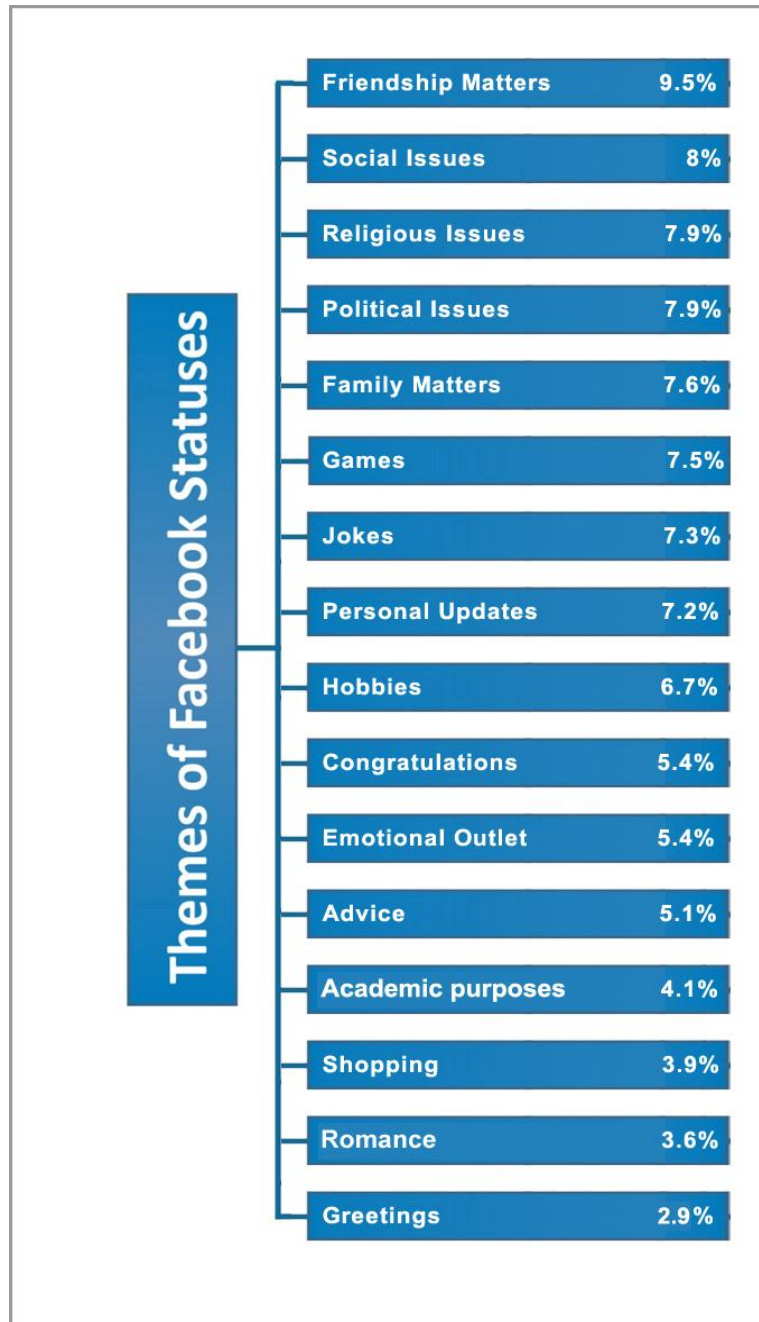
Figure 1. Themes of Saudi university students' facebook status updates

3.1 Friendship Matters (n = 751)

Status updates regarding friendship ranked first among the themes and accounted for 9.5% of the total number of status updates. Because of the gender segregation role (Le Renard, 2008), friendship between individuals of the same sex is considered the norm in Saudi life. It seems that this offline prevalence of same-sex friendships is reflected in the virtual world, as a majority of Facebook status updates were directed towards users' friends of the same sex. The status updates posted within this theme fall into four main categories: celebrating with friends, apologising for an interruption in contact, providing or requesting contact information, and keeping in touch.

As the current research sample comprises university students, the celebrations included end-of-year parties,

engagements, and birthdays. The analysis of the sample status updates suggests that celebrating these events is popular. The locations where these events were celebrated demonstrate gender differences among Saudis: most of the males' status updates indicated that their events took place outside the home, often in restaurants or coffee shops, while females' status updates revealed that they largely celebrated these events in their houses.

Saudi university students seem to consider Facebook an important venue to maintain their friendships, given that some of the status updates offered apologies for neglecting friends online (e.g., "My friends, forgive me for ignoring your private messages. I am now back and we can continue our activities"). Lampe, Ellison, & Steinfield (2006) indicate that Facebook use supports students' formation of 'bridging capital', social ties that support their integration into life. In addition, Boyd (2007) argues that these friendship-driven online practices are ways in which young people have taken advantage of opportunities to 'hang out' with friends on new social media platforms. Thus, young people are able to engage in more activities of peer socialisation and identity formation than they would do offline.

Some of the status updates also showed that the students used Facebook to share contact information with their friends. This may indicate that Saudi university students consider Facebook a standard method of communication where they can guarantee that their messages will reach a considerable number of their friends. For instance, some announced their new email addresses (e.g., "Hey friends! Please write down my email so no one will say "I sent you an email and you did not reply""), while others posted their BlackBerry Messenger PIN and asked their friends to add them (e.g., "This is my Blackberry PIN guys: XXXXX. Add me"). This was also demonstrated when they asked after friends they had not seen in a while (e.g., "X, how are you? I have not seen you in a long time"). Others asked how they could reach their friends directly (e.g., "…you have not even used Messenger for a while. Are you alive or dead?").

3.2 Social Issues (n = 634)

The status updates within this theme comprise 8% of the total number of posts. Status updates on social issues covered a wide range of topics. One of the prominent social norms criticised by both Saudi males and females was the existing cultural difference in the expected, gendered offline social behaviour and how Saudi females are criticised and judged for behaviour in which males can freely engage. Many suggested that this gave males the dominant role in society. For instance, a female posted, "One of the main causes of misbehaviour among Saudi men is the idea that men can do no wrong; as a result, they do whatever they want". According to Faber (2007) utilising social media platforms to criticise common norms may allow users to take the first step towards changing these norms.

Saudi university students' discussions surrounding social issues usually began as interactions about daily topics, regarding a Facebook page, a hash tag, a shared YouTube video, or even an article in a traditional newspaper. Their communication regarding such material ranged from discussing it once to communicating about it for an entire month. These status updates covered the issues either by reflecting individual attitudes (supporting or opposing), or by documenting the news in a neutral fashion and waiting for others' responses. Saudi university students also acted as citizen journalists, offering their own coverage or commentary on the news of governmental service shortcomings, or publishing eyewitness news accounts. According to Goode (2009), citizen journalists within social media platforms are defined as ordinary users who actively play a role in gathering, evaluating, and spreading news and information. He states that the main aim of this contribution is to offer the autonomous, trustworthy, accurate, extensive, and relevant information that a democracy needs. Citizen journalism can bring attention to a story in the semi-public sphere. For instance, one participant took a photo of a blind student who fell into a hole due to the carelessness of the university regarding special needs students and documented his story. This accident was then covered by the traditional press to highlight the issue. Harlow (2012) confirms that, for users who post citizen journalism comments, Facebook provides a means to publish their own information and publicise content that mainstream media might deem 'un-newsworthy'. Some of the current sample's status updates about social issues progressed from online discussions to encouraging others to join virtual campaigns.

Gerhards & Rucht (1992) identified three collective action frames for discussing social issues within online communities: diagnostic framing, which defines a problem or assigns blame; prognostic framing, which details possible solutions; and motivational framing, which incites individuals to act or mobilise. Vegh (2003) also classified online posts aimed at discussing social issues, and provided a useful framework with which to analyse such posts by identifying three distinct dimensions: awareness/advocacy (the generation of sympathetic information),

organisation/mobilisation (planning and deliberation as a result of sympathetic information), and action/reaction (the result of such planning and deliberation). Applying these classifications to social issues' status updates reveals that they could be classified under Gerhards & Rucht's (1992) diagnostic frame and Vegh's (2003) awareness/advocacy dimension. There is no evidence from this sample that content fell into the higher levels described by these authors.

3.3 Religious Issues (n = 626)

The status updates within this theme comprise 7.9% of the total number of posts. According to Mishra & Semaan (2010), little research has been carried out on online religious writing on the Internet, and even less on the Islamic religion. Campbell & Lövheim (2011) suggest that religious writings online reflect users' personal missions: they provide a prophetic voice, define their faith, introduce others to the relevance of users' faith, and engage friends and strangers in a religious discussion. A study conducted by the Pew Internet and American Life Project (2012) revealed that up to 69% of Middle Eastern citizens indicate that religion is very important to them. That religious issue ranked third in the Saudi university students' status updates reflects the significance of religion in their lives. The status updates within this theme defend and confirm their beliefs. They covered issues such as defence of the Prophet Mohamed, Quran verses and Prophet Mohamed quotes, references to life after death, prayers, and religious rituals.

Regarding the defence of the Prophet Mohamed, the publication of cartoons depicting the Prophet Mohamed (peace be upon him) in the Danish newspaper Jyllands-Posten on 5 February, 2006, resulted in Muslims and non-Muslims holding yearly offline protests and online campaigns to spread the Prophet's inspiring life story and sharing positive portrayals of his life (Ammitzbøll & Vidino, 2007). Similar examples from the current research include status updates introducing the mission of the Prophet Mohamed, writing about his virtues and high morals, sharing pages about his life, and launching campaigns in several languages to further his missions: for example, "Muhammad, the Messenger of Allah, is a symbol of tolerance and advocacy for the preservation of rights. When Christians and Jews were minorities in the Arabian peninsula, he said that if anyone oppresses any of them or asks them to overwork, the Prophet will be his opponent in the doomsday" and "Our prophet was not ever a racist or a hate-monger. On the contrary, he urged Muslims to have a strong faith in Jesus and named his mother Mary, peace be upon them, queen of the ladies".

Saudi university students also posted quotations from the two main Islamic sources - the Quran and the Prophet Mohamed - in their profiles. The topics covered in these quotes included virtues, obedience to parents, and calls for forgiveness and mercy, such as this quote from the Quran: "O my Servants who have transgressed against their souls! Despair not of the Mercy of Allah: for Allah forgives all sins: for He is Oft-Forgiving, Most Merciful". Selections from Prophet Mohamed's sayings were also popular: "A person said: "Allah's Messenger, who amongst the people is most deserving of my good treatment?" He said: "Your mother, again your mother, again your mother, then your father, then your nearest relatives according to the order [of nearness]"".

Saudi university students also showed their concern about life after death and the need to prepare for Judgment Day by adhering to religious values. They posted statuses about the importance of accounting for mistakes in the sight of others (e.g., "I always remind myself that the judgement day will not be easy"), or prayers asking God to accept their work and not punish them for their wrongdoing (e.g., "Please God, forgive us for all of our mistakes").

It should be noted that the analysis of the status updates covered a considerable time period (eleven months), during which religious occasions such as Ramadan, Hajj (pilgrimage), Eid al-Fitr, and al-Adha occurred, and the students' statuses reflected these occasions. They posted statues indicating the religious rituals that could be practiced during these occasions (e.g., "Do not forget to perform Umrah [an Islamic ritual] in Ramadan. It is equivalent to making a pilgrimage").

3.4 Political Issues (n = 625)

Since 2011, when this research began, the world has witnessed revolutionary movements in the Middle East and North Africa to bring down long-standing regimes, many in close proximity to Saudi Arabia. The role of social media in these uprisings has attracted the attention of scholars, and the terms 'Facebook revolution', 'Twitter revolution', and 'YouTube revolution' have become ubiquitous (Joseph, 2012). The analysis of the status updates occurred in the middle of this heated period. This was clearly reflected in students' posts, with 7.9% of the status updates concerning political issues and discussing Arab revolutions.

Saudi university students posted about the Arab Spring and Arab revolutions in neighbouring countries. Their

writings evaluated the Libyan revolutionaries' chances of success (e.g., "since Qatar and United Arab Emirates started to support the protestors in Libya, I expect their chance of success is higher") and analysed the position of the Al-Asad regime and the poorly-equipped Syrian revolutionaries, as well as the destruction that Syria experienced. The sample also discussed the Yemen revolution and the aims of Yemenis in building a reformed society. Some status updates highlighted the new experience of Egyptians going through the presidential election and the Islamic party's chances of winning the election. They also discussed the right of the Bahrain government to stand against the Bahraini revolution and the interference of the Saudi military to stop the protests (e.g., "the so-called revolution in Bahram is mainly directed by the Iranian agenda and the role of the Saudi military to stop it is a must"). Such an attitude is in line with the Saudi state position towards the Bahraini revolution (Nuruzzaman, 2013). According to Erdbrink & Warrick (2011), this revolution was started by Islamic Shiites. Thus, because the majority of Saudis are Islamic Sunni, the revolution did not receive support from the current sample. It might even have been perceived as a threat to their religious beliefs if it had succeeded, due to its proximity to the eastern province of the Saudi kingdom (Mabon, 2012).

3.5 Family Matters (n = 599)

The family is considered the most important social institution in Saudi society. It is the main source of identity and status for individuals (Long, 2005). As part of a collectivist society that highly values both nuclear and extended families, it is expected that Saudi university students would devote part of their status updates to sharing some of their family issues. The current sample allocated 7.6% of their status updates to family matters, including news and updates about family members and family announcements – happy or sad news and occasions that required support, such as births: (e.g., "My sister gave birth to a baby girl last night! Her name is X"), operations: (e.g., "My mother had surgery today and she is fine now") and deaths: (e.g., "My cousin X submitted to the mercy of God today").

3.6 Games (n = 594)

According to Kirman, Lawson, & Linehan (2009), games on Facebook have become a popular phenomenon among users. The popularity of Facebook games was reflected in Saudi university students' status updates, as 7.5% of their status updates were about games. Status updates under this theme are broken down into three categories: multiplayer game requests, updates on stages reached, and invitations to play the game, whether on Facebook (e.g., "Please, add me on X game") or external to Facebook (e.g., "This is my ID on PlayStation"). Others requested help in games or with game requirements (e.g., "I need help in X game. I need to feed two cows to complete this level") or mentioned their current progress (e.g., "I've distributed 1,000 gold coins in X game on the occasion of reaching a higher level"). Saudi university students also posted invitations to join a new game (e.g., "Girls, hurry! Join X. It's a very interesting game").

3.7 Jokes (n = 580)

According to Weaver (2013), joking is a culturally and historically specific activity. It provokes laughter in certain contexts and reveals a sense of humour in communication with others. It may also shed light on distinct aspects of a society in a certain time period (Wanzer, Booth-Butterfield, & Booth-Butterfield, 1995). The analysis of the current sample's status updates revealed that 7.3% of the total number of posts was jokes. The jokes under this theme can be divided into two main themes: local culture jokes and general jokes.

Local cultural jokes included jokes about Saudi females' behaviour (e.g., "Say 'MMMMMMMMMM.' Say 'OOOOOOOO.' Say 'AAAAAAAAAA'. A Saudi girl is putting lipstick on another girl"). Some made jokes about the differences between Saudis and people of other nationalities (e.g., "A 30-year-old Korean has a soft voice, while a 16-year-old Saudi Arabian sounds like a vacuum cleaner"). Other types of status updates included general jokes, such as, "A man asked why his son was kicked out of school. They brought him an egg and told him that his son said it was a donkey egg. The man said, "I swear to God he did not learn to cheat from me"". Another student wrote, "If you spill water on the floor or on yourself, leave it. It will dry itself. Do not charge your cell phone battery unless it is empty. If the answer to your question is not in the first suggested website in Google search, then it does not exist. Why make your bed if you will sleep on it again? If you are late, and you will not be able to arrive on time, then do not go. If you drop an ice cube on the floor, then throw it under the fridge".

3.8 Personal Updates (n = 566)

According to Barash et al. (2010), providing small snapshots of daily activities via status updates has become a

popular phenomenon among social media users. This argument has been confirmed by previous studies that revealed that the most frequent status updates on Facebook are about personal issues and events (Denti, et al. 2012; Winter, et al. 2014). The current Saudi university students allocated 7.2% of their total number of status updates for daily personal updates. The status updates under this theme are divided into two types: sharing the users' own activities in specific places, and what they were currently doing. The status updates referred to specific places such as restaurants/cafés (e.g., "I'm in the coffee shop enjoying jasmine tea"); college (e.g., "I'm on campus now"); gardens (e.g., "I'm at King Fahd Zoo garden") or somewhere inside or outside the country (e.g., "I will pass by X City to have a seafood dinner" or "We stopped at X city to drink Moroccan tea"). Other status updates stated what they were doing at the time of the post without specifying the place (e.g., 'Reading', 'Driving', or 'Lunch time').

3.9 Hobbies (n = 528)

For Saudis, many hobbies are considered incompatible with cultural and religious norms. The limited available set of offline hobbies was reflected by the status updates (6.7%) addressing this theme. Both male and female students indicated that they liked to read, listen to music, cook, and engage in volunteer work. Other status updates showed gendered differences. For instance, most of the status updates about sports were posted by males, such as those about football, swimming, and riding horses. On the other hand, females posted more about shopping, fashion, cooking, and dancing.

3.10 Congratulations (n = 429)

A number (5.4%) of Saudi university students' status updates included congratulations, focusing on two main areas: sporting victories (e.g., "Congratulations to the fans of my favourite football team X for winning!") and national occasions. There was evidence that the Saudi students in the present sample shared congratulations about national occasions (e.g., "To all Saudis: Happy National Day!"). It should be noted that the shift in celebrating the national day among Saudis was not limited to exchanging Facebook congratulations. According to Muravchik (2013), following Saudi King Abdullah Al-Saud's royal declaration making Saudi National Day a national holiday in 2006, Saudis started to treat that day as an important occasion to celebrate.

3.11 Emotional Outlets (n = 424)

According to Myers (2004: 500), emotions are defined as processes encompassing "physiological arousal, expressive behaviours, and conscious experience". Expressing emotions and empathy towards others has become common among Facebook users and users seem to post both positive and negative feelings, in their status updates (Ellison, Steinfield, & Lampe, 2007). Emotional contagion through Facebook status updates, in which users can transfer both positive and negative emotional states to others through their words, has significantly attracted scholars' attentions after the publication of Kramer, Guillory, & Hancock's (2014) study.

Kramer, Guillory, & Hancock (2014) published the results of a large-scale research project they conducted on 689,003 Facebook users by modifying the status updates the users viewed on their Facebook accounts to assess the effect on their emotions over the course of one week. The effect of emotional contagion on Facebook was studied by utilising an automated system that altered the emotional content in news feeds (i.e., the latest updates generated by users' Facebook friends). The findings revealed that when positive status updates were decreased, the percentage of positive words users employed in subsequent status updates decreased. Further, when negative status updates were decreased in users' news feeds, the percentage of negative words in their subsequent status updates also decreased. This experiment is the first to suggest that emotions expressed through social media platforms affect other users' moods. For a long time, research on emotional contagion assumed the need for in-person and nonverbal cues.

This study was heavily criticised by media and communication scholars who questioned its ethics. While some studies have used Facebook data to examine emotional contagion, this is the first known study that manipulated algorithms for the purposes of research (LaFrance, 2014). The results of the Kramer, Guillory, & Hancock (2014) study are helpful for this research because they indicate that the emotions expressed by users' friends affected their moods and empirically support the claim that individuals' emotions can spread through their networks via contagion. The analysis of the status updates in the current research revealed that 5.4% of Saudi university students' status updates expressed a wide range of emotions. Out of the 424 statutes updates that express emotions, 307 or about 72.4% of these were about positive emotions. Saudi university students often posted statuses that expressed their emotions in general without disclosing the reason behind them, such as happiness, sadness, or boredom (e.g., "I feel

bored").

3.12 Advice (n = 404)

As indicated earlier, Saudi Arabia is considered a collectivist culture, and highly emphasises social interdependence, especially mutual reliance and group responsibility. As a result, the behaviour of an individual in this collectivist culture is likely to affect and be affected by others more than the behaviour of an individual in an individualistic culture (Hofstede, 1980). It is, thus, logical to infer that attempts to influence others, especially attempts to induce others to conform to social norms and expectations (including attempts packaged as advice), are common in collectivist cultures (Al-Gahtani, Hubona, & Wang, 2007). In Saudi culture, there is no such phrase as "mind your own business". Instead, Saudis feel an obligation to monitor the behaviour of others and correct it when necessary, and this is considered as a socially acceptable form of surveillance. This tendency was reflected in 5.1% of the updates, which can be classified as advice related. The advice theme in the current research is divided into three main categories: moral advice, social skills advice, and conventional wisdom.

Students posted moral advice to call on others to do good deeds and be honest (e.g., "When you lie, do not swear. Do not be a liar twice"); to practise forgiveness (e.g., "The best behaviour is to forgive people when you can punish them. Be a forgiving person"); or to be kind (e.g., "Be kind to others when you are in a high position because you will eventually meet them when you come back"). Social skills advice was aimed at strengthening relationships (e.g., "Life is so simple that a smile can make anyone very happy. So keep smiling and make people around you happy"). Some users warned others about negativity (e.g., "You can satisfy all people except the envious; they will be satisfied only with the demise of your grace, so treat them carefully"). Some highlighted the importance of communication (e.g., "Many problems will disappear if people learn to talk with each other instead of talking about each other. Hold your tongue about other people and dialogue with them") and admitting personal mistakes (e.g., "An apology is like fresh food: if not provided on time; it loses its flavour. So be aware of the expiration date"). They also shared known wisdom that contained advice regarding success (e.g., "If you see someone in a high position, do not ask 'Why?' Instead, try to follow his steps to success"), optimism (e.g., "The one who looks behind does not win, so leave the past behind and look ahead"), happiness (e.g., "If you want to reach happiness, follow the tips provided by others"), and enjoying life (e.g., "Life is like a rollercoaster; it has its ups and downs. But it is your choice to scream or enjoy the ride").

3.13 Academic Purposes (n = 322)

Previous studies regarding the impact of Facebook on students' academic performance have reported conflicting results. While some have argued that it is a time-consuming activity that negatively affects students' academic performance (e.g. Kirschner & Karpinski, 2010; Junco & Cotton, 2011; Junco, 2012), a few studies have revealed no significant relationship between Facebook use and academic performance (e.g. Pasek & Hargittai, 2009). Evidence from the current analysis suggests that Facebook is used by students to help in their studies. The current sample, however, allocated only 4.1% of status updates for academic issues, and the academic purposes theme was ranked as one of the five least common statuses posted. This finding is consistent with the results of a study conducted by Grosseck, Bran, & Tiru (2011), which revealed that a majority of students tended to post less for academic purposes on Facebook, even if they discussed or shared information about their academic life.

The academic theme from the current Saudi university students' status updates is classified into four categories: academic inquiries, academic criticism, academic experience, and study groups. Saudi university students posted a number of inquiries about academic majors (e.g., "I want to ask about the requirement for specialising in medicine; does anyone know?") and course books, assignments, and topics to be included in exams (e.g., "Do you know what will be included in the CPIT100 exam?"). The students also criticised professors' treatment of students and the difficulty or high standards of the admission requirements of universities (e.g., "Our professors taught me that attendance is more important than understanding"). They also shared academic expertise (e.g., "I learned this English phrase "Use it or lose it""). Some even recounted joining groups for specific courses or modules (e.g., "Join us at X academic group to discuss mid-term exams").

3.14 Shopping (n = 306)

Only 3.9% of the Saudi university students' status updates fell into the shopping theme. This theme consists of two categories: selling and announcing one's purchases. Saudi university students posted about their attempts to sell their

belongings (e.g., "I want to sell my laptop. It works well and it has excellent features. Price is negotiable" and "I have X books in good condition. Contact me if you want to buy them"). They also wrote reviews about certain products such as books, electronics, or accessories. In addition, there were status updates that encouraged others to buy a product by comparing it with another one, such as certain types of smart phones and tablet devices, or announcements of discounts on several products (e.g., "X company now has a great offer on Internet service").

3.15 Romance (n = 284)

There is evidence that students use Facebook to romance; 3.6% of their status updates fell under this theme. Although this is low in comparison with other themes, Saudi university students employed a number of strategies in their status updates regarding this theme before announcing that they were engaged or married. For instance, males tagged their lovers in a picture, an audio file of a song sung by them, or a YouTube link to a love song; after a couple of months, they announced that they were engaged. This finding is consistent with the results of a study conducted by Diuk (2014), which revealed that relationships begin with a courtship period on Facebook: messages are exchanged, profiles are visited, and posts are shared on each other's timelines.

3.16 Greetings (n = 233)

The least frequent theme of the status updates posted by Saudi university students was greeting others. Only 2.9% of their status updates fell under this theme, and thus the frequency of such status updates was not a trend among the sample population. Saudi university students post status updates conveying morning and evening greetings (e.g., "Good morning everyone!"), or bedtime greetings (e.g., "Good night, sweet dreams!").

To sum up, through thematic content analysis of 7,905 status updates from 50 Saudi university students' Facebook profiles over the course of eleven months, 16 themes emerged. It is worth noting that the status update traffic increased during certain events, such as religious occasions, including Ramadan, Eid al-Fitr, and Eid al-Adha; during exam time; during periods when trending current affairs emerged in social media, such as women's driving campaigns (pro and anti); and during Arabic political events, such as the death of the former president of Libya, Al-Gaddafi. While Saudi university students tend to post on average one status update every two days, they showed an average increase of about two statuses during these occasions.

Another important outcome of these results is that interesting themes emerged from the status updates: religious issues, hobbies, congratulations, advice, and greeting. For instance, the present phase revealed that religion was an important theme, accounting for almost 8% of status messages among Saudi students. Such a result could be a reflection of their Islamic culture and their desire to defend their faith and religious belonging. The advice theme reflected the collective nature of Saudi culture in showing how the current sample felt responsible for enhancing good manners within their social networks. The theme of hobbies reveals how the gender segregation in Saudi society offline is reflected in each gender's hobbies. The importance of national occasions was also revealed in the congratulatory status updates these users tend to post on their profiles.

3.17 Gender Differences in Facebook Status Updates

Correspondence analysis was used to investigate whether Saudi male and female Facebook users differed in the status updates they generated and shared on their Facebook accounts. The multi-dimensional information in the cross-tabulated variables was separated into two lower dimensions such that each category could be plotted as a point on two constructed axes (Component 2 versus Component 1) known as a correspondence map. Symmetrical normalization, a form of averaging, was applied so that closely-related points were located in near proximity, whereas unrelated points were located far apart. Table 2 represents the themes that showed gender differences.

Table 2. Differences between males and females on themes of status updates

Males' Status Updates	Females' Status Updates
Social Issues	Congratulations
Political Issues	Family Matters
Jokes	Emotional Outlet

From Table 2, it can be seen that males posted more status updates about Social Issues, Political Issues, and Jokes. Unlike male Saudi students, female Saudi students posted more status updates about Congratulations, Family Matters, and Emotional Outlets. These results confirm and validate the findings of previous research in that males tend to use Facebook more than females to gratify their need to discuss political and social issues and more females tend to use this online social platform to gratify their need to express their emotions. The findings of this research add that females tend to post more about their family matters and congratulations while males post more jokes on their Facebook accounts. These findings are in line with previous research that suggests that females tend to post more statuses about emotions (Denti, et al. 2012; Parkins, 2012), family relations (Denti, et al. 2012; Jackson & Wang, 2013), and congratulations (Winter, et al. 2014), whereas males are more likely to post political status updates (Wang, Burke, & Kraut, 2013) and entertaining status updates (Winter, et al. 2014).

The differences between males and females in status updates could also be interpreted in light of social role theory, as Saudi social norms place males in charge of public life while females are in charge of the domestic sphere. This may explain why Saudi males discuss political issues on their accounts more than females, whereas females tend to post more statuses about their families and more congratulations. In addition, males are stereo typically viewed as less emotionally expressive (Brody & Hall, 2010) and more humorous than females (Robinson & Smith-Lovin, 2001).

4. Levels of Self-discclosure on Facebook

Quantitative content analysis was used to investigate the level and amount of personal information disclosed by Saudi university students on their Facebook accounts, utilising the checklist proposed by Nosko, Wood, and Molema (2010). This checklist classifies the possible disclosed personal information items on Facebook accounts into 34 variables that are dichotomously coded from the topical content on an individual's Facebook account. According to its creators, the inter-coder reliability of the checklist was very high (99% agreement).

From these items, Nosko, Wood, and Molema (2010: 410) developed three levels of disclosed information according to their sensitivity. Scores in each of the three areas are created by summing the individual constituent items, with each item coded dichotomously (0/1).

First Level. Disclosure of basic personal identifying information. This level refers to the type of information people might disclose in official situations to identify themselves, including eight items: "profile picture, gender, birthday, birth year, email address, address, current city, and postal code".

Second Level. Disclosure of sensitive personal information. This level refers to information that could be used to find or identify an individual. Such information may be misused or perceived negatively by others. Fourteen items were included in this classification: "relationship status, news feed, high school, university, employer, job position, viewable wall, photo albums, self-selected photos, tagged photos, friends list, send a gift, private messages, and poking".

Third Level. Disclosure of potentially stigmatising personal information. This level is defined as sensitive personal information that could lead to condemnation within society. In other words, it is information about a person that a random viewer could find objectionable. Twelve items were included in this category: "gender of interest, activities, political views, religious views, favourite music, favourite books, favourite shows, favourite movies, favourite quotes, interests, personal description, and personal photos".

The Nosko, Wood, and Molema (2010) checklist was chosen because it provides a systematic, objective, and quantifiable content analysis tool. It is systematic because the disclosed information is selected, coded, and analysed according to explicit and consistently applied sets of rules and procedures. It also enables comparison to be made with previous studies using the same checklist and ensures that the researcher's personal biases do not affect the collection of the data. It is quantifiable because the main focus of the checklist is on counting occurrences of already defined items on Saudi university students' Facebook accounts to capture the levels of breadth and depth of the disclosed information. The checklist breaks down the disclosed information in Facebook accounts into categories and constituents to count their frequencies. Thus, this tool indicates the relative prominence and absence of key information in Saudi university students' accounts. It should be noted that this checklist was developed for a Canadian sample. The use of this checklist among the current Saudi sample enabled the investigation of cultural differences.

Inter-rater reliability is the degree of agreement among two or more researchers who are rating, measuring, or observing the same set of data. It provides a score that indicates how much homogeneity or consensus there is among researchers' assessments to determine the reliability of the results. If two or more researchers do not agree, then the data may be defective, the researchers need to be re-trained, or the instructions/categories might be poorly specified (Creswell, 2009).

4.1 Inter-rater Reliability for the Chechlist

To check the inter-rater reliability of the disclosed personal information on Saudi university students' profiles, the three raters coded 30 Facebook accounts using the 34 items on the Nosko, Wood, and Molema (2010) checklist. According to Sim and Wright (2005), a sample size of 30 in quantitative content analysis provides sufficient power (80%) to determine if kappa is significantly greater than zero, as long as kappa is at least 0.5. However, the power is insufficient if kappa is less than 0.5.

The kappa values ranged from 0.70 to 0.99. Thus, the inter-rater agreement between the codes assigned by different raters for the checklist categories was almost perfect (kappa = 0.81 to 1.00) for 29 categories. For five categories (News feed, Send a gift, Relationship status, Profile picture, and Personal photos), the inter-rater agreement was substantial (kappa = 0.61 to 0.80). In summary, the values of kappa were high and consequently, the sample had sufficient power to obtain correct statistical inferences ($p < .001$). The results indicated high reliability with regard to the coding of the checklist.

The overall results of the analysis based on Fleiss's kappa indicated that the inter-rater reliability was good, implying that the data derived from Facebook accounts were valid. Furthermore, the ability of different raters to code the same data was consistent, implying that the researcher's coding was unbiased and equivalent to that of other coders.

4.2 Disclosure of Basic Personal Identifying Information on Facebook

Nosko, Wood, and Molema (2010) defined the basic personal identifying information category as revealing information about the user's identity, particularly what is deemed default/standard information. This was explained as the sort of information people might disclose in official situations and which could be used to identify users. Eight of the items in the checklist are used to measure basic personal identifying information: profile picture, gender, birthday, birth year, email address, address, current city, and postal code. The number and percentage of respondents disclosing information on their Facebook profiles for the eight constituent items in the basic personal identifying information category were tabulated. The descriptive statistics (e.g., mean, SD, and range) for the total category score were computed to provide summary statistics on the distribution of responses for this category of disclosure.

Almost all Saudi respondents disclosed their profile pictures (92%) on their profiles. Investigating the types of profile pictures using Nosko, Wood, and Molema's (2010) sub-categories of profile pictures - self, activity, friends, relationship partner, family, work, school, animal, or symbolic picture - reveals that 59% (n= 27) were symbolic pictures, which were presented almost exclusively by females (26 out of the 27 symbolic pictures). As Nosko, Wood, and Molema's (2010) classification does not include further sub-categories of symbolic pictures, the content of these pictures was coded as flowers (n = 9); pictures of Korean actresses (n = 6), which may be due to the widespread broadcasting of Korean dramas on Arabic television channels (Kim 2006); cute babies (n = 4); cartoon characters (n= 3); chocolate desserts (n = 3), and anime characters (n = 2).

This result reflects how Saudi females act according to the gender roles determined by Saudi society. Saudi females do not show their faces, they mainly choose symbolic pictures as their profile pictures instead of personal photos. This attitude differs significantly from the Western world. While the results from previous Facebook research regarding disclosure of personal photos among Western samples have not revealed significant gender differences in the frequency of posting personal photos (e.g., Reichart Smith and Cooley 2008; Young and Quan-Haase 2009; Hum et al. 2011), this research reveals a significant gender difference.

This research also reveals that the majority of the current Saudi university students disclosed their birthday and birth year, possibly because they are young and do not feel the need to hide their ages. On the other hand, students were conscious about the sensitivity of disclosing their addresses, with only 16% disclosing this information. Nevertheless, this percentage was higher than that of Nosko, Wood, and Molema's (2010) Canadian sample (3.5%) and Ntlatywa, Botha, and Haskins's (2012) South African sample (2%). None of the Saudi participants displayed their postal codes, perhaps because not all houses in Saudi Arabia had postal codes until recently.

The overall score for the sample's level of disclosure of basic personal identifying information was calculated by summing the items, with higher scores indicating more disclosure. Of the eight default items that could be disclosed, respondents on average revealed a mean of 4.82 (SD = 1.35). In comparison with other cultures, this result indicates that the Saudi university students disclosed a relatively higher level of basic personal identifying information (60.3%) than their counterparts in Canada (48.2%) (Nosko, Wood, and Molema 2010) and South Africa (36%) (Ntlatywa, Botha, and Haskins 2012).

4.3 Disclosure of Sensitive Personal Information on Facebook

Nosko, Wood, and Molema (2010) define sensitive personal information as details that are more in-depth than basic information and could be misused or perceived negatively by others. Information measured in this category consisted of 14 items: relationship status, news feed, high school, university, employer, job position, viewable wall, photo albums, self-selected photos, tagged photos, friends list, send a gift, private messages, and poking. The frequency and percentage of respondents who reported each of the items that Nosko, Wood, and Molema (2010) classified as sensitive personal information were tabulated.

The majority of the Saudi university students disclosed their relationship status, with most saying they were single. 8% indicated that they were in a relationship. Another 8% revealed that it is complicated, which implies that they are in a relationship, but the users do not want to say what this is. A high percentage of Saudi participants left the 'tagged photos' and 'news feed' features of Facebook available for others to view (98% and 88% respectively). According to Rui and Stefanone (2013), the owners of the Facebook accounts are not the only sources of personal information. Facebook friends also provide further information about them by commenting on their status updates, adding posts on their profiles, and tagging them in photos without their permission. Thus, Facebook friends can provide a better picture about the owner of a Facebook profile (Walther et al. 2009). While it is possible for the profile owner to conceal all or some of these interactions from other users, the majority of Saudi students kept these two features public.

Computer-mediated communication scholars consider information regarding an individual added by a third party as validation of the accuracy of the information provided by the individual. For instance, Walther and Parks (2002) refer to this feature as a warranting principle. As Walther et al. (2009: 232) argue, warranting indicates "the capacity to draw a reliable connection between a presented persona online and a corporeally-anchored person in the physical world". This feature improves the detection of deception in profiles. As almost all the current Saudi sample allow others to tag them, it could be argued that the validation of the information disclosed on their profiles is high.

Almost all of the students leave their private messages, poking, and virtual gift features available for others to interact with them. Such openness allows others to initiate connections even if they are not in their friends list or of the same sex. Saudi university students also tend to disclose their friends list (78%), which allows others to see their family members or friends included within this list. This is an interesting result given that Saudi males do not generally like others to know about their female family members (Heng 2009). Although the friends list is expected to be sensitive information, it was found that such information was often disclosed by the current sample of Saudi university students.

It should be noted that work-related items (i.e., employer and job position) were not present in any of the profiles, perhaps because most of the participants in this sample were university students. With the exception of these two items, Saudi respondents revealed most of the sensitive information items at high rates. The mean of the summed sensitive personal information scores was 10.80 (SD = 1.31) out of the possible 14 items. Thus, on average, Saudi respondents revealed 77.1% of the items in the sensitive personal information category and this percentage would even be higher if work-related items are excluded. As with basic personal identifying information, Saudi students disclosed more sensitive information than their counterparts in Canada (69.8%) (Nosko, Wood, and Molema 2010) and South Africa (47.1%) (Ntlatywa, Botha, and Haskins 2012).

4.4 Disclosure of Potentially Stigmatizing Personal Information on Facebook

Nosko, Wood, and Molema (2010) define potentially stigmatizing personal information as that which could result in condemnation within society. In other words, it is information about a person that a random viewer could conceivably find objectionable. Nosko, Wood, and Molema (2010) included the following 12 items in this category: gender of interest, activities, political views, religious views, favourite music, favourite books, favourite TV shows,

favourite movies, favourite quotes, interests, personal descriptions, and personal photos. The percentages of respondents who reported each of the items that Nosko, Wood, and Molema (2010) classified as potentially stigmatising personal information were tabulated.

Regarding gender of interest, Facebook initially regarded this information as being for dating purposes, so in the Western world it could be considered potentially stigmatising when an individual discloses a same-sex gender of interest (Zhao, Grasmuck, and Martin 2008). By contrast, Saudis perceived this information as related to 'friending' on Facebook, and thus regarded this information as potentially stigmatising when indicating that they were interested in being friends with the opposite sex. More than one-third of Saudi university students in the current sample disclosed this information (36%), and most of those who disclosed it indicated that they were interested in people of the same sex to be their friends on Facebook, and so, in this case, this does not mean that they are homosexual. However, a few (n= 4) of those users disclosed that they were interested in the opposite sex, either indicating that they are interested in both men and women, to lessen the stigma, or only in men or only in women. Such a difference shows the role that the cultural factor plays in individuals' perceptions.

Only a few of the students disclosed their political views (8%). Regarding religious views, more than one-third of Saudi students disclosed this information (36%) and they all indicated that they are Muslims. Of those, a few specified that they are Sunni Muslims (n = 6), and only one female specified that she is a Shiite Muslim. This makes sense given that Saudi society is mostly homogenous in religion. The majority of the population are Sunni Muslims, and only a minority, mostly in the eastern provinces, are Shiite Muslims. While in the early days after the country was established, Shiites tended to hide their Islamic sect (Kymlicka & Pfostl, 2014), Shiite Saudis cautiously began to show their religious affiliation after the Saudi state established the centre for national dialogue, which aims to ensure the equality of all citizens and reject discrimination against minorities. The first meeting of the centre was held in June 2003, and had religious leaders from several Islamic affiliations: Ulama (Muslim legal scholars) from the official religious establishment, Salafi preachers, Shiites, and Sufis, to ensure unity in the kingdom. The attendance of the Shiites and Sufis was significant, as these two affiliations were not perceived as brothers in faith by the leading Sunni citizens. This meeting was mainly intended to have a Sunni–Shiite understanding, a vitally important matter in a time of change in neighbouring Iraq, where Shiites were gaining more power (Kapiszewski, 2006).

This result shows a different attitude toward disclosing religious devotion than the findings of a study conducted by Bobkowski (2008) on American undergraduates. His study revealed that American students wanted to present themselves in their Facebook profiles as being sociable and liberal. They did not want others to have inaccurate impressions of them based on Christian stereotypes and attempted to make their profiles 'likeable'. At the same time, they attempted to make their profiles authentic reflections of their religious commitments. These two objectives, to be perceived as both honest and likeable, led many American religious students to represent themselves as moderate Christians. Unlike Saudis, the undesirability of appearing too religious in the American context resulted in many Facebook users in the sample not mentioning religious affiliations on their profiles. This is also in line with Thotho's (2010) study that showed the role of culture in the finding that Kenyans were more likely than Americans to reveal their religious affiliations.

Although listening to music, watching TV shows and movies, and reading specific types of books (e.g., political, romance or poetry), could be considered potentially stigmatising information to disclose, about half of the respondents disclosed this information. The majority of Saudi university students disclosed information about themselves in the personal description section and their favourite quotations (78% and 74% respectively). Such percentages are higher than the Canadian sample in the study by Nosko, Wood, and Molema (2010), as 30% of the Canadian participants disclosed personal description information and 47.3% disclosed their favourite quote; similarly, the study by Ntlatywa, Botha, and Haskins (2012) revealed that 27% of South Africans in their sample disclosed a personal description and 16% disclosed their favourite quotation.

The mean for disclosing potentially stigmatising information among the sample of Saudi university students was 6.60 items (SD = 3.47) out of the possible 12 items. Thus, on average, Saudi university students revealed 52% of potentially stigmatising items. However, the large standard deviation indicates that there was considerable variability in their profiles. In this level, as in the lower levels of disclosure, Saudi university students disclosed more potentially stigmatising information than their Canadian (45.2%) (Nosko, Wood, and Molema 2010) and South

African (31.5%) counterparts (Ntlatywa, Botha, and Haskins 2012).

In sum, Saudi university students revealed 60.3% of the basic identifying information items, 77.1% of the items in the sensitive personal information category, and 52% of the potentially stigmatising personal information items. Comparing these results with those in Canada and South Africa, it appears that Saudi university students tend to disclose more personal information online. Such a high percentage of disclosure by Saudis requires further investigation to understand the reasons behind it and whether the students hold any related privacy concerns.

It should be noted that although the current data were collected at about the same time as the Ntlatywa, Botha, and Haskins (2012) study, the data for the Nosko, Wood, and Molema (2010) study were likely gathered at least one year before the publication date of 2010. Two years is considered to be a significant time period in terms of Internet and Facebook research because of usage increases (Patchin and Hinduja 2010). Thus, some of the differences noted in this phase may be a result of changes in Facebook usage over time rather than cultural factors.

Applying Nosko, Wood, and Molema's (2010) checklist to Saudi university students' profiles revealed that cultural differences may play a role in determining the sensitivity level of information. Five items appeared to be different in their levels of sensitivity in the Saudi sample. While a profile picture is considered basic information, according to this Canadian checklist, a picture of oneself on a public profile is considered potentially stigmatising information for female Saudis to reveal. Additionally, revealing a relationship status outside the auspices of marriage (i.e., single, engaged, or married) would also be considered not only sensitive but also potentially stigmatising information by Saudis, as it violates the traditions of their society.

Gender of interest is also perceived by Saudis as potentially stigmatising information, not because Saudis are afraid to be classified as homosexual, but because they could be stigmatised for looking for friends of the opposite sex. Religious views are considered by Saudis potentially stigmatising information when they are not in line with the mainstream religious affiliation of being Sunni Muslim. Although postal code could also be classified as basic personal information by Saudis to disclose, this item is not shown in the current sample's profiles because most of the houses in Saudi Arabia have not had postal codes until recently. It is recommended that such modifications be applied to the classification of the mentioned items when utilising this checklist to examine Saudis' Facebook profiles in future studies.

4.5 Gender Differences in the Information Disclosed on Facebook

The scores in each of the three disclosure categories were evaluated according to gender. The mean scores for males and females were compared using independent-sample t-tests to determine whether any differences in online disclosure emerged. The results show that the mean scores of males and females did not differ significantly on any of the disclosure scales.

The findings from this research interestingly reveal that Saudis' attitudes offline may not fully reflected in their behaviour on Facebook. They tend to have a high level of disclosure on all levels, with the exception of females' profile photos, which continue to be considered sensitive information and even potentially stigmatizing information. It seems that the current Saudi youth have adjusted their norms regarding the privacy issue online and started to disclose their personal information in a semi-public platform, regardless of their gender, in exchange for obtaining a diverse range of gratifications from this platform.

5. Conclusion

The current research utilises both thematic and quantitative content analysis to address the research objectives: revealing the themes of Saudi students' Facebook status updates and students' levels of online disclosure. The results of the inductive bottom-up thematic content analysis showed that Saudi university students generated a wide range of status updates that can be classified into 16 themes. Classifying the themes of status updates also helps to explain why Saudi university students are using Facebook. The students' statuses – about religious issues, advice, hobbies, and congratulations – offer deep insights into the Saudi society.

This research also showed that Saudi university students revealed 60.3% of the basic identifying information items, 77.1% of the items in the sensitive personal information category, and 52% of the potentially stigmatising personal information items. Comparing these results with those in Canada and South Africa, it appears that Saudi university students tend to disclose more personal information online. Such a high percentage of disclosure by Saudis requires

further investigation to understand the reasons behind it and whether the students hold any related privacy concerns.

References

Ammitzbøll, P., & Vidino, L. (2007). After the Danish Cartoon Controversy. *Middle East Quarterly*, 3-11.

Anderson, R. (2007). *Thematic Content Analysis (TCA): Descriptive Presentation of Qualitative Data.* Retrieved 4 May 2017, from http://www.wellknowingconsulting.org/publications/pdfs/ThematicContentAnalysis.pdf

Barash, V., Ducheneaut, N., Isaacs, E., & Bellotti, V. (2010). Faceplant: Impression (MIS) management in Facebook Status Updates. In Hearst, P. (Ed.), *Proceedings of the Fourth International Conference on Weblogs and Social Media,* held 23-26 May at Washington, D.C. Menlo Park, Ca: The AAAI Press, 207-210.

Bobkowski, P. S. (2008). Self-disclosure of religious identity on Facebook. *Gnovis, 9*(9.1).

Boghardt, L. (2013). Saudi Arabia's War on Twitter. *The Washington Institute for Near East Policy*.

Boyd, D. (2007). Error: You Must Be Someone's Friend to Comment on Them. *In Proceedings of the 57th annual conference of International Communication Association,* held 24-28 May at San Francisco, CA, USA.

Brody, L.R., & Hall, J.A. (2010). Gender and Emotion in Context. In Lewis, L, Haviland-Jones, J.M. and Feldman Barrett, L. (Eds.), *Handbook of Emotions* (pp.395-408). New York, NY: Guildford Press.

Campbell, H. A., & Lövheim, M. (2011). Rethinking the Online–Offline Connection in the Study of Religion Online. *Information, Communication & Society, 14*(8), 1083-1096. https://doi.org/10.1080/1369118X.2011.597416

Creswell, J. (2009). *Research design: Qualitative, quantitative, and mixed methods approaches.* SAGE Publications, Incorporated.

Dang, Y., Zhang, Y., Hu, P. J. H., Brown, S. A., Ku, Y., Wang, J. H., & Chen, H. (2014). An Integrated Framework for Analyzing Multilingual Content in Web 2.0 Social Media. *Decision Support Systems, 61*, 126-135. https://doi.org/10.1016/j.dss.2014.02.004

Denti, L., Barbopuolos, I., Nilsson, I., Holmberg, L., Thulin, M., Wendeblad, M., Andén, L., & Davidsson. E. (2012). *Sweden's Largest Facebook Study*. Göteborg: Gothenburg Research Institute.

Diuk, C. (2014). *The Formation of Love: Facebook Data Science.* Retrieved 18 September 2016, from https://www.facebook.com/notes/facebook-data-science/the-formation-of-love/10152064609253859

Ellison, N. B., Steinfield, C., & Lampe, C. (2007). The Benefits of Facebook Friends: Social Capital and College Students' Use of Online Social Network Sites. *Journal of Computer‑Mediated Communication, 12*(4), 1143-1168. https://doi.org/10.1111/j.1083-6101.2007.00367.x

Faber, B. (2007). Writing and Social Change. In Bazerman, C. (Ed.), *Handbook of Research on Writing: History, Society, School, Individual, Text* (pp. 269-280). New York, NY: Lawrence Erlbaum Associates.

Frehat, M., & Abu-Shanab, E. (2014, September). The Role of Social Networking in the Social Reform on Young Society. In *Proceedings of the 6th International Conference on Management of Emergent Digital EcoSystems* (pp. 25-26). ACM. https://doi.org/10.1145/2668260.2668269

Gerhards, J., & Rucht, D. (1992). Mesomobilization: Organizing and Framing in Two Protest Campaigns in West Germany. *American Journal of Sociology*, 555-596. https://doi.org/10.1086/230049

Goode, L. (2009). Social News, Citizen Journalism and Democracy. *New Media & Society, 11*(8), 1287-1305. https://doi.org/10.1177/1461444809341393

Grosseck, G., Bran, R., & Tiru, L. (2011). Dear Teacher, What Should I Write on My Wall? A Case Study on Academic Uses of Facebook. *Procedia-Social and Behavioral Sciences, 15*, 1425-1430. https://doi.org/10.1016/j.sbspro.2011.03.306

Harlow, S. (2012). Social Media and Social Movements: Facebook and an Online Guatemalan Justice Movement That Moved Offline. *New Media & Society, 14*(2), 225-243. https://doi.org/10.1177/1461444811410408

Hofstede, G. (1980). *Culture's Consequences: International Differences in Work Related Values*. Beverly Hills, CA: Sage Publications.

Hum, N. J., Chamberlin, P. E., Hambright, B. L., Portwood, A. C., Schat, A. C., & Bevan, J. L. (2011). A picture is

worth a thousand words: A content analysis of Facebook profile photographs. *Computers in Human Behavior, 27*(5), 1828-1833. https://doi.org/10.1016/j.chb.2011.04.003

Jackson, L. A., & Wang, J. L. (2013). Cultural Differences in Social Networking Site Use: A Comparative Study of China and the United States. *Computers in Human Behavior*, *29*(3), 910-921. https://doi.org/10.1016/j.chb.2012.11.024

Joinson, A. N. (2008). Looking at, Looking up or Keeping up with People? Motives and Use of Facebook. In *Proceedings of the SIGCHI conference on Human Factors in Computing Systems*, held 5-10 April at Florence, Italy. New York, NY: ACM Press, 1027-1036.

Joseph, S. (2012). Social Media, Political Change, and Human Rights. *Boston College International & Comparative Law Review, 35*(1), 1164-188.

Junco, R. (2012). Too Much Face and Not Enough Books: The Relationship between Multiple Indices of Facebook Use and Academic Performance. *Computers in Human Behavior, 28*(1), 187-198. https://doi.org/10.1016/j.chb.2011.08.026

Junco, R., & Cotten, S. R. (2011). Perceived Academic Effects of Instant Messaging Use. *Computers & Education, 56*(2), 370-378. https://doi.org/10.1016/j.compedu.2010.08.020

Kapiszewski, A. (2006). Saudi Arabia: Steps toward democratization or reconfiguration of authoritarianism?. *Journal of Asian and African Studies, 41*(5-6), 459-482. https://doi.org/10.1177/0021909606067407

Kirman, B., Lawson, S., & Linehan, C. (2009). Gaming on and off the Social Graph: The Social Structure of Facebook Games. In *Computational Science and Engineering International Conference,* held August at Vancouver, BC, Canada. New York: ACM Press 4, 627-632.

Kirschner, P. A., & Karpinski, A. C. (2010). Facebook and Academic Performance. *Computers in Human Behavior, 26*(6), 1237-1245. https://doi.org/10.1016/j.chb.2010.03.024

Kramer, A. D.I., Guillory, J. E., & Hancock, J. T. (2014). Experimental Evidence of Massive-Scale Emotional Contagion through Social Networks. *PNAS*. https://doi.org/10.1073/pnas.1320040111

Kymlicka, W., & Pföstl, E. (Eds.). (2014). *Multiculturalism and minority rights in the Arab world.* OUP Oxford. https://doi.org/10.1093/acprof:oso/9780199675135.001.0001

Lafrance, A. (2014). It's Ethically Okay from the Regulations Perspective, But Ethics are Kind of Social Decisions. *The Atlantic*, 28 June. Retrieved 19 August 2016, from http://www.theatlantic.com/technology/archive/2014/06/even-the-editor-of-facebooks-mood-study-thought-it-was-creepy/373649/

Lampe, C., Ellison, N., & Steinfield, C. (2006). A Face(book) in the Crowd: Social Searching vs. Social Browsing. In *Proceedings of the 2006 20th Anniversary Conference on Computer Supported Cooperative Work*, held 4-8 November at Banff, Alberta, Canada. New York, NY: ACM Press, 160-170. https://doi.org/10.1145/1180875.1180901

Le Renard, A. (2008). Only for Women: Women, the State, and Reform in Saudi Arabia. *The Middle East Journal, 62*(4), 610-629. https://doi.org/10.3751/62.4.13

Long, D.E. (2005). *Culture and Customs of Saudi Arabia*. Westport, CT: Greenwood Press.

Mabon, S. (2012). The Battle for Bahrain: Iranian‐Saudi Rivalry. *Middle East Policy, 19*(2), 84-97. https://doi.org/10.1111/j.1475-4967.2012.00537.x

Muravchik, J. (2013). *The Next Founders: Voices of Democracy in the Middle East*. New York, NY: Encounter Books.

Myers, D. G. (2004). *Theories of Emotion* (Seventh ed.). New York, NY: Worth Publishers.

Ntlatywa, P., Botha, R. A., & Haskins, B. (2012, August). Claimed vs observed information disclosure on social networking sites. In *Information Security for South Africa (ISSA)*, 2012 (pp. 1-6). IEEE. https://doi.org/10.1109/ISSA.2012.6320443

Nuruzzaman, M. (2013). Politics, Economics and Saudi Military Intervention in Bahrain. *Journal of Contemporary*

Asia, 43(2), 363-378. https://doi.org/10.1080/00472336.2012.759406

Parkins, R. (2012). Gender and Emotional Expressiveness: An Analysis of Prosodic Features in Emotional Expression. *Pragmatics and Intercultural Communication, 5*(1), 46-54.

Pasek, J., & Hargittai, E. (2009). Facebook and Academic Performance: Reconciling a Media Sensation with Data. *First Monday, 14*(5). https://doi.org/10.5210/fm.v14i5.2498

Patchin, J. W., & Hinduja, S. (2010). Trends in online social networking: Adolescent use of MySpace over time. *New Media & Society, 12*(2), 197-216. https://doi.org/10.1177/1461444809341857

Pew Internet and American Life Project (2012). *The World's Muslims: Unity and Diversity*. Washington, DC: Pew Internet and American Life Project Retrieved 23 February 2013, from http://www.pewforum.org/2012/08/09/the-worlds-muslims-unity-and-diversity-executive-summary/

Reichart, S. L., & Cooley, S. (2008). Face-ism on Facebook: An analysis of self-inflicted face-ism in online profile pictures. In *annual convention of the International Communication Association, Chicago, IL.*

Robinson, D. T., & Smith-Lovin, L. (2001). Getting a Laugh: Gender, Status, and Humour in Task Discussions. *Social Forces, 80*(1), 123-158. https://doi.org/10.1353/sof.2001.0085

Rui, J., & Stefanone, M. A. (2013). Strategic self-presentation online: A cross-cultural study. *Computers in Human Behavior, 29*(1), 110-118.

Sallam, A., & Hunter, M. (2013). Where Is Saudi Arabian Society Heading?. *Contemporary Readings in Law and Social Justice, 5*(2), 141-157.

Starks, H., & Trinidad, S. B. (2007). Choose Your Method: A Comparison of Phenomenology, Discourse Analysis, and Grounded Theory. *Qualitative Health Research, 17*(10), 1372-1380. https://doi.org/10.1177/1049732307307031

Thotho, S. W. (2010). Information Disclosure on Facebook: A content Analysis of American and Kenyan user profiles.

Vegh, S. (2003). Classifying Forms of Online Activism. In McCaughey, M., & Ayers, M. (Eds.), *Cyberactivism: Online Activism in Theory and Practice* (pp. 71-95). New York, NY: Routledge.

Vratskikh, I., Al-Lozi, M., & Maqableh, M. (2016). The Impact of Emotional Intelligence on Job Performance via the Mediating Role of Job Satisfaction. International. *Journal of Business and Management*, 69-91. https://doi.org/10.5539/ijbm.v11n2p69

Walther, J. B., & Parks, M. R. (2002). Cues filtered out, cues filtered in. *Handbook of interpersonal communication, 3*, 529-563.

Walther, J. B., Slovacek, C. L., & Tidwell, L. C. (2001). Is a picture worth a thousand words? Photographic images in long-term and short-term computer-mediated communication. *Communication Research, 28*(1), 105-134. https://doi.org/10.1177/009365001028001004

Walther, J. B., Van Der Heide, B., Hamel, L. M., & Shulman, H. C. (2009). Self-generated versus other-generated statements and impressions in computer-mediated communication: A test of warranting theory using Facebook. *Communication research, 36*(2), 229-253. https://doi.org/10.1177/0093650208330251

Wang, Y. C., Burke, M., & Kraut, R. E. (2013). Gender, Topic, and Audience Response: An Analysis of User-Generated Content on Facebook. In Mackay, W. (Ed.), *Proceedings of the SIGCHI Conference on Human Factors in Computing Systems*, held 27 April – 2 May at Paris, France. New York, NY: ACM, 31-34. https://doi.org/10.1145/2470654.2470659

Wanzer, M., Booth‑Butterfield, M., & Booth‑Butterfield, S. (1995). The Funny People: A Source‑Orientation to the Communication of Humour. *Communication Quarterly, 43*(2), 142-154. https://doi.org/10.1080/01463379509369965

Weaver, S. (2013). A Rhetorical Discourse Analysis of Online Anti-Muslim and Anti-Semitic Jokes. *Ethnic and Racial Studies, 36*(3), 483-499. https://doi.org/10.1080/01419870.2013.734386

Winter, S., Neubaum, G., Eimler, S. C., Gordon, V., Theil, J., Herrmann, J., Meinert, J., & Krämer, N. C. (2014).

Another Brick in the Facebook Wall: How Personality Traits Relate to the Content of Status Updates. *Computers in Human Behavior, 34,* 194-202. https://doi.org/10.1016/j.chb.2014.01.048

Young, A. L., & Quan-Haase, A. (2009, June). Information revelation and internet privacy concerns on social network sites: a case study of facebook. In *Proceedings of the fourth international conference on Communities and technologies*(pp. 265-274). ACM. https://doi.org/10.1145/1556460.1556499

Zhao, S., Grasmuck, S., & Martin, J. (2008). Identity construction on Facebook: Digital empowerment in anchored relationships. *Computers in human behavior, 24*(5), 1816-1836. https://doi.org/10.1016/j.chb.2008.02.012

Zuckerman, E. (2014). Cute Cats to the Rescue? Participatory Media and Political Expression. In Allen, D. and Jennifer, L. (Eds.), *Youth, New Media and Political Participation*. Cambridge, MA: MIT Press.