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# Social Work Doctoral Students and OnLine Technology

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Social work practice today requires that most practitioners be proficient in the use of online technologies. Information technology can be used to access, gather, process and communicate information. Although social workers can use information technology for conducting research, sharing ideas through listserves and chatrooms, communicating with colleagues through e-mail, and publishing work, very little is known beyond conjecture about how social workers use these resources, and the extent to which online activities have supplemented and enhanced professional capabilities. The literature provides a wealth of descriptive information about online technology, providing basic educational information about resources, websites and benefits for social workers (Karger, & Levine, 1999; Martinez & Clark, 2001; Menon, 2002; Yaffe & Gotthoffer, 2000).

This article reports the findings of a study which examined the manner in which social work doctoral students use online technology, the patterns of its use, and perceptions regarding benefits and self-efficacy. A primary focus was placed on examining the resources which provide self-reported positive outcomes for social work practice and scholarly endeavors. The implications and findings are discussed as well as some strategies to enhance the use of these resources among social work students, faculty and practitioners.

## Introduction

Professional practice requires workers to be proficient in accessing and using online technology to enhance their job performance as well as to benefit their clients. The online world is now accessible and available to social workers and other helping professionals. In this study it was hypothesized that social work doctoral students make significant use of computer technology as part of their research activities.

While it is intuitively logical that a significant proportion of doctoral students use and value online technology, empirical investigation helps to confirm the validity of such notions, and contributes to a deeper understanding of underlying factors that may affect use and value. This study examined the extent to which social work doctoral students use online resources and for what purpose; perceptions about the value of online technology for social work practice, research, advocacy and education; the extent to which doctoral students perceive that online resources provide positive outcomes for practice and scholarship; and the extent to which Internet related self-efficacy is associated with perceived value of online technology and patterns of use.

## Background

Over the past 10 years there has been a staggering increase in Internet use. The latest research finds that over 59 percent of American households have Internet access (The Pew Charitable Trust, 2002). It is projected that by the year 2005, over 75 percent will be online (Charny, 2000).

Commentators site a number of outcomes that can result from the use of online resources (Karger, & Levine, 1999; Kjosness, Barr, & Rettmann, 2004; Martinez & Clark, 2002).

These include increasing access to: professional knowledge; library information, topic specific web sites, government resources; academic journals, interactive and written communication; participating in discussion groups and mailing lists as tools for teaching and learning; and information through keyword searches.

A survey of the literature reveals a large empirical base related to Internet use by professionals ranging from the clergy and educators to health professionals, librarians, and architects (Becker, 1998;

Jones, 2001; Kirby, 2002; Richardson, 2000). The way in which social work doctoral students use online technology is unknown. It was postulated that doctoral students actively use online technology, and would therefore provide a suitable study population. Exploring the manner in which social work doctoral students use these resources and for what purpose provides insight into the extent to which online activities can supplement and enhance one's educational and professional activities.

## Methodology

Respondents were asked to indicate the frequency of use of online technology for various purposes, as well as the extent to which they agreed or disagreed with various propositions and perceptions about the use of information technology. This study focused on the perceived benefits of online resources on the (a) work/practice and (b) scholarly pursuits of social work doctoral students.

two interrelated areas: perceived benefits of online resources for work/practice and for scholarly pursuits. Positive relationships were sought between perceived benefits of online technology for practice and scholarship and other factors, such as: patterns of online use; Internet related self-efficacy; perceived value of online technology; and use of online technology for advocacy functions.

To address the research question surveys were sent to 71 schools of social work within the United States and Canada listed in the Group for the Advancement of Doctoral Education (GADE) directory as having a social work/welfare doctoral program as of May, 2001. The directors of doctoral programs were asked to distribute the questionnaires to their first and second year doctoral students. Surveys were received from 44 schools. Of the 693 students from the 44 schools, 203 responses were received, yielding a response rate of 29 percent. Indirect routing to students may have adversely affected the response rate, but to an unknown degree.

### Measures

Several new variables were derived for use in this analysis. Scales were related to patterns of

Internet use, Internet self-efficacy, and frequency of Internet use. Scales related to patterns of Internet use included research related use; email and communication; professional funding related use; and non-social work related use. These were based on self-reported frequency of use based on the following six point scale: 0 = never; 1 = once a semester; 2 = once a month; 3 = once a week; 4 = once a day and 5 = more than once a day. A mean was computed for the items in each scale and higher means indicated more frequent use. The scale for research related use included items such as Internet use for research material for school and Internet use for social work related web browsing. The reliability coefficient for this scale was .8, within the acceptable range for a newly derived scale.

The scale measuring the frequency of Internet use for email and communication included items such as: email with professors, fellow students, and colleagues. The reliability coefficient for this scale was .75, again, within the acceptable range.

The scale for Internet use for professional/ funding purposes included items such as: schools of social work web sites, professional association web sites, and dissertation research grant web sites yielding a reliability coefficient of .67, considered low, but just under the minimum of .7, which is acceptable for new scales (Monet, Sullivan & Dejong, 2002).

The scale measuring frequency of use of the Internet for non-social work related purposes included non-social work related chat rooms and non-social work discussion groups. The reliability coefficient here was .59, a bit low, but useful for discussion purposes here.

The scale used to assess Internet related self-efficacy included items such as: comfort using the Internet and ability to use the world wide web; responses ranged from 1 = strongly disagree, to 5 strongly agree. The reliability coefficient was .79, within the acceptable range for internal consistency. Higher scores indicate higher Internet related self-efficacy.

An additional nominal measure was created to capture general frequency of Internet use. The four mutually exclusive categories included: frequent (at least once a day) web and email use; frequent web, but NOT email use; frequent email but NOT web use; and sporadic web and email use (once a week or less for both).

## Findings

### Demographics

The sample was comprised of first and second year students. Just over half (55 percent) of the respondents were first year students. There was a high number of female respondents (74 percent), which reflects the male/female ratio in social work doctoral programs, as well as in the profession of social work (Gibelman, 2003).

Over 20 percent of the respondents reported that their field of practice was with children and adolescents. The next largest category was mental health (14.7 percent). The remaining categories were distributed over a wide variety of fields. Fields of practice with less than five responses were combined into a category of 'other.'

### Online Usage and Access Locations

Students primarily access online resources from home (92 percent). Other significant locations included their workplace (55 percent), the library (57 percent), and the computer lab (52 percent).

When asked how they learned to use online resources, a large percentage expressed that self learning (89 percent) and family/friends (52 percent) helped shape their knowledge base. Relatively few learned to use online technology from other resources such as the library, a university course or reading books. Just over one third (33 percent) indicated that a course would have helped speed up their learning, or having a friend (33 percent) teach them. Over half (56 percent) indicated that having more time to experiment would have enhanced their ability to navigate the technology.

With respect to the use of online resources on campus, respondents indicated that having more time (66 percent), more training (34 percent) and more computers (25 percent), would increase their frequency of use.

Over three quarters of the respondents used e-mail. Although respondents indicated that they use e-mail to communicate with professors, fellow students and colleagues, most used it to communicate with friends and family (see table 1).

### Table 1: Frequency of Email Use

| Email with | Never | | At least once a day | | Once a week or less | |
|---|---|---|---|---|---|---|
| | N | % | N | % | N | % |
| Family/friends | 127 | 62.9 | 70 | 34.7 | 5 | 2.5 |
| Colleagues | 94 | 47.2 | 94 | 47.2 | 11 | 5.5 |
| Fellow students | 92 | 45.8 | 104 | 51.7 | 5 | 2.5 |
| Professors | 65 | 32.5 | 128 | 64.0 | 7 | 3.5 |

Very few (less than 4 percent) visited discussion groups or chat rooms, whether related to social work or to other areas of personal interest. Relatively few (8 percent) indicated that they had a personal web page. Of these, a very small number (3 percent) included social work content on their web page.

The majority of the respondents (58 percent) reported that they used Internet technology for both the web and email at least once a day. The second largest group (27 percent) used online technology for email once a day, but not for browsing the web. Nine percent reported using the Internet for browsing the web daily, but not for email, and 7 percent used online technology for browsing the web and email sporadically, once a week or less.

A large majority of respondents (92 percent) tend to use the Internet to remotely access the online resources of their school library from home or work (92 percent). A majority (84 percent) of these respondents indicated that they access data bases such as Proquest, Lexis Nexis and Social Work Abstracts; 78 percent access online journals; and 52 percent access their library's card catalogue.

### Use of Online Resources for Research

Over 80 percent of the respondents indicated

that they use online resources for social work research. The two most frequently used research resources were Proquest (70 percent) and web-browsing for social work related sites (70 percent), such as, child welfare, domestic violence and substance abuse. Over half (56 percent) of the respondents indicated that they use online resources to access full text articles. Other uses included: course related websites (36 percent) and government websites (33 percent). Only one quarter of the respondents indicated that they use online resources as an inspiration for ideas (24 percent).

*Overall Patterns of Online Use*

As discussed, the majority of respondents use online technology for communication purposes (e-mail). The second largest group use the technology for research-based needs; this is followed by professional use. A very small minority of respondents use online technology for non-social work related uses, other than using e-mail to contact family and friends (see table 2).

## Table 2: Patterns of Internet Use

| Email with | N | Mean | Std. Deviation |
|---|---|---|---|
| Email and Communication | 202 | 3.19 | .92 |
| Research Related Internet Use | 203 | 2.49 | .85 |
| Professional Use | 203 | 1.29 | .72 |
| Non-Social Work Related Use | 197 | .34 | .80 |

*The higher the mean, the more frequently the respondent used the internet for this purpose. Numbers based on a six point scale (0=never; 1-once a semester; 2=once a month; 3=once a week; 4=once a day; 5=more than once a day.*

*Attitudes and Perceptions about Use of Online Technology*

Regarding overall attitudes and perceptions about use of online technology, most respondents agreed that their ability to use email was very good (93 percent), and used email frequently to communicate with fellow students and professors (92 percent). Although only 40 percent of the respondents agreed that their professors used online technology to supplement their courses and communicate course related information to their students, most agreed that it was important to use online technology for scholarly endeavors such as doctoral research, course work and papers (91 percent), and inclusion in course content (87 percent). Many respondents reported that they were comfortable using the Internet (86 percent) specifically World Wide Web resources (80 percent), although a large number (88 percent) also agreed that it would be important to offer an orientation to the Internet and other online resources.

There were some areas in which the responses were less favorable. For example 64 percent agreed that they would feel less efficient without online resources for their professional endeavors and even fewer felt capable of assessing the reliability of Internet sites (60 percent), or easily found the social work related information they sought (56 percent). Similarly, less than half (48 percent) agreed that social workers actively used online resources, or that the social work profession has kept pace with other professions with regard to online resources (38 percent). Less than one third agreed that they used online resources to speak out on issues of importance (32 percent).

*Patterns of Online Use by Benefits to Work/Practice*

The findings demonstrate that patterns of use vary directly with the extent to which one perceives that online resources provide positive outcomes (see Table 3). A significant relationship was found between perceived benefits of technology for work/practice and patterns of online use, such as research related use, communication, and professional use.

The relationship between perceived benefits for scholarship and use of online resources for research-based activities was positive but weak (r=.125), and not statistically significant (p=.077). (see table 3)

*Self-Efficacy by Benefits to Work/Practice*

Self-efficacy was positively correlated with perceived benefits of technology for scholarship and for work/practice. This suggests that the more doctoral students believe in their ability to navigate

## Table 3: Patterns of Use with Perceived Benefits to Practice and Scholarship

| | | Would feel less tooled without online resources for my job (BENEFITS TO PRACTICE) | Would feel less tooled without on-line resources for research, class work, papers (BENEFITS TO SCHOLARSHIP) |
|---|---|---|---|
| Research Related | Pearson Correlation | .228** | .125 |
| | Sig. (2-Tailed) | .001 | .077 |
| | N | 202 | 202 |
| Email and Communication | Pearson Correlation | .234** | .007 |
| | Sig. (2-Tailed) | .001 | .921 |
| | N | 201 | 201 |
| Professional | Pearson Correlation | .254** | .076 |
| | Sig. (2-Tailed) | .000 | .279 |
| | N | 202 | 202 |
| Non Social Work | Pearson Correlation | .010 | .033 |
| | Sig. (2-Tailed) | .890 | .648 |
| | N | 196 | 196 |

*\*\* Correlation is significant at the .01 level (2-tailed)*
*\* Correlation is significant at the .05 level (2-tailed).*

online resources, the greater the perceived benefit to education and work/practice.

As indicated in table 4, frequent e-mail and World Wide Web (WWW) users reported that they were very comfortable using the Internet. Not surprisingly, those who used the Web most frequently had higher Internet self-efficacy mean scores than email only users or sporadic Web and email users. There was a significant difference in the mean Internet self-efficacy score between frequent web and email users (n=117, mean 4.22) and frequent email users only (n=54; mean = 3.74). Although sporadic email and web users had a lower mean score (3.70), the number of cases in this group was very small (n=18) and the difference was not significant. (see table 4)

## Table 4: Frequency of Internet Use and Internet Self-Efficacy

| Email with | N | Mean | Std. Deviation |
|---|---|---|---|
| Frequent Web and Email User | 117 | 4.22* | .67 |
| Frequent Web (Not Email) User | 18 | 3.96 | .81 |
| Frequent Email (Not Web) User | 54 | 3.74* | .82 |
| Sporadic Web and Email User | 14 | 3.70 | .75 |

*The higher the mean, the more frequently the respondent used the internet for this purpose. Numbers based on a six point scal (0=never; 1-once a semester; 2=once a month; 3=once a week; 4=once a day; 5=more than once a day.*

*\* Statistically significant difference at the .05 level.*

With regard to Internet related self-efficacy and patterns of Internet use, moderately statistically significant correlations were found between Internet self-efficacy and use of online technology for research related purposes ($r = .297$; $p = .000$), use of online technology for email and communication purposes ($r = .238$; $p = .000$); and the use of online technology for professional use ($r = .311$; $p = .003$). This suggests that belief in one's ability to use online technology is significantly related to frequency of use of online technology for research, communication and professional purposes. Self-efficacy was not significantly related to the use of online technology for non-social work uses.

*Perceived Value of Online Technology*

The findings indicate that perceived value of social work related sites is significantly related to both the perceived benefits of technology for scholarship (mean=4.31, F=5.08, p=.007) and for work/practice (mean=4.7, F=5.5, p=.005). This suggests that the more doctoral students perceive online social work resources to be of value, the greater the perceived benefit of online resources are to both social work/practice and scholarship (see table 5).

*Perceived Value of Online Social Work Benefits to Work/Practice*

A significant relationship was found between research related Internet use and perceived value (see table 6). Respondents indicating that they felt that social work related Internet sites were valuable or very valuable had a significantly higher mean frequency of research related Internet use than those who did not. This suggests that perceived value of social work related sites is significantly related to use of online technology for research. Value of social work related sites was not significantly related to Internet use for communication, professional purposes or non-social work related purposes. (see table 6)

A moderately low ($r=.2$), but statistically significant correlation ($p=.005$) was also found between perceived value and Internet use for research purposes. Use of online technology for communication,

### Table 5: Benefits to Practice and Scholarship by Perceived Value of Social Work Related Internet Sites

|  | N | Mean | Std. Deviation |
|---|---|---|---|
| Would feel less tooled without online resources for my job (BENEFITS TO PRACTICE) | | | |
| Not Valuable | 11 | 3.28 | 1.55 |
| Valuable | 114 | 4.18 | .91 |
| Very Valuable | 72 | 4.32* | .98 |
| Would feel less tooled without online resources for doctoral research, classwork, papers. (BENEFITS TO SCHOLARSHIP) | | | |
| Not Valuable | 11 | 3.91 | 1.51 |
| Valuable | 114 | 4.54 | .74 |
| Very Valuable | 71 | 4.72 | .74 |

*Statistically significant differences in mean scores for both perceived benefits to practice and scholarship were found between those who found SW related internet sites to be valuable or very valuable and those who did not at the .05 level.*

### ANOVA for Benefits to Scholarship and Benefits to Education by Perceived Value

|  |  | F | Sig. |
|---|---|---|---|
| Benefits to Practice | Between Groups | 5.50 | .005 |
| Benefits to Scholarship | Between Groups | 5.08 | .007 |

professional purposes and non-social work related use were not significantly related to the perceived value of social work related Internet sites.

*Use of Online Technology for Advocacy*

A low but positive correlation ($r=.162$; $p=.02$) was found between the use of online technology for advocacy purposes and the extent to which online resources for work/practice is perceived as beneficial (see table 7).

Some statistically significant correlations were found between the use of online resources for advocacy purposes and patterns of online use (see table 8).

### Discussion and Implications

The findings of this study indicate that there are a variety of factors related to the utilization patterns of online technology by social work doctoral students, such as: perceptions regarding benefits to practice and scholarship and self-efficacy. Some of these can potentially be modified in order to increase conditions under which online resources can be used to enhance the use of online technology as an educational adjunct.

One of the major findings of this study was that Internet related self-efficacy, or the perception of one's ability to master online technology, is positively related to actual use of online technology for surfing the web. It is not possible to say which con-

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**Table 6: Research Related Internet Use by Perceived value of Social Work Related Internet Sites**

|  | N | Mean | Std. Deviation |
|---|---|---|---|
| Research Related Internet Use | | | |
| Not Valuable | 11 | 1.90 | .85 |
| Valuable | 114 | 2.45 | .86 |
| Very Valuable | 72 | 2.67 | .78 |
| Total | 197 | 2.50 | .85 |

**ANOVA for Research Related Internet Use by Perceived Value**

|  |  | F | Sig. |
|---|---|---|---|
| Research Related Internet Use | Between Groups | 4.612 | .001 |

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**Table 7: Use of Online Social Wok Resources for Advocacy by Benefits to Social Work Practice**

|  |  | Would feel less tooled without online resources for my job (BENEFITS TO PRACTICE) |
|---|---|---|
| I use online resources to speak out on issues of importance (ADVOCACY) | Pearson Correlation | .162* |
|  | Sig. (2-Tailed) | .022 |
|  | N | 199 |

* *Correlation is significant at the .05 level (2-tailed).*

## Table 8: Use of On-Line Social Wok Resources for Advocacy by Patterns of Utilization

|  |  | I use on-line resources to speak out on issues of importance (ADVOCACY) |
| --- | --- | --- |
| Research Related | Pearson Correlation | .144* |
|  | Sig. (2-Tailed) | .042 |
|  | N | 200 |
| Email and Communication | Pearson Correlation | .293** |
|  | Sig. (2-Tailed) | .000 |
|  | N | 199 |
| Professional | Pearson Correlation | .130 |
|  | Sig. (2-Tailed) | .068 |
|  | N | 200 |
| Non Social Work | Pearson Correlation | .334** |
|  | Sig. (2-Tailed) | .000 |
|  | N | 195 |

*\*\* Correlation is significant at the .01 level (2-tailed)*

*\* Correlation is significant at the .05 level (2-tailed).*

tributes to which, that is, whether students use the Internet more because they feel that they have a particular proficiency, or whether perceptions of mastery increase as students actually use the technology available to them. Significant correlations were also found with Internet related self-efficacy with perceived benefits of the Internet for both practice and for scholarship. That is, the more confident one is in one's ability to use the resources available online, the more one believes that these sources are beneficial for practice and for scholarship.

The literature suggests that a very high proportion of students use some form of online technology (Jones, 2002); the more education one has, the more likely he/she is to use the Internet (Schau, 2000/2001). This study finds that social work doctoral students are no different, with a great majority of respondents using online resources at least once a day.

### Obstacles and Contributions to Online use

One third of the respondents did not use the Internet on a daily basis. In addition, nearly 41 percent of the respondents had trouble finding social work related sites on the Internet and 24 percent felt incapable of assessing whether an Internet site had reliable content. Regarding possible social work related Internet use, almost two thirds (64 percent) did not use online technology for advocacy related purposes, and a quarter did not believe that social workers actively use online resources at all. Finally, more than a third (38 percent) did not believe that social work has kept pace with other professions with regard to online resources. While respondents were not specifically

asked about perceived obstacles to use, these findings present a challenge to social work educators, particularly in doctoral education, regarding the way online technology is used and perceived by students. Clearly there is work to be done in this area if social work is to keep pace with other professional disciplines.

## Limitations

The study was limited to only doctoral students, and findings may not be generalizable to other students, or to social workers in general. In addition, the data reported here were gathered at one point in time, as a result, longitudinal trends can not be explicated. The findings reflect the views of respondents, not the total population of social work doctoral students.

Although there was a high degree of agreement that online technology was valuable, there was no further opportunity to operationalize the ways in which respondents found it valuable. We hope to address this in the next study with MSW and BSW students.

The data did not allow for an assessment of the degree of consistency and comparability across schools with regard to the use and availability of online technology resources. The response rate (29 percent) suggests the operation of a self-selection bias. That is, the students who chose to participate in the study may not have been representative of doctoral students in general.

## Recommendations for Future Research

These findings evoke several important questions: (1) what hampers and what contributes to use of online technology; (2) what are the perceived benefits of online technology for social work practice and scholarship; (3) to what extent does self-efficacy play a role in utilization patterns and perceived benefits; and (4) what can schools of social work do to increase online utilization for students.

The literature indicates that patterns of use, value, and self-efficacy with regard to online

resources varies according to what has been termed a "digital divide," suggesting that one's use of online resources is affected by an array of variables. For example, the perception that online resources have immediate instrumental value has been found to have less of an influence on actual use for students majoring in Humanities and Social Sciences than for those majoring in Math and Science (Kuh & Hu, 2001). The literature also suggests that school and student affluence, student cognitive ability and computer accessibility all influence online use (Dillan & Gabbard, 1998; Flowers, Pascarella, & Pierson, 2000). Access comes in many different forms; some have access at home, others only at work or school. Some have high speed DSL lines, while others have slow modem connections.

In addition to the above mentioned factors affecting differential use this study found that for doctoral students in social work, self-efficacy, perceived value of social work resources, patterns of use, and perceived benefit to scholarship and to social work/practice also varied significantly. Those most confident about their ability to use online resources were more likely to perceive benefits from their use. Similarly, those with the most self-efficacy tended to use more sophisticated resources, such as remote access to their school's online databases, journals and card catalogues.

Studies have found that self-efficacy plays a determining role in the patterns of information technology use (Compeau & Higgins, 1995; Igbaria, Livari, & Maragahh, 1995), and in perceptions regarding ease of use (Igbaria, Livari, & Maragahh, 1995).

Conversely, those less comfortable use it less for scholarly purposes; perhaps they are hampered by frustration or lack of ability, leaving them to spend less time using these resources. Their time online is primarily spent using e-mail and occasionally using search engines for scholarly research and professional purposes. The use of computer based technology for word processing and e-mail is practically

universal, whereas activities that are more time con-
suming and require more advanced knowledge are
less common (Kuh & Hu, 2001). Overall, the
research indicates that when support is provided,
ability is improved; this leads to higher perceptions
of self-efficacy (Compeau & Higgins, 1995;
Igbaria, Livari, & Maragahh, 1995). This study
found that perceived benefits derived from the use
of online technology increases with frequency of
use, comfort with ability, and perceived value of
social work resources for scholarship and practice.

*What Can Schools of Social Work Do To Increase
Online Effectiveness For Students*

The results of this study suggest that social work
doctoral students benefit from their use of online
resources and recognize the need for training and
technical support on a university level in order to
maximize these benefits. As a result, schools of
social work need to be proactive in enhancing the
online proficiencies of its students; nurturing
online self-efficacy; and increasing availability of
online technology use.

A number of recommendations emanate from
these findings. Students should be encouraged by
professors and administrators to enhance their pro-
ficiency; the role of the school is to both provide
and help students use resources. This can be done
by providing general Internet training and incorpo-
ration of this technology in course supplements and
assignments, such as faculty web pages, student
discussion groups, links to course related websites,
study guides, informational bulletin boards, etc.

Professors should attempt to accurately assess the
online abilities of students rather than assume that
students are competent in this area. An assessment
of students' online proficiencies could easily be
determined through the use of a simple self adminis-
tered survey regarding use and comfort level with
search engines, evaluating the quality of online
resources, knowing where to begin research, cut-
ting/pasting digital material (Goett & Foot, 2000)
and ability to use remote access resources. This
information could be useful in decisions about what

areas need to be addressed and improved. This also
provides students with an opportunity to anony-
mously ask for help in the areas in which they feel
less proficient. Schools might consider offering
informal seminars which spotlight different online
technologies; small workshops on remote access to
libraries, use of search engines, web pages and how
to access and navigate social work related websites.
The challenge is to enhance the online efficiency
and effectiveness of students, while concomitantly
uncovering stumbling blocks that prevent schools
from becoming more invested in improving student
access, use and expertise.

## Conclusion

Virtually all doctoral students appear to have at
least a basic understanding of online resources and
a moderate level of proficiency. There exists however,
a significant disparity in access and ability. In effect,
doctoral students, already disproportionately affected
by encumbrances such as tuition costs and family
responsibilities, are further overwhelmed by evident
differences in online aptitude and access between
themselves and fellow students.

The results of this study suggest that there is
agreement among doctoral students on the value
and usefulness of online resources for doctoral edu-
cation. Many believe that schools ought to provide
those resources that can enhance ease and access.
These findings indicate that doctoral programs
should consider enhancing online training and sup-
port of their students. This will provide students
with the ability to access and use online resources
on an equal footing with students of other disci-
plines. It remains to be seen whether the experi-
ences of doctoral students in social work are shared
by students in other disciplines and social work stu-
dents at other levels, such as those in MSW and
BSW programs. Further research is needed to
explore the perceptions and patterns of use among
these groups.

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