Fun and useful apps: female identity construction and social connectedness using the mobile phone.

Scott Rickard, University of Canberra

Clare Lloyd, Curtin University

Abstract

This article explores the domestication of mobile technologies by women and how their identities, as seen through their choices of apps, are interrelated to their social connectedness. Building on existing gender, intimacy and mobile communications literature, this paper provides a needed overview of how women are strategically deploying the use of 'apps' on their smart phones in both 'fun' and 'useful' ways. Two groups are being analysed in this article. The first comprises women who only use a mobile single Internet connection, identified as 'Single Connectors'. This group is contrasted with a second group who use multiple Internet connections, identified as 'Triple Connectors'. In this article we playfully name the social seeking Triple Connectors Social Butterflies *and the mobile Internet Single Connectors have been identified as* Information Seeking Consumers. *'Social networking' was identified as a 'fun' app rather than a 'useful' app by both groups of female connectors; what does this say about women and their definitions of leisure? Are women still viewing networking as part of their commitment to emotional labour rather than something that is 'useful'? What might this tell us about women and their ability to build intimacy, identity, and social connectedness using the mobile phone?*

Keywords: gender, intimacy, identity, smart phones, apps, domestication

---

The use of mobile phones for personal and intimate communications has been well researched over the past decade (Prøitz, 2005, 2007; Rheingold 2003; Thurlow, 2003). Scholars have written on the range of ways mobiles are utilised to help create and preserve intimate relationships (Ling & Yttri, 2002; Pertierra, 2005), others have examined the ways in which the mobile phone may be used to keep in constant contact, and how in turn this may increase the level of intimacy in a relationship (Fortunati, 2002; Lloyd, 2010; Rettie, 2007). Closely related to issues of intimacy are issues of identity. Identity construction is a complex process. Often it is a challenging ongoing process. Choices made around technology use are often related to identity. Hjorth raises relevant thematic issues relating to identity in the chapter 'Postal presence: a case study of mobile customisation and gender in Melbourne' (2005). Hjorth focuses on Melbournians' personalisations of mobile media (Melbourne is the capital city of the state of Victoria, Australia). Although Hjorth's chapter is specifically focused on the personalisation of the mobile phone and not a range of mobile phone communication practices, her work is highly significant because it reveals that customisation and use of a mobile phone by any individual involves agency and suggests that 'customising one's mobile phones (or the choice not to) is a decisive form of representation – both as an extension of one's identity and as a form of identification to certain cultural capital' (Hjorth 2005, p. 55). Often women are seen as the socially connected gender who spend the majority of their non-work time communicating with other family members and

friends (Wajcman et al, 2008). Fischer's seminal investigations with the telephone in the 1980s uncovered that historically women used the telephone for social connectedness while men used it for business (1988). With this finding in mind we could assume women would prefer apps for their phones that enable greater communication through the multiple methods currently available: text, voice, and video. In the results of our online questionnaire (conducted in 2010), women who used multiple methods of connection to the Internet, known as Triple Connectors, used more social-enabling 'fun' and 'useful' apps, than women who used a single point of connection through their mobile phones – the Single Connectors. The Single Connectors chose more information-seeking apps for both 'fun' and 'usefulness'. When all the women were asked to identify their three 'fun' apps and their three 'useful' apps, both groups responded differently in terms of overall number of categories. The choice in apps differs from the two types of connectors: the Single Connectors use almost double the categories of apps than the Triple Connectors. The majority of the Triple Connectors selected socially-related apps and so these women are referred to as *Social Butterflies.* Information- and entertainment-related apps were more popular among the Single Connectors and so these women are referred to as *Information Seeking Consumers*. This analysis raises questions regarding the myth that women may use technology primarily for social reasons (which could be argued from social media statistics (Nielsen, 2011)). However it is more complex than this. Indeed the social reasons may include emotional labour and participants in this study could be 'information- and entertainment-seeking' for social reasons, as well as consumption.

Australians have an average of 25 apps on their phones compared with 23 for Britain and the US (Moses, 2011). In our results the *Information Seeking Consumers* chose double the number (18) of 'useful' apps compared to the *Social Butterflies,* implying apps can provide a powerful central entry point to information for women. Perhaps the use of information- and entertainment-seeking apps is an extension of a woman's perspective on leisure, which women often conflate with personal space (Green, 2001). Women could use these apps as a way of accruing additional information in order to be more productive in terms of emotional labour that is assisting family and friends. Further, women could be using apps as a central entry point on a mobile device to ultimately act as points of sale for their everyday providers such as grocery stores, and the AIMIA Australian Mobile Phone Lifestyle Index, 7th Edition: Mobile Phone Advertising and Marketing indicates 'shopping' apps are a popular type of app to download (Mackay, 2011).

About the study

The data for this paper draw on a larger study that was conducted using an online questionnaire circulated in 2010 (Rickard, 2011). Participation in the online questionnaire was voluntary, and no incentives were offered for participation. Participants needed to be Australian residents of at least 18 years of age. The questionnaire took about 15 minutes to complete; however, times varied depending on the number of different forms of Internet connectivity and devices used by respondents. Respondents were asked to write in the provided free text box their three preferred 'fun' and 'useful' apps. The question was expressed this way to ensure we recorded respondent preferences according to genre, delineated from what they downloaded and did not use.

About the respondents

One hundred and seventy-four participants aged between 18 and 69 answered the online questionnaire. As a result of the small number of respondents, the conclusions drawn in this paper can only be indicative of adoption and usage practice in Australia. This paper focuses on the female respondents, comprising 92 females aged between 18 and 63.

Profiling the 'Social Butterflies' (Triple Connectors):

The Triple Connectors are the respondents who connect to the Internet using all three forms of wireless broadband: Mobile Broadband, Mobile Internet and WiFi. The Triple Connectors are the largest single group identified in the larger study, and make up 25.6% or 44 of all the respondents, 15 of whom are female between 18 and 50 years of age. Most female Triple Connectors are single (53.3%), but a high percentage is also married and living with children (13.3%); 26.7% of the Triple Connectors work full-time, 60% are full-time students, and 20% are employed part-time or casually (a double response to the employment status was available).

Profiling the 'Information Seeking Consumers' (Single Connectors)

The Single Connectors make up 15 per cent or 26 of all the questionnaire respondents, 17 of whom are female between 18 and 45 years of age. Most female Single Connectors are either single (52.9 per cent) or married and living with children (23.5 per cent). A few are in a relationship with no children (17.6 per cent) and the remainder are married with no children (5.8 per cent). Single Connectors work either full-time (35.2 per cent), part-time (41.2 per cent) or work as stay at home parents (42.1 per cent) (a double response to the employment status was available).

Literature

Women adopt and domesticate technology slowly:

The slower adoption and domestication of technology by women (than men) can be seen from past research. The pattern of women adopting technology more slowly than men has been seen over time with technologies such as the telephone, computers, the Internet, and mobile phones (Ewing & Thomas, 2010; Wajcman et al, 2008). In Australia the female adoption rate for the Internet in 2007 was 71 per cent increasing to 80 per cent in 2009 (Ewing & Thomas, 2010, p. 2). The average time spent online shows the most dramatic difference between the genders. In 2009 male users had on average been online longer than female users by about four months (Ewing & Thomas, 2010, p. 6). This is a dramatic increase of female use of the Internet since the previous survey. In 2007 the gap was around 16 months (ibid). This confirms that Australian women's adoption rate of the Internet when compared to that of Australian men is slow. This adoption trajectory can be seen in relation to the major technology developments over the past few decades including the mobile phone (Ewing & Thomas, 2010, Wajcman et al, 2008).

As women adopt technologies two key differences emerge: women are seen to use technology in different ways, and consumerisation occurs. Supriya Singh contends that "as a technology becomes domesticated and feminised, gender differences are seen in the use of the technology rather than access" (2001, p. 396). Again this applies across all technologies. Early studies reported men view the telephone primarily as a business tool (Fischer, 1988; Wajcman et al, 2008) and women use it to maintain social contact (Fischer, 1988; Lohan, 2001; Wajcman et al, 2008). Fischer reports in his seminal work that as a domestic device Bell struggled to increase the

take-up of the telephone in the US home until in the late 1920s, when they changed focus and included the 'social character of the telephone' as part of their aggressive marketing strategy (Fischer, 1988, p. 42), even though social conversations were labelled as 'frivolous' and 'unnecessary' (Fischer, 1988, p. 48). Challenging the norm of untimed calls, one Seattle manager placed time limits on phone calls in an 'effort to stop people who insisted on chatting when there was "business" to be conducted' (ibid).

Women as networkers and 'Social Butterflies':

Gender-based research examining fixed-line services in the 1990s resulted in international studies indicating women continue to be the more social of the genders when using the telephone, taking calls from family and friends, and acting as gatekeepers for other family members, while men were reluctant to participate on the phone (Lohan, 2001; Moyal, 1995; Rakow, 1987, 1993; Wajcman et al, 2008).

The introduction of social networking services has extended communication paths available to all. Australian women are frequent users of social networking sites (SNS), specifically Facebook, LinkedIn, Twitter and MySpace (Sensis 2011, p. 10), enabling them to maintain their image as being socially connected or for the purposes of this paper to act as *Social Butterflies*. Reportedly the predominant use of SNS by Australian females is to 'catch up with friends and family' (96 per cent) (Sensis, 2011, p. 19). According to the Sensis survey, the majority of females using these sites are young women 14 to 39, who are most likely to visit the sites daily (2011, p. 10). Older women (30-plus) are less frequent users of the sites and some never visit (ibid). Facebook is still the dominant SNS for Australians with 99 per cent of female participants using the site (Sensis 2011, p. 13). Significantly for the purposes of this paper, the devices being used to access social media are changing. Currently the device most used to access social media and to connect with friends and contacts is a laptop computer (Sensis, 2011, p. 17). A laptop computer is the device most used among all age groups to access social media. However, smart phone access is slowly catching up, with 31 per cent of all females using a smart phone to access social media (Sensis, 2011, p. 17). This percentage increases to 52 per cent in the 14 to 19 age group (Sensis, 2011, p. 17). Part of the rationale for women to use social media and to act as 'Social Butterflies' is their persistent role as emotional caregivers within the context of family and friends. In telephony studies, Wajcman has reported that among Australians the highest calls made are between spouses (18 per cent), and by women to their children (13 per cent), parents (11 per cent), and extended family (12 per cent) (Wajcman et al, p. 18). Wajcman also reports that with texting, family (47 per cent), and friends (43 per cent) are the highest recipients of text messages (2008, p. 19). Supporting this work is the recent Pew Internet report which reveals Americans are using SNS to keep in contact with close ties (Smith, 2011). American "women are slightly more likely than men to say that staying in touch with current friends is a major reason for using online social tools (70 per cent vs. 63 per cent)" (Smith, 2011, p. 4). For an older age group such as those of middle age or older, "female social media users are more likely than male users to cite family connections as a major reason for using these [social networking] sites (72 per cent vs 55 per cent)" (Smith, 2011, p. 4).

Feminist perspectives on women, technology and consumption (Information-Seeking Consumers):

Feminist perspectives on the domestication and subsequent consumption of technology offer some interesting points in relation to this paper. Firstly Consalvo and Paasonen highlight that in

the early days of most technological adoption (and here they specifically mean the 'Internet'), the few women users participating find themselves in potentially hostile places (Consalvo & Paasonen, 2002, p. 9) accounting perhaps for women's slow adoption of new technologies. In the early 1990s, phrases used to describe being on the Internet created images of men and women being "settlers" of the "electronic frontier" (Consalvo & Paasonen, 2002, p. 9; Consalvo, 2002) evoking masculine themes of exploration and settlement. Yet women participated in early Internet activities such as listservs, MUDs, bulletin boards and created home pages (Consalvo & Paasonen, 2002, p. 9), it was just without the same amount of fanfare and kudos as was awarded to men. From a different perspective, some feminists believe in a more binary position where technology is socially shaped and primarily patriarchal (Schwartz Cowan, 1999; van Zoonen, 1992; Wajcman, 2004). The patriarchal position of some technologies is reflected in the continual under-representation of women in computer- and Internet-related professions (Dorer, 2002), while women accept and use domestic technologies such as the fridge, the oven and the washing machine (Singh, 2001). van Zoonen suggests ecofeminists believe it is the 'supposedly rare female person who has managed to master and enjoy technology, must suffer from a split personality and false consciousness; her use of technology is at odds with her "true" feminine nature, and makes her collaborate in her own oppression' (van Zoonen 1992, p. 18) .

"The frontier has been tamed":

The diffusion of the Internet among greater numbers of people made it mainstream. Becoming mainstream means "the Internet often operates on a naturalised gender difference" (Paasonen, 2002, p. 29). This has meant websites and other online services are now targeted towards women, and they "rarely promote deconstructive approaches to gender with their horoscopes and tips on relationships, home and food" (Paasonen, 2002, p. 29). Consalvo's research has detected that in the mid to late 1990s there was a push towards consumption and commodification when businesses began to refine the idea that individuals could buy products online (2002, p. 131). The 'frontier has been tamed' (Consalvo, 2002, p. 132). When women began to adopt the Internet in greater numbers, they became viewed as potential consumers and as an audience for online advertising (Consalvo & Paasonen, 2002, p. 8). Consalvo contends that, 'it is no accident that commerce has arrived in tandem with women. Women are an important demographic for marketers, and the Internet during this period has become more of a place for selling than for exploring or creating' (2002, p. 133).

When women went online the same discourses repeated in line with previous technologies. The telephone became gendered as female for 'social contact' (Fischer, 1988; Lohan, 2001; Wajcman, 2008), women are now perceived and discussed in their traditional roles as social networkers as avid users of social networking sites (Sensis, 2011), of e-reading (Nielsen, 2011) and now in the US reports indicate that women, especially older women, are downloading more apps to tablets than men (Purcell, 2011, p. 3).

What women may want from a consumption perspective seems accepted – it is almost expected that women will want what their previous experience has been as consumers (in print and online). Women now often expect to be grouped together as a 'category of women', 'defined in terms of embodied difference (menstruation, pregnancy, maintenance of femininity), the gendered division of labour (child care, housework, home decoration, cooking) or interests (relationships, fashion, beauty, romantic fiction)' (Paasonen, 2002, p. 30). There is an expectation that similar images, colours and memes will be used whether the commodity is print, online or

an app. By creating women as consumers, 'women are positioned as receivers of various items of information", there is no possibility for interaction -- just reception (Sadowska, 2002, p. 100). Therefore women as consumers of technology, and increasingly apps, are well positioned to not only consume the devices and apps but also the goods and services that are accessible through these devices and platforms. In 2010 Ewing and Thomas revealed that 88 per cent of Australians used the Internet for product research prior to purchase (2010, p. 44), and more recently an ACMA report, *Communications report marketplace in Australia: Online shopping* revealed the 'majority of internet users are online shoppers' in Australia (ACMA, 2011, p. 1).

Indeed, Australian women are well poised as potential consumers. Of the 4 per cent of the Australian population who make purchases using a mobile phone, 43 per cent are women (ACMA 2011, p.20). In keeping with their femininity (Paasonen, 2002, p. 30) Australian women are shopping online for clothing/fashion and it is the highest product search conducted through social networking sites (Sensis, 2011, p. 20).

Results

While there are hundreds of thousands of apps to download and use on smart phones and tablets (Fraser, 2011), there is little investigation into actual end-user preferences for apps. Total downloads of apps is a commonly used measure, but it does not reflect consumer preferences for the app once they have begun to use it. It is possible that after downloading an app a consumer becomes dissatisfied with the product and they may even delete it from their device. Currently 12 per cent of product share of online retail sales in Australia is attributable to software and apps (ACMA, 2011, p.10). In relation to fun apps in AIMIA's results for 2010 '66 per cent stated they used an entertainment or information service' during the past 12 months, and '48 per cent of all respondents used games' (Mackay, 2010, p. 6). These figures do not include mobile Internet specific data downloads. Only 31 per cent of AIMIA's respondents use mobile Internet to access entertainment services and content (Mackay, 2010, p. 7).

Social Butterflies and 'fun' apps:

Forty per cent of the female Triple Connectors use 'fun' apps on their phones and 46.7 per cent of female Triple Connectors use 'useful' apps on their phones (see Figures 1 and 2 below).

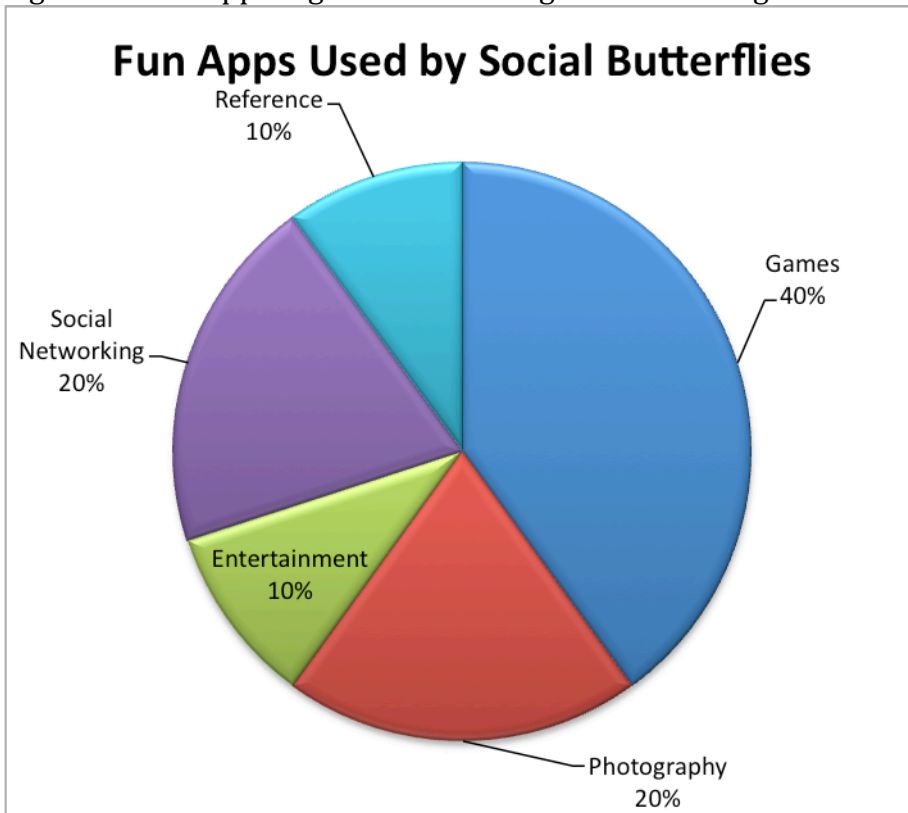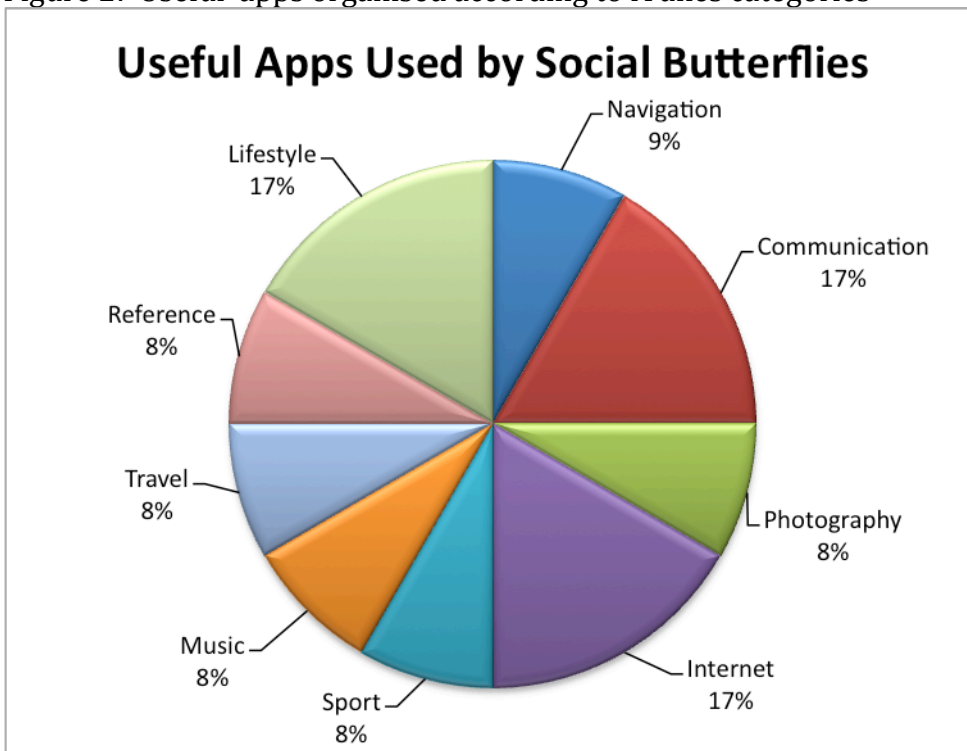Figure 1: 'Fun' apps organised according to iTunes categories

Fun Apps Used by Social Butterflies

- Reference 10%
- Social Networking 20%
- Entertainment 10%
- Games 40%
- Photography 20%

Figure 2: 'Useful' apps organised according to iTunes categories

Useful Apps Used by Social Butterflies

- Lifestyle 17%
- Navigation 9%
- Communication 17%
- Reference 8%
- Travel 8%
- Music 8%
- Sport 8%
- Internet 17%
- Photography 8%

Information Seeking Consumers and apps:
'Fun' apps are used by 64.7% of *Information Seeking Consumers* and 70.6% use 'useful' apps (see Figure 3).

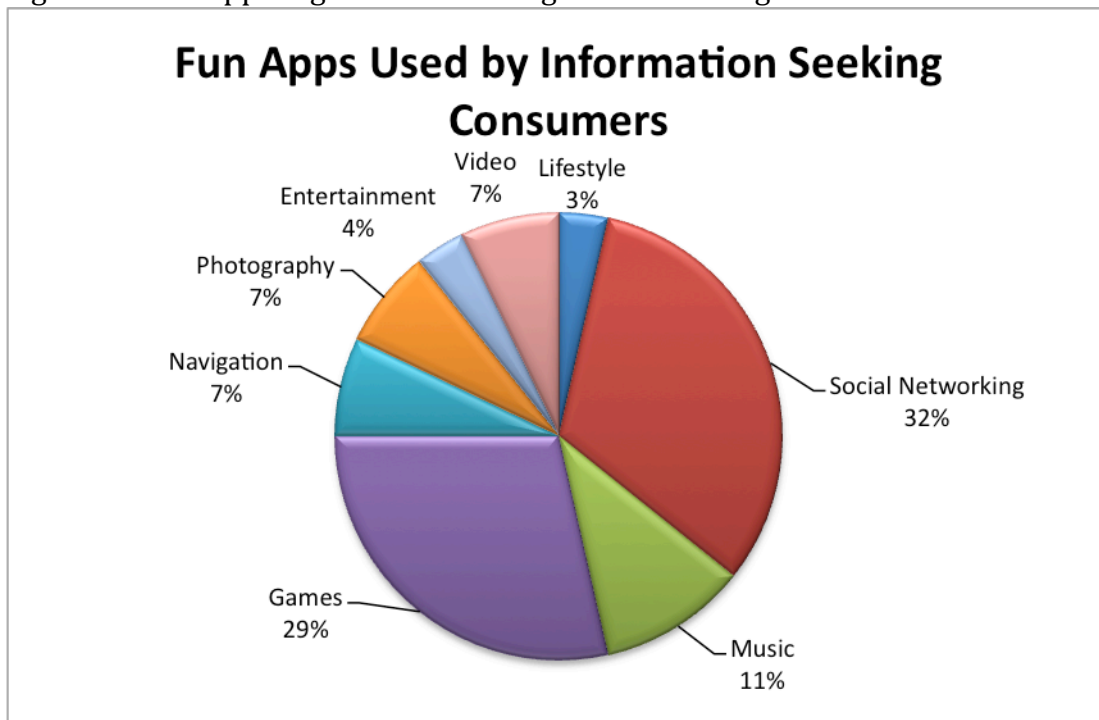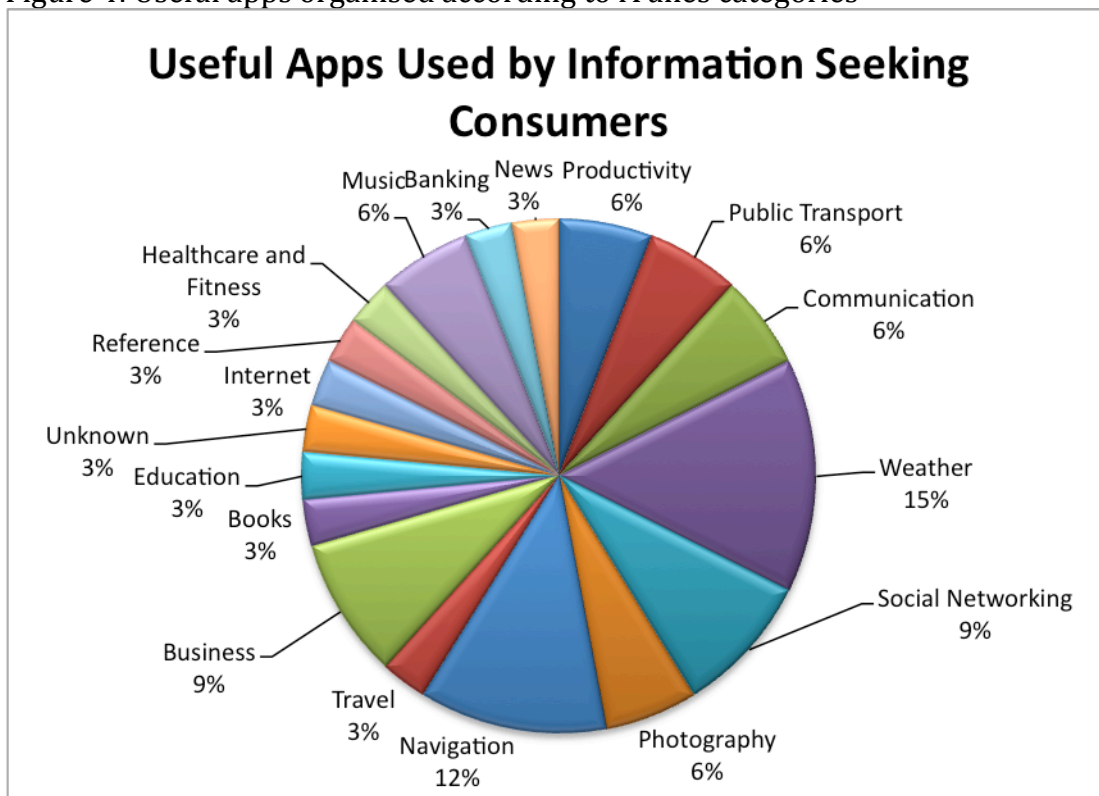Figure 3: 'Fun' apps organised according to iTunes categories

Figure 4: Useful apps organised according to iTunes categories

Discussion

The results indicate that *Information-Seeking Consumers* prefer more 'useful' apps than the *Social Butterflies*. The respondent data shows *Information-Seeking Consumers* prefer the most apps overall when compared to those used by the *Social Butterflies*. The *Social Butterflies* prefer five 'fun' apps and nine 'useful' apps while the *Information-Seeking Consumers* prefer eight 'fun' apps and 18 'useful' apps.

The types of apps downloaded by the *Social Butterflies* and *Information-Seeking Consumers* (female Single and Triple Connectors) were consistent with those recorded by AIMIA in the 2010 reporting period (Mackay, 2010, p. 9). AIMIA respondents downloaded and installed games, maps and navigation, news, weather, instant messaging, social networking, photos and search applications (ibid).

As discussed earlier, women are slower to domesticate new technologies and services. There's a clear alignment between offline services such as newspapers, magazines and books migrating across into the app market. The uptake for these particular services has held wide appeal for women; older women in particular have adopted e-readers and tablets such as the iPad. While the uptake in all mobile devices has continued to rise, US women's uptake in e-readers has dramatically increased from 47 per cent to 61 per cent in 12 months (Nielsen, 2011). Sensis reports that 6 per cent of Australian women reported using iPads or another tablet to access social media (Sensis, 2011, p.17).

Social Butterflies:

Our results indicate that the *Social Butterflies* are entertainment focused enjoying games (40 per cent), entertainment (10 per cent), photography (28 per cent), sport (8 per cent), music (8 per cent) and travel (8 per cent) along with their expected interests in communication, with social networking at20 per cent and communication 17 per cent. *Social Butterflies* are able to increase their use of social networking sites through their phones and tablets because of the development of SNS-specific apps. These shortcut apps provide easy access to the existing online platform by removing the need to navigate through a browser, and the use of such apps is often supported in Australia through unlimited social networking plans by telecommunication providers such as Telstra and Optus. Unlimited plans encourage further use of these apps, potentially reducing the need to use traditional services such as voice, or even SMS. In this study there was no specific app mentioned by the Social Butterflies that detailed the use of a traditional activity as part of the gendered division of labour such as sending cards. Vogue notes that Apple has a card-sending app stating that 'This is the kind of vintage innovation we would all do well to download' (Palmer, 2011).

Information Seeking Consumers:

A significant difference in the apps used by the *Social Butterflies* as opposed to those used by *Information-Seeking Consumers* is that apps designed to offer products and services are most likely to be stand-alone apps and not those tied into an existing online platform like an SNS such as Facebook. Stand-alone apps designed specifically for use on phones and tablets are value-added as they offer the potential to act as points of sale and Australians are interested in mobile commerce as recent figures indicate. Australian m-commerce doubled from 2 per cent to 4 per cent in the period from November 2009 to April 2011 (ACMA, 2011, p. 4). The ability of mobile apps to act as points of sale is likely to be especially important when the take-up of apps for

everyday services such as grocery shopping actions reaches mass adoption levels. While it is currently possible to create grocery shopping lists using a mobile device, it is not possible to purchase your shopping list using your phone (with any of the large Australian supermarkets). This is a distinct disconnect for the end-users wanting to complete the transaction. A future trend highlighted by developments in Internet Protocol Television (IPTV) indicates video tagging technology will make it possible to purchase items during the broadcast of a television show by simply selecting the item and then completing the transaction (Canning 2011). The use of augmentation or augmented reality in relation to apps, such as Layar, could be another future possibility.

Conclusion

The adoption and domestication of mobile technologies by women has been consistent with the uptake of previous 'new' technology. Building on previous gender, intimacy and mobile communications research, this paper offers a needed 'snapshot' of the ways women are intentionally engaging with apps on their mobile devices. It can be seen that two distinct groupings of women, the *Social Butterflies* and the *Information-Seeking Consumers,* choose a different range of apps. This paper has explored the differences in these identities (as seen through their choices of apps), but for both groups it would seem women define leisure as including [social] networking as part of their [gendered] role, and that the emotional labour they engage in via the use of these mobile communication technologies means they understand the apps as 'useful' rather than as 'fun'. This means women are using their mobile phones to continue their emotional labour, maintaining and building intimate relationships in their daily lives.

It is important to note that while this research aligns with previous work done on gendered uses of technology, intimacy and identity, it is always possible that through the use of mobile technologies 'gendered types of performance can be both reinforced and subverted' (Hjorth & Kim, 2004, p. 49). So while this paper outlines the choices women make to remain connected identities and highly social, gendered use of technologies is not a simple matter and it is both socio-culturally and demographically nuanced.

Since technology is now so enmeshed in the everyday lives of women from domestic to communication technologies, perhaps women will gain greater confidence in considering possibilities of subverted apps and sites that more closely match the less-feminised identities of the non-homogenous category known as 'woman'.

References

ACMA 2011, *Communications report 2010-11. Series Report 1 – e-commerce marketplace in Australia: online shopping*, Australian Communications and Media Authority (ACMA), Canberra, viewed 1 October 2011, <http://www.acma.gov.au/webwr/_assets/main/lib410148/cr_comp_report1-e-commerce_marketplace_in_aust-exec_summary.pdf>.

Canning, S., 2011, 'Touch and it's yours while the show goes on', *The Australian,* November 21, p. 24.

Consalvo, M., 2002, 'Selling the Internet to women', in M Consalvo & S Paasonen (eds), *Women & Everyday Uses of the Internet: agency & identity*, Peter Lang, New York, pp.24-31.

Consalvo, M. and Paasonen, S., 2002, 'On the Internet, women matter' in M. Consalvo & S. Paasonen (eds), *Women & Everyday Uses of the Internet: agency & identity*, Peter Lang, New York, pp.1-18.

Ewing, S. & Thomas, J., 2010, *CCi Digital Futures 2010: The Internet in Australia,* ARC Centre of Excellence for Creative Industries and Innovation, Swinburne University of Technology, Victoria, viewed 1 July 2011 <www.cci.edu.au/projects/digital-futures>.

Dorer, J., 2002 'Internet and the construction of gender: female professionals and the process of doing gender', in M. Consalvo & S. Paasonen (eds), *Women & Everyday Uses of the Internet: agency & identity*, Peter Lang, New York, pp.62-89.

Fraser, H., 2011, 'There's an App for that' *Communications Policy and Research Forum*. Network Insight Institute, Sydney, pp. 98-104, viewed 20 Nov 2011 <http://www.networkinsight.org/events/cprf2011.html/group/6>.

Fischer, C., 1988, '"Touch someone": the telephone industry discovers sociability', *Technology and Culture*, vol. 29, no. 1, pp. 32-61, doi:10.2307/3105226.=

Fortunati, L., 2002, 'The mobile phone: towards new categories and social relations', *Information, Communication & Society,* vol. 5, no. 4, pp. 513-528.

Green, E., 2001, 'Technology, leisure and everyday practices', in E. Green & A. Adams (eds), *Virtual Gender: Technology Consumption and Identity*, Routledge, Hoboken, pp.136-148.

Hjorth, L. 2005, 'Postal presence: a case study of mobile customisation and gender in Melbourne', in P. Glotz, S. Bertschi & C. Locke (eds), *Thumb Culture: the meaning of mobile phones for society*, Transaction Publishers, New Brunswick, pp. 53-66.

Hjorth, L. & Kim, H., 2004, 'Being there: society of the phoneur gendered customising of mobile telephonic net practices in Seoul', in proceedings of *Seoul Conference on Mobile Communication*, 18-19 October, Hallym University, Chuncheon, Korea, pp. 237-242.

Ling, R. & Yttri, B., 2002, 'Hyper-coordination via mobile phones in Norway', in J. E. Katz & M. Aakhus (eds), *Perpetual contact: mobile communication, private talk, public performance*, Cambridge University Press, Cambridge, pp. 139-169.

Lohan, M., 2001, 'Men, masculinities and "mundane",' in E. Green & A. Adams (eds), *Virtual Gender: Technology Consumption and Identity,* Routledge, Hoboken , pp. 149-161.

Lloyd, C., 2010, 'Intimate mobile connections: a tool for intimacy'. In K. McCallum (Ed.), *Media Democracy and Change: Refereed Proceedings of the Australian and New Zealand Communications Association Annual Conference, Canberra, July 7-9*.

Mackay, M., 2010, *Australian Mobile Phone lifestyle Index: Mobile Phone Applications*. *Australian Interactive Media Industry Association Mobile Industry Group*, viewed 20 Oct 2011 <http://www.aimia.com.au/enews/events/AMPLI 2010/101002 AIMIA_Report_Final.pdf>.

Mackay, M., 2011, *Australian Mobile Phone Lifestyle Index: Mobile Phone Advertising and Marketing. Australian Interactive Media Industry Association Mobile Industry Group*, viewed 20 Oct 2011 <http://www.aimia.com.au/enews/events/AMPLI%202011/AMPLI%20Report2011_FINAL .pdf>.

Moses, A., 2011, 'Australia's white hot smartphone revolution', *The Age*, viewed 8 September 2011 <http://www.theage.com.au/digital-life/mobiles/australias-white-hot-smartphone-revolution-20110908-1jz3k.html>

Moyal, A., 1995, 'The gendered use of the telephone: an Australian case study'', in S. Jackson & S. Moores (eds), *The politics of domestic consumption*: *critical readings,* Prentice Hall/Harvester Wheatsheaf, Hertfordshire, pp. 258-273.

Nielsen, 2011, 'Changing Demographics of Tablet and e-Reader owners' viewed 20 October 2011 <http://blog.nielsen.com/nielsenwire/online_mobile/changing-demographics-of-tablet-and-ereader-owners-in-the-us/>.

Paasonen, S., 2002, 'Gender, identity, and "the limits of play on the Internet'',' in M. Consalvo & S. Paasonen (eds), *Women & Everyday Uses of the Internet: agency & identity*, Peter Lang, New York, pp. 21–39.

Palmer, C., 2011, 'Need it now: Apple's new mobile app sends cards through the mail', Vogue.com, viewed 20 October 2011, <http://www.vogue.com/vogue-daily/article/need-it-now-apples-new-mobile-app-sends-cards-through-the-mail/>.

Pertierra, R., 2005, 'Mobile phones, identity and discursive intimacy', *Human Technology: An Interdisciplinary Journal on Humans in ICT Environments,* vol. 1, no. 1, pp. 23-44.

Prøitz, L., 2005, 'Cute boys or game boys? The embodiment of femininity and masculinity in young Norwegians' text message love-projects', *Fibreculture Journal,* no. 6, viewed 04 December 2008, <http://journal.fibreculture.org/issue6/issue6_proitz.html>.

Prøitz, L., 2007, 'The mobile phone turn: a study of gender, sexuality and subjectivity in young people's mobile phone practices', Department of Media and Communication, PhD, University of Oslo, viewed 29 August 2009, <http://ncom.nordicom.gu.se/ncom/research/the_moblie_phone_turn(49027)/>.

Purcell, K., 2011, 'Half of adult cell phone owners have apps on their phones'. Pew Internet & American Life Project, November 2011, viewed 5 November 2011, <http://pewinternet.org/Reports/2011/Apps-update.aspx>.

Rakow, L. F. & Navarro, V., 1993, 'Parallel shift: women meet the cellular telephone', *Critical Studies of Mass Communication,* vol. 10, no. 2, pp. 144-157.

Rakow, L. F., 1987, *Gender on the line: women, the telephone and community life*, University of Illinois Press, Urbana.

Rettie, R., 2007, 'Texters not talkers: phone call aversion among mobile phone users', *PsychNology Journal,* vol. 5, no. 1, pp. 33-57.

Rheingold, H., 2003, *Smart mobs: the next social revolution,* Perseus Publishing, Cambridge, Massachusetts.

Rickard, S., 2011, 'Wireless broadband and Mobile Knowledge Workers', *Telecommunications Journal of Australia***,** vol. 61, no. 4, pp. 58.1-58.14

Sadowska, N., 2002, 'Women's Internet Sites: a search for design strategies to engage the female viewer', in M. Consalvo & S. Paasonen (eds), *Women & Everyday Uses of the Internet: agency & identity*, Peter Lang, New York, pp. 90-107.

Schwartz Cowan, R., 1999, 'The consumption junction: a proposal for research strategies in the sociology of technology', in H. A. P. Bijker (ed), *The Social Construction of Technological Systems*, MIT Press, Cambridge, pp. 261-280.

Sensis, 2011, 'Sensis Social Media Report: What Australian people and businesses are doing with social media', viewed 20 November 2011, <http://www.aimia.com.au/enews/Membership/Members_Only/SENSIS_SOCIAL_MEDIA _REPORT_May2011.pdf>.

Smith, A., 2011, *Why Americans use social media: social networking sites are appealing as a way to maintain contact with close ties and reconnect with old friends,* Pew Internet & American Life Project, November 2011, viewed 5 November, <http://pewinternet.org/~/media//Files/Reports/2011/Why Americans Use Social Media.pdf>.

Singh, S., 2001, 'Gender and the use of the internet at home', *New Media & Society*, vol. 3, no. 4, pp. 395-416.

Thurlow, C., 2003, 'Generation Txt? The sociolinguistics of young people's text-messaging', *Discourse Analysis Online,* vol. 1, no. 1, viewed 02 July 2008, <http://extra.shu.ac.uk/daol/articles/v1/n1/a3/thurlow2002003-paper.html>.

van Zoonen, L., 1992, 'Feminist theory and information technology', *Media, Culture & Society*, vol.14, no. 1, pp. 9-29. doi:10.1177/016344392014001002.

Wajcman, J., 2004, *Technofeminism*, Polity Press, Cambridge.

Wajcman, J., Bittman, M., Jones, P., Johnstone, L. & Brown, J. E., 2008, *The impact of the mobile phone on work/life balance: final survey report*, Australian Mobile Telecommunications Association, viewed 09 August 2009, <http://polsc.anu.edu.au/staff/wajcman/pubs/Mobile_phone_final%20survey%20report _27Mar08.pdf>