GENDER IN CYBERSPACE
Women lawyers and the Internet

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This article examines the way in which legal practitioners use the Internet for work and especially focuses on whether there is a gender difference in the way men and women use the Internet in the legal practice environment. Analysing current interdisciplinary research of Internet use patterns, this piece draws on the results of a study of these patterns among Queensland lawyers and concludes that patterns of use of the Internet do vary between genders. Further, it reveals that constraints such as lack of confidence and lack of training are more likely to effect women than men.

Introduction: Is Use of the Internet Gendered?

The Internet is developing at an extraordinary rate. Many argue that to keep pace with modern notions of legal practice, lawyers must keep up with the developments of the Internet.[1] Studies of women's use of the Internet suggest that women are under-represented as users and that when women do use the Internet, they use it in a more restricted way to their male counterparts. Use of the Internet may be gendered.

Statistics on the proportion of women users of the Internet vary; some studies show the gender gap to be high and some studies suggest that men may make up 87% of the user base for the Internet.[2] Alternatively, recent Queensland research suggests that the gender gap in use is narrowing. Amongst Internet users over 14 years of age, the gap between male and

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1 M McGregor-Lowndes and A Davidson (1997) *The Internet for Lawyers*, LBC, p v.

2 87% of Internet users are male: M Jones, 'Who's Out There: Internet Demographics' (1996) 2 *Internet Australasia* 25, p 34; R Senjen and J Guthrie (1996) *The Internet for Women*, Spinifex Press, p 21. Compare with other studies: around 31.4% of all WWW users are women: Georgia Institute of Technology (1996) *Georgia Institute of Technology 6th WWW User Survey*, Graphics, Visualisation and Usability Center. Generally though, the figure for women users is rising rapidly; a 1997 study suggested that about 45% of women now use the Internet: C Kramarae (1997) 'Shaking the Conventions of Higher Education', *Women Information Technology and Telecommunications in Industry and Education* (henceforth referred to as *WITTIE*) Conference Proceedings, Queensland University of Technology, Brisbane, 5 December, p 29.

female Internet users is possibly as low as 3%.[3] In the recent past, there have also been strong indications from studies, in fields other than law, that women are not making use of online possibilities to the extent of their male counterparts. In an increasingly 'online world',[4] this is likely to be to their detriment. In spite of all the potential advantages of the Internet which have been argued to exist for women; its anonymity, its lack of social contextual-isation and its portability, it seems that, to date, women are less likely to take up using the Internet.

Much of the research about Internet use supports traditional stereo-types of women's response to technology, suggesting first that women perceive that they do not have the time to explore the Internet or that they lack access to hardware (including modems, which are necessary for online connection).[5] A second stereotype which has developed suggests that women consider computer technology to be a masculine technology and therefore exclusionary, and that as a result women view computers as part of a culture that they do not relate to. Thirdly, studies suggest that women experience fear or lack of confidence when they approach technology. Finally, another problem suggested by the literature is that education and training about technology is biased against women, that the training options available conform to traditional educative methods more suited to men.[6]

The above stereotypes and issues have, at least in the recent past, been thought to represent barriers to be overcome by women if they are to fully use resources available on the Internet and, as a corollary, specifically to use the legal resources on the Internet. Dayal argues that becoming familiar with computer software is a largely psychological obstacle.[7] However, there are likely to be other practical barriers, such as lack of access described above, especially for women. Whether the barriers listed above actually continue to exist for women is a vexed question and research about these barriers is discussed in more detail below.

There have been few studies which relate specifically to the way the Internet is used in legal practice and thus it is difficult to know whether use patterns by legal practitioners, a typically more conservative group, are reflected by studies of Internet use from other disciplines. The first part of this article will examine the literature referred to above. The second part will report the findings of a study which examined women lawyers' use of

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3   J Sheldon (1997) in *WITTIE*, p 2.

4   See S Turkle (1995) *Life on Screen*, Phoenix, p 11; and Senjen and Guthrie (1996) p 21.

5   Most of the research about the Internet has been carried out in disciplines other than law. In relation to studies of occupations' use; see T Robertson (1997) '"And It's a Generalisation. But No it's Not": Women, The Discourse of Work and the Discourses of Technology Design', presented at the Sixth International IFIP Conference on Women, Work and Computerisation, Bonn, Germany, May. For research on recreational use of the internet, see Turkle (1995).

6   See K Coyle (1996) 'How Hard Can It Be?' in L Cherney and E Reba Weise (eds) *Wired Women: Gender and New Realities in Cyberspace*, Seal Press, p 45.

7   S Dayal (1997) *LDL Online 1997: Laying Down the Law*, Butterworths, p ix.

the Internet in their work in southeast Queensland. Finally, this article will make several suggestions for further research and draw some conclusions about the issues outlined above.

Part One
Lack of time and access

Time may be a particularly limited commodity for women; often women are balancing a range of roles.[8] Domestic and child care responsibilities remain high for most women in spite of their return to the work force and these duties may be preventing some women from having the necessary time available to explore and use (legal) resources on the Internet.[9] Further, women may be more likely than men to believe, considering their range of roles, that time taken to explore the Internet may be better spent elsewhere.[10]

Another practical barrier which women in particular may face may be a lack of access to hardware. In the United States, six times as many boys as girls have computers bought for them.[11] Access to the right software could also be a potential issue. Lack of access may be a particularly relevant limiting factor for those women who work part-time or who work from home where they may not be able to access the Internet.[12] Palumbo notes that women's salaries are, on average, 40% lower than men's, leaving them with less disposable income to purchase computers, modems and software.[13]

Exclusionary culture of the Internet

The literature about whether or not the Internet promotes a culture which excludes women is contradictory. In 1995, Spender wrote that computer technology has become gendered.[14] It is seen as a masculine technology.[15]

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8   G Kirkup (1992) 'The Social Construction of Computers: Hammers or Harpsichords?' in G Kirkup and L Keller (eds) *Inventing Women: Science, Technology and Gender*, Polity Press, p 271. Also see Senjen and Guthrie (1996) p 28.

9   See generally P Maushart (1997) *The Mask of Motherhood*, Penguin, p 123. According to recent studies, women continue to do an unfair share of home-related tasks in spite of their involvement with full-time work.

10   Queensland Government, Office of Women's Affairs, *Logged On or Locked Out: What are Some of the Social Implications for Women's' Use of the Internet?* Available online:
     < http://www.qldwoman.qld.gov.au/owp/ittalk/howto/howto_13.html >
     (visited 12 May 1999).

11   D Spender (1995) *Nattering on the Net*, Spinifex Press, p 167.

12   Note *Arts Today*, Radio National/Digitarts research presented on that program, 10 September 1998.

13   A Palumbo, 'Pillars of Cyberspace',
     < http://www.ppn.org/net97/oct/oct1.html > (visited 5 May 1998). Although Palumbo doesn't specify, her statistics would appear to refer to the United States.

14   D Spender (1995) p 172.

Spender noted that men are more socialised than women to take risks,[16] and risk taking is something that is required for Internet exploration. Some have argued that because men dominate the design and use of technology, and more particularly the design and use of the Internet, this makes computers masculine, excluding women in the process.[17] Debates continue about the potential of technology and the Internet to create a more homogenous space where social identity is less relevant. Some argue that because race, gender, physical appearance and so on are not immediately identifiable on the Internet, there is greater anonymity.[18] The lack of political and juridical borders suggests that a greater social freedom is possible on the Internet than in 'real space'.[19] Alternatively, many believe that even cyberspace is gendered territory,[20] where women must contend with sexual harassment, confront sexual stereotypes and then deal with the monopolisation of news-groups and other interactive forums by men.[21]

Turkle suggests that for men the computer is a 'partner in an intimate relationship' whereas for women, computers are something very different to that. She argues that women tend to place the machine in a culture of 'computer virtuosos'.[22] In her study of 25 female MIT Computer Programming Graduates, Turkle found that many of the graduates were keen to set themselves apart from what they saw as the stereotypical computer user. These women perceived that the traditional users of computers had a single-minded devotion to computers and were 'sort of related to their terminals'.[23] This attitude is perhaps reflected in the fact that computer science courses still dramatically under-represent women.[24]

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15   Ibid.

16   Ibid, p 174.

17   F Henwood (1993) 'Establishing Gender Perspectives on Information Technology: Problems, Issues and Opportunities' in E Green et al (eds) *Gendered by Design? Information, Technology and Office Systems*, Taylor and Francis, p 43.

18   N Baym (1995) 'Community in CMCs' in S Jones (ed) *Cybersociety*, Sage, p 140.

19   M Chon, 'Radical Plural Democracy and the Internet' (1997) *Cal W LR* 143.

20   C Kramarae (1996) 'Backstage and Virtual Reality' in S Jones (ed) *Cybersociety*, Sage, p 43. See also H Truong, 'Gender Issues in Online Communications', < http://www.cpsr.org/cpsr/gender/bawit.cfp93 > (visited 5 May 1998). See the Computer Professionals for Social Responsibility (CPSR) Homepage for interesting   research   into   issues   relevant   to   this   paper: < http//www.cpsr.org/ > (visited 12 May 1999).

21   C Kramerae and J Taylor (1993) 'Women and Men on Electronic Networks: A Conversation or a Monopoly?' in J Taylor et al (eds) *Women, Information Technology and Scholarship*, Center for Advanced Study, University of Illinois, p 56.

22   S Turkle (1988) 'Computational Reticence: Why Women Fear the Intimate Machine' in C Kramerae (ed) *Technology and Womens' Voices: Keeping in Touch*, Routledge & Kegan Paul, p 43. See also Coyle (1996) p 42.

23   Turkle (1988) p 47.

24   See T Brattetieg and G Verne (1997) 'Feminist or Merely Critical?: In Search of Gender Perspectives in Informatics', presented at Technology and Democracy:

Lack of confidence and fear of technology

There is currently some recognition of a modern-day phenomenon of technophobia among Internet users which is perceived by some to be a particular problem for women.[25] Turkle has preferred to use the word 'reticence' rather than phobia, arguing that women are not staying away from computers because of fear and panic but rather that they stay away because of what computers represent to them.[26] Many writers have commented that women have a different attitude towards computers, 'the computer is not as attractive to women as it is to men'.[27] As Dale Spender points out, we want to know why this seems to be the case but there is silence in answer to the question.[28] More recently, feminists have suggested that the computer may not be unattractive to women; more likely, they are just taking a longer time to realise its possibilities.[29] Although some, like Elizabeth Reid, argue that computer-mediated communication, such as email, tends to reduce inhibitions amongst its users,[30] it should be pointed out that even if this is the case, women have to deal with their initial fear of technology before they can get to the point of using it effectively.

Legal practitioners: Education and training

Women are already largely excluded from the legal profession; for example. women make up only 38% of practising solicitors in Queensland. Where they do practice, women tend to occupy the positions of lower status in law firms; currently, only 5% of partners in Queensland law firms are women.[31] Regular and exploratory use of the Internet is likely to develop skills and confidence, and if women are not using computers in this way, their skills may be underdeveloped. Women need to become accomplished in using the Internet or they may risk even further exclusion from the profession: log on or risk being locked out.[32]

Comparative Perspectives Conference, Oslo, 17–19 January, proceedings notes, p 5. See also L Spender (1994) 'Gels Online', presented at Women Information Technology and Telecommunications in Industry and Education Conference, University of Illinois, 9 November, where she notes that at the University of Sydney in 1994, only 20% of those enrolled in computer science were women.

25   D Spender (1995) p 166. Also see Queensland Government, Office of Women's Affairs http.

26   Turkle (1988) p 40.

27   D Spender (1995) p 171.

28   Ibid, p 176.

29   Kramarae (1997) p 29.

30   E Reid (1995) 'Culture and Imagination' in S Jones (ed) *Cybersociety*, Sage, p 173.

31   Queensland Law Society (1998) Statistics, October, unpublished. For a discussion of women's position in the 'jurisprudential community', see M Thornton (1996) *Dissonance and Distrust: Women in the Legal Profession*, Oxford University Press.

32   Queensland Government, Office of Women's Affairs http.

There is now a large body of research by feminist legal academics about the standpoint of law and the diverse responses of women and men to the traditional modes of legal education. Some feminists have recognised that the legal system promotes a gender-neutral person and that, as a result, gender becomes falsely 'invisible' in the law.[33] As a corollary of this, it is sometimes said that the law is written from a male standpoint so that the law does not recognise women's' experience.[34] This male construction of the law may find its way into law school teaching and into continuing legal education after graduation. MacKinnon argues that women are silenced by intimidation in the law school classroom.[35] Morgan suggests that men learn to be assertive in their law school training[36] and that assertiveness is likely to be carried into their work in the profession. An extension of this notion is that women's lack of assertion constrains them in relation to learning new technologies at work. Men are perhaps more assertive and thus less afraid to experiment and teach themselves about the Internet.

Hantzis reminds us of the Professor Kingsfield law-teacher model.[37] Only the most confident survive their experiences with him unscathed.[38] Hantzis goes on to explain that most of those who are prepared to speak out in his law school classes are male.[39] If this is the case in the classroom, it would not be surprising to find that it is those with greater confidence, generally male, who manage to tackle new research technologies like the Internet without training. In her study of a number of Wall Street lawyers, Epstein agrees that self-confidence is something women need in the legal profession and tend to have less of than their male counterparts.[40]

Legal research using computer technology, such as the Internet, is now on most law school curriculums. If the kind of exclusion of women from education discussed above is also prevalent in technology education and training, then it is possible that women may be experiencing a new kind of exclusion from the legal profession based on their intimidation from using the Internet to carry out legal research or as a tool in practice. Although this may be considered in itself a small thing, it is perhaps part of a larger exclusion from the legal profession. Thornton's 1995 study of women lawyers used material gathered from interviews with over 100 women who were involved in the legal profession either as judges, magistrates, lawyers, public

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33   C MacKinnon, 'Feminism in Legal Education' (1989) 1 *Legal Edu R* 85, p 88. See also M Mossman, 'Gender Issues in Teaching Methods: Reflections on Shifting the Paradigm' (1995) 6 *Legal Edu R* 129, p 142.

34   MacKinnon (1989).

35   Ibid, p 93. See also L Finley, 'Women's Experience in Legal Education: Silencing and Alienation' (1989) 1 *Legal Edu R* 101.

36   J Morgan, 'The Socratic Method: Silencing Co-operation' (1989) 1 *Legal Edu R* 151, p 159.

37   From the 1973 movie *The Paper Chase*, directed by James Bridges.

38   C Hantzis, 'Kingsfield and Kennedy: Reappraising the Male Models of Law School Teaching' (1988) 38 *J Legal Edu* 155, p 158.

39   Ibid.

40   C Epstein (1993) *Women in Law*, Basic Books, p 305.

servants or academics.[41] Thornton's interviews focused on women's experience of their involvement with the law. Her research concluded that women had not yet been fully accepted into the legal profession and that neither increasing numbers of women entering the profession nor the mere passing of time will guarantee equal inclusion.[42] MacKinnon agrees that women lawyers are excluded from what she describes as the 'inner circles'.[43] In spite of Judge Mathews prediction that the law could not remain a male preserve beyond the 1980s,[44] it seems she may have been proven wrong.[45] Technology competence is perhaps particularly important for women lawyers as they strive to be included in the 'inner circle'.

A changing climate?

In the last two to three years, feminist researchers have started to move away from focusing on women's lack of activity on the Internet and more generally their lack of involvement with the new technologies. More recently, feminist researchers have sought to emphasise the place of women in the history of the design and use of technology. Ada Lovelace, who assisted in the development of a calculating machine in the 1800s, and Grace Murray Hopper, who programmed the first full functioning programmable computer, have been highlighted as some of the many examples of women who have been involved in the design of technology throughout history.[46] Both Plant's latest book and a recent collection of essays edited by Cherny and Weise stress the current involvement of women in both the design and use of computer systems.[47] Coyle argues that 'if [women] accept the standard view of a male dominated computer industry, we will never see the women who are making a contribution'.[48] Even Spender has recently re-assessed the place for women in computer technology, suggesting that women are increasing their connection to computers at a fast pace.[49] In line with this trend of attempting to break down stereotypes, the research hypothesis for

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41 Thornton (1996).
42 See also M Mossman, 'Invisible Constraints on Lawyering and Leadership: The Case of Women Lawyers' (1988) 20 *Ottawa LR* 567, p 585.
43 C MacKinnon (1997) *Feminism Unmodified*, Harvard University Press, p 76.
44 Judge J Mathews, 'The Changing Profile of Women in the Law' (1982) 56 *ALJ* 634, p 642.
45 38% of practicing lawyers in Queensland are women: Queensland Law Society, (1998); see also H Meadows, 'Utmost Good Faith' (1999) 12 *Proctor* 4, for a short note on the situation in Victoria.
46 S Plant (1997) *Zeroes and Ones: Digital Women and the New Technoculture,* Fourth Estate, p 5; S Plant (1996) 'Taking the Byte: Women and New Technologies', presented at the Women in Information Technology, Brisbane, 20 July.
47 Plant (1997); L Cherney and E Reba Weise (eds) *Wired Women: Gender and New Realities in Cyberspace,* Seal Press.
48 Coyle (1996) p 45.
49 D Spender (1997) in *WITTIE,* p 12.

one student's current doctoral research is 'the new information and communication technologies, while having negative impacts on women, can be empowering for women and can be harnessed by women to further their own socio-political goals'.[50]

Another positive view which has started to be emphasised in the literature is that although women may take longer to become involved in the new technologies, once they do start to access online possibilities, they behave *differently* to men rather than in a *less effective* way than men. There are now some studies available which indicate that this may be the case.[51]

This 'cultural' difference between men and women's approaches may mean that women are able to achieve just as much, if not more, from the technology. Reflecting the underlying ideas of relational/cultural feminism, it may be that women use a 'different voice'[52] when they use the Internet. One study suggests that once women become familiar with Internet resources, they are able to communicate more effectively in their work environments than their male counterparts.[53] Spender explains that the dramatic rise in women's participation in the Internet is related to women's discovery of the Internet as a communication tool.[54]

The comparison has recently been made between the telephone and the Internet; 'women are now taking up the computer as they once took up the telephone', with the similar time lag between invention and take-up that occurred in relation to the telephone.[55] In the late 1800s, telephones were originally marketed to men in business but by the 1920s, marketers were attempting to stimulate women's telephone use in recognition of the strong market women represented.[56] While history can promote a positive view that women are likely to become highly involved in computer culture given time, the historical experience with the telephone also creates a warning about new technologies such as the Internet. Rakow suggests that the telephone was used to maintain and construct gender differences and hierarchies and argues that '[t]he story of the telephone teaches us the lesson that communications technologies in a gendered society are not gender-neutral'.[57]

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50   G Carriere (1997) PhD Candidate, School of Film and Television, Queensland University of Technology, Confirmation document, November (copy available from Carriere).

51   Turkle (1995) p 11; and Robertson (1997).

52   C Gilligan (1982) *In a Different Voice*, Harvard University Press.

53   Robertson (1997).

54   D Spender (1997) p 10.

55   Ibid; see also E Lupton (1993) *Mechanical Brides: Women and Machines from Home to Office*, Princetown Architectural Press, esp pp 29–41.

56   Lupton (1993) p 38.

57   L Rakow (1988) 'Women and the Telephone: The Gendering of a Communications Technology' in C Kramerae (ed) *Technology and Women's Voices: Keeping in Touch*, Routledge & Kegan Paul, p 207.

Part Two

The lawyers and the Internet study

An overview of research in the area of women and computer/Internet use demonstrated that there was no available research about lawyers and the way they use the Internet for their work in practice[58] and, more specifically, no research available about whether there are any differences between the way men and women use the Internet in legal practice. A survey titled *Lawyers and the Internet* (hereafter the *LI Study*) was conducted in 1997–1998 by the writer.[59] In October 1997, the *LI Study* surveyed 2000 legal practitioners' in private practice in southeastern Queensland about their use of the Internet.[60] Approximately one-third responded.[61] The study attempts to assist in developing a more complete picture of the way women are responding to Internet technology by focusing on a previously un-researched group: women lawyers.

As a result of the background literature, the *LI Study* attempted to address several questions. First, do women lawyers perceive that their use of the Internet is constrained by a lack of time and lack of access to computers and Internet software? Secondly, do women lawyers use the Internet in a different way and for different purposes to their male counterparts (this relates to the question of whether Internet culture is exclusionary)? Thirdly, do women lawyers perceive that their use of the Internet is constrained by fear and a lack of confidence? Finally, the study sought to discover whether particular Internet training and education issues existed for women that were different to the issues confronting men.

The sample Of those who responded to the survey, 34% were women.[62] A large proportion of respondents to the survey (approximately 44%) was between 21 and 30 years of age. The proportion of respondents tended to decrease with increasing age of respondents.[63] This is not surprising and may

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58   Note that Microsoft Corporation is currently surveying lawyers needs via an Internet survey available at:
      < http://www.internetlawyer.com/postsurv.htm > (visited 16 May 1999) and the Australian National University, Canberra, is currently in the midst of a study of use patterns amongst 'professionals' generally. For details about this survey, contact Mathew Ciolek, email: tmciolek@coombs.anu.edu.au.

59   With the assistance of Natalie Cuffe.

60   This group was chosen as the core of lawyers 'historically, numerically and ideologically — is private practice': J De Groot (1995) *Producing a Competent Lawyer: Alternatives Available*, Centre for Legal Education, Law Foundation New South Wales, p 10.

61   627 practitioners responded to the survey. Copies of the surveys are available to view and are with the writer.

62   213 in number.

63   Approximately 2% of respondents were between 17 and 20 years of age and approximately 2% were over 60 years of age. 5% of respondents were between 51 and 60 years old and the remainder of the respondents were between 31 and 50 years old.

be explained in several ways. First and most likely, those in the younger age
bracket are more likely to have had access to the Internet or at least to elec-
tronic resources during their law school training and thus may have been
more confident and comfortable with completing a survey focussing on the
Internet. Secondly, those in the younger age bracket may have less work
and domestic responsibilities and possibly more time available to complete a
survey form.

The correlation of data in this study of age with gender also reflects
that women who answered the survey tended to make up the lower ranks of
solicitors in the firms in terms of age.[64] Approximately 60% of women were
aged between 21 and 30 years old while fewer than 40% of male respondents
were in this age group.[65] It is also interesting, although predictable, that
generally the male respondents to this survey had higher status in their
firms that their female counterparts. This is particularly obvious in the
breakdown of partners and employed solicitors.[66] The data illustrates that
almost 50% of female respondents were employed solicitors while 28% of
men were employed solicitors. Only 12% of women were partners
compared with the male group, where over 40% were partners or principals.
It is likely that this distribution reflects the legal profession in Queensland,
where very few women are partners or principals.[67]

Overall, a disproportionate number of partners and articled clerks
responded to this survey.[68] Given that respondents were advised that the
survey sought to examine patterns of Internet use for legal research amongst

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64   There was a fairly even spread of respondents admitted to legal practice
     between 1970 to 1993. Approximately 4% of respondents were admitted before
     1960 and up to 1969. Approximately 17% of respondents were admitted
     between 1994 and 1996 and approximately 5% of respondents were admitted in
     1997. About 17% of respondents were not admitted. At the time of the survey,
     over 25% of women were not admitted, as compared to 12% of men not being
     admitted. This obviously suggests that many women articled clerks responded
     to the survey. Women tended to be more highly represented than their male
     counterparts in the more recent admission periods between 1991 and 1997.
     Men were more highly represented than women in the later admission periods,
     before 1960 and up to and including 1990.

65   See also Thornton for a discussion of the hierarchy of law firms and the
     positions women tend to occupy: Thornton (1996) ch 5.

66   Generally men who answered the survey were relatively evenly spread between
     the age range of 21 to 50 years old.

67   9% of partners in private law firms in Queensland are women, many of these
     being in sole practice: Queensland Law Society Statistics (1998) quoted to
     author. Most likely this reflects the state of the profession in Australia
     generally, with women tending to leave private legal practice at a much greater
     rate than men before reaching higher ranks, such as associate or partner, in the
     firm: see Thornton (1996) Appendix B, p 295. A relatively even percentage of
     partners and employed solicitors responded to the survey (approximately 32%
     and 35% respectively). Articled clerks made up 20% of respondents and 7% of
     respondents were associates. Ten librarians responded to the survey.

68   Queensland Law Society figures unavailable.

practitioners, the survey may have attracted those respondents who are most likely to carry out legal research and those who are most likely to be familiar with using the Internet. Other research has indicated that articled clerks and partners are those who are most likely to carry out legal research.[69]

The most common fields of practice for survey respondents were general practice, property, personal injury and commercial litigation. It is interesting that a similar proportion of men and women responded that they practice in Corporate Law and Commercial Law. Not surprisingly, approximately 18% of women respondents to the *LI Study* practice Family Law as compared with approximately 6% of men. About 21% of men stated that they had a general practice, whereas only 9% of women described their practice as general. Areas like Tax, Securities and Industrial Law were dominated by men.

Nearly one-third of practitioners who responded to the survey were located in the larger firms of 10 or more partners (34%) and about a quarter of practitioners were to be found in the sole practitioner category (24%). The only significant gender difference in this data was that men were 10% more likely than women to be practicing from a sole practice. Women were also 7% more likely than men to be practising in firms with 10 or more partners.[70]

Overall in this survey sample, women tended to be younger, less experienced and in lower positions in law firm hierarchies than their male counterparts. Women were more likely to be practicing in the larger firms. This is likely to be a fairly representative sample of the Queensland legal population, especially in southeastern Queensland, where many of the large firms are located and which tend to attract women at the commencement of their careers.[71]

Lack of time and access: The LI study

Curiously, the *LI Study* found that men are more likely than women to find that family and domestic responsibilities constrain their use of the Internet. This was particularly so in relation to family commitments, where men in our study were more than 10% more likely than women to feel constrained in their use of the Internet for this reason. Perhaps this result can be explained as an issue about individuals' perceptions; possibly men see domestic and child care responsibilities as tending to be outside of their traditional role and thus are more aware of the constraining impact of such commitments. In comparison, perhaps women are more likely to see child-care and domestic responsibility demands on their time as an integral part of their lives, rather than some added factor which constrains them with respect to using the Internet.

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69   T Hutchinson (1994) *Legal Research in Law Firms*, Hein, p 119.

70   It is difficult to know how representative this sample is, as statistics are not available for the particular region.

71   See Thornton (1996).

In terms of availability of access to computer hardware, nearly all respondents in the *LI Study* had some kind of access to a computer at work. Men were only slightly more likely than women to have access at work. Although men were a little more likely than women to have access to a computer at home, only about half of the sample who responded actually had access to a computer at home.[72] Ultimately, availability of computers amongst respondents was much higher than their use of the Internet. Although the potential for the legal profession in the sample studied is that over 80% could use the Internet in the near future, given the level of access to a computer, only about 60% of respondents currently use the Internet.

According to the *LI Study*, the most common place of access to the Internet is at home, followed by desktop at work and then library at work. Men are about 15% more likely to access the Internet from home than are women. This data may reflect traditionally higher workloads at home for women (commented on above) or it may simply be because men are more likely than women to have access to a computer at home; the reason for this difference was not clearly established in the *LI Study*.

Women and men show similar patterns of access to computers on their desktops. The data did not show that women are particularly less likely than men to have desktop access. There is a greater tendency for men to access someone else's computer for Internet access than for women.

Interestingly, women are more likely than men to use public space computers to access the Internet. Women are approximately 10% more likely than men to access the Internet from a library at work and at university. Similarly, women are 6% more likely than men to access computer laboratories at university.[73] This may reflect women's lower status in the firm and that they are thus less likely to have office access to the Internet.

Most respondents[74] spend five hours or less per week on the Internet, with very few of the respondents[75] spending more than five hours per week on the Internet. 46% of women and 45% of men spend one hour or less on the Internet. 10% more women than men spend two to three hours per week on the Internet but there was a larger proportional cluster of men than women accessing the Internet on the higher use levels (from six hours per week upward). Overall, the data suggested that men are more likely than women to spend from six hours or more per week on the Internet than women, and possibly the data suggests that men tend to spend more hours per week than women using the Internet.[76]

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72   In a 1996 survey carried out by the Australian Bureau of Statistics, it was found that of those who used a computer at home, 71% were male; the gender gap in computer use would seem to be much larger in the community as a whole than amongst lawyers: D Tanner (1997) 'Internet use on the rise', *Weekend Australian*, 15–16 November, p 5.

73   Only 12.7% of respondents had access to a computer at a university.

74   Number: 327.

75   Number: 44.

76   The cluster of men at higher use levels may correspond to their greater level of

Just over 70% of all users said they used the Internet during business hours. This suggests that more lawyers have access to computers with Internet software in their offices than outside of them. 58% usually access the Internet after business hours and 36% of respondents usually access the Internet on weekends. The data suggests that women are slightly more likely than men to access the Internet during business hours (approximately 6% more likely). Men are more likely than women to access the Internet after business hours (approximately 12% more likely).[77] Weekend access levels to the Internet appear to be very similar between men and women.

Overall, it would appear that women use a greater variety of access points than their male counterparts. The data also suggests that women are more likely to use Internet access from public-space computers, such as laboratories and libraries. Women are also more likely than men to access the Internet during business hours and men are more likely than women to access the Internet after business hours.

Although the data is not conclusive, the data suggests that neither a lack of availability of time or access to Internet software act as real constraints to women accessing the Internet. Women, however, were 11% more likely than men to perceive that lack of access was a constraint on their use of the Internet.

Exclusionary or different culture : The study

In the *LI Study*, 62% of men responded that they use the Internet, compared to 57% of women. Although the data shows that a higher proportion of male lawyers than female lawyers is currently using the Internet, the gender gap is not large at only 5%.

Level of experience and time spent using the Internet The data collected in the *LI Study* indicates that nearly 10% more women than men have been using the Internet for only 6 months or less. Statistics between men and women were similar in the mid-range level of use between one and two years. Differences appeared in the longer-range periods of use for three years or more. Men were almost twice as likely as women to have used the Internet for between 2 to 3 years and five times more likely to have used the Internet for 4 years or more. The data clearly suggests that in more recent times, women have been accelerating their take-up of the Internet. The data from the *LI Study* corresponds to other recent research in Queensland carried out by the Queensland Government, which shows the same trend.[78] Although the *LI Study* suggests that there is only a small gap in terms of proportion of men and women legal practitioners using the Internet, men are likely to be more experienced users than women.[79]

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experience in terms of how long they have been using the Internet.

77   Although this was not specifically defined, given the other possible answer of weekends, after business hours is assumed to mean before 9am and after 5pm during weekdays.

78   Sheldon (1997) p 3.

79   Ibid; men are likely to use the Internet for more hours weekly than are women.

Most respondents who use the Internet use it for legal research on a weekly basis (approximately 42%). Approximately 10% of respondents use the Internet for legal research on a daily basis, 17% on a monthly basis and 26% occasionally. Only 2% of all those who use the Internet never use it for legal research. Level of use is relatively similar for men and women. Interestingly, women are slightly more likely than men to use the Internet for legal research on a daily basis (approximately 3% more likely) and men are slightly more likely than women to use the Internet for legal research on a weekly basis (approximately 4% more likely).

Use of particular Internet applications   Although most respondents either 'never' or only 'occasionally' use the Internet to look for newspapers, at the higher use levels, men are five times more likely than women to use the Internet to look at newspapers and, on a weekly basis, men are twice as likely as women to use the Internet to look at newspapers. Similar patterns emerge in relation to using the Internet to look at non-legal journals. Men are five times more likely than women to look at non-legal journals on a daily basis and more than twice as likely as women to use the Internet to look at non-legal journals on a weekly basis. 55% of women responded that they never looked at non-legal journals on the Internet, as compared to 32% of men.

Interestingly, a higher proportion of women uses the Internet to look up sport on a daily basis (but there were very low numbers here). 15% of men stated that they used the Internet for sport on a weekly basis, compared to 10% of women. Most women (79%) responded that they never used the Internet to look up sport, whilst only 42% of men responded in this way. Men in this survey accessed the Internet for music on a far more regular basis than women: 11% of men on a weekly basis as compared with 2% of women. 75% of women never use the Internet to access music, as compared with 52% of men.

On the higher use levels, men use the Internet for general net surfing more than women. Men are three times more likely than women to use it for this purpose on a daily basis and approximately 8% more likely than women to access the Internet on a weekly basis for general net surfing. Women are more likely than men to use the Internet for general net surfing on an occasional basis (approximately 8% more likely) and more likely 'never' to use the Internet for this purpose (approximately 8% more likely).

Almost all practitioners who use the Internet access the WWW[80] on at least an occasional basis. The pattern of use of the WWW is very similar for men and women. Most practitioners access the WWW on a weekly basis, followed by accessing on an 'occasional' basis. Again on the high use level, men are almost twice as likely as women to use the WWW on a daily basis and women are slightly more likely than men to 'never' use the WWW. Overall, men tend to use the WWW more than women.

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80   This was defined in the survey as 'the universe of hypertext servers (HTTP servers) which are the servers that allow text, graphics, sound files, etc to be mixed together'.

Few clear differences emerge in relation to how respondents find material on the Internet.[81] Women are more likely than men to use referrals from other people to access Internet information (12% more likely) and slightly more likely to use established legal sites (6% more likely). Although this may suggest that women tend to be less experimental than men, this is not necessarily borne out by the data, as women are actually more likely to go general net surfing to search for information than men (approximately 5% more likely). Men are 5% more likely than women to use print reviews to find information on the Internet.[82]

The data suggested an overall tendency for women to see the Internet as more important for legal research than their male counterparts. More men (approximately 4% more) than women state that the Internet is not at all important for legal research.

The data suggested similar use patterns between men and women of other applications canvassed in the survey (including Listserve, IRC/CHAT Relay, Newsgroups, Gopher and File Transfer Protocol). Although the data suggested that there is a slightly higher tendency for women to have 'never' used these more technical applications, the difference is not particularly relevant as the numbers of users of these applications was extremely low.

Email Generally, those practitioners who use email use it on a daily basis. Although men appear to use email on a more regular basis, overall there is not a significant difference in regularity of use. The survey data shows that there is a slightly higher tendency for women to communicate via email with family and friends (approximately 5% more likely than men). In relation to contacting work colleagues by email, men and women show very similar patterns. In relation to other possible recipients (discussion groups, lecturers, other students, courts, government agencies, opposing counsel and clients), men are generally more likely than women to communicate by email. It would be interesting to survey this issue again in some years when women have gained more Internet experience and see if such patterns change.

Women's responses indicated that they are 10% more likely than men to use email for personal correspondence. This strengthens the picture that emerged in relation to who respondents communicate with via email (above). In the reverse, men are almost 10% more likely to use email for work correspondence. Men are also more likely to use email to communicate case or legislation information (approximately 6% more likely). In

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81   Most respondents (78%) find material on the Internet by using established legal sites. The second most common method of locating material is to use search engines (63%), followed by referrals from other people (27%). About 20% of respondents use organisation homepages and general net searching to find material.

82   The remaining options canvassed in the survey were: search engines, advertising in print, advertising online, homepages of professional organisations and reviews online. No particular differences were noted in the data in relation to these options of accessing material on the Internet.

relation to service of papers and discussion groups, similar patterns emerge
between men and women, with men being approximately 6% more likely
than women to use email in this way.

Conclusion Overall, women were more likely to access the Internet to do
legal research. In comparison, men are more likely to access the Internet for
other types of information.[83] Women were much more likely than men to
respond that they never use the Internet for non-legal research purposes.
This may reflect a lack of time or possible a lack of experience or confi-
dence. Thus, although men seem to spending more hours each week using
the Internet, their purposes are likely to go beyond being work related.
Women may in fact be using the Internet more for legal research than their
male counterparts. Also interesting was the data which showed that women
are more likely than their male counterparts to use the Internet for
contacting family and friends rather than work purposes. Perhaps this latter
data supports a view that women are using a 'different voice' in their
Internet interactions.

Fear and confidence: The LI study

The most common constraint on using the Internet is 'work commitments'
(52% of all respondents). In this area, men and women are close together;
men are only 6% more likely than women to cite this reason as a constraint
on use. Respondents did not generally feel constrained in relation to techni-
cal difficulties, financial reasons and leisure activities. In respect of these
issues, the responses of men and women were fairly even.
    Perhaps the most interesting data that arises from the *LI Study* relates to
whether respondents felt that their access to the Internet was constrained by
lack of training and lack of confidence. In both of these areas, women felt
much more constrained in their use of the Internet than did their male
counterparts. Women were 14% more likely than men to find that lack of
training was a constraint and 9% more likely to find that lack of confidence
was a constraint. It is quite likely that lack of confidence and lack of training
are interlinked. A greater understanding of this issue may help to design
training which is appropriate to the needs of women. These responses may
possibly echo MacKinnon's position that the learning environments avail-
able for women intimidate and silence women.[84]

Education and training: The LI study

A particular focus of the current study was to examine the legal education
needs of practitioners in terms of learning about Internet legal research
skills. More particularly, the project sought to examine the perceptions and
needs of women as compared to men in respect of this type of training.
Which group tends to take up formal training programmes most often and
which group had continued access to training? It was believed that if this

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83   Newspapers, sport, music, general net surfing and non-legal journals.

84   MacKinnon (1989) p 88; see also Mossman (1995) p 142.

kind of information could be obtained, it may assist in better targeting and design of training programmes.

By far, the majority of respondents were self-taught (approximately 72%), while approximately 14% were trained by a librarian. The difference between men and women in relation to how they were taught is not significantly different. A higher proportion of women (approximately 4% more than men) responded that they had been taught by a librarian.

The data suggests that the larger the firm, the more likely practitioners are to be trained in use of the Internet. It is interesting to note that a reasonably high proportion of practitioners who use the Internet in firms where there are 10 or more partners have been taught by librarians (9.4%). Self-teaching is fairly evenly spread, with a slightly higher proportion of people at both ends of the scale (sole practitioners and firms with 10 or more partners) being self-taught.

Unfortunately, the data does not allow the drawing together of women's perceived lack of training with an actual lack of training compared to men. Perhaps this data does suggest that although women are receiving as much training as men, it is suiting their needs less well. To this end, it would be useful at some future time to find out from women lawyers how best to address their training needs. Many feminist educationalists reject the Socratic method in favour of 'truly enquiring forms of learning'; for Menkel-Meadow, this means developing teaching models which aim to empower students fostering 'open and flexible understandings of how problems can be solved'.[85] Kramerae and Taylor have some suggestions about how training programmes could be set up which incorporate women's learning styles, such as linking skills to rewards, systematic instruction and follow up instruction.[86] Another suggestion that may assist in training women more effectively is focusing the training on the Internet as a tool which allows computer-mediated communication.[87] Given that a number of respondents to the *LI Study* responded that they used the Internet for looking up pornography,[88] it may be that some women perceive that the use of the Internet is not ethical and lose confidence because of this. Thus, another suggestion that may assist in developing more appropriate training for women is generally focusing of promoting ethical use of the Internet.[89]

Part Three
Issues for further research

Librarians' use of the Internet and their role in law firms Many law firms now employ law librarians. As far as we have been able to discover, the majority

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85   C Menkel-Meadow, 'The Fem-Crits Go to Law School' (1988) 38 *J Legal Edu* 61, p 81.

86   Kramerae and Taylor (1993) p 17.

87   R Mason, 'Where does Computer Aided Learning Fit in the Tertiary Education Question?' (1996) 7 *J L & Info Sci* 105, p113.

88   6 respondents.

89   E Clark et al, 'The Role of Information Technology (IT) in University Teaching' (1995) 6 *J L & Info Sci* 131, p 147.

of law librarians in Queensland law firms are women. These women tend to have low status in the firm; after all, they have no direct client contact, relatively low pay and they are first to go at the sign of any financial difficulty in the firm. Ten librarians (all women) responded to our survey. They appear to be the people most likely to be locating research-oriented information via Internet for lawyers, advising staff of new and useful sites and training staff in relation to Internet use. Kramarae has commented that men have their technologies and use women as their tools; law librarians may be a good example of this.[90] It may be useful to examine law librarians as a particular site of gender oppression in the legal workforce.

Women and training Women seem particularly likely to claim that lack of confidence and training constrain their use of the Internet. It would be appropriate to examine in detail the types of training programmes which are currently offered to lawyers and to consider ways in which training could be most appropriately designed to suit women's needs.

Women and email In line with many of the projects currently being undertaken by feminist scholars in other disciplines,[91] it would be interesting to examine in more depth the purpose and patterns of email use by legal practitioners. Although the survey used in the *LI Study* attempted to find out if women were using email differently to men, the results are not clear. This type of research would require a researcher to work closely with legal practitioners, examining their online communications in some depth. Privacy and confidentiality issues may be difficult to overcome. Such research may able to deliver a clearer picture of whether there are in fact gender differences in the way men and women communicate online.

Conclusion: Is Use of the Internet Gendered?

The gender gap between men and women lawyers in terms of numbers who use the Internet is very narrow: only 5% more men than women use the Internet. Women lawyers are 10% more likely than male lawyers to have been using the Internet for six months or less, whereas men are more likely to have been using the Internet for longer time.[92] To this extent, the study reflects other studies of gender patterns of Internet use from other disciplines.[93] In the recent past, women lawyers have been taking up the Internet at a fast pace and are catching up with their male counterparts.

Men's generally higher level of experience in using the Internet probably explains why men tend to spend more hours per week than women in using the Internet, and more specifically, in using the Internet more often than women for general net surfing and in using Internet applications on

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90   Kramarae (1996) p 52.

91   Carriere (1997); Robertson (1997).

92   Twice as likely as women to have used the Internet for between two to five years and five times more likely than women to have used the Internet for four years or more.

93   See generally Kramarae (1997).

higher use levels (such as daily). Interestingly, women and men use the Internet for legal research at a comparative level, yet women tend to view the Internet as more important for legal research than men. Although male lawyers use the Internet to access a wider variety of information, this could be explained as a result of men's generally greater experience or, alternatively, that women are feeling more constrained in their use for various reasons. Women are slightly more likely to correspond with family and friends via email and, as a corollary, women are more likely to use email for personal correspondence.

There does seem to be a difference between men and women lawyers in terms of where and when they are likely to access the Internet. Men are more likely than women to access the Internet from home, whereas women are more likely than men to access the Internet from public-space computers (such as those in libraries or computer laboratories). Where men are more likely to access the Internet after business hours, women are more likely to access the Internet during business hours.

Although women and men are currently using the Internet in slightly different ways, and to that extent use is gendered, it is likely that women's increasing experience will make use patterns look very similar in the near future. This study, like much of the recent research and literature in this area,[94] challenges stereotypes of women, specifically women lawyers, as technophobic and unwilling to integrate new technologies into their work. It demonstrates that women are catching up with and in some ways possibly surpassing their male counterparts in their use of technology in their legal work. Women are actually involved in the technology, whether it be for email or legal research.

Importantly, in a practical sense, the *LI Study* indicates the real need of legal practitioners, especially women, for training in relation to the new technologies available on the Internet. Internet training programmes need to be developed which can respond to the anxieties with respect to confidence, training and technical difficulties which women have particularly expressed in this survey.

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