GENDER DIFFERENCES IN USING SOCIAL NETWORKS

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ABSTRACT
The purpose of this study is to determine individuals' usage purposes of social networks with a focus on the possible differences between females and males. Facebook, which is one the most popular and being most widely used social network, is investigated in this study. The study group consisted of 870 Facebook users who responded an online survey designed by the researchers. Analyses of the results showed that usage purposes can be categorized under four categories, namely maintaining existing relationships, making new relationships, using for academic purposes and following specific agenda. Significant differences were found between genders in all of the purposes mentioned. While the difference on making new contacts was in favor of males, the differences on the other three user purposes were in favor of females.
Keywords: Social networks, Facebook, gender differences, usage purposes

INTRODUCTION

Social networks have become a global phenomenon and attracted extensive population from all around the world in different ages, cultures, education levels, etc. In addition to routinely checking e-mails, reading daily forums and newspapers or following instant message tools, people now also check their social network profiles by following others' status changes, updating their profiles or looking at others' profiles. Research has shown that many people connect to social network sites at least once a day either to check their profiles or to participate in different online activities (Joinson, 2008; Lenhart, 2009).

Social networks are defined as a body of applications that augment group interaction and shared spaces for collaboration, social connections, and aggregates information exchanges in a web-based environment (Barlett-Brag, 2006). Facebook, Myspace, Youtube, Flickr, and Linkedn are the most commonly known social network sites containing similar as well as different features. Facebook is handled among other social networks in this study because of being the most popular and most heavily visited social network website (eBizMBA, 2010). Facebook is defined as "a social utility that helps people share information and communicate more efficiently with their friends, family and coworkers" (facebook.com). Despite the fact that Facebook was launched in 2004 as a Harvard-only Social Network site, it expanded to include other high school students, professionals inside corporate networks, and eventually everyone who have access to the online world (Cassidy, 2006). Facebook provides an opportunity to users, to create personalized profiles that include general information like education background, work background, and favorite interests and also to add links and song clips of their favorite bands, post messages on friends' pages, and post and tag pictures and videos, among other things (Rosmarin, 2007; Zywica &Danowski, 2008).

People use social network sites for a variety of reasons among which ease of use, allowing rapid updating, analyzing and sharing the continuously increasing information, reflecting on daily life, establishing and maintaining spontaneous social contacts and relationships, supporting informal learning practices with interaction and communication and facilitating delivery of education are the leading ones. Thus, these reasons explain why social network sites are adopted rapidly although they first had emerged with the purpose of sharing photos, personal information, videos, profiles and related content (Mejias, 2005; Ajjan & Hartshorne, 2008).

Most of the social network users are young individuals most of whom are university students. Hence, social network sites are considered to play an active role in younger generation's daily lives (Lenhart, 2009; Koca 2009). The relationship between the youth and their involvement in social network sites has attracted many research that focused on young people's social network activities in relation to their privacy concerns as pertaining in their social network usage (Lenhart & Madden, 2007; Pempek, Yermolayeva & Calvert, 2009; Zywica &Danowski, 2008). Similarly, comparisons of different social networks in terms of their features and users' demographics such as gender, frequency of use and their reasons for participating in social network environments remain as the most popular research areas.

It is stated that as social networks facilitate the sharing of photos and videos with both real world as well as virtual friends while allowing them to build unique online identities by customizing their personal profiles with a range of multimedia elements that are open to others' reading (McLoughlin & Lee, 2007). Because individuals come together around shared and common goals or needs willingly in social networks, especially, tendency to

building new communities and groups or participating in them comes up. In these environments, individuals move from being passive consumers to fully functioning members by sharing their materials and views with others with whom they reach sensible conclusions. Hence, this cooperative activity helps members to shape the group identity in addition to their individual identities (Atwell, 2006).

It is important to reveal individuals' social network usage purposes, usage areas and outcomes to understand what motivates them to adopt social networks so rapidly and to use so actively. Various researchers have studied users' purposes in using social networks. Stutzman (2006) stated that social networks can be used for passing time, learning about other people, maintaining social relations, following changes at the university, class or school enrolled. On the other hand, Ellison, Steinfield & Lampe (2007) explained that social network can be oriented towards work- related contexts, establishing new relationships, or reaching those with shared interests such as in music or politics. Lockyer & Patterson (2008) also showed that users can share their personal information with the help of their profile page, connect with other users, upload, tag and share multimedia content they have created, link others to a variety of accessible content, initiate or join sub-sets of common interest groups. Grant (2008) also acknowledged that social networks such as Facebook, MySpace, YouTube, weblogs, as well as wikis are predominantly used by teenagers and young adults as an extension of their personality to show their friends and the world who they are, what they care about, and with whom they are like-minded. According to Joinson (2008), people use social networks to keep in touch with old friends, find the lost contacts, communicate with the like-minded people, join groups with shared interests, organize or join events, view and tag photos, share/ post photographs, play games, update one's own status, see others' status. He also grouped these uses under seven categories which were to keep in touch, passive contact, social surveillance, re-acquiring lost contacts, communication, photographs, designing related uses, perpetual contacts and making new contacts. Lenhart (2009) further argued that social networks are primarily used for establishing and maintaining personal or professional contacts, making plans such as by organizing an event or a cause, and simply flirting. Mazman & Usluel (2009) suggested that usefulness, ease of use, social influence and innovativeness can be considered as direct factors influencing usage of social networks whereas facilitating conditions, subjective norms, image and community identity can be accepted as indirect factors.

When examined studies about usage purposes of social networks above, it can be suggested that, most of the studies stated that, people maintain their relations with social networks in which they formed or joined new networks to make new friends. It is noticeable that people generally tend to keeping in touch with friends, maintaining their relations, making new friends, building groups with people around common background (graduated school, department and class groups) or building new groups or joining groups with people which they have shared interest or needs (Mazman & Usluel, 2010; Pempek, Yermolayeva & Calvert, 2009). In this study, Facebook, being one of the most commonly used social networks is studied in relation to usage purposes with a focus on if gender has an effect on these users' purposes.

METHOD
Participants
The study group is consisted of 870 Facebook users who responded to the online survey accurately. The web address of the survey was spread out in Facebook and people who took the survey forwarded the survey's link to their friends voluntarily. In addition, link of the survey was displayed on the various Facebook groups' wall to access an extensive crowded people. The survey was available on the web for four weeks. All of the surveyors participated voluntarily to this research and any reward or prices promised.

The study group has showed that most of the participants were 18 to 25 ages (74.4%) and were university students (73.6%) while 94.2% of them are members of at least one of the Facebook groups. As can be seen in Table 1, majority of male users are undergraduate students whereas most of the graduate students who use Facebook are females.

Table 1. Frequency distribution of genders by educational level

Gender	Educational Level			Total
	High school	Undergraduate	Graduate	
Male	36	339	68	443
Female	34	296	90	420
Total	70	635	158	863

Data Collection Tool
Data were collected by means of an online survey which was developed by the researchers. The survey consisted of two sections. In the first section, demographic characteristics of Facebook users were collected. The second section of survey consisted of 12 items whose responses varied from 1 (Never) to 5 (Always) in form of a five point Likert type scale. In order to ensure the validity of the data collection tool, 7 experts' views were collected. Based on the feedback received from the experts, the scale was modified and finalized.

An explanatory factor analysis was also employed to determine the item factor loads and to ensure the construct validity of the data collection. In this process, items with low factor loads and those which could be placed under two different factors were specified and one item, (A12) was extracted from the scale. The Cronbach's alpha value of this 11- item scale was found to be .802 showing that this scale could be considered as a reliable data collection tool within the context of the study.

The explanatory factor analyses (see Table 2) helped extracting the principal components of Facebook usage in 11 items among which only four factors with Eigen values higher than one were selected (3. 877; 1.521; 1.172; 1.014). These 11 items were distributed under four factors and five items, namely A1, A3, A4, A6, A8 were placed under the first factor, namely "maintaining existing relationships" which included finding old friends and maintaining existing friendships. Two items, namely A2 and A5 were placed under the second factor called "making new relationships" which included making new friends, joining new groups, or building new groups with people around shared interests and needs. A7 and A9 were placed under the third factor which included the activities such as projects, studies, research or homework, and this factor was called "academic usage". Lastly, two items, namely A10 and A11 were placed under the fourth factor and included activities such as following changes in daily life, following innovations having fun and wasting time. This last factor was called 'following agenda'.

Table 2.Facebook Usage Purposes Survey Factor Analysis Result

Factor	Item	Factor Load			
		1	2	3	4
Maintaining existing relationships	A1	,734			
	A3	,767			
	A4	,498			
	A6	,662			
	A8	,538			
Making new relationships	A2				,901
	A5				,680
Academic Usage	A7		,863		
	A9		,801		
Following Agenda	A10			,908	
	A11			,886	

While a total number of four factors emerged, these explained 68.951% of the total variance. The variance accounted for by the first factor, maintaining existing relationships, being the highest proportion, is 35.244%, following this, variance accounted by third factor, academic usage, is 13.831%, variance accounted by fourth factor, following agenda, is 10.653% and by the lowest proportion, variance accounted by second factor, making new relationships is 9.22%.

As a result of factor analysis, individuals' Facebook usage purposes are grouped mainly under four factors, namely; "maintaining existing relationships", "making new relationships", "academic usage" and "following agenda".

FINDINGS
The mean scores attained from the surveys were calculated to determine the purposes of Facebook users in using it. As can be seen in Table 3, maintaining relationships, as a factor containing A1, A3, A6, A8 and A4 has the highest mean score. Item A1 (I use Facebook to find my old friends) was found to be the leading purpose having the highest mean score. While A10 and A11 (items about the "following agenda" factor) followed these, item A9 (I use Facebook to support my academic work) has the lowest means score.

Table 3: Facebook Usage Purposes Items with Mean Scores

		Item	N	Min	Max	$\overline{x}$
Maintaining Existing Relationships	A1	I use Facebook to find my old friends.	870	1	5	4.09
	A2	I use Facebook to contact with my friends.	870	1	5	4.00
	A3	I use Facebook to share information and resources with my friends.	870	1	5	3.26
	A4	I use Facebook to maintain my relations by joining academic groups (class, school, department and faculty).	870	1	5	3.54
	A5	I use Facebook to follow changes and improvements about my school and school friends.	870	1	5	3.29
Making New Relationships	A6	I use Facebook to make new friends.	870	1	5	2.02
	A7	I use Facebook to find out people with common interests and to join groups with such people.	870	1	5	2.55
Academic Usage	A8	I use Facebook to share my homework and projects with my classmates.	870	1	5	2.16
	A9	I use Facebook to support my academic work.	870	1	5	1.92
Following Agenda	A10	I use Facebook to follow the changes occurring in our daily lives.	870	1	5	2.73
	A11	I use Facebook to keep track of innovations on the agenda.	870	1	5	2.46

To determine if Facebook usage purposes differs in terms of genders, t-test analysis was carried on the total scores by factors.

Table 4: t test of Facebook Usage Purposes in terms of genders

	Gender	N	$\overline{x}$	df	Cohen d	p
Usage Purposes						
Maintaining Existing Relationships	Male	446	17.5	4.02	0.365	.000
	Female	424	18.9	3.55		
Making New Relationships	Male	446	5.0852	2.03937	0.552	.000
	Female	424	4.0212	1.80150		
Academic Usage	Male	446	3.8767	1.92220	0.209	.002
	Female	424	4.2925	2.05350		
Following Agenda	Male	446	4.7848	2.11646	0.375	.000
	Female	424	5.6085	2.27901		

As seen in Table 4, significant differences were found between males and females in their Facebook usage purposes. According to these results, females use Facebook for 'maintaining existing relationships', 'academic usage' and 'following agenda' more than males do while males only use Facebook for 'making new relationships' more than the females. To figure out the standardized difference between the two means, Cohen's d effect size was calculated. The effect size between 0.2 to 0.5 were classified as small, between 0.5 to 0.8 as medium and above 0.8 indicated the large effect size. Examining Cohen's d effect size showed that the most significant difference was in making new relationships (d=0.052) while the least significant difference was in academic usage (d=0.209).

DISCUSSION

This study revealed out the usage purposes of social networks with a focus on the differences between females and males. The explanatory factor analysis was carried out and individuals' Facebook usage purposes were categorized under four categories; 'maintaining existing relationships', 'making new relationships', 'academic usage' and 'following agenda'.

It was found that, people most generally use Facebook for maintaining existing relationships. As Facebook gives users an opportunity to communicate with their friends via messages or chat and also, to track their friends' status messages, walls and other profile changes, people tend to benefit from these facilities of Facebook. Similarly, in line with this study, Joinson (2008) categorized individual's social network usages under seven categories, namely 'social connection', 'shared identities', 'photographs', 'content gratifications', 'social investigation', 'social network surfing' and 'status updates', and found that the most important uses of social networks are related to social connections which includes 'finding out what old friends are doing now', 're-acquiring lost contacts', 'connecting with people you otherwise would have lost contact with." Joinson's (2008) study support this study's findings on bases of the social connection factor which reflects the 'maintaining existing relationships' factor that was found to be the leading purpose of users in this study. In addition to this, 'social network surfing' and 'social investigation' factors which include statements such as meeting new people, looking for specific types of people, and looking at the profiles of the people unknown to the user overlap with the "making new relationships" factor of this study.

As people in Facebook, share news from newspapers, TV or magazines and also announce advertisement of innovations, new products or event notifications related to concerts, films, theaters, sport activities etc, 'following agenda' factor was found to another most important usage purpose. Once again a similar factor revealed out in Joinson's (2008) study as 'content' and 'status update' factor.

Lampe, Ellison & Steinfield (2006) pointed at the distinction between the use of Facebook for social searching (finding out information about offline contacts) and social browsing (the use of the site to develop new connections). With a survey of over 2000 students, he found that the primary use of Facebook was 'social searching' that is, using Facebook to find out more about people who they have met offline, or who they attend class or share a dormitory with. The use of Facebook for 'social browsing', for instance, to meet someone via the site with the intention of a later offline meeting, or to attend an event organized online, scored relatively low amongst their sample. Lampe, Ellison & Steinfield (2006) also reported that their sample preferred "keeping in touch with an old friend or someone known from high school, university, etc. Similarly, in this study, the findings showed that users make a distinction between maintaining existing relationships and making new relationships, the former being the main purpose of the users with whom the study was carried out.

Lenhart (2009) found that individuals use their social network profiles mostly to 'stay in touch with friends.' On the other hand, other social networks usages were accepted as making plans with friends, making new friends, organizing events or causes, making new business professional contacts, promoting work and flirting which are similar to the findings of this study's factors of 'academic usage' and 'making new friendships'.

Furthermore, it is found that individuals use Facebook mostly for 'finding old friends'. This finding can be related with the fact that people can search for their old schools, business corporations, and classes without needing their telephone numbers, addresses, e-mails or the city or country in which they live, or simply by writing their names and surnames in Facebook. On the other hand *I use Facebook to contact with my friends* and *I use Facebook to maintain my relations by joining academic groups (class, school, department and faculty)* have been revealed out as the other statements that have higher mean scores. This finding indicating that the majority of users claim to use Facebook to contact with their friends and to maintain their relations by joining academic groups shows how individuals' communication with those with common background or interests are facilitated with various Facebook features as chat, messaging, message walls. Interactivity can be said to enable this interaction which in return affects users' purposes while becoming a more popular and inviting online application.

Females use Facebook for maintaining existing relationships, academic purposes and following agenda higher than males while males use it for making new relationships at a rate higher than the females'. This finding shows that males use social networks mostly for making new friends and relationships while females use it mostly for finding their old friends and keeping in touch with the existing ones. The reasons for this finding could be explained by the possibility that females tend to hide their identities and personal information to keep their privacy in Internet environment. Research shows that females don't disclose themselves to people they don't really know because of social pressure and traditional social roles associated with women (Bölükbaş & Yıldız, 2005; Fallows, 2005). Similarly, Mazman, Usluel & Çevik (2009) found that social influence on the decisions of

females is higher than personal decisions while personal decisions are more dominant over social influence in males. This finding is in line with Tüfekçi's (2008) study which shows significant differences between males and females on the usage of social networks that females are more likely to use social networks to keep in touch with friends either living nearby or in other schools while males are more likely to use social networks to find potential friends and find people with have similar interests. Thelwall (2008) and Lenhart & Madden (2007) found that males tend to make new relationship in social network environments more than females do. On the other hand, Korkut (2005) found that females' communication skills are more positive than males' and he explained this by suggesting that females are more social than males. In our study, however males were found to be more open to new relationships just as communication skills are important both for maintaining existing relationships and making new relationships. Hence, findings of this study do not support Korkut's (2005) study on females and males in terms of their communication skills.

Social networks have millions of users whose numbers increase rapidly. In this study, usage purposes of social networks are aimed to explain the important role of these sites in people's daily lives. 18-25 age group who are main common users, were found to be dominant users of social networks in most of the usage factors than other age groups. On the other hand in terms of genders, only in 'making new relationships' factor, males found to be having higher scores than females. Hence, future research should investigate the reasons why females don't disclose themselves in internet environment as much as males do beside to the reasons affecting this reality. In addition to this, an another statement must be investigated is why female behave uncomfortable when they are communicating in online environments, while males tend to gain social status and image by sharing their photos and personal characteristics with others to make new relations. Also, usages of social networks should be studied in terms of different variables such as educational level, profession, cultural differences, etc., while the possible sources of these differences can be examined in an in-depth manner.

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