

YOU'VE GOT MAIL! YOU DON'T WANT IT: CYBER-VICTIMIZATION AND ON-LINE DATING*

by

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ABSTRACT

This paper provides an analysis of victimization risk by women who use Internet dating services as a means of pursuing interpersonal relationships. Specifically, the paper is a study of women's opinions of the risk they may encounter and the prevention measures employed by women who use such services. The actual victimization experiences of women who currently use Internet dating services is also detailed.

INTRODUCTION

On-line dating Internet sites are the newest devices being used to help people find love and companionship. The use of on-line dating services is described as booming and there are many Internet sites whose sole purpose is the business of helping individuals find romantic partners. Skriloff and Gould (1997) list 42 such sites in their 1997 book devoted to assisting women to be successful in "flirting, dating and finding love on-line" (title page). One of the more popular sites is Match.com (www.match.com/main/dating_tips.cfm) that boasts of approximately 100,000 active members and is used by over two million individuals (Benson, Harrison & Koss-Feder, 2000).

As on-line dating has become mainstream, people have started to debate its effect on social relationships. The popular literature is filled with mixed messages, describing either the value of on-line dating in helping people meet Mr./Mrs. Right or warning of its danger to the individual's safety. Interestingly enough, there is a noticeable lack of systematic research specifically examining on-line relationships. Katz and Aspden (1997) have noted that with the development of each new form of communication technology, there have been critics espousing its evils. They note that such innovations as the telegraph, telephone, and automobile have all radically altered society. With these innovations has come the debate as to whether the improvements in the quality of life such technology brings overrides possibly detrimental changes in relationships and society as a whole.

As with these earlier technologies, Internet communication has its advocates and critics (When cupid uses a cursor, 1999; Katz & Aspden, 1997; Merkle & Richardson, 2000; Parks & Floyd, 1996). Advocates argue that genuine and meaningful communication can occur, and in fact can be enhanced, using on-line methods (Merkle & Richardson, 2000). Some claim that this method actually harkens back to the old days of courtship (Benson, Harrison & Koss-Feder, 2000; Canon, 1997). Unlike face-to-face relationships that are typically initiated based upon physical attractiveness and spatial proximity, on-line dating allows individuals to talk and truly get to know each other's backgrounds, opinions and life goals prior to deciding whether to meet each other. Accordingly, Merkle and Richardson (2000) have described computer-mediated relationships as occurring through an inverted developmental sequence. That is, individuals get to know each other first and then later discover whether there is a physical attraction. How often computer-mediated relationships lead to face-to-face relationships remains to be determined (Cooper & Sportolari, 1997; Schnarch, 1997).

A second major argument for the value of on-line dating is its ability to allow individuals to "meet" each other from around the world. On-line communication is said to be creating an Internet "global village" and with this individuals have more choice and hence more of a possibility of meeting someone who reflects the attributes of their ideal lover (Katz & Aspden, 1997; Krakowka, 1998; Skriloff & Gould, 1997).

The critics charge that computer-mediated communication and relationships are shallow, impersonal, and potentially dangerous. The majority of dangers discussed in the popular and professional literature deal more with the deterioration of meaningful social relationships as compared to criminal victimization issues. Most of the charges are anecdotal and based on personal impressions and case studies (Katz & Aspden, 1997; Parks & Floyd, 1996). For example, Ann Landers has warned her readers to be wary of on-line romance because she has received

approximately 250 letters from individuals who have described their emotional, and in one instance, physical trauma as a result of using computer-mediated communication methods (Stein, 1996).

Actual and perceived risk of victimization as a result of engaging in on-line relationships has as yet to be systematically investigated. The purpose of this study is to explore the actual and perceived risk of victimization of women who use Internet dating services as a means of pursuing interpersonal relationships. The types of cyber-victimization investigated include threatening email, obscene email, spamming (receiving a multitude of junk email), and flaming (on-line verbal abuse). Other forms of traditional victimization studied include unsolicited phone calls, letter or gifts, stalking, vandalization, and physical harm.

In addition to surveying women on their victimization experiences as a result of using on-line dating services, women were also asked about the safety precautions they use when engaging on-line dating services. The popular literature and on-line dating services all provide precautionary advice. Such precautions include: (1) never giving out a home address; (2) never giving out a home phone number; (3) meeting in a public place; (4) telling a friend of the meeting; (4) never going home with the individual; and (5) reporting individuals who violate the rules to the dating service (Cyberangels.org, 2000; Match.com, 2000; Swoon.com, 2000; Skriloff & Gould, 1997). Women were asked whether they were aware of each of these precautions and whether they actually used them. Finally, women were asked to evaluate the perceived risk of using an on-line dating service.

METHOD

Participants

A computer survey of a randomly selected international sample of female customers of three popular Internet dating services was conducted over a monthlong period. The purpose of this research was to specifically study victimization of women who engage in on-line dating. The three services advertised that over one million individuals used them. The survey instrument was developed after reviewing available information on stalking, cyberstalking, and dating violence prevention. After an initial mailing to 140 possible participants, the survey was revised. The survey was then emailed to 1400 female members of the dating services. The survey required approximately 10 – 15 minutes to complete and was administered with guarantee of protecting participants' anonymity, privacy, and confidentiality.

To select a representative sample of participants using Internet dating sites, the authors used a clustered sampling method. Establishing age group limitations (i.e., 18 – 27, 28 – 37, 38 – 47, 48 and above) as the only profile requirement, the dating sites' selection services provided a randomly selected list of members. The first 350 members in each age group were then emailed the survey. Of the 1400 surveys that were sent out, 154 were returned as undeliverable or went to email addresses for other sites (i.e., pornographic and international dating services). Of the remaining 1246 surveys, 134 were completed resulting in a 10.75 percent participation rate.

The sample characteristics were well reflected in the participation characteristics. Nearly equal numbers were found in the age group categories that were used in the selection process (See Table 1).

Table 1: Age of Respondents

Age	Frequency
18 – 27	24
28-37	29
38-47	31
48-61	24
Missing	26

Regarding marital status, 44.5 percent of the respondents classified themselves as single, 46.1 percent were divorced, 7.8 percent were separated and 1.6 percent were married. The vast majority of the respondents were Caucasian (85.4 percent). Two percent of the respondents were African-American, 6.2 percent were Asian, 1.5 percent were Hispanic, and 4.6 percent were of other ethnicity. In regards to education of the respondents, slightly over half had college and/or advanced degrees (51.2 percent).

The survey respondents were also equally distributed across the length of time categories established. Using three categories (see Table 2), the participants were listed as being new to on-line dating (less than one month), having some experience with on-line dating (one month to six months), and being experienced in on-line dating (greater than six months).

Table 2: Respondents' Length of Using On-line Dating Services

On-line Dating Length of Use	Frequency	Percent
Less than or equal to one month	42	32.3
Greater than one month to six months	40	30.8
Greater than six months	48	36.9

Survey instrument

The survey asked women to describe their perceived risk, knowledge and use of safety measures, and any victimization experiences as a direct result of the use of an on-line dating service. A list of possible detrimental cyber-victimization experiences were developed by using the safety precaution information provided by the Internet dating services and Internet sites dedicated to on-line safety (Cyberangels.com, 2000). The forms of victimization examined can be broken down into cyber-victimization and stalking. Forms of cyber-victimization included: (1) receiving threatening email; (2) receiving unsolicited obscene email; (3) receiving a multitude of junk e-mail (spamming); (4) experiencing verbal on-line verbal abuse (flaming); (5) receiving improper messages on message boards; (6) receiving electronic viruses; and (7) being the subject of electronic identity theft. Forms of stalking included: (1) being followed or spied on; (2) receiving unsolicited letters or written correspondence; (3) receiving unsolicited phone calls; (4) having someone stand outside their home, school or workplace; (5) being left unwanted items; (6) having property vandalized; (7) experiencing the destruction or harm of something loved; and (8) encountering physical harm. If any of these forms of victimization or stalking occurred, participants were asked to indicate the number of times. They were asked if they were frightened by this behavior and if they feared bodily harm.

In addition to victimization experiences, participants were asked if they had read the safety precaution message provided by the Internet site. They were also asked which, if any, of the safety precautions they had used: (1) meeting at a public location; (2) telling a friend of the meeting; (3) never leaving or going home with someone they met; (4) never giving out a home address; (5) never giving out a phone number; and (6) reporting people who violate dating rules to the dating service. Finally, respondents were asked to rate their perceived risk of using an on-line dating service (i.e., no risk, minimal risk, acceptable risk, moderate risk, or extreme risk).

Statistical Analysis

Basic descriptive statistics were calculated for each of the demographic characteristics of the respondents. Frequency, Chi-Square, and Spearman Rho Correlation analyses were also conducted for the forms of victimization and stalking experienced by respondents, safety precautions used, and the perceived risk of using on-line dating services.

RESULTS

The basic thrust of the analysis was to examine perceived risk, victimization and stalking experiences, and knowledge and use of safety measures by females who use on-line dating services. The majority of respondents perceived the risk of using on-line dating services to be within minimal or acceptable levels (See Table 3). Length of time using on-line dating services did not change perceptions of risk (Chi-square [4, $N = 115$] = 4.167, $p = .384$). Perceptions of risk also did not vary between different age groups (Chi-square [12, $N = 108$] = 5.57, $p = .936$).

Table 3: Respondents Perception of Risk Using On-line Dating Services

Perceived Risk	Percent
No Perceived Risk	9.5
Minimal Risk	37.9
Acceptable Risk	36.2
Moderate Risk	13.8
Extreme Risk	2.6

Table 4 analyzes the frequency of cyber-victimization experienced by users of on-line dating services. The age of the respondent and their education level did not influence cyber-victimization experiences. The analysis did show a difference in cyber-victimization experiences based upon the length of time one uses a dating service. Specifically, the results indicated that the longer one uses the service, the greater the chances one will receive on-line verbal abuse (Chi-square [2, $N = 129$] = 8.069, $p = .018$), obscene email (Chi-square [2, $N = 128$] = 13.083, $p = .001$), threatening email (Chi-square [2, $N = 128$] = 5.342, $p = .069$) and junk email (Chi-square [2, $N = 128$] = 22.914, $p = .000$). The amount of variance explained by on-line dating experience is: (1) on-line verbal abuse (Spearman Correlation [$N = 129$] = .250, $p = .004$); (2) obscene email (Spearman Correlation [$N = 128$] = .317, $p = .000$); (3) threatening email (Spearman Correlation [$N = 128$] = .193, $p = .029$); and (4) junk email (Spearman Correlation [$N = 128$] = .384, $p = .000$).

Table 4: Frequency of Cyber-Stalking Behaviors Experienced by On-line Dating Users

Forms of Cyber Stalking	Frequency
On-line Verbal Abuse(Flaming)	21
Threatening E-mails	11
Obscene E-mails	36
Junk-E-mails (Spamming)	21
Electronic Virus	4
Improper Messages on Message Boards	2

The increase in cyber-victimization did not translate into a significant amount of traditional stalking behavior among the groups. Among current users the incidents of stalking that had occurred were almost negligible. Table 5 summarizes the frequency of traditional forms of stalking behaviors experienced by the respondents using on-line dating services.

Table 5: Frequency of Traditional Forms of Stalking Behaviors Experienced by On-line Dating Users

Traditional Forms of Stalking	Frequency
Followed or spied on	4
Unsolicited letters	3
Unsolicited phone calls	4
Standing outside home, school or workplace	1
Leaving unwanted items	1
Vandalizing property	1
Destroying or harming something loved	1
Physical harm	1

With respect to respondents' knowledge of on-line dating safety precautions, 84 percent stated they were aware of such precautions. However, it is interesting to note that many respondents never read the safety messages provided by the on-line services (34.7 percent) and, of those who did, only 57.4 percent found the messages helpful.

The percentage of respondents who used the various safety precaution measures recommended by on-line dating services ranged from 44 percent to 90 percent (See Table 6). With the exception of giving out one's phone

number, over 80 percent of the respondents consistently reported using the various safety precaution methods. However, the use of safety precaution measures did vary across different age groups. Respondents age 38 and older are more likely to tell a friend of the meeting (Chi-square [3, $N = 104$] = 7.73, $p = .052$) and to meet in a public location (Chi-square [3, $N = 106$] = 7.50, $p = .057$). Older respondents are also less likely to give out a home address (Chi-square [3, $N = 105$] = 9.32, $p = .025$).

Table 6: Safety Precautions Used by On-Line Dating Users

Safety Precaution Used	Percent
Meet in a Public Location	89%
Tell a Friend of the Meeting	90%
Never Give Out Home Address	82%
Never Give Out Phone Number	44%
Never Leave or Go Home with "Date"	84%

Women who have greater experience with the dating services also employ more safety measures. They are much more likely to meet in a public location (Chi-square [2, $N = 110$] = 11.367, $p = .003$) and are more likely to have told a friend about the meeting (Chi-square [2, $N = 108$] = 9.884, $p = .007$). Further analysis of these findings indicates a moderate correlation between experience and the use of safety measures. The amount of variance explained by on-line dating experience is: (1) meeting in a public location (Spearman Correlation [$N = 110$] = .253, $p = .008$) and (2) being more likely to have told a friend about the meeting (Spearman Correlation [$N = 108$] = .232, $p = .016$).

Even though some correlation exists, as can be seen in Table 7, there is no significant difference between the groups in their perceived risk of using the various on-line dating services. The research also finds that there is no difference in giving out phone numbers, going home with a person, and giving out home addresses based upon length of experience in using on-line dating services.

Table 7: Perceived Risk of Using On-line Dating Service

Length of Use	No Risk	Minimal Risk	Acceptable Risk	Moderate Risk	Extreme Risk
Less than or equal to one month	5	16	12	3	0
Greater than one month to six months	3	13	17	5	2
Greater than six months	3	15	12	8	1

DISCUSSION

Dating modalities are continuing to evolve. As has been observed, "a major trend in the 20th century has been the expansion and differentiation of the courtship process" (Makepeace, 1997: 29). This continues to be true in the 21st century with the use of Internet dating services. This research has shown that the Internet is also expanding the ways women can be victimized. Even with the Internet as the intermediary, victimization of women still occurs within dating and developing interpersonal relationships. Moreover, there are expanding forms of victimization, what we call "cyber victimization." Flaming, obscene emails, and spamming are all novel methods of victimization that use the web and email. However, traditional forms of victimization are also finding a new home. Sexual harassment, intimidation, and stalking opportunities may occur because of this new communication medium.

The research also shows that women do recognize safety issues and are careful with their encounters over the Internet, especially once they have gained experience using on-line dating services. Older users also tend to be more cautious and many respondents commented that they see no greater danger in on-line dating than in traditional

blind dating. Some even found meeting people on-line to be safer than other ways of meeting possible dates. We have also found that the greater the experience a woman has using an Internet dating service, the more likely she is to be cyber-stalked. While the behaviors encompassing the definition of cyber-stalking may seem inconsequential, the trauma they can induce is not.

The greater the experience of women with the Internet, the more precautions they use. This suggests that Internet on-line dating services would be serving their customers better if they provided professional crime prevention guidelines that were required reading before someone joined the service. The messages the on-line services employ now seem to be inadequate. They may do this because they fear losing customers or they may not know the risks. While almost all of the victimization that occurred seems to be minor, the ability of individuals to use the Internet to locate and do serious physical as well as psychological harm is increasing. The use of the Internet has widened the sheer number of individuals with whom people can come in contact.

This research creates as many questions as it answers. Using email solicitation is a relatively new way of studying social behavior. With this new method, limitations are expected (Cho & LaRose, 1999, Tse, 1998). These limitations include the method of sampling and the low response rate that can impact both internal and external validity. It is recognized that non-probability sampling is acceptable when probability sampling is not feasible (Babbie, 1990). Such is the case when sampling web users (Kaye & Johnson, 1999). In our specific case of women using dating services, the population is unknown and the ability to do random sampling is impossible. The model we used involved deliberate sampling across three different websites to ensure a wide range of individuals as recommended by Cook and Campbell (1979: 77) where they state "deliberate purposive sampling for heterogeneity is usually more feasible than random sampling for representativeness."

This study also is limited in its sample response rate. We recognize that the low response rate can impact external validity, and this has been acknowledged by researchers using on-line surveying (Cho & LaRose, 1999). While our response may initially seem very low, it may not be. Sampling on the web and using email to contact subjects make it impossible to distinguish between those who actually received and declined to respond to a survey and who never received the survey at all (Kaye & Johnson, 1999).

It would also be reasonable to assume that most women who have been victimized over the Internet may have stopped using it. Identifying those women who have been victimized and gathering data on their experiences is imperative. We also acknowledge there is a need for information on individuals' experiences with on-line dating and how it compares to traditional methods of meeting romantic partners. There has been very limited research systematically examining the nature of cyber-relationships (Fagan, 2001; Griffiths, 2000).

Additional inquiry into cyber-victimization is the only way to develop better prevention methods. While the web and email both offer individuals tremendous potential for positive experiences, victimization through this new medium can have the same impact as traditional victimization. This research indicates that women can be victimized by this new medium in many ways. Gaining an understanding of the types of victimization that can occur, its frequency and severity, and establishing effective crime prevention modalities for potential victims is increasingly important.

ENDNOTE

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