



The association of parenting style and child age with parental limit setting and adolescent MySpace behavior

Larry D. Rosen^{a,*}, Nancy A. Cheever^b, L. Mark Carrier^a

^a Department of Psychology, 1000 E. Victoria St., California State University, Dominguez Hills, Carson, CA 90747, USA

^b Department of Communications, California State University, Dominguez Hills, USA

ARTICLE INFO

Available online 15 August 2008

Keywords:

Adolescents
Parenting style
Parental limit-setting
Social networking
Internet
Sexual solicitation
Cyberbullying
MySpace

ABSTRACT

Parent and teen MySpace user pairs completed online surveys administered in June ($N = 266$) and September 2006 ($N = 341$) to assess relationships between parenting styles and limit setting and monitoring of online behaviors, the prevalence of Internet dangers and pre-teen and teen MySpace behaviors. Cross-comparison measures of MySpace usage, parenting style, limit setting/monitoring, MySpace problems, and media perceptions were used. Parenting styles were strongly related to adolescent MySpace experiences, behaviors, and attitudes, with some age differences. Parents with older children were more likely to have Neglectful or Indulgent parenting styles and less likely to set limits on online behavior. The extent of sexual solicitation, pornography, and cyberbullying was relatively low as compared with studies asserting a high incidence of Internet-related problems. Parents' high estimates of online dangers were not matched by their low rates of setting limits and monitoring teens. Theoretical and practical perspectives of the results are offered to enhance social networking experiences for parents and their children.

© 2008 Elsevier Inc. All rights reserved.

1. Introduction

The media portrays the Internet as a dangerous place for adolescents (Lee, 2008). They warn of online predators, while parents are cautioned to keep their children safe by careful monitoring. NBC's *Dateline* aired "To Catch a Sexual Predator," a *Candid Camera*-like show intimating that the Internet is replete with adults waiting to entrap and molest teenage children. Recent research suggests that these fears might be unwarranted. In a five-year cross-sectional study from 2000 to 2005, Mitchell, Wolak and Finkelhor (2007) found a decline in unwanted sexual solicitations, but an increase in online harassment and unwanted exposure to pornography among Internet users aged 10 through 17 years.

When teens go online, they often log in to MySpace.com. MySpace is a virtual community that has exploded from its introduction in 2003 as a site for unknown musicians to reach an Internet audience of 59 million unique monthly visitors. Within three years it had blossomed into a full-blown social networking haven for adolescents. A recent study by the Pew Internet & American Life Project (Lenhart & Madden, 2007) found that 55% of online American youths aged 12 to 17 years use online social networking sites, nearly all (85%) on MySpace.

Despite the importance of MySpace to teens, little research has been done on its impact on MySpace users. An exception is Rosen's (2006) study of 1257 MySpace teens and adults, which found that more time spent on MySpace was correlated with more depression, more Internet addiction, lower self-esteem and more online friends; having more online friends was related to more Internet addiction, less shyness, and more honesty online. Although only 10% of the sample was under 18 years, Rosen reported that adolescent MySpacers were more addicted to the Internet than older users.

* Corresponding author.

E-mail address: lrosen@csudh.edu (L.D. Rosen).

One variable that could be relevant to teen MySpace behavior is parenting. Baumrind (1991, revised by Macoby & Martin, 1983) identified two dimensions of parenting behavior—control/demandingness and warmth/reponsiveness—used to classify parents into one of four styles: (1) high control and low warmth was classified as an *Authoritarian* parenting style; (2) high control and high warmth defined as an *Authoritative* parenting style; (3) low control and high warmth reflected as an *Indulgent* style; and (4) low control and low warmth, denoted as an *Uninvolved* or a *Neglectful* style.

Research has found that parenting style is related to teen Internet behavior. Eastin, Greenberg and Hofschire (2006) examined how parents mediated Internet use and found that Authoritative parents used evaluative (co-viewing or discussing content) and restrictive techniques (placing time or content limits) more often than Authoritarian and Neglectful parents. In addition, Authoritative parents were more likely to use technological mediators (e.g., blocking software) than Authoritarian and Neglectful parents. In an earlier report prepared for the Smith Richardson Foundation, Greenberg, Hofschire, Eastin and Lachlan (2002) presented the finding that parenting style impacted the use of rules, discussion of content, blocking, and co-viewing across multiple media sources including video games, Internet, television, music, and videos. The Pew Internet & American Life Project (Macgill, 2007) reported that most parents try to stay involved in their teenagers' "online lives" — 65% of parents reported they check the websites their teen visits on a regular basis, while 74% said they can identify whether their teen has created a page on MySpace or Facebook. Eighty-five percent of parents reported they have "established rules about the kinds of personal information their child can share with people they talk to on the Internet" (p. vi). While parents reported being involved in their children's Internet activity, most (68%) also reported having regulations about which sites their child may visit, and how much time their teen spends online (55%). Almost half the teens in the study reported that their parents checked to see what websites they had visited. Further, parents' perception of whether Internet use is a "good thing" for their children decreased 8% from 2004 to 2006 (Macgill, 2007).

Previous research on how child age affects parental Internet monitoring has shown that parents of younger children are more likely to monitor child behavior. Based on a nationally representative sample of child Internet users and caregivers drawn in 1999–2000, Mitchell, Finkelhor, and Wolak (2005) found that parents of younger children (10–15 years) were more likely to use filtering software. Based on a different nationally representative sample of online youth (12–17 years) and parents in 2000, Wang, Bianchi, and Raley (2005) reported that parents of younger teenagers engaged in a relatively higher level of parental monitoring than parents of older teenagers. Specifically, parents less often subjected older teens to time limits for Internet use and were less likely to place monitoring software on the computer when teens were older. However, age of the teen was not a statistically significant predictor of whether parents checked the websites their teens visited.

No study has looked at how parenting style affects teen MySpace use. The present research investigates parenting style and parental limit-setting and monitoring as factors in teens' MySpace behavior. Study 1 provides an overview of teen MySpace activities and examines parental perceptions of those activities and how they are or are not regulated overall and in terms of child age and sex. Study 1 also compared parent and teen perceptions of the impact of MySpace on teens, including the issue of sexual solicitation and its portrayal in the media. Study 2 replicates and extends this work by assessing the relationships among parenting style, parental limit setting, and teen MySpace usage. In addition, Study 2 provides a more detailed examination of potential MySpace problems (e.g., sexual solicitation, harassment, sexual and other negative images). The two studies explored the following hypotheses and research questions:

Hypothesis 1. Most parents will not monitor or limit teen MySpace activities (Studies 1 and 2).

1a: But parents will monitor younger children more than older children.

Hypothesis 2. Parenting style will be related to both teen MySpace activities and parental limit setting of those activities. More specifically, Authoritative parenting will lead to more positive MySpace behaviors, greater parental knowledge of their children's MySpace behaviors, and more parental limit setting and monitoring (Study 2).

Research question 1. How do teens use MySpace? (Studies 1 and 2)

Research question 1a: Are there developmental differences in the way that pre-teens, younger teens, and older teens use MySpace?
Research question 1b: Are there sex differences in the way that teens use MySpace?

Research question 2. To what extent are parents aware of teen MySpace activities? (Studies 1 and 2)

2a: Does parental awareness vary with the age of their child?

Research question 3. Do parents and teens agree on the prevalence of sexual solicitation and its media portrayal, and concerns about potential problems with MySpace involvement? (Studies 1 and 2)

3a: Are there any differences in parents' concerns for younger and older teens?
3b: Are there any differences in parents' concerns for daughters and sons?

Research question 4. What is the extent of MySpace problems (e.g., sexual solicitation, cyberbullying, exposure to pornography)? (Studies 1 and 2)

2. Study 1

2.1. Method

2.1.1. Participants

Data were collected from a convenience sample of 266 MySpace users and one of his/her parents in the Los Angeles area in June 2006. Data were collected through an online, anonymous questionnaire completed by both the teenager and her/his parent. Parents, 66% of whom were female, ranged in age from under 30 (6%), 31–35 (14%), 36–40 (23%), 41–50 (24%), to over 50 (12%).

Parents' ethnic background represented the urban Los Angeles multicultural mix: Asian (12%), African-American (19%), Anglo-American/Caucasian (35%), Latino (30%) and Other (4%), roughly approximating the most recent census figures for Los Angeles County (U.S. Census Bureau, 2006: Asian 13%, African-American 9%, Caucasian 29%, Latino 47%). Fourteen percent were single parents; the remaining families had two or more adults in the home. The typical household included two children, ranging from a single teenager to five children. More than half the parents had a college degree (53%) and another 24% had completed some college. More than two-thirds were employed full-time. Although children under 14 years are prohibited from establishing a MySpace page, the sample of 44% male and 56% female teens included 13% under 14 years, 23% between 14–15-years, and 64% between 16–18-years ($M = 15.9$). These three age groups – labeled “pre-teens” (10–13), “younger teens” (14–15), and “older teens” (16–18) are compared in this paper. However, for simplicity MySpace users aged 10–18 years old are referred to as “teens” as the vast majority of the participants in the studies were older than 12 years.

2.1.2. Materials and procedure

The survey, presented on the Survey Monkey website, included questions that focused on the following topics: (1) parent and teen demographics, (2) teen MySpace use, (3) parent awareness of teen MySpace use, (4) teens' uncomfortable experiences on MySpace, and (5) parent and teen perceptions and attitudes concerning MySpace use. Parents and teens were asked identical questions concerning: (1) teen time spent on MySpace, (2) concern about MySpace issues (e.g., social isolation, sexual predators), (3) teen information disclosed on MySpace (e.g., full name, e-mail address, school name), (4) MySpace interference with daily activities, (5) perceived presence of sexual predators on MySpace, (6) media coverage of sexual predators, (7) time and meals together, and (8) parental limits placed on MySpace usage.

After IRB approval, participants were recruited by students in an upper-division undergraduate social science course who were given a website link which included consent forms for both parent and teen and asked to recruit parent-teen pairs for the study. The only requirement was that the teen be a MySpace user and under 18 years old. The initial 30 questions were directed to the parent and the final 34 questions were directed to the teenager. The survey was anonymous and data were collected during June 2006. There were no incentives for participation.

2.2. Results

2.2.1. Teen MySpace use (Research question 1)

Teens varied in their MySpace experience with 30% having joined within the previous six months, 37% between six months and a year, and 34% had been on MySpace at least one year. Forty-three percent of older teens had been on MySpace at least a year, more than younger teens (20%) and pre-teens (15%), $\chi^2(4, N = 266) = 33.18, p < .001$. Teens spent a mean of 5.2 days per week and 2.1 h per day for a weekly mean of nearly 11 h per week on MySpace. The only significant age difference was that older teens ($M = 5.45$; $SD = 1.94$) spent more days per week on MySpace than younger teens ($M = 4.80$; $SD = 1.96$), $F(2, 263) = 3.66, p < .05$, who did not differ significantly from pre-teens ($M = 4.71$; $SD = 2.21$). There was no sex difference on any measure of MySpace activity.

The primary activity on MySpace was social communication among “friends.” MySpace allows users to accept fellow MySpace users as “friends,” who can then access each other's MySpace pages. Teens reported a mean of 294 friends ($Mdn = 118$), with a range of 0–24,506. These data were skewed by several teens claiming thousands of friends and accordingly numbers of friends greater than three standard deviations above the mean were rescaled to exactly three standard deviations above the mean. This resulted in a mean of 168 friends ($SD = 161$; $Mdn = 118$). Strikingly, 56% of the teens reported having 100 or more friends and an additional 23% reported between 50 and 99 friends. Older teens ($M = 186.70, SD = 161.68$) and younger teens ($M = 163.32, SD = 153.44$) had significantly more friends than pre-teens, $M = 83.91, SD = 147.62, F(2, 260) = 5.88, p < .01$.

2.2.2. Parent awareness of teen MySpace use (Research question 2)

Thirty-eight percent of parents had not seen their teen's MySpace page; another 14% responded that they had almost never viewed their teen's page. Only 16% looked at that page at least once a week. In addition, 60% of parents reported having viewed their teen's MySpace photographs and even fewer (38%) parents reported having talked with their teenager about MySpace. This lack of attention may have been aided by the fact that 50% of teens reported that they accessed MySpace from a computer in their bedroom and/or because 55% of parents believed that MySpace was just another Internet fad. More boys (59%) than girls (43%) had computers in their bedrooms, $\chi^2(1, N = 266) = 7.04, p < .01$. Interestingly, 70% of teens reported they would be comfortable having their parent view their MySpace page.

Forty-three percent of parents were not sure how many days per week their teenager visited MySpace and 36% were not sure how many hours per day they spent there. Of those parents who reported that they were sure, their estimate of 9.5 h per week ($SD = 11.21$) was an underestimate compared to the mean of 11 h ($SD = 12.21$) that the teens reporting spending on MySpace.

Table 1

Percentage of teens ($N = 266$) who reported disclosing personal information on MySpace and of parents' ($N = 266$) beliefs about teen disclosures of such information on MySpace

Type of information	Parent not sure teen discloses	Parent believes teen discloses information	Teen discloses personal information	z-test comparing parent–teen ^a
Full name	33%	34%	46%	2.74*
Address	32%	5%	9%	1.64
School name	34%	43%	74%	7.17***
Phone number	34%	8%	23%	4.67***
E-mail address	36%	33%	49%	3.66***
IM name	40%	36%	55%	4.31***
Social event information	42%	25%	46%	4.97***
Overall	36%	26%	43%	4.04***

Note. Possible parent responses to information disclosure by their teen were yes, no, or not sure. Possible teen responses to information disclosure were yes or no. ^az-test for proportions comparing percentage of parents who believe their teen discloses information and actual percentage of teens who disclose personal information.

* $p < .05$. ** $p < .01$. *** $p < .001$.

There were two significant developmental differences in parental awareness of teen MySpace use. First, parents were more likely to view their younger children's MySpace page at least once a week, $\chi^2(2, N = 266) = 6.52, p < .05$; 29% of the parents with 10–13 year olds compared to 18% of the parents with 14–15 year olds, and 13% of the parents with 16–18 year-olds. Second, older teens were more likely than younger teens to have a computer in their bedroom, $\chi^2(2, N = 266) = 9.31, p < .05$; 32% of 10–13 year olds, 41% of 14–15 year olds, and 57% of 16–18 year olds.

Table 1 illustrates other important aspects of parental awareness about their teens' MySpace use. More than one-third of parents reported that they were not sure about the information their teens are divulging on MySpace. Those who reported they were sure greatly underestimated the extent to which their teens gave out their full name, e-mail address, IM name, school name and social event details, all sources of potential information for outsiders to locate online teenagers. Parental awareness of their teen's information disclosure did not vary with child age, $p > .05$.

2.2.3. Parental concerns (Research question 3)

Table 2 illustrates parental concerns about their teens. Parents and teens were asked several identical questions about potential MySpace problems. Table 2 shows that teens and parents disagreed about Internet problems, with parents being nearly three times more concerned than their teenagers.

In terms of age differences, parents of pre-teens were more concerned about their children posting personal information than parents of the two older teen groups (85% of the parents with 10–13 year olds, as compared to 61% of the parents with 14–15 year olds, and 66% of the parents with 16–18 year olds), $\chi^2(2, N = 266) = 6.34, p < .05$. There were also sex differences: more parents were concerned about sexual predators for their daughters (76%) than their sons (64%), $\chi^2(1, N = 266) = 4.74, p < .05$. More parents were concerned about their daughters (75%) than their sons (62%) meeting someone in person that they met online, $\chi^2(1, N = 266) = 4.96, p < .05$. (Response options were structured as described in Table 2 Note).

Parental concerns about MySpace also were apparent in responses to items that asked parents and teens about perceived incidence and media coverage of online sexual predators. Sixty-three percent of parents thought that there are quite a few sexual predators on MySpace, whereas teens claimed there are "only some, but not too many" sexual predators (46%) or that sexual predators were "very rare", (19%), $\chi^2(2, N = 266) = 45.67, p < .001$ (These three were the only response options for this question). In addition, parents believed that "media are accurate" in their reporting of sexual predators (43%) or that media "underestimate the problem" (22%), while teens believed such media coverage is "overblown", 59%; $\chi^2(3, N = 266) = 41.16, p < .001$. (These three response categories were used in the chi-square analysis.) Responses to these questions did not vary with age of the child.

Table 2

Percentage of parents ($N = 266$) and of teens ($N = 266$) indicating they were somewhat or very concerned about potential Internet problems

Potential internet problem	Parents	Teens	z-test
Sexual predators	83%	35%	11.28***
Social isolation	75%	15%	13.93***
Addiction to MySpace	72%	21%	11.81***
Addiction to the Internet	73%	17%	13.01***
Lack of physical activity	82%	20%	14.33***
People posting personal information	82%	29%	12.32***
People posting sexual pictures	88%	29%	13.84***
People viewing sexual pictures	88%	38%	11.97***
People making friends online and meeting them offline	81%	36%	10.55***
Overall mean percentage	80%	29%	11.83***

Note. The response format included four levels of concern: "not at all", "mildly", "somewhat", or "very concerned", with the percentages in the table indicating a total of the latter two "concern" categories.

*** $p < .001$.

Table 3Percent of parents ($N = 266$) and teens ($N = 266$) who felt MySpace interferes somewhat or very much with offline activities

Activities	Parents	Teens	z-test
Schoolwork	28%	16%	3.34 ***
Family time	29%	9%	5.89 ***
Outdoor activities	34%	13%	5.72 ***
Relationships with offline friends	12%	8%	1.54
Chores	30%	16%	3.84 ***

Note. Response options were: "not at all", "a little", "somewhat" and "very much", with the percentages in the table indicating a total of the latter two categories.
 *** $p < .001$.

Table 3 shows that parents felt more strongly than their teen children that MySpace interfered with offline teen activities. In addition, parents of younger children were significantly more concerned about MySpace interfering with their children's schoolwork than parents of older children, (47% of the 10–13-year olds' parents, 25% of the 14–15-year olds' parents, and 27% of the 16–18-year olds' parents), $\chi^2(2, N = 266) = 6.32, p < .05$; interfering with family time, (50% of the 10–13 year olds' parents, 23% of the 14–15-year olds' parents, and of 28% the 16–18 year olds' parents), $\chi^2(2, N = 266) = 8.49, p < .05$; with outdoor activities, (59% of the 10–13 year olds' parents, 26% of the 14–15-year-olds' parents, and 32% of the 16–18-year-olds' parents), $\chi^2(2, N = 266) = 11.45, p < .01$; and with relationships with offline friends, (35% of the 10–13 year olds' parents, 7% of the 14–15 year olds' parents, and 9% of the 16–18 year olds' parents), $\chi^2(2, N = 266) = 20.27, p < .001$ (Research question 2a). The only sex difference was that more parents felt that MySpace interfered with family time for their sons (36%) than their daughters (24%), $\chi^2(1, N = 266) = 4.74, p < .05$. (Response options were structured as in Table 3 Note)

2.2.4. Parent–teen interaction and computer/MySpace limits (Hypothesis 1)

Parents and teens agreed that, on average, they shared five or fewer meals (41%) or six or more meals together (59%) per week, $\chi^2(2, N = 266) = 3.54, ns$, and that they typically talked together one hour or less per day (38%), two hours per day (31%), or three or more hours per day (32%), $\chi^2(6, N = 266) = 9.35, ns$. Parents of pre-teens were more likely to share six or more meals (79%) compared with parents of younger teens (59%) or older teens (56%), $\chi^2(2, N = 266) = 6.70, p < .05$. There were no age differences in conversations between parents and teens; $\chi^2(4, N = 266) = 3.56, ns$.

However, while 46% of parents stated that they placed limits on computer use, only 36% of the teens reported such limits, $z = 2.35, p < .01$. Similarly, 32% of parents claimed to place limits on MySpace use, but only 25% of teens reported such MySpace limits, $z = 1.79, p < .05$. In either case, these results confirm Hypothesis 1: most parents do not monitor or limit teen MySpace activities.

More parents of younger children reported that they were likely to place limits on computer use than did parents of older children (79% of parents of 10-year olds, 57% of parents 14–15-year-olds, and 34% of parents of 16–18 year olds), $\chi^2(2, N = 266) = 28.51, p < .001$. Finally, parents of younger children reported they were more likely to place limits on use of MySpace (61% of parents of 10–13 year olds, 39% of parents of 14–15 year olds, and 24% of parents of 16–18 year olds), $\chi^2(2, N = 266) = 18.96, p < .001$. These results confirm Hypothesis 3.

2.2.5. Teens' report of uncomfortable experiences on MySpace (Research question 4)

Teenagers were asked an open-ended question about any uncomfortable experiences they might have had on MySpace. Responses were coded by one of the researchers and validated by a student assistant until 100% agreement was reached on all participant responses. Only 59 teens (22%) acknowledged having had an uncomfortable experience. Of these, 22 (8.2% of the entire sample) described an experience of a sexual nature. Of those, one mentioned a stalker, 19 described receiving messages from "perverts," and two were of a sexual nature but uncodable (i.e., "I had some jerk message me that I'm cute and that we should talk some more"). The remaining uncomfortable experiences involved disagreements between MySpacers that were non-sexual in nature, including fights over boyfriends, gossip, and general "teen drama."

The 22 MySpacers who had had an uncomfortable sexual experience had significantly more "friends" than those who had not had such an experience, $t(262) = 2.81, p < .005$, talked more often with their parents, $t(264) = 2.22, p = .027$, were more likely to be female (16 of the 19), $\chi^2(1, N = 22) = 7.97, p < .005$, and were more likely to have been on MySpace for more than a year, $\chi^2(1, N = 22) = 4.60, p = .032$. Typical experiences included: "A guy started talking to me and telling me all these sexual stuff that he wanted to do to me," and "Some guy was hitting on me but I just blew him off." There were no significant differences in uncomfortable sexual experiences by age of child.

2.3. Study 1 discussion

Study 1 demonstrates several aspects of MySpace use. First, teens are actively using MySpace and accumulating large numbers of "friends." Second, parents are, for the most part, unaware of what their teenagers are doing on MySpace. Most parents rarely view their teen's MySpace pages and more than one-third reported that they are unsure about what information is posted there. Those parents who did claim to be aware of what information their teens are posting vastly underestimate the potential problem of their teens divulging personal information.

Third, parents and teens differ widely on areas of concern, with parents showing more concern about potential MySpace hazards and interference with offline activities. This may have been due to their differing perceptions of the prevalence of sexual predators and the accuracy of media coverage of these predators. A very small percentage of teens reported having an uncomfortable experience and a smaller fraction of those experiences were of a sexual nature.

Fourth, in accord with Hypothesis 1, less than half of parents report that they set limits on computer use and less than one-third set limits on MySpace use, figures which are overestimates in comparison to their teenagers' perceptions. However, they do, in accord with Hypothesis 1a, set more limits for pre-teens than for teens.

Thus, Study 1 demonstrates several aspects of the online environment for teens using MySpace, including differential parent-teenager perceptions of MySpace use, potential concerns and problems, as well as scant parental limit setting.

3. Study 2

3.1. Introduction

Given the discrepancy between parent and child perceptions, Study 2 was designed to investigate the relationship between parenting style and limit-setting and monitoring as well as to further examine teens' uncomfortable sexual experiences on MySpace. Even though Study 1 found that only a small proportion reported uncomfortable experiences of a sexual nature, the issue is important enough to warrant further examination. Therefore we included items from the Youth Internet Safety Survey (YISS) study (Wolak, Mitchell, & Finkelhor, 2006) to assess sexual solicitation, online harassment, exposure to sexual materials, and exposure to sexual talk on MySpace. The Wolak et al. study found that sexual solicitations occurred to one in eight teens, harassment to one in 11 teens, and unwanted exposure to sexual materials to one in three teens. Further, the YISS-2 study found that a large majority of teens reacted appropriately in each situation (82% to sexual solicitation, 78% to harassment, 93% to unwanted exposure to sexual materials) by telling the person to stop, blocking the person from their MySpace page, removing themselves from the situation, reporting the incident to an adult, or changing their profile or username. Most of the remaining teens ignored the situation; few acted inappropriately. The YISS-2 study found that a small percentage of teens were very or extremely upset by these MySpace problems (28% to sexual solicitation, 30% to harassment, 26% to unwanted exposure to sexual materials).

3.2. Method

3.2.1. Participants

Three hundred and forty-one teen-parent pairs participated in this online, anonymous survey in September 2006. Parents were primarily female (75%), working fulltime (73%), in a dual parent/adult home (85%), with one (44%) to four children ($Mdn = 2$). Parents ranged in age from under 30 to over 55 years, with half between 36–45 years, and one-third older than 45. Parents most often reported college education, with 40% having a college degree and 29% reporting some college. As in Study 1, participants are referred to as “teens” and were divided into three age groups: “older teens” (17–18 year olds; 41%), “young teens” (14–16 year olds; 42%) and “pre-teens” (younger than 14 years; 17%); 62% were female. The majority of teens had been on MySpace for more than one year (47%) or six months to one year (30%). The sample of parents was multicultural with 15% Asian, 18% African-American, 30% Caucasian, 31% Latino, and 9% other. There were no significant differences in teen or parent demographics between samples included in Study 1 and in Study 2.

3.2.2. Materials

Materials included survey questions from Study 1 plus some additional questions and measures. In Study 2 teens were asked specifically about three potential MySpace problems—sexual solicitations, harassment, and exposure to unwanted sexual material. Wording was identical to that used by Wolak et al. (2006) in their YISS-2 study, including an assessment for each problem occurrence, how it was handled, and how it made the teen feel. Teens were also asked if they had considered meeting or had actually met with someone who they first met on MySpace. Questions about blogging and meeting online friends offline were also added to the Study 2 survey.

The Parenting Style Questionnaire (PSQ, Lamborn, Mounts, Steinberg, & Dornbusch, 1991), which was based on Maccoby and Martin's (1983) revision of Baumrind's (1971) conceptual parenting style framework, was also administered. The PSQ includes two subscales, parental warmth/involvement (10 items) and parental strictness/supervision (9 items) which are generic and independent of Internet or computer use. Sample items of the warmth/involvement subscale include “I can count on my parent to help me out if I have some kind of problem,” while the strictness/supervision scale includes items such as “My parents know exactly where I am most afternoons after school.” Total scores for each scale were divided at the median to produce four groups corresponding with Baumrind's (1971) parenting styles—Authoritarian (high strictness, low warmth), Authoritative (high strictness, high warmth), Indulgent (low strictness, high warmth) and Neglectful (low strictness, low warmth). Lamborn et al. (1991) found alphas of .72 and .76 for the two scales and in a study of 4,081 teens 14–18 year old, and found 32% of their parents to be Authoritative, 15% Authoritarian, 15% Indulgent, and 37% Neglectful. In the present study, the PSQ was administered to both the teen and the parent, with an internal consistency of $\alpha = .70$ for the teens and .84 for the parents. Parent and teen responses were significantly correlated for both dimensions: warmth/involvement $r = .59$, $p < .001$, and strictness/supervision $r = .70$, $p < .001$.

The Parent Limit Setting and Monitoring Scale (PLMS) (Healy, 2004) originally included 24 items designed to measure a parent's ability to set and monitor limits on adolescent behavior. Based on Healy's factor analysis, 12 items were included in the present

study, each presented to both parent and teen, with a five-point scale ("never", "rarely", "sometimes", "most of the time", and "always") including "I know what my teenager is doing at all times" for the parent or "My parent knows what I am doing at all times" for the teen. Alpha coefficients were .90 (parent) and .92 (adolescent) in our sample and parent and teen PLMS scores were significantly correlated, $r = .75, p < .001$.

3.2.3. Procedure

After IRB approval, participants were recruited by students in an upper-division social science course who were given a website link that included parent and teen consent forms and asked to recruit parent–teen pairs for the study. As in Study 1, the only requirement was that the teen be a MySpace user and under 18. Thirty-four questions were answered by the parent and 36 by the teen. The survey, administered online on the Survey Monkey website, was anonymous and data were collected during September 2006. Only participants who completed the whole questionnaire were retained in the sample.

3.3. Results

3.3.1. Teen MySpace use: Comparison of Study 1 and Study 2 (Research question 1)

Only three months had elapsed between data collection in Study 1 and Study 2. Nonetheless, the teens in Study 2 represented a more "veteran" MySpace sample than in Study 1, with nearly half (47%) having been on MySpace for at least one year, $\chi^2(2, N = 607) = 10.14, p < .01$. Sixty percent had 100 or more friends and 14% had between 50 and 99 compared with 56% and 23%, respectively, in Study 1, $\chi^2(4, N = 603) = 8.57, p < .05$. (The sample size was reduced by four in analyses concerning numbers of "friends" because two participants in each study gave nonnumerical responses that could not be used.)

As was the case in Study 1, older teens were more likely to have been on MySpace at least a year (54%) than young teens (40%) or pre-teens (32%), $\chi^2(4, N = 341) = 14.20, p < .01$. In addition, pre-teens spent less time ($M = 6.75$ h per week) on the Internet than teens: 14–15 year olds spent an average of 9.05 h per week while 16–18 year olds spent an average of 11.16 h per week, $F(2, 338) = 4.33, p < .05$. As in Study 1, pre-teens had fewer "friends" than the other two age groups: older teens (64%) and young teens (61%) were more likely to exceed 100 friends than were pre-teens (46%), $\chi^2(4, N = 339) = 10.62, p < .05$.

Study 2 included questions about blogging and meeting online "friends" offline. Forty-five percent of teens reported keeping a blog; however, only 9% wrote at least a few days a week, 6% wrote once a week and 30% wrote only a few times a month; this activity did not vary with age. When asked about meeting online "friends" offline, 80% stated that they had not done so, nor even considered it. Eight percent considered meeting an online "friend" offline but did not actually meet, whereas 12% did meet someone personally whom they first met on MySpace. There were no differences in age between those who met an online "friend" offline and those who did not, $\chi^2(4, N = 341) = 8.17, ns$. As in Study 1, there were no sex differences in MySpace usage.

3.3.2. Parent awareness and concern: Study 1 and Study 2 compared (Research questions 2 and 3)

In Study 2, one-third of parents had not seen their teen's MySpace page, with 44% admitting they never or almost never visited their teen's MySpace page. Parents were more likely to never or almost never view older teen MySpace pages (52%) than the pages of young teens (33%), and those of pre-teens (34%), $\chi^2(4, N = 341) = 11.25, p < .01$. Only 38% of teens had a computer in their bedrooms, with older teens (46%) more likely to have a bedroom computer than young teens (28%) or pre-teens (28%), $\chi^2(2, N = 341) = 10.64, p < .01$. Only 41% of parents put limits on computer use and 33% on MySpace use, with more parents of pre-teens imposing limits on both kinds of use (63% limit computer use; 60% limit MySpace use) than parents of young teens (51%; 43%, respectively) or older teens (30%; 33%), Computer use: $\chi^2(2, N = 341) = 24.89, p < .001$; MySpace use: $\chi^2(2, N = 341) = 33.21, p < .001$. Unlike Study 1, parental and teen perceptions of limits were similar, with 36% of teens reporting computer limits and 29% reporting MySpace limits; both of these figures were not significantly different from parental reports and were within 5% and 4%, of the parents' estimates.

In addition, a test of differences in parent viewing teens' MySpace pages revealed that parents of older teens (52%) were more likely than parents of young teens (33%) and pre-teens (34%) to have never or almost never viewed their child's MySpace page, $\chi^2(2, N = 341) = 11.25, p < .001$. Overall, the data in Tables 5 and 6 confirm that parenting style is related to teen MySpace behavior and that in many cases this appears to be moderated by the age of the child.

Although 42% of parents were not aware of how often their teens visited MySpace, most were again very concerned about the same problems addressed in Table 1. In comparison with older children, parents were more concerned about their younger children becoming addicted to MySpace, $\chi^2(2, N = 341) = 7.83, p < .05$, being exposed to sexual materials, $\chi^2(2, N = 341) = 7.66, p < .05$, and sexual talk, $\chi^2(2, N = 341) = 6.16, p < .05$. Thus, the pattern of greater parental concern about MySpace for younger than for older children held for both studies.

Further, according to parental reports, parents set limits and monitored their pre-teens ($M = 3.82$) and young teens ($M = 3.68$) significantly more than older teens ($M = 3.12$), $F(2, 338) = 21.76, p < .001$. According to teen reports, parents set more limits on their pre-teens ($M = 3.67$) than their young teens ($M = 3.32$), and even fewer limits on their older teens ($M = 2.86$); $F(2, 335) = 19.91, p < .001$. In addition, tests investigating the role of children's age revealed that more than half the parents of pre-teens set limits on both computer use (63%) and MySpace use (60%) compared to parents of young teens (computer limits = 51%; MySpace limits = 43%) and older teens (computer limits = 30%; MySpace limits = 29%); computer use, $\chi^2(2, N = 341) = 24.89, p < .001$; MySpace use, $\chi^2(2, N = 341) = 33.20, p < .001$. Parents of pre-teens (28%) and young teens (28%) were less likely to allow a computer in the bedroom compared to older teens (46%), $\chi^2(2, N = 341) = 10.64, p < .01$. This finding provides further support for the hypothesis that parents would monitor or limit younger children more than older children.

Table 4Parenting styles classification based on parent's and teen's PSQ responses ($N = 341$ parent–teen pairs)

	Parenting style			
	Authoritative	Authoritarian	Indulgent	Neglectful
<i>Respondent</i>				
Parent	32%	17%	15%	37%
Teen	34%	16%	16%	34%

The same pattern of sex differences that was observed in Study 1 emerged in Study 2. More parents had high levels of concern about their daughters meeting someone in person that they had met online (70%) than their sons (54%), $\chi^2(1, N = 266) = 8.05, p < .01$. More parents had high levels of concern about sexual solicitation for their daughters (39%) than their sons (27%), $\chi^2(1, N = 266) = 5.39, p < .05$.

More parents felt that MySpace interfered significantly with outdoor time for their daughters (27%) than for their sons (17%), $\chi^2(1, N = 266) = 4.64, p < .05$. (The relevant structuring of response options is found in Tables 1 and 3).

Parents were also unsure about how much information their teen divulged on MySpace, including providing their full name (26%), home address (25%), school name (31%), phone number (29%), e-mail address (35%), IM name (40%) or the location of social activities (42%). Parents of older teens were less sure than parents of young teens and pre-teens in reporting whether their teen gave out their home address (older teens = 32%; young teens = 16%; pre-teens = 12%), $\chi^2(2, N = 341) = 13.69, p < .001$; their school name (35%; 31%; 16%, for the age groups, respectively), $\chi^2(2, N = 341) = 7.82, p < .05$; their phone number (36%; 23%; 14%), $\chi^2(2, N = 341) = 11.88, p < .01$; their IM name (45%; 38%; 26%), $\chi^2(2, N = 341) = 6.36, p < .05$; and the location of school activities (49%; 37%; 26%), $\chi^2(2, N = 341) = 10.79, p < .01$. Parents significantly underestimated how much information their teens actually disclosed, including full name [teen report = 42% vs. parent report = 28%; $\chi^2(2, N = 341) = 104.36, p < .001$], home address [teen 8% vs. parent 3%; $\chi^2(2, N = 341) = 34.03, p < .001$], school name [teen 64% vs. parent 44%; $\chi^2(2, N = 341) = 110.43, p < .001$], phone number [teen 21% vs. parent 8%; $\chi^2(2, N = 341) = 52.21, p < .001$], e-mail address [teen 54% vs. parent 34%; $\chi^2(2, N = 341) = 121.02, p < .001$], IM name [teen 55% vs. parent 32%; $\chi^2(2, N = 341) = 90.76, p < .001$] and social activities [teen 37% vs. parent 17%; $\chi^2(2, N = 341) = 116.05, p < .001$].

The most startling difference in findings between the two studies was the estimated presence of sexual predators on MySpace and attitude toward their media portrayal, with 80% of Study 2 parents and 59% of teens stating that there were “quite a few” sexual predators on MySpace, compared to 63% of parents ($z = 4.57, p < .001$) and 36% of teens in Study 1 ($z = 5.54, p < .001$). In addition, 50% of teens and 73% of parents in Study 2 felt that the media either “underestimated the number of sexual predators” or was “pretty close to the truth” compared to 41% of the teens and 64% of the parents in Study 1 (teens: $z = 2.12, p < .05$; parents: $z = 2.29, p < .05$).

Investigation of the role of child age differences in this domain showed that parents of pre-teens were more concerned than parents of young or older teens about sexual solicitations, $\chi^2(2, N = 341) = 9.82, p < .01$; social isolation, $\chi^2(2, N = 341) = 9.97, p < .01$; harassment, $\chi^2(2, N = 341) = 8.77, p < .05$; exposure to both sexual materials, $\chi^2(2, N = 341) = 9.93, p < .01$; sexual talk, $\chi^2(2, N = 341) = 10.03, p < .05$; and lack of physical activity, $\chi^2(2, N = 341) = 6.56, p < .05$. Parents of older teens were less sure than those of young teens or pre-teens about disclosure of their address, $\chi^2(2, N = 341) = 13.69, p < .01$; school name, $\chi^2(2, N = 341) = 7.82, p < .05$; phone number, $\chi^2(2, N = 341) = 11.88, p < .01$; IM name, $\chi^2(2, N = 341) = 6.36, p < .05$; and location of social activities, $\chi^2(2, N = 341) = 10.79, p < .01$.

3.3.3. Parenting style, knowledge of children's Myspace activities, and Myspace limit-setting (Hypothesis 2)

The PSQ, administered to both teens and parents, yielded four distinct parenting styles, Authoritarian, Authoritative, Indulgent and Neglectful, as seen in Table 4. The majority of parents, whether rated by themselves or by their teens, were classified as either Authoritative or Neglectful. Overall, 67% of parents and their teen matched one another on the perceived parenting style with the greatest percentage of matches occurring for Authoritarian parenting (89%) and the least for Indulgent parenting (37%). Based on this agreement, and high correlations between teen and parent responses, only teen reports of perceived parenting styles were used in the remaining analyses.

There were no significant differences in parenting style for any parent demographic, except parent sex, $\chi^2(3, N = 341) = 13.57, p < .005$. Fathers (49%) were more likely to be categorized as Neglectful than mothers (29%). There was no significant difference in parenting style based on child sex ($p = .48$), but there was a significant difference based on child age, $F(3, 337) = 9.26, p < .001$ with Tukey's *B* indicating that teens with Neglectful or Indulgent parents were older than those with Authoritative and Authoritarian parents. Because parent sex and child age were significantly correlated with parenting style, each of these was included in an analysis of covariance when statistically appropriate. There were no significant interactions involving parenting style and age.

Table 5 displays relationships between parenting styles and parental limit setting and monitoring of MySpace use. In support of Hypothesis 1, teens with Authoritative parents had limits and were monitored more than those with Authoritarian and Indulgent parents; Neglectful parents set fewer limits and monitored their teens the least.

Based on additional questionnaire items, the parenting style differences presented in Table 6 indicate that parents classified as Authoritative and Authoritarian in style were more likely to set limits on computer and MySpace behavior and less likely to allow computers to be in the teen's bedroom than parents classified as Indulgent or Neglectful. This finding differs somewhat from the

Table 5

Mean scores, analysis of covariance *F*-scores and post-hoc *Tukey B* results for parent–teen variables as a function of parenting styles (homogeneous subsets are indicated by mean scores sharing the same superscript; *N* = 341 parent–teen pairs)

Parent–teen variables	Parenting style classification				<i>F</i> (3,336)
	Authoritative	Authoritarian	Indulgent	Neglectful	
Hours/week on MySpace	8.88 ^a	6.40 ^a	14.14 ^b	10.50 ^{a,b}	5.39 ^{***}
Limit setting/monitoring (Parent perspective)	3.91	3.47 ^a	3.35 ^a	2.80	43.01 ^{***}
Limit setting/monitoring (Teen perspective)	3.82	3.18 ^a	3.06 ^a	2.38	72.85 ^{***}

Note. For Limit Setting/Monitoring, higher PLMS scores reflect more limit setting and monitoring. Items sharing a superscript do not differ significantly by the *Tukey B* Test.

****p* < .001.

hypothesized result in indicating that Authoritarian parenting can, in some respects, achieve the same result as Authoritative parenting.

Authoritative parents also had the greatest knowledge of their child's MySpace profile. They were the parent group that most often had seen their child's web page (Table 6). Along with Indulgent parents, Authoritative parents had the most general MySpace knowledge; Authoritative and Indulgent parents were also more likely to have their own MySpace page, which of course allows them to link with their child's page if their child agrees to add them as a "friend". Along with Authoritarian parents, Authoritative parents were likely to have seen the photographs on their child's MySpace profile. Overall, although not in every detail, the hypothesis that Authoritative parenting would be associated with more knowledge of their children's MySpace behavior was confirmed.

3.3.4. Parenting style and teen MySpace behaviors (Hypothesis 2)

The parenting style differences presented in Table 6 show that Authoritative and Authoritarian parents were less likely to have teen bloggers, and reported that their teens were least likely to disclose personal information; further, Authoritative parents were also more likely to be sure about whether their teen disclosed personal information. Teens with Indulgent parents were reported to be more likely to meet someone offline whom they had met online, followed by teens with Authoritarian, Neglectful and Authoritative parents. This finding confirms the hypothesis that Authoritative parenting would be associated with the fewest risky or negative MySpace behaviors.

Table 6

Percentage of parent–teen MySpace behaviors and experiences as a function of parenting styles (*N* = 341 parent–teen pairs)

MySpace variables	Authoritative	Authoritarian	Indulgent	Neglectful	$\chi^2(3, N = 341)$
Parent has seen teen MySpace page	78%	67%	67%	52%	15.98 ^{***}
Parent never or almost never views page ^a	22%	40%	53%	64%	49.25 ^{***}
Parent looked at teen MySpace photos	72%	73%	66%	46%	21.15 ^{***}
Parent says he/she limits computer use	57%	51%	27%	26%	30.33 ^{***}
Parent says he/she limits MySpace use	50%	42%	29%	15%	34.19 ^{***}
Computer in bedroom	32%	27%	51%	44%	9.92 [*]
Parent has own MySpace	40%	24%	36%	22%	11.39 [*]
Parent concerned about: ^b					
Sexual materials	70%	66%	47%	70%	10.31 [*]
Sexual talk	72%	66%	46%	63%	11.58 ^{**}
Parent not sure teen discloses:					
Address	15%	29%	20%	35%	13.06 ^{**}
School name	21%	36%	26%	41%	12.00 ^{**}
Phone number	19%	31%	24%	41%	13.77 ^{**}
E-mail address	26%	40%	29%	42%	8.14 [*]
IM name	30%	44%	33%	50%	10.75 [*]
Social activities	29%	46%	51%	49%	12.85 ^{**}
Teen writes blog	39%	35%	56%	51%	8.69 [*]
Teen discloses:					
Full name	29%	29%	55%	54%	22.93 ^{***}
Address	3%	6%	13%	12%	9.39 [*]
School name	56%	53%	69%	73%	11.31 ^{**}
E-mail	40%	49%	73%	54%	19.80 ^{***}
IM name	45%	53%	67%	59%	8.84 [*]
School location	23%	27%	51%	47%	22.52 ^{***}
Teen met with someone first met on MySpace	6%	15%	27%	10%	23.65 ^{***}

Note. Unless indicated below, all data reflect the percentages of "yes" responses.

^aResponse scale was "never or almost never", "every few months", "about once a month", "a few times a month", "about once a week", or "every day" with table percentages indicating only the "never or almost never" answers. ^bResponse scale was "not at all", "mildly", "somewhat" or "very concerned" with table percentages indicating a total of the "somewhat" and "very concerned" categories.

p* < .05. *p* < .01. ****p* < .001.

3.3.5. MySpace problems: Studies 1 and 2 compared (Research question 4)

Only 14% of the teens reported that they had received unwanted sexual materials. For all Internet problems, the vast majority of MySpace teens either had appropriate reactions (telling the person to stop, blocking the person from the MySpace page, removing themselves from the situation by logging off, reporting the incident to an adult or to MySpace authorities) or ignored the behavior (sexual solicitation: 92% of responses were appropriate; harassment: 90% of responses were appropriate; unwanted exposure to sexual materials: 94% of responses were appropriate). In addition, few were very or extremely upset by sexual solicitation (19%), harassment (22%), and/or unwanted exposure to sexual materials (20%). An equal percentage of male (16%) and female (14%) teens were sexually solicited, $\chi^2(1, N = 341) = 0.46, ns$. The same was true for harassment (males = 10%; females = 8%, $\chi^2(1, N = 341) = 0.37, ns$). However, more females (18%) than males (9%) received unwanted sexual materials, $\chi^2(1, N = 341) = 4.39, p < .05$. In terms of age, 16–18 year olds received more sexual solicitations (19%) than 14–15 year olds (10%), or those under 14 (4%), $\chi^2(2, N = 341) = 10.89, p < .01$. There were no significant age differences in harassment or in receiving unwanted sexual materials.

4. General discussion

According to a recent study (Lenhart & Madden, 2007), 55% of online American teens use social networking sites, with the vast majority using MySpace. The present research included two studies of parents and their MySpace teens using online anonymous questionnaires. Study 1 used a sample of 266 MySpace users from the Los Angeles area and one of his/her parents and examined teen behaviors on MySpace, similarities and differences in parent–teen perceptions of MySpace activity, parental knowledge of teen MySpace behaviors, and parental monitoring of their teen's MySpace activity. Study 2, completed three months later, used a similar sample of 341 teen–parent pairs from the same Los Angeles area and provided further evidence concerning parent–teen assessment of MySpace behavior, as well as an examination of the association of parenting styles with parental limit-setting, parental monitoring, parental knowledge, and teen MySpace behaviors.

4.1. Social networking experience

Both studies indicated that most teens had been using MySpace regularly, approximately five days a week for one to two hours per day. However, despite no differences in the demographics of the two samples, the Study 2 data, collected only three months later, contained more veteran MySpace users, and these users had a significantly larger number of MySpace "friends."

Teens engage in a variety of activities on MySpace, including collecting hundreds of friends and nearly half writing blogs. This figure indicated substantially more blogging on MySpace than found in the 2005 Pew Internet & American Life Project study, which reported that 19% of teens created blogs (Lenhart & Madden, 2005). This difference could be due to one or more of several different factors; but, given the difference in time between the 2005 Pew study (data collected in 2004) and the current study (data collected in 2006), this increase likely could be the result of the ease with which MySpace blogs now can be created and their increasing attractiveness to teens.

Both studies reported here indicated that many parents were unaware of their teen's MySpace behaviors. More than one-third of parents had not seen their teen's MySpace page and nearly half admitted that they never or almost never looked at it. Nearly half the parents allowed their teens to go online in their bedrooms (although this percentage dropped to 38% in Study 2, perhaps indicating more parental vigilance in monitoring their teen's computer use); Only one-third of parents put limits on MySpace use and only 40% put limits on computer use. More than 40% of parents underestimated the number of days per week and the amount of time their teen spent on MySpace. All of these findings held across both Study 1 and Study 2.

In both studies, between one in four and one in three parents were unsure about whether their teen was disclosing personal information including full name, home address, school name, phone number, e-mail address, IM name, and social activities. Parents who said they were sure about their teen's personal information disclosure underestimated that disclosure. Clearly, many parents were "clueless" about their teen's MySpace adventures.

4.2. Parenting practices

Study 2 highlighted the possibility that parenting style and parental limit-setting and monitoring play a role in teen online behavior. A convergence of findings showed that an Authoritative parenting style was related to fewer high-risk online behaviors on the part of teens, for example, low rates of disclosure of personal information of all kinds and a low rate of meeting online acquaintances in the real world. These results validate and extend the findings of Eastin et al. (2006) and Greenberg et al. (2002), which showed that Authoritative parents were more likely to mediate their children's media use.

4.3. MySpace dangers

Although many parents in both studies were unsure about their teenager's MySpace activities, most were concerned about the impact of those activities. Parents in both studies were more concerned than their teenagers about potential MySpace hazards including sexual solicitation, social isolation, computer addiction, harassment, exposure to sexual materials, interference with offline activities, and disclosure of personal information. For example, in both studies more parents than teens were concerned about their teens receiving sexual solicitations on MySpace, divulging personal information, and interfering with family time and outdoor activities.

The majority of parents in both studies felt that there were “quite a few” sexual predators on MySpace and that the media coverage of these dangers is either an underestimate or pretty close to the truth. However, in Study 1 only 8% of the teens had had an uncomfortable experience of a sexual nature, mostly from what they termed “perverts.” In Study 2, where teens were asked directly about sexual solicitation, 15% reported having been approached, a rate that is in agreement with the 13% solicitation rate reported by Wolak et al. (2006) in their survey of online teens. However, the similarity of the rates must be interpreted with caution as the population from which the present samples were drawn is not known. This applies to findings of the study as a whole as well.

Nonetheless, the relatively low rate of sexual solicitation suggests that parents' beliefs in the frequency of sexual predation are, for the most part, overestimated with respect to MySpace, at least in the present studies. Furthermore, it is important to note that nearly all teens either reacted appropriately to sexual solicitation by rebuffing the person, blocking him/her from their MySpace page, reporting the incident to an adult or ignoring the solicitation. In addition, half said that they were not upset by the experience.

Parents were also concerned that their teens were being harassed online. The data collected in Study 2 is not consistent with this fear and confirms similar data collected in the YISS study (Wolak et al., 2006). Only 8% of the sampled teens and 9% of YISS teens reported being harassed online. Nearly nine in ten took appropriate actions or ignored the harassment. A major conclusion from the YISS study was that “More youth were exposed to sexual material they did not want to see” (Wolak et al., 2006; p.8). In the present study, 66% of the parents reported being concerned about their teens being exposed to pornography. However, while the YISS study found 34% of youth had unwanted exposure to sexual material, the present study found only 14%. In addition, these experiences were nearly always handled appropriately and caused little distress. One possible overall interpretation of these data is that, while pornography may pose a problem on the Internet in general, it may not be a major problem for MySpace adolescents.

Unlike in the YISS study, females were not the majority of those receiving sexual solicitations; an equal percentage of male and female teens were sexually solicited. The same was true for harassment and unwanted sexual talk. However, more females than males received unwanted sexual materials.

It should be noted that, over the three months between studies, both parents *and* teens reported feeling that there were more sexual predators on MySpace and that the media coverage was fairly accurate. For example, whereas 36% of teens in Study 1 felt there were “quite a few” sexual predators, this increased to 59% in Study 2 (parents increased from 63% to 80%). In addition, slightly more teens and parents in Study 2 felt that media coverage of sexual predation on MySpace was either an underestimate or close to the truth compared to those in Study 1. Coupled with the increase in sexual solicitations shown between Study 1 and Study 2 (from 8% to 15%), these results may portend a potential online danger that is increasing or perhaps simply more media attention to infrequent episodes of sexual solicitations.

However, it should be noted that the difference could be due to variability from sample to sample. In addition, while the teens in the two studies were demographically similar, they were different samples; the teens in Study 2 were more veteran MySpace users, which may have made them more aware of media reports of sexual solicitations or stories about MySpace sexual encounters. In addition, awareness of Internet dangers and therefore attitudes about Internet experiences might have been heightened due to a recent media blitz or school-based program in the area.

4.4. Developmental differences

The age of the teens in the present study was significantly associated with a variety of measures. Both studies found that older teens were more likely to have a computer in their bedrooms than younger teens, older teens had more experience with MySpace than younger teens, and older teens had more MySpace friends than younger teens. Study 2 found that older teens spent more time on the Internet and received more sexual solicitations than younger teens. Parenting style was significantly correlated with the age of the child; parents practicing Neglectful or Indulgent parenting styles had older children than parents practicing Authoritative or Authoritarian parenting styles.

Child age appeared to be associated with differences in parent behavior in still another way. Both studies found that parents of older teens were less likely to view the child's MySpace page and were less likely to place limits on computer use than parents of younger teens. In other words, they permitted the increasing autonomy that develops during adolescence. In Study 2, parents of older teens were less likely to place limits on MySpace use than parents of younger teens. Parents of older teens were less concerned than parents of younger teens about MySpace interfering with other activities (Study 1), about children becoming addicted to MySpace (Study 2), about children being exposed to sexual material (Study 2), and about children engaging in sexual talk (Study 2). Parents of older teens were more unsure than parents of younger teens about whether their children divulged revealing information online (Study 2). At the same time, parents of older teens were more concerned than parents of younger teens about their child posting personal information on MySpace (Study 1). Generally, the developmental results reflect prior research showing that older children are monitored less and given more freedom on the Internet and elsewhere (Mitchell et al., 2005; Wang et al., 2005).

4.5. Implications

Taken together, these results suggest that, although parents are highly concerned about their children's online activities, they do not actively monitor or limit them. While admitting that they are scared of online dangers, they act as though none of these dangers will actually affect *their* teen. This study suggests that this cognitive misperception may be related to parenting style.

Although certainly not a causal conclusion, the results suggest the possibility that adopting an Authoritative parenting style, where limits are set with input from the teenager, would help ensure adolescent safety on the Internet.

One important parental change would be to place the teen's computer in a public location, rather allowing bedroom access, which appears to be related to potential online dangers. Another would be to take a course in parenting which would help develop this parenting style. These changes may be difficult for parents on two levels. First, adolescents have more knowledge about the online world and parents may feel inhibited or uninformed about potential dangers. Parents need to learn more about what their teens are doing on MySpace. Although only 17% of parents in Study 1 had their own MySpace page, this increased to 30% in Study 2. This is a positive sign. A second reason for parents disconnecting from their teenagers' online activities may be that MySpace is perceived as yet another sensitive topic they have to discuss with their teens. After talking about drugs, alcohol, and sexuality, they may believe that either they have covered any potential MySpace issues or are simply overwhelmed by all that it portends. Parents clearly need to be more aware of their adolescents' MySpace activities and take a more active role in setting limits and monitoring their behavior.

4.6. Study limitations

This cross-sectional examination of MySpace behaviors used different samples of parents and teens, three months apart. Although parents and teens were statistically equivalent demographically, teens in Study 2 were more experienced MySpacers, which may have affected their perceptions, attitudes, and behaviors. As previously mentioned, the escalating media portrayal of sexual predation on the Internet in general, and MySpace in particular, may have influenced the parents and the teens.

One must proceed with caution when generalizing the present results to other parts of the United States or to the country as a whole. The Los Angeles region is generally characterized as having a relatively large proportion of families that are of Latino heritage, that are Spanish-speaking, and/or are recent or near-recent immigrants into the United States. These characteristics could influence some of the behaviors that are being examined in the present studies. As one example, parents in families with Latino heritage might display a different distribution of parenting styles than parents from other backgrounds. As another example, Spanish-speaking teenagers, who might surf the web using some significant proportion of Spanish-language websites, might behave differently online than other teens.

5. Conclusions

These studies of teen MySpace behavior and parent Internet monitoring behavior contribute to our knowledge of online behavior during development in several ways. First, the present studies measured adolescents' responses to negative online events (e.g., unwanted sexual solicitation) and they were found to exhibit a range of "healthy" responses to these events. Second, both the teens' and the parents' perceptions of the frequencies of negative events were captured, with the results revealing a discrepancy between parents' perceptions and parents' behaviors. Although parents were more likely to be concerned about negative online situations than teens, the parents did not show a high level of Internet monitoring or limit setting with respect to teen online behavior. Third, the current studies not only measured teens' disclosure of personal information online, but also parental perceptions of the amount of disclosure. There was a disconnect between these two factors, with parents tending to underestimate the actual amount of disclosure. Finally, the results revealed that parenting style was not only correlated with parent behavior, but additionally with teen online behavior. In general, the Authoritative parenting style was associated with the lowest levels of counterproductive teen behaviors.

Acknowledgment

We thank the following students who were involved in this research project from its inception: Julie Felt, Cheyenne Cummings, Michelle Albertella, Jynny Babcock, and Julia Rifa.

References

- Baumrind, D. (1991). The influence of parenting style on adolescent competence and substance use. *Journal of Early Adolescence*, 11, 56–95.
- Eastin, M. S., Greenberg, B. S., & Hofschire, L. (2006). Parenting the Internet. *Journal of Communication*, 56, 486–504.
- Greenberg, B. S., Hofschire, L., Eastin, M., & Lachlan, K. (2002). *Mothers and their teenagers: Monitoring mass media use. A report prepared for the Smith Richardson Foundation*. East Lansing, MI: Michigan State University.
- Healy, J. R. (2004). Initial development of an instrument measuring limit-setting and monitoring in parents of adolescents. Unpublished doctoral dissertation. Alliant International University, Los Angeles, CA.
- Lamborn, S. D., Mounts, N. S., Steinberg, L., & Dornbusch, S. M. (1991). Patterns of competence and adjustment among adolescents from authoritative, authoritarian, indulgent, and neglected families. *Child Development*, 62, 1049–1065.
- Lee, T. (2008, January 30). Bill would bar sex offenders from Facebook and MySpace. *The New York Times*. Retrieved July 8, 2008, from http://www.nytimes.com/2008/01/30/nyregion/30myspace.html?_r=1&scp=23&sq=myspace+sex&st=nyt&oref=slogin
- Lenhart, A., & Madden, M. (2005). Teen content creators and consumers: More than half of online teens have created content for the Internet. Washington, D.C.: Pew Internet & American Life Project. Retrieved February 20, 2007, from http://www.pewinternet.org/pdfs/PIP_Teens_Content_Creation.pdf
- Lenhart, A., & Madden, M. (2007). Social networking websites and teens: An overview. Washington, D.C.: Pew Internet & American Life Project. Retrieved February 20, 2007, from http://www.pewinternet.org/pdfs/PIP_SNS_Data_Memo_Jan_2007.pdf
- Maccoby, E. E., & Martin, J. A. (1983). Socialization in the context of the family: parent–child interaction. In P. H. Mussen & E. M. Hetherington (Eds.), *Handbook of child psychology, 4th ed. Socialization, personality, and social development* (Vol. 4, pp. 1–101). New York: Wiley.
- Macgill, A.R. (2007, October 24). Parent and teenager Internet use. Pew Internet & American Life Project, from http://www.pewinternet.org/pdfs/PIP_Teen_Parents_data_memo_Oct2007.pdf

- Mitchell, K. J., Finkelhor, D., & Wolak, J. (2005). Protecting youth online: family use of filtering and blocking software. *Child Abuse & Neglect*, 29, 753–765.
- Mitchell, K. J., Wolak, J., & Finkelhor, D. (2007). Trends in youth reports of sexual solicitations, harassment and unwanted exposure to pornography on the internet. *Journal of Adolescent Health*, 40, 116–126.
- Rosen, L. D. (2006). Adolescents in MySpace: Identity formation, friendship and sexual predators. Retrieved February 26, 2007, from [http://www.csudh.edu/psych/Adolescents in MySpace - Executive Summary.pdf](http://www.csudh.edu/psych/Adolescents%20in%20MySpace%20-%20Executive%20Summary.pdf).
- U.S. Census Bureau (2006). American Community Survey. Retrieved June 26, 2008, from http://factfinder.census.gov/servlet/ACSSAFFacts?_event=Search&_lang=en&_sse=on&geo_id=05000US06037&_county=Los+Angeles+County
- Wang, R., Bianchi, S. M., & Raley, S. B. (2005). Teenagers' Internet use and family rules: a research note. *Journal of Marriage and Family*, 67, 1249–1258.
- Wolak, J., Mitchell, K.J., & Finkelhor, D. (2006). Online victimization of youth: Five years later. Crimes Against Children Research Center. Retrieved from <http://www.unh.edu/ccrc/pdf/CV138.pdf>