

Online Social Networking: An Australian Perspective

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Abstract

This paper reports the findings of a survey conducted in Australia in 2007/08 that investigated the experiences of online social network users aged between 15-65 years. This research is underpinned by two socio-cultural theories of learning: Situated Cognition and Activity Theory, and has a particular emphasis on online identity creation.

Both quantitative and qualitative data are reported on issues of privacy, relationship between online and offline friends, time spent engaged in online social networking activities, use of photographs and status features and positive and negative experiences associated with online social networking. The findings are then interpreted from a socio-cultural perspective of learning.

Keywords: Online social networking – identity creation – situated cognition – activity theory

Online Social Networking: An Australian Perspective

Introduction

Today anyone with Internet access can create and maintain a permanent online presence through social networking sites such as, Facebook, MySpace, Hi5 and BeBo. As a result individuals who participate in online social networking (OSN) make use of language, multimedia and technology to create an online identity which permanently 'stands in' for their physical self. OSN is not simply a collection of online 'friends'. Engaging in OSN activity enables users to develop knowledge and learn the skills necessary to participate in the new forms of socialisation available in the digital age.

The survey reported here sought to uncover the experiences and attitudes of active online social network users. The findings presented are the first phase of a study into OSN and underpin an in-depth qualitative study of individual online social network users and the (co)construction of their online identity.

To understand the phenomenon of OSN, principles of two socio-cultural theories of learning (namely Situated Cognition and Activity Theory) are applied. Following this, the paper moves to present the findings of an online survey conducted in Australia late 2007 through early 2008. The survey data is both quantitative and qualitative in nature. The quantitative data reports on the type, frequency and nature of respondents' OSN experiences. The qualitative data explores specific components in more depth, such as the use of photographs and 'status' to communicate particular messages to an intended audience.

Socio-Cultural Theories of Learning and Online Social Networking

The popularity of OSN has increased significantly in a relatively short period of time. This is evidenced by the increased membership to MySpace which has grown from 4.9 million in November 2004 to 26.7 million in November 2005 (Read/WriteWeb 2007), to over 70 million registered users in 2006 (Snyder et al., 2006). Statistics for Facebook similarly suggest widespread growth. Trends indicate that Facebook users are increasing 3% per week with a 143% increase in page views at 15.8 billion over the period May 2006-May2007 (Techcrunch 2007). It is currently reported that these two very public and popular social networking sites are attracting around 115 million people to their respective sites each month (Techcrunch 2008). As at April 2009, Facebook is identified as the fifth most popular website and MySpace the tenth most popular site globally (Alexa 2009a)¹.

In Australia MySpace and Facebook are consistently listed in the top 10 most popular websites in the country. As at September 2008, Hitwise (2008)² ranks Facebook third and MySpace seventh in terms of market share visits. In April 2009, Alexa (2009b) identified Facebook as the third most popular site in Australia, while MySpace came in tenth position.

The popularity of these sites makes them a valuable context for exploring the nature of 21st century socialisation and, in turn, the phenomenon of online identity creation. In understanding this phenomenon it is useful to consider two socio-cultural perspectives of learning: Situated Cognition and Activity Theory. Socio-cultural theories of learning value the communication of knowledge through social practices and the opportunity to engage in

¹ www.alexa.com has been providing traffic rankings since 1996 by continually trawling all publicly available websites to create a series of snapshots from which data is derived

² www.hitwise.com has patented methodology which allows it to anonymously capture the online usage, search and conversion behaviour of 25 million Internet users (US, UK, Australia, NZ, Hong Kong and Singapore)

various communities to learn with and from others. The link between online identity and socio-cultural theories of learning arises from widespread use of a culturally valued tool (in this case social networking websites) which provides a context for the individual to learn how to construct an online identity which engages him/her with the collective OSN community.

Amongst other key principles, Situated Cognition is concerned with the notion of 'communities of practice' whereby learning is tied to one's desire to engage with, and become an active member of society (Lave & Wenger 1991). This could be viewed as a process of enculturation where, from an early age, people adopt behaviours and belief systems of their social groups and eventually start acting in accordance with their norms (Brown et al., 1989). To a certain extent this learning occurs as more capable individuals (masters) expose their practices to novice learners (apprentices) (Brown et al., 1989). Learning occurs as a result of participation in real-life contexts and so, engagement in authentic activity is heralded as a fundamental component in any investigation of human experience (Bannon 1997; Brown et al., 1989; Herrington & Oliver 2000). Taking account of principles underpinning Situated Cognition, research into OSN must relate directly to experience, as it occurs in the daily lives of social networking site users. From this perspective OSN can be explored as a process of enculturation, where the user actively engages in the practices of a global online community – learning from this community and subsequently contributing to the community.

Building upon the Situated Cognition view of learning the modern interpretation of Activity Theory considers that human cognition occurs as individuals engage in motivated, goal-directed activity. This activity is mediated by tools, which are culturally developed and valued (Engeström 1989; 1993; 1999; Kaptelinin 1992). From this perspective competence is required with external (technical) tools, that is, the manipulation of physical objects (for example, a hammer, calculator or computer) and also mastery of internal (psychological) tools (for instance, language, calendar, icons) which enable humans to communicate, interact and influence each other (Bannon 1997; Lim 2002). Mastery of these two forms of 'tool' provides a means for sharing knowledge which reflects the social and cultural context in which the tools are used (Blanton et al. 1997; Riva 2001). Under Activity Theory technical and psychological tools are considered the means by which humans' change how they interpret and transform their external world and this is a key aspect of learning (Hedegaard 2001). Importantly, as individuals and groups are shaped by the cognitive tools available to them, commonalities begin to emerge among members of society (Hatano & Wertsch 2001). This concept ties back Situated Cognition, specifically, 'communities of practice' and learning as a form of enculturation within a given community. The relationships between the concepts of Activity Theory are best represented in Figure 1 below:

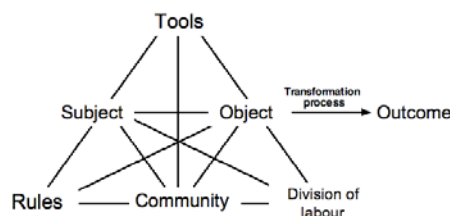


Figure 1. Representation of Activity Theory

The upper triangle in Figure 1 shows human activity as a process which involves the *Subject* using *Tools* for a specific *Objective*. It is recognised that this activity does not occur in a

vacuum and so, the lower component of the triangle acknowledges the context in which activity occurs. Here, the impact of the *Rules* governing any activity is recognised and it is understood these *Rules* are co-constructed by members of the relevant *Community*. The *Community* also contributes the skills, knowledge and understanding (*Division of Labour*) which underpins any human activity. These interrelated components contribute to the intended (or at times unintended) *Outcome* that results from activity.

With respect to OSN the application of Activity Theory is shown in Figure 2 below:

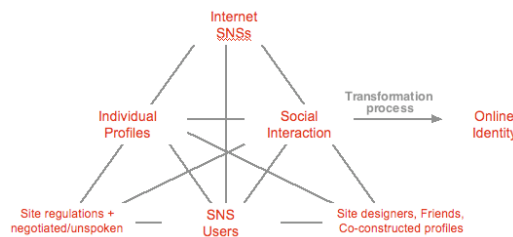


Figure 2: Activity Theory applied to Online Social Networking

Figure 2 firstly acknowledges the activity of creating *Individual Profiles* using the *Internet* (specifically social networking sites) to engage in *Social Interaction*. Again, this activity does not occur in isolation but is determined by the context in which it occurs. OSN activity is controlled by *Site Regulations*, which are a result of both design/platform constraints and unspoken rules imposed by *Social Networking Site Users* as a collective. In a Web 2.0 environment the collaboration between site designers and site users results in a collective knowledge to produce the applications which contribute to evolution of the site. The six elements work together to enable creation of each *Online Identity* which is an outcome beyond the originally stated role of s which was to ‘get in contact’ and ‘stay in contact’ with others.

The application of Situated Cognition and Activity Theory to OSN suggests social networking sites can be viewed as culturally valued, cognitive tools which facilitate engagement with the world through goal-driven activity which enables new forms of identity creation, communication and socialisation. Hence, these two socio-cultural theories of learning underpin the author’s research in this field, placing particular emphasis on the need for holistic investigation of the phenomenon of OSN. The use of social networking sites should not be viewed in isolation of computer and user; rather this interaction should be explored in the context of the users’ whole life (online and offline). Given this, the survey which forms the basis of this paper (and future research emerging from the survey results) is specifically designed to gain insight into current online social network users’ experiences of, and attitudes towards, OSN with emphasis on how this activity contributes to, and aligns with, their offline activities.

The presentation of statistics which specify the amount of time someone spends online and the number of friends they have is certainly useful to understanding the phenomenon of OSN. However, the application of Situated Cognition and Activity Theory to this research has enabled the phenomenon to be analysed in greater depth, particularly in relation its implications for identity creation and socialisation. This in turn has enabled some initial understandings of the ‘learning’ which is facilitated in the OSN context.

Research Design

An online survey was created using an in-house University survey tool. After gaining approval from the relevant Faculty Deans, this survey was emailed to all undergraduate and post-graduate students currently enrolled in the Faculty of Education and the Faculty of Humanities and Social Sciences. In the accompanying email to students it was stated that recipients could (and should) forward the survey to others who may be interested in responding. The survey remained opened until end January 2008. From this convenience population there were 752 respondents and a breakdown of demographics is presented in Table 1 below.

Table 1. Demographic Overview of Survey Respondents

Male	N=183 (24.3%)
Female	N=569 (75.7%)
<17	N=167 (22.2%)
18-25	N=272 (36.2%)
26-35	N=189 (25.1%)
36+	N=124 (16.5%)
University student	N=354 (47.1%)
Full-time employment	N=268 (35.6%)
Part-time employment	N=100 (13.3%)
Other	N=30 (4.0%)

This sample is not intended to be representative of the entire OSN population, particularly given the over-representation of women and people aged between 18-25 years. Also, the sample is further limited given respondents are all University educated, or in some way associated with a University student. While this sample is not necessarily representative of the OSN community the findings do provide many insights into the experiences of active online social network users, particularly from an Australian perspective, which contributes to the overall picture of this global phenomenon.

After obtaining demographic information a series of survey questions about general Internet use were investigated (findings reported elsewhere). The survey then moved to explore respondents' use of, and experiences with, OSN. This component of the survey included 23 quantitative questions with prescribed response choices:

Have you created an online profile in an online social networking site such as MySpace, Facebook or LinkedIn?
Which sites have you used?
How long have you had an online profile?
How many online profiles do you consider active today?
Why did you originally create an online profile?
What personal information is available on your profile?
What level of privacy have you set?
What is your current online profile picture?
How often do you change your profile picture?
How many online 'friends' do you have?
How many online 'friends' do you see in person each week?
How many online 'friends' do you phone or text-message each week?
Who makes up the majority of your online 'friends'?
How do you interact with others through your online profile?
How often do you post photos on your profile?
How often do you post videos on your profile?
How often do you post music on your profile?
How often do you change graphics/wallpaper on your profile?
Do you update your 'status' (how you are feeling) regularly?
Do you keep a blog on your profile?
Which item best describes most of your blog entries?
Estimate how much time you spent last week updating/editing/playing with applications on your profile?
Estimate how much time you spent last week browsing/contributing to your friends' profiles?

The survey also included two Likert scale questions which explored the degree to which:

My online profile is important to:
my social life
enable me to communicate with others
allow me to express myself
keep in touch with family/friends/colleagues
meet new people
follow what is happening in the lives of others
show my popularity
entertain me
let me entertain my friends
My online profile makes me unhappy if:
someone rejects my friend request
I reject someone's friend request
I go days/weeks without a friend request
I go days/weeks without communication from my friends (eg. poke, writing on wall, a virtual gift)
people send me negative messages/actions
people do not respond to my messages/actions
I have to spend a lot of time online communicating with people

Dispersed throughout the quantitative responses described above were three opportunities for qualitative reply:

8(a) Why did you choose your current profile picture?
19(a) Why do you change your status/express how you are feeling on your profile?
26. If my online profile ceased to exist tomorrow I would feel.....

Findings

Of 752 respondents 68% have created an OSN site profile. As would be expected younger respondents were more likely to have a profile (86% of <17 and 87% of 18-25 year olds), while around half of the respondents aged 26-36 have a profile and only 27% of those aged 36 and over have created an online profile.

Type and number of profiles

Facebook was clearly the most popular website for this sample (49%), MySpace came in second with 29% of respondents using this platform and the remainder distributed amongst other well-known sites (for example, LinkedIn and Hi5). Almost 50% of respondents reported that they had actively maintained an online profile for over one year. The vast majority (75%) has just one active profile, while 22% acknowledge that they have two active profiles and only 3% of respondents had three or more active profiles.

Profile Purpose

The two primary reasons respondents identified for originally creating their online profile were, an invitation from others (40%) or a desire to **stay** in contact with family and friends (29%). Fewer respondents indicated that they had originally created a profile to actively **get** in contact with others (as opposed to staying in contact) (9%), out of general curiosity (9%), promote themselves or an event/issue (4%), to expand social networks (3%) or business networks (2%) networks, or 'other' unstated reasons (4%).

Privacy

With respect to privacy, the majority (68%) indicated that they created an online profile to be viewed only by people already known to them. Only 16% have part of their profile available to be viewed by anyone and 16% have their entire profile openly accessible to anyone. Further analysis of this data revealed that male respondents and those aged over 36 years had a greater tendency to have their profile publicly available.

'Friends'

As would be predicted, younger respondents have a greater number of online 'friends' than their older counterparts. As outlined in Table 2 below, 84% of under 17s and 73% of 18-25s have more than 50 friends. In contrast, less than 20% of 26-35 year olds and 8% of 36+ have greater than 50 online 'friends'.

Table 2. Number of 'friends' based on age

Age	Number of Friends						
	1-5	5-10	10-20	20-50	50-100	100-200	200+
<17	<1%	3%	17%	33%	26%	16%	4%
18-25	1%	3%	6%	17%	23%	35%	15%
26-35	14%	22%	18%	27%	12%	7%	<1%
36+	43%	24%	11%	14%	8%	0%	0%

n = 752, discrepancies in percentages due to rounding

Given the commentary around the term ‘friend’ as used in relation to social networking sites it was of particular interest to investigate the relationship between number of online friends and number of those ‘friends’ who also present in traditional offline interactions (that is, face-to-face or telephone communication). Data was, therefore, collected on the number of online friends and the number who are seen, text-messaged or telephoned each week. This data is presented in Table 3 and Table 4 below.

Table 3. Number of ‘friends’ seen in person each week (based on age)

Age	Number of Friends						
	0	1-2	2-5	5-10	10-20	20-50	50+
<17	<1%	4%	18%	34%	27%	17%	4%
18-25	3%	11%	24%	29%	21%	1%	1%
26-35	22%	25%	32%	17%	4%	0%	0%
36+	40%	23%	20%	14%	3%	0%	0%

n = 752, discrepancies in percentages due to rounding

Table 4. Number of ‘friends’ telephoned/text-messaged each week (based on age)

Age	Number of Friends						
	0	1-2	2-5	5-10	10-20	20-50	50+
<17	2%	7%	24%	35%	21%	11%	0%
18-25	3%	13%	21%	29%	20%	14%	1%
26-35	23%	29%	28%	17%	3%	0%	0%
36+	43%	20%	26%	11%	0%	0%	0%

n = 752, discrepancies in percentages due to rounding

It is noted from this data that those aged over 26 years (who had fewer online ‘friends’) see and/or telephone very few of those online friends (if any at all). The younger respondents see and/or communicate offline with a greater percentage of their online friends. When asked who makes up the majority of online friends it was revealed that they are:

- real friends who I spend time with outside the Internet (29%)
- past colleagues/school/University friends (23%)
- current colleagues/school/University friends (22%)
- family members (13%)
- people I have some friends in common with but don’t know well (4%)
- people I have met out socially but don’t see regularly (7%)
- people I have never met (2%)

Time Investment

Also of interest is the amount of time being invested in OSN activities. As outlined in Table 5 (over page) the majority of respondents are spending under one hour per week on their own profile (and certainly less than five hours per week) and also less than five hours per week on the profiles of their friends.

Overall 98% of respondents report spending less than five hours on their own profile and 95% devote less than five hours per week to their friends’ profiles. This data was further

analysed in relation to ‘number of friends’ and ‘time spent online’. This analysis revealed that number of online friends is not a predictor of time spent on one’s own profile. For instance, respondents with 50-100 friends were identified as spending more time per week on their own profile than those people who reported having over 200+ friends.

As would be expected, the more online friends one has the more time the individual spends on their friends’ profiles. However, even of those with more than 100 online friends less than 1% indicated that they would spend over 10 hours on their friends’ profiles each week.

Table 5. Time per week spent on OSN activities (percent)

Time per week spent on OSN activities	On own profile	On friends’ profiles
< 1hr	66%	55%
1-5hrs	32%	40%
5-10hrs	2%	4%
10-20hrs	1%	<1%
Total Percent	100%*	100%*

n = 752, * discrepancies due to rounding

It was also noted that there was no discernable difference in time spent on one’s own profile and the profile of friends based on gender or age.

Profile Picture

No respondent reported updating their profile picture on a daily basis but, 14% do so weekly, 47% do so monthly, 14% do so yearly, while 23% never make changes to their online profile picture. More interesting were the respondents’ qualitative responses about their choice of online picture. Interpretive analysis of this data revealed seven factors underpinning one’s decision for choosing a certain photo as outlined in Table 6 below.

Table 6. Reasons for choosing profile picture

Looks good	<i>“It’s a (rare) decent photo of me” “good photo of me” “best of a bad lot” “I looked pretty” “cause, between you and me, I’m not too bad to look at ;-)”</i>
Projects desired image of self	<i>“Because it shows the real me” “coz it resembles my personality...” “says what I want to say about me” “gives a sense of my place on the planet”</i>
Represents an occasion	<i>“..at a great and memorable event” “..reminds me of good times...” “...it was taken in circumstances I will never forget and is therefore meaningful to me...”</i>
Includes significant other/friends	<i>“Having friends in picture gives it more inviting feel..I think” “...so people will see my husband” “shows me being with my family”</i>
Convenience	<i>“All I had” “Because it was available on my computer...” “I don’t upload photos and this one had been tagged by a friend on facebook”</i>
Maintains some anonymity	<i>“Provides a level of privacy...” “...shows me but my face is covered” “..a certain ambiguity...hard to see me” “...doesn’t really show my face clearly”</i>
Image – not oneself	<i>“Because I liked the cartoon” “I am a fan of the person in the picture” “...tv character shares same surname</i>

Anecdotally it has been reported that immediate judgments are made about a person based on the picture presented on his/her online profile. Similar to the experience of ‘first impression’ in face-to-face meetings, an individual’s profile picture is the first point of reference when encountering their online presence. As would be expected, results of this study suggest that photo choice is, more often than not, a conscious and purposeful decision. This makes the choice of online photograph an interesting area for exploration in relation to identity creation.

Status Updates

In addition to posting an online profile picture another area where the individual has control over is his/her image is updating of status/feelings. Survey data revealed that 40% of respondents make use of this feature. There was no discernable difference between gender or age in making status updates. Interpretive analysis of qualitative data suggested four reasons (Table 7) for choosing to update one’s status.

Table 7. Reasons for updating ‘status’

Wanting to be ‘witty’	“to be humorous” “...to make friends laugh” “to be amusing” “I think it’s funny” “I usually only add amusing updates to gain attention” “it is amusing, people don’t write serious things, rather joking kind of comments” “its an opportunity to make a joke...”
Keep alignment with ‘real’ self	“so people know whether to talk to me or not” “because my general overall mood can fluctuate” “when I see the old status I realise it is no longer relevant” “because of my changing feelings” “indication of my changing moods” “because otherwise people would think I never changed my feelings...” “just like in reality”
Belief others should/do want to know their feelings/activities	“to allow friends and family to feel that they are keeping in touch with me and my life happenings” “because people can’t see you physically, it’s important for them to get a bearing on how you are feeling....” “...I like to think others will be interested in what I am up to” “because I want people to know how I am going”
Engage ‘friends’	“...can sometimes start a conversation with others” “it becomes a stimulus for online conversation” “constant way to communicate with your friends” “to invite comments on my wall” “...a conversation starter”

Of course, also interesting for further exploration here are the reasons behind 60% of social networking site users not making use of this feature and the implications this may have on their social interactions and others’ perceptions of his/her online identity.

Updating other profile features

In relation to updating other available profile features it was found that the only element respondents added/updated regularly were photographs. Table 8 below shows the regularity with which other features are updated (if ever):

Table 8. Regularity of updating OSN features

	Photos	Video	Music	Theme/wallpaper
Daily	<1%	0%	1%	0%
Weekly	14%	<1%	5%	3%
Monthly	47%	8%	17%	14%
Yearly	15%	11%	8%	16%
Never	24%	78%	68%	68%

n = 752, * discrepancies in percentages due to rounding

The difficulty with asking about these available features in a survey which encompasses all variety of social networking sites is that each site differs in the features it offers and the amount of control users have over such features. Where respondents have reported 'never' it is impossible to determine if this is because they have chosen not to make use of the feature or whether the function is not readily available on their chosen social networking site.

Feelings toward online social networking

When asked what may contribute to OSN being viewed negatively it was found that respondents felt quite strongly about receiving negative messages/actions and being ignored. Over half of respondents also found the amount of time they were spending online to communicate to be an issue. Table 9 below presents the items in order of most detrimental to those which have less negative effect on the feelings of the online social network user.

Table 9. Negative consequences of OSN

My online profile makes me unhappy if:	
	(undecided/agree/strongly agree)
- People send me negative messages/actions	68%
- People do not respond to my messages/actions	55%
- I have to spend a lot of time communicating online	54%
- Someone rejects my friend request	45%
- I reject someone's friend request	43%
- I go days/weeks without communication from friends	41%
- I go days/weeks without a friend request	25%

When ranked in order of importance (Table 10 below) it was found that OSN is clearly an important tool for keeping in touch and communicating with others, less important as a form of entertainment and relatively unimportant as a tool for meeting new people or demonstrating popularity.

Table 10. Positive outcomes for OSN

My online profile is important to:	
	(important/somewhat important)
- keep in touch with family and friends	79%
- enable me to communicate with others	70%
- follow what is happening in the lives of others	67%
- entertain me	61%
- my social life	40%
- let me entertain my friends	38%
- enable me to express myself	29%
- meet new people	13%
- show my popularity	9%

The data which has been presented here explores a number of different elements of OSN and provides an overview of the experiences of this particular sample of Australian respondents. The paper now moves to discussion of the results, with parallels being drawn between emerging international findings in the field of OSN. The findings are also considered in light of principles of Situated Cognition and Activity Theory.

Discussion

Across many countries there is evidence that significant proportions of the population are engaging in OSN activity. However, much of the data (particularly that reported in academic journals) is limited to University students and thus not reflective of the general population. It is expected that University students are more likely to have created an OSN profile than other groups within the community. The result of this survey from an Australian perspective would indicate that this particular population are (at 68%) less likely to have an online profile than their University educated peers in the United States. Salaway et al. (2008), for instance, report 85.2% of the 27,317 United States university students they surveyed currently have at least one active OSN profile. Similarly, Raake & Bonds-Raake (2008) found that 87.1% of the 116 United States university students they surveyed maintained either a Facebook or MySpace profile.

It is important to note, however, that this high uptake of OSN cannot necessarily be generalised to the overall population and (Ofcom 2008) provide useful statistics on the number of people with Internet access who use the Internet for OSN. Ofcom (2008) report (on selected countries) that, of this more general population (that is, not limited to University students), Canada has the highest proportion of people with Internet connections using this connectivity to access social networking sites (53%) – followed by the United Kingdom (39%), United States 34%), Japan (32%), Italy (22%), France (17%) and Germany (12%). For these reported countries it is apparent that a significant portion of the population is engaged in OSN. From a socio-cultural perspective this would indicate the value of OSN as a culturally valued tool.

Although there are many variables influencing the statistics reported on the rate at which various populations make use of OSN the popularity of these sites is obvious given there is at least one social networking sites reported in the Top 10 most popular websites³ across various countries. This study supported existing statistics that identify Facebook and MySpace as amongst the most popular social networking sites in Australia. Further review of the most popular websites in various countries certainly confirms that OSN is a global phenomenon. Countries which align with Australia where Facebook is identified as the most popular social networking site include, United Kingdom, Canada, Kenya, South Africa, Belgium, Argentina and Pakistan (all in the Top 10 of most popular websites in these countries). Interestingly, uptake of particular social networking sites does not appear to be necessarily language based. For example, in Spanish speaking Mexico, *Hi5* is currently the most popular social networking site, while in Spain, the most popular site is *Tuenit*. In Portuguese speaking Brazil, *Orkut* is preferred while in Portugal's online social networkers are using *Hi5*. Popularity of sites also does not appear to be based on location, for instance, in Asia Vietnamese users are drawn to *Zing* while in Thailand they are using *Hi5*. However, there has been found to be some relationship between choice of social networking site based on age (for example, Bebo is designed for, and popular with, younger users) and race, ethnicity and education levels (Hargittai 2007). It is also noted, that several countries have seen the evolution of their own country-specific social networking site – France has *Skyrock*,

³ Source: www.alexa.com

the Netherlands is using *Hyves* and Russia has *Vkontakte* (which is, incidentally, the most popular website in the country). This has implications from a socio-cultural perspective. If individuals limit their OSN to a country-specific site, what may be the longer-term implications for global networking experiences and also the evolution of particular site features that may not present a global perspective? This is particularly important when considering the principles of Situated Cognition which highlight the influence of context on learning. In a global world it is becoming increasingly important to engage in practices which are transferable worldwide.

In relation to privacy it was found in this study that the majority of respondents limited access of their online profile to their existing network, more so than the US participants surveyed by Raacke and Bonds-Raacke (2008) on this issue. In the past, a lack of awareness about the function of privacy settings contributed to online profiles being publically available. However, as Acquisti and Gross (2006) report, people appear to be increasingly aware of their privacy settings and Ofcom (2008) identified only 3% of respondents who were unable to state what level of privacy they had set on their profile. It is suggested that older online social network users may be more willing to have a publicly accessible profile because they do not publish as much personal information as their younger counterparts. Further, issues surrounding privacy reflect the socio-cultural learning present in the OSN community. As this community has become aware of issues surrounding privacy there has been shift in the users understanding of the 'public' versus 'private' nature of their online profiles.

This study revealed young online social network users have, on average, a greater number of online friends than their older counterparts. As expected, this finding reflects international data on this issue, such as the large-scale US study by Salaway et al. (2008) which found 51.9% of over 30s had fewer than 25 online friends while 31.5% of 18-19 year olds had over 300 online friends. The notion of 'friend' is one of the most intriguing concepts surrounding OSN. It is suggested that while accumulating online friends may be a show of popularity for younger users, it is likely that more traditional notions of friendship influence the acceptance of online friend requests by older users. In their study of the blogging site *LiveJournal* (Fono & Raynes-Goldie 2006) identify various meanings applied to online friendship (as trust, as courtesy, as declaration, as nothing) and the meaning of online friendship for different cohorts of online social networkers is an important area for further investigation. Interestingly, if we consider the master/apprentice relationship from the Situated Cognition perspective, we should question the belief that young persons are more capable in OSN activity. Instead, we could view older persons as having greater understanding of 'friendship' which has subsequently seen them often manage online 'friends' more capably than some younger social networking site users.

One area where the survey presented here appears unique is in asking participants about the presence of their online friends in traditional offline communications. While the number of online friends can be in the hundreds, for this Australian sample, number of online friends was not a determinate of the extent of their offline interactions. The author would have assumed that fewer friends online meant that those friends would be close friends and would, therefore, be seen/telephoned on a regular basis but this was not the case. This suggests that for older online social networkers the people who make up their online friends are not those forming part of their daily offline interactions. However, with respect to younger online social networkers, the relationship between the large number of online friends and the high number seen in weekly, face-to-face interactions is, in all likelihood, as a result of most online friends being school or University peers who are conveniently seen in large numbers on a weekly basis. The data collected in relation to online friends would suggest that OSN is providing an additional avenue for younger people to socialise with their peers, while older

users are less likely to be using OSN to engage with people seen/contacted regularly in day-to-day life. As noted in Situated Cognition, learning must be examined from within the authentic context it is situated and social networking sites provide one context to examine social relationships. However, from an Activity Theory viewpoint, this activity does not occur in isolation and must be considered in the larger context. Given this, questioning users about the relationship between their online and offline friends provides insight into how OSN fits into a person's offline social experiences.

Upon reflection, to more fully understand these relationships it would be useful to identify the number of online friends an individual has and then analyse the number of those who actually contribute something meaningful to that person's profile (for example, sending gifts, writing on wall, and so on). The composition of online friends was found in this study to be predominately made up of people already known to users, but the depth of these relationships has not been explored. This is an important area for further investigation, particularly in order to uncover the potential of OSN to contribute to one's 'social capital'⁴ as it has been found by Ellison (2007) that a positive relationship exists between Facebook use and the maintenance and creation of social capital.

Some people would argue that socialising online is detrimental because it detracts from face-to-face communication. However, from a socio-cultural perspective of learning, time spent online means opportunity for greater skill development and increased likelihood of mastery of the socially valued cognitive tools (both external and internal) which facilitate this new form of socialisation and identity creation. Given this, it was interesting to ascertain the extent to which social networking site users engaged in online activity. The survey data presented here is limited in accurately defining the time respondents spend engaged in OSN activities and more accurate accounts should be obtained through specific analysis of data available by capturing website history views. However, self-reporting in this instance would suggest these Australian respondents are spending similar quantities of time engaged in OSN activities as those reported by Raacke and Bonds-Raacke (2008) who found that individuals, on average, spent 1.4 hours per week on their own profile and 1.10 hours on the profiles of others but perhaps less time than that reported by Salaway et al. (2008) who suggest the average of all OSN activity was 7.3 hours per week. As at August 2007 ComScore (2008) identified light social networking site users to be active 0.3hrs per month, medium users 3.9hrs and heaving users active 22.1hrs per month. ComScore also identified United Kingdom users to spend most hours per month on social networking sites (5.8hrs), followed by Germany (3.1hrs), France (2.0hrs), Spain (1.8hrs) and Italy (1.8hrs). These reported figures appear to be far less than those reported in this survey and research emerging from the United States. More detailed investigation is clearly needed to uncover the time being devoted to OSN activity. As OSN evolves it will be important to investigate the consequences of non-engagement. From the socio-cultural perspective of learning non-users (or infrequent users) can not achieve objectives of OSN, such as, mastery of the technology, skill in online identity creation and any socialisation benefits.

Two areas which are specifically controlled by the individual to create a desired impression of his/her identity, is the choice of choice of online profile photo and updating his/her status. Results here suggest that choice of photo is varied and serves many purposes. Similarly, individuals are not just blindly updating their status, they are consciously using this tool to express elements of personality and/or seek reactions from others. From this data it was

⁴ Social Capital has many varied definitions but for the purposes of this discussion the following definition is used: "*the collective value of all social networks and the inclinations that arise from these networks to do things for each other*" Robert Putnam, available at: <http://www.bowlingalone.com/socialcapital.php3> viewed 30 July 2007.

revealed that people who used the status feature felt a need to closely align their online self with the experiences of their real self and/or considered that they are providing a 'service' to their network by keeping them informed of their feelings and activities. These two features of social networking sites are important sources of data in the analysis of online identity creation. Further research is needed to more fully explore the ways in which an individual uses pictures and statements (and now more commonly music) within social networking sites to create a desired impression of him/herself. This is particularly important if one considers an OSN profile similar to previous creation of a personal website where it was found that the electronic 'self' was not fundamentally different from the 'self' presented in other contexts (Miller & Arnold 2003) and the nature of OSN to create a social scene around the member, rather than in physical places, through discussion or at events (Chan 2006).

It is noted that these Australian respondents primarily only added photographs on a semi-regular basis. The addition of photos supports anecdotal reports that photos are posted and tagged to mark important occasions which warrant public display. At present, it appears the OSN friend-based communities are developing their own rules/regulations (as identified in Activity Theory) to negotiate the posting/tagging of the photographs of others. More qualitative research into the evolution of community-based OSN rules is essential.

The final aspects explored in the survey were the positive and negative experiences associated with OSN. It is concluded from this data that OSN has the potential to negatively affect users when communications are not positive in nature and when users feel ignored. This is an important issue, particularly given it has previously been found that negative feedback on one's online profile is linked to low self-esteem and well being (Valkenburg & Peter 2007). In contrast, of course, positive outcomes result from some of the affordances of OSN. The respondents of this survey indicate that OSN positively contributed to their ability to maintain contact with others and provided a useful vehicle for communication. It appears that the scope of social networking sites is evolving far beyond merely getting and staying in contact with others. Other reported uses include sharing photos, music and videos; communicating with classmates about course-related topics; planning or inviting people to events; participating in special interest groups (Salaway et al., 2008); looking at campaigns and petitions; self-promotion; engaging in political and social issues (Ofcom 2008); academic purposes; dating purposes (Raacke & Bonds-Raacke 2008). On the other hand, consideration must also be given to some of the unintended, and possibly negative, affordances which are emerging from OSN activity, such as, advertising, marketing and information mining; bullying, rumour mongering and fake profiles for untoward purposes (Ofcom 2008). This range of uses demonstrates the variety of 'learning' experiences available to social networking site users, both individually and collectively.

Future Research Directions

As suggested by socio-cultural perspectives of learning (Situated Cognition and Activity Theory), OSN should be considered in the context of the whole lives of the users of such sites. As such, the users of social networking sites must be given greater voice on their experiences, beyond that which can be obtained from a researcher-constructed survey. Hence, there is a continued need for carefully structured qualitative studies. In this regard, the survey data presented here is being followed up with a study which utilises the emerging methodology of integrated offline/online ethnography to study the relationships between online and real life (Miller & Slater 2000). In order to strengthen these survey results in-depth interviews are needed to explore issues of privacy, the relationship between online and offline friendships, time spent engaged in OSN activities (and the nature of these activities) and the positive and negative consequences of these activities.

Further, in order to understand the decisions which underpin online social network users actions to present their online 'self' in a particular light and/or to encourage communication with others, it would be useful to ask participants to 'think-aloud' as they deconstruct their online profile. The 'think-aloud' method has previously been found to elicit the usually covert cognitive processes engaged during Internet-mediated activity (Young 2005). It is anticipated that pragmatic issues related to the creation and maintenance of an online profile will emerge during the deconstruction process. Also, the ways in which language and multimedia are integrated to facilitate communication and socialisation will be revealed. Analysis can take place to explore what this means in terms of creating an online identity for the purposes of socialising in these online communities.

Conclusion

The survey results presented here reflect the OSN experiences of a small, convenience sample and it is not suggested that these findings are representative of the broader Australian population, or indeed, the global population of online social network users. What this survey does contribute, however, is insight into the ways some individuals are using OSN to engage (communicate) socially with others and create their online identity. The survey results provide understanding of frequency and type of online engagement through social networking sites and some insight into the experiences and feelings of individuals who choose to use such sites. Small-scale studies such as this contribute to the cumulative picture of this phenomenon and are useful for comparisons across different contexts.

More importantly, the results of this study are considered in light of socio-cultural theories of learning. This facilitates consideration of the impact of social networking sites as culturally valued cognitive tools which, once mastered, enable the user to participate in an online community. Social networking sites reflect the emerging socialisation practices of the online communities who participate. As these users continue to contribute and expand their online profiles, the forms of communication and interaction that are enabled will continue to evolve. Participation enables individuals to learn necessary skills to effectively mix language and media to create an online identity. The identity can then facilitate forms of socialisation not enabled through traditional communication activities.

From the theoretical perspective presented in this paper, holistic investigation of the phenomenon acknowledges that the interaction is not merely between individual and tool (that is, computer) but rather a form of socialisation that is underpinned by one's conscious decision to create an online identity that is accessible by others. As Chan (2006) suggests, social networking sites facilitate a kind of low-intensity social mirroring where the user must demonstrate relevant social competence in self-presentation and social interaction online. Creative customisation of one's online identity combines social competence with web competence in a hybrid of social and technical practice (Chan 2006). From the Situated Cognition and Activity Theory perspectives we can clearly identify each OSN platform as a culturally valued cognitive tool, where the user is exposed to activity which facilitates his/her learning of socialisation practices and self-presentation techniques, along with associated technical skills.

Research in this field is limitless and as a result of the survey presented here many questions have been raised for further investigation. We should continue to explore how the online identity which has been created online aligns with one's offline self and the degree to which it supports offline socialisation activities. It is also important that we gain a better understanding of the ways in which multimedia and language features are used to deliver messages to one's audience.

At present it is impossible to say how OSN will evolve or the long-term implications it could have on identity creation and socialisation. For now, we must continue to collect data and present current understandings which will, in time, become a useful record for interpreting the development of OSN and its consequences.

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