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Can Social Networking Be Used to Promote Engagement in Child Maltreatment Prevention Programs? Two Pilot Studies

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Title:

Can Social Networking Be Used to Promote Engagement in Child Maltreatment Prevention Programs? Two Pilot Studies

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Abstract:

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While there isresearch to support the effectiveness of BPTs in maltreatment prevention, the reach of such programsis still limited by several barriers, including poor retention of families in services. Recently, newtechnologies have emerged that offer innovative opportunities to improve family engagement. Thesetechnologies include smartphones and social networking; however, very little is known about thepotential of these to aid in maltreatment prevention. The primary goal of this study was to conduct 2pilot exploratory projects.

Methods: The first project administered a survey to parents and providers to gather data about at-riskparents' use of smartphones and online social networking technologies. The second project tested asocial networking-enhanced brief parenting program with 3 intervention participants and evaluated parental responses.

Results: Seventy-five percent of parents surveyed reported owning a computer that worked. Eightyninepercent of parents reported that they had reliable Internet access at home, and 67% said theyused the Internet daily. Three parents participated in the intervention with all reporting improvement inparent-child interaction skills and a positive experience participating in the social networking-enhancedSafeCare components.

Conclusion: In general, findings suggest that smartphones, social networking, and Facebook, inparticular, are now being used by individuals who show risk factors formaltreatment. Further, themajority of parents surveyed in this study said that they like Facebook, and all parents surveyed said that they useFacebook and have a Facebook account. As well, all saw it as a potentially beneficial supplement forfuture parents enrolling in parenting programs. [West J Emerg Med. 2014;15(5):575–581.]

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Can Social Networking Be Used to Promote Engagement in Child Maltreatment Prevention Programs? Two Pilot Studies

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INTRODUCTION

Anna Edwards-Gaura, PhD

Daniel Whitaker, PhD Shannon Self-Brown, PhD

With approximately 3.6 million children referred for suspected maltreatment each year, child maltreatment (CM) is one of the United States' most significant public health problems.¹ The consequences of maltreatment range from impaired brain development and behavioral problems to low academic achievement and mental health problems later in life.^{2,3} These consequences impact our society at a large price, with estimated financial costs at \$103.8 billion.⁴

To prevent maltreatment from occurring, and also prevent its reoccurrence, experts recommend behavioral parent training programs (BPTs) which focus on teaching skills that will replace and prevent neglectful or abusive behavior.^{5–7} While there is research evidence to support the effectiveness of several BPTs (e.g., SafeCare[®], Triple P, Parent Child Interaction Therapy, Incredible Years) in maltreatment prevention, the reach of such programs is still limited by a number of barriers, including lack of dissemination of such programs and poor engagement and retention of families in services. Current research indicates attrition rates between 20% and 67% for parenting programs, even among home-based programs^{8–10} and among parents who are mandated to services by child welfare systems.¹¹

Technology has been identified as a potentially effective means to reach clients, help engage them, and augment or replace sections of face-to-face intervention programs to increase reach but also reduce cost.^{12,13} Technology provides interventionists new opportunities to increase engagement in a number of ways across the social ecology. The most commonly studied technologies to date in CM prevention include television and DVD media,^{14,15} Internet;¹⁶⁻¹⁸ telephone,¹⁹ and text messaging.²⁰ Over the last decade, however, newer technologies have emerged that offer innovative opportunities for client reach and intervention enhancement. These technologies include smartphones and tablet applications, including social networking applications such as Facebook. However, little is known about the potential of these to aid in maltreatment prevention efforts, including information about their appeal and accessibility to at-risk parents.

Smartphones and tablets provide an abundance of opportunities to instantly interact, play games, send messages, send and watch videos, edit and send photographs, communicate with large groups of one's choosing through messages and pictures, and get notifications of upcoming activities all in one small handheld device. According to a June 2013 report by Pew Research Center,²¹ 91% of the adult population now owns some kind of cell phone and 56% of American adults are now smartphone users, and smartphone use has steadily increased across demographic groups since 2010.²¹ Young adults are the most likely to be smartphone owners (79% among 18–24 year olds, 81% of 25–34 year olds); those same groups are most likely to receive child welfare services. Projections of smartphone use suggest increase growth across socioeconomic strata.

Online social network tools (e.g., Facebook, Instagram) accessed via smartphone are becoming increasingly common. Pew Research data show broad use of social networking apps across demographics, with 71% of women, 68% of black, 72% of Hispanic, 72% of those with income below \$30,000, and 61% of individuals who live in rural areas using social networking technology.²¹ Within the field of mental health and health behavior change, online social networks are slowly becoming popular avenues for health communication and health promotion.²² While no quantitative studies have yet examined the relationship between use of social networking apps, behavior change, and parent interventions, they are now being studied in other areas of health behavior change. For

example, online interventions using a social network-type format have been found to help increase social support for individuals with coronary heart disease,²³ promote sexual health,²⁴ increase social interactions in youth with disabilities,²⁵ and reduce psychological stress.²⁶ Given the promise of these new technologies, questions remain about the functional utility of such technologies within the maltreatment prevention populations we serve. After all, these technologies can only improve outcomes if families are willing and able to use them. The current pilot study was designed to help address some of these questions.

METHODS

This paper reports on 2 pilot projects. The first project gathered initial data from parents and providers on the use of smartphones and online social networking technologies by atrisk parents. The second project consisted of a pilot study in which 3 parents completed behavioral parent training that had been augmented by a computer-administered social networking enhancement (i.e. a private Facebook group).

Project 1 – Parent and Provider Surveys

Survey Participants

Parent Participants. Participants included 12 parents with children under age 5 who were recruited from 2 communitybased organizations that serve at-risk children in a high violence, urban area of a large southeastern city. The first of the 2 referring agencies was a hospital and university-affiliated agency that provides comprehensive pediatric care for at risk families. The second referring agency provides child care, education, and comprehensive support services to families of various income levels within the metro area. Parents who participated in the study were either referred to the project by a Behavioral Health Coordinator who worked for the agency, or were approached at the agency by research staff. Because of these recruitment methods, no information is available on the percentage of participants who were approached but declined to participate. Inclusion criteria for the parents included that the parent must be age 18 or over, the biological or custodial caregiver of a child between 0-5 years old, and reside in the home with the target child. Exclusion criteria included an inability to communicate in English, cognitive impairment, or an inability to understand the consent form. Analysis of demographics for parents participating in surveys yielded that parents had an average of 2.4 children (range 1 to 4); an average household size of 4.25 individuals (range 3 to 6); an average monthly income of \$1,360 (range 0 to \$2,600); 67% of parents were single (8% were divorced, 25% were married); 67% were unemployed (33% employed); and 100% of parents were African American.

Provider Participants. Six providers who serve parents with a history of or risk factors for CM were also surveyed for the project. Providers were recruited from staff at the above

described Georgia agencies, as well as through an additional agency in Oklahoma City that provides SafeCare[®]. Of the participating providers, 2 typically provided services to families living in rural areas, 1 provided services to families living in an urban area, and 3 provided services to families who lived in a combination of rural and urban areas. Providers indicated serving families with multiple risk factors including low income, single parents with multiple children, and parenting substance use and mental health problems.

Survey Materials and Procedure. Once a parent or provider expressed interest in participating, they were contacted by a member of the research team to describe the project and schedule a survey. Verbal consent was obtained from each participant prior to initiating the survey. All parent surveys were administered by project research staff in person or by phone at a time that was convenient for the parent. Questions focused on parents' use of computer, use of cellular phones, participation and attitudes towards social networking, and attitudes regarding participation and engagement challenges in parenting-related services. All provider surveys were administered through a secure online web-based survey system. Parent and provider surveys took approximately 25 minutes to administer. Parent respondents were reimbursed with a \$20 gift card and provider respondents were reimbursed with a \$25 gift card.

SURVEY RESULTS

Parent Results on Computer and Cell Phone Use

Findings from the study were generally consistent with Pew Research.²¹ Specifically, 75% of parents surveyed reported owning a computer that works. Further, 89% of parents reported that they had reliable Internet access at home, and 67% of respondents said that they used the Internet daily.

Of the parents surveyed, all reported owning a cell phone, and 92% reported using it daily. Two-thirds (66%) said they had a smartphone, and 92% reported having Internet access via their phone. All parents reported using their phone for texting on a regular basis. Sixty-seven percent said that they send pictures to friends with their phone, and 33% said that they send videos to friends with their phone.

Provider Results on Computer and Cell Phone Use

Providers' observations of computer use within homes differed to some degree from parental reports. Of the 6 providers surveyed, 4 reported seeing working computers in families' homes less than 25% of the time.

Compared to relatively infrequent observations of working computers in families' homes, providers reported observing much greater use of cellular phones with the parents they serve. Four of six providers reported that >75% of their at-risk families had a cellular phone that they regularly used. Further, providers said that they regularly (i.e. >75% of the time) saw parents do things other than talk on the phone, such as text or send pictures to friends. Consistently, 4 of the 6 providers said that they regularly see "smartphones" in families' homes.

Parent Results on Use of Social Networking

When asked about their knowledge of and attitudes towards social networking, and Facebook in particular, 75% of parents said that they like Facebook, 8% said they didn't like it, and 17% said they were not sure. All parents surveyed reported that they have a Facebook account and use it, with a quarter using it daily, 50% using it weekly, and a quarter using it monthly. Responses to open-ended questions yielded that parents perceived Facebook as a good way to interact with old friends, to network with others, and to potentially find jobs and resources for their family.

Provider Results on Use of Social Networking

All providers believed that their client base was familiar with Facebook. Providers gave some anecdotal descriptions of parents' Facebook use, both positive and negative, including parents airing their anger on Facebook and having negative repercussions from friends, parents meeting new friends on Facebook, keeping up with family and friends' photographs, and sharing helpful information and recipes on Facebook.

Parent Perceptions Regarding Reach and Engagement in Services

Open-ended survey questions were asked to assess parents' perceptions of family engagement difficulties. Most parents responded that they perceived engagement of families to be difficult because of logistical factors, including difficulty finding the time to schedule the appointment, sessions being too long, and difficulty with transportation to the service setting. One parent commented that she thought parents worry that their children's bad behavior will be blamed on them if they participate. Other parents commented on privacy-related concerns (e.g., "not wanting people in their business").

Provider Perceptions Regarding Reach and Engagement in Services

Providers' reports of family engagement difficulties focused on family stressors that interfered with parental engagement, including parents' lack of time due to holding several jobs, working odd hours, and having a generally busy schedule. Providers also commented that families seem "putoff" by programs that seem "cookie-cutter," caseworkers who come across as punitive, and case plans that are focused on things the parent has done wrong. Several providers also commented that lack of parental motivation was likely a contributor to engagement difficulties. When asked what providers should do to best overcome these challenges, providers commented that they felt it was important to spend time building good rapport with families, help link families with resources to show that they care, give families tools to help them be less stressed, demonstrate a demeanor that is not judgmental or criticizing, and overall treat the family with respect and honesty.

PROJECT 2 – BRIEF INTERVENTION WITH PARENTS

Brief Intervention Participants

Three of the parents surveyed participated as brief intervention participants. The 3 brief-intervention parent participants were single, African American mothers living in the metro Atlanta area. All 3 of these parents said that they had consistent Internet access either through a home computer or through a nearby library. They had an average of 1.6 children and an average monthly income of \$1,200.

Intervention Materials and Procedure

Following completion of surveys, 3 brief intervention parents received a social networking-enhanced brief intervention over the course of a 3-week period. Parents received a \$20 gift card for each session they attended. A graduate assistant interventionist delivered SafeCare® services (Parent-Child Interaction [PCI] components only), receiving training and supervision from the first author using the standard SafeCare® training protocol.²⁷ In Session 1, parents were provided a unique username and password and were enrolled in a private SafeCare Facebook group online. Parents were taught how to use all relevant functions of Facebook on a computer and for participation in the group. The interventionist asked parents to demonstrate several skills during this session, such as checking messages, posting messages to individuals and the group, checking the resource page, and posting pictures. Provisions for participation in the group were also discussed and provided in writing during this session, including content that was allowed and not allowed to be posted on the group site, the right of the principal investigator (PI) and interventionist to remove any content not deemed consistent with the goals of the project, and the requirement of participation in the SafeCare® case studies to be a member of the group. The interventionist then conducted a modified version of Safe Care®'s PCI module²⁸ in parents' homes during 3 weekly sessions for the duration of 3 weeks. Outside of the sessions, parents participated in the Facebook group that included daily communications by the interventionist about SafeCare®-related skills, posting of favorite parenting websites and links to articles, and positive feedback about others' postings. At the end of each session, surveys were conducted with each parent to evaluate the perceived ease of use of the Facebook group, ability to post messages and pictures, comfort posting messages and pictures, ability to connect with others socially, and any other perceptions of the Facebook component of the intervention.

Intervention Analyses

We employed a process consistent with thematic analysis²⁹ to evaluate parent survey responses. First, the PI read through all of the parents' surveys several times and wrote notes and

marked ideas from the narratives. Second, the PI searched for themes among the responses that represented coherent patterns and re-read the data to ensure limited overlap between themes. The themes discovered through this process are discussed in the results section below.

BRIEF INTERVENTION RESULTS

Given that the primary objective of the brief intervention was to pose a scenario in which to evaluate parents' use and perceptions of a Facebook enhancement to a parenting program, limited information was collected about parents' acquisition of PCI skills as part of the abbreviated SafeCare® components. In general, however, parents reported that they enjoyed participating in the SafeCare® component of the intervention. Homework and skill acquisition was variable among parents, as 1 parent reported being frequently out of town in-between sessions, and thus had "limited opportunity" to practice the skills being learned. The other 2 parents reported enjoying learning about the skills and practicing using them. All 3 parents reported that the PCI skill-building component of the intervention helped them gain more awareness of the skills they often use and don't use with their children at home. All parents self-reported increases in their use of praise (e.g., highfiving their children, saying "thank you"), giving choices, and talking while interacting with their children. At the end of the brief intervention, all parents also reported feeling the need for continued practice, particularly in the areas of ignoring minor inappropriate behavior and using rules and consequences consistently.

All brief intervention sessions concluded with a parent interview to evaluate parent use of the Facebook group, likes of the group, dislikes, and suggestions for improvement. Participation rates in the Facebook group were moderate. More specifically, the 2 parents that had computers in their homes reported checking the Facebook group regularly, and reported, on average, checking the Facebook group page 3 times weekly. One parent had to check the Facebook group from the library and her participation was more variable, as she participated in the Facebook group some weeks but not others.

Most feedback generated during interviews indicated positive responses about participation in the Facebook component of the intervention. Overall, parents reported that participating in the group was very easy, as the Facebook functions were intuitive. One parent expressed some difficulty finding other group members through the Facebook "Friend" search function. Content that parents posted to the Facebook group included links to helpful websites and parenting articles online. Parents said that they were careful to only post content that was appropriate for and they felt comfortable sharing with an anonymous group. They also felt that it would be important for other parents to do the same. Parents also commented on the content that they enjoyed viewing (of others' postings) within the group, including parenting resources, links to websites, and supportive comments to and from other parents. In general, parents felt that participation in the group would be a good way to engage future participants in the parenting program, especially given that the typical SafeCare[®] intervention length is 18 weeks.

During interviews, parents also made suggestions for future changes or additions to the Facebook group. Two parents suggested inclusion of Facebook "events" and incentives where parents can get raffle tickets and win prizes to increase motivation for participation. Parents also said that they would enjoy having more contact with their home visitor through Facebook, either through direct messages, group messages, or instant chats. A parent also commented that it would be helpful to see more examples of the skills parents are practicing at home, and they would like for home visitors to post videos of the skills on Facebook to show examples. Inclusion of themes (e.g., Money Saving Monday, Wellness Wednesday) was also mentioned as a way to add structure to the group. In general, parents reported enjoying being connected with other parents, though within the 3-week intervention period most postings were to the group and not directed individually to other parents. Related, a parent commented that she would enjoy the opportunity to see more similarities between herself and other parents participating in the group (e.g., similar-aged children, similar geographic locations). Parents also commented that the group would be more fun and engaging with a larger number of participants than 3.

DISCUSSION

The goals of this study were to learn more about at-risk parents' use of smartphones and online social networking technologies and to test a social networking enhancement to a brief behavioral parenting intervention. Our survey findings indicated that smartphones, social networking, and Facebook, in particular, are being used by individuals interviewed who represent a range of demographics and individuals in minority ethnic groups. This is consistent with Pew research data that tell us that younger adults—regardless of income level— are now very likely to be smartphone owners and 72% of online adults now use social networking sites. In this study, the majority of parents had favorable attitudes toward Facebook, and all reported using Facebook, and believed it could be a beneficial supplement to a parenting program.

The potential of new technologies to increase frequency of communication, provide stimulating and engaging means of communication, and make communication with home visitors easier are now beginning to be demonstrated through research. University of Kansas researchers ^{20,30} found that mothers receiving regular text messages via cell phone when participating in a parenting program demonstrated increased engagement, decreased parenting stress, and increased use of positive parenting strategies than mothers receiving the same program without texts. Given the enhanced capabilities of smartphones, which were not available at the time this study was conducted, it could be postulated that these positive

findings could be further enhanced by smartphone and social networking use.

Indeed, a number of new opportunities are available for smartphones and social networking technologies. Both of these innovative technologies offer a number of exploratory avenues to help facilitate technological adaptations in a field that has generally lagged behind other areas of health. More specifically, within maltreatment prevention, social networking, smartphones, and tablets can help reach new populations (e.g., communicate with rural families), increase family engagement through non-traditional forms to increase interest, remind parents of appointments and/or homework assignments, and use nontraditional methods to teach home visitors and parents new skills (e.g., video chat instead of inperson sessions, "app"-based games or interactive activities). Additionally, these technologies are appealing to young adults, which are often the target of home- visiting interventions.

LIMITATIONS

Although the current findings are encouraging regarding the use of smartphones and social networking technologies, several limitations exist. First, the study used a small sample size, and given the qualitative nature of the analysis, the findings are not generalizable. Future studies would benefit from addressing these limitations and incorporating standardized measures that would allow for quantitative data analysis and examination of group comparisons, examination of parental skill acquisition, and examination of the way in which social networking is used by parent participants (e.g., how to parents connect with each other, how do they connect with the group, what frequency of communications correlates with results). Further, while there may be benefits of social networking, potential difficulties have been of concern to some researchers, clinicians, and university ethics boards. Similarly, some concerns were echoed in the survey and brief intervention feedback. Parents commented on the importance of "revealing information that is appropriate for the setting." Providers surveyed also commented on times when they had observed parents "airing their anger on Facebook" and making statements that "provoked negative repercussions from friends." Consistently, ethical discussions among clinicians about Facebook and social networking, while recognizing its benefits, have expressed concerns about potential breeches to Health Insurance Portability and Accountability Act rules, iatrogenic effects of parents who may make negative comments to a social networking group, losses to confidentiality that parents may incur unintentionally, and parents who may inappropriately use Facebook to air crisis and safety-related information. Thus, while online social networking offers an avenue of opportunity for enhancement of social service programs, inherent difficulties must be considered when designing adaptations.

CONCLUSION

The growth of smartphone and social networking technology reveals a number of new opportunities to address engagement-related dissemination difficulties in child welfare. When considering the integrated theory of parent involvement framework,³¹ social networking has the potential to improve parental involvement among individual, provider, programmatic, and neighborhood levels, including increasing individual motivation and engagement, allowing an interventionist to connect with parents more frequently, and connecting parents with one another and in turn helping them feel less socially isolated. Thus, while much needs to be learned about policies and training procedures that will protect client's best interests, it appears that the benefits of technologyenhanced interventions have the potential to far outweigh the costs. This serves as rich area for future study.

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REFERENCES

- U.S. Department of Health and Human Services, Administration for Children and Families, Administration on Children, Youth and Families, Children's Bureau. *Child Maltreatment 2011*. Washington, DC: U.S. Department of Health and Human Services, 2011.
- Gilbert R, Widom CS, Browne K, et al. Burden and consequences of child maltreatment in high-income countries. *Lancet*. 2009;373:68–81.
- Widom CS. Child abuse, neglect, and adult behavior: Research design and findings on criminality, violence, and child abuse. *Am J Orthopsychiatry*. 1989;59:355–367.
- Fang X, Brown DS, Florence CS, et al. The economic burden of child maltreatment in the United States and implications for prevention. *Child Abuse Negl.* 2012;36:156–165.
- Chaffin M, Friedrich B. Evidence-based treatments in child abuse and neglect. *Child Youth Serv Rev.* 2004;26:1097–1113.
- Whitaker DJ, Lutzker JR, Shelley GA. Child Maltreatment Prevention Priorities at the Centers for Disease Control and Prevention. *Child Maltreat*. 2005;10:245–259.
- Barth RP, Landsverk J, Chamberlain P, et al. Parent-Training Programs in Child Welfare Services: Planning for a More Evidence-Based Approach to Serving Biological Parents. *Res Soc Work Prac.* 2005;15: 353–371.

- Duggan AK, McFarlane EC, Windham AM, et al. Evaluation of Hawaii's Healthy Start Program. *Future Child*. 1999;9:66–90.
- Gomby D. Home Visiting: Recent Program Evaluations: Analysis and Recommendations. *Future Child*. 1999;9:4–26.
- McGuigan WM, Katzev AR, Pratt CC. Multi-level determinants of retention in a home-visiting child abuse prevention program. *Child Abuse Negl.* 2003;27:363–380.
- Lundquist LM, Hansen DJ. Enhancing treatment adherence, generalization, and social validity of parent-training with physically abusive and neglectful families. In: Lutzker JR (ed.) *Handbook of child abuse research and treatment*. New York: Plenum, 1998;449–471.
- Jones DJ, Forehand R, Cuellar J, et al. Harnessing innovative technologies to advance children's mental health: Behavioral parent training as an example. *Clin Psychol Rev.* 2013;33:241–252.
- Self-Brown S, Whitaker DJ. Parent-focused child maltreatment prevention: Improving assessment, intervention, and dissemination of technology. *Child Maltreat*. 2008;13:400–416.
- Sanders M, Calam R, Durand M, et al. Does self-directed and webbased support for parents enhance the effects of viewing a reality television series based on the triple P–Positive Parenting programme? J Child PsycholPsychiatry. 2008;49:924–932.
- Nixon RDV, Sweeney L, Erickson DB, et al. Parent-child interaction therapy: A comparison of standard and abbreviated treatments for oppositional defiant preschoolers. *J Consult Clin Psychol.* 2003;71:251– 260.
- Webster-Stratton C. The long-term effects of a videotape modeling parent-training program: Comparison of immediate and 1-year follow-up results. *Behav Ther.* 1982;13:702–714.
- Taylor TK, Webster-Stratton C, Feil EG, et al. Computer-based intervention with coaching: An example using the Incredible Years program. *Cogn Behav Ther.* 2008;37:233–246.
- Baggett KM, Davis B, Feil EG, et al. Technologies for expanding the reach of evidence-based interventions: Preliminary results for promoting social-emotional development in early childhood. *Topics Early Child Spec Educ*. 2010;29(4):226–238.
- McMahon R, Forehand R. Helping the noncompliant child: A clinician's guide to effective parent training. New York: Guilford, 2003.
- Bigelow KM, Carta JJ, Lefever JB. Txt u ltr: Using Cellular Phone Technology to Enhance a Parenting Intervention for Families at Risk for Neglect. *Child Maltreat*. 2008;13:362–367.
- Pew. Pew Internet and American Life Project 2012 Report. Washington, DC: Pew Research Center, 2012.
- 22. Eysenbach G, Powell J, Englesakis M, et. al. Health related virtual communities and electronic support groups: sytematic review of the effects of online peer to peer interactions. *Br Med J*. 2004;328:1–6.
- Delgado DH, Costigan J, Wu R, et al. An interactive Internet site for the management of patients with congestive heart failure. *Can J Cardiol.* 2003;19:1381–1385.
- Nguyen P, Gold J, Pedrana A, et al. Sexual health promotion on social networking sites: A process evaluation of The FaceSpace Project. J Adolesc Health. 2013;53:98–104.
- 25. Raghavendra P, Newman L, Grace E, et al. 'I could never do that before': Effectiveness of a tailored Internet support intervention to

increase the social participation of youth with disabilities. *Child Care Health Dev.* 2013;39:552–561.

- George DR, Dellasega C, Whitehead MM, et al.Facebook-based stress management resources for first-year medical students: A multi-method evaluation. *Comput Hum Behav.* 2013;29:559–562.
- Whitaker DJ, Lutzker JR, Self-Brown S, et al. Implementing an evidence-based program for the prevention of child maltreatment: The SafeCare[®] program. *Report on Emotional & Behavioral Disorders in Youth.* 2008;8:55–62.
- Bigelow KM, Lutzker JR. Using video to teach planned activities to parents reported for child abuse. *Child Fam Behav Ther.* 1998;20:1–14.
- Braun V, Clarke V. Thematic analysis. In: Cooper H, Camic PM, Long DL, Panter AT, Rindskopf D, Sher KJ (eds.) APA handbook of research methods in psychology, Vol 2: Research designs: Quantitative, qualitative, neuropsychological, and biological. Washington, DC US: American Psychological Association, 2012;57–71.
- Carta J, Lefever JB, Bigelow K, et al. Randomized Trial of a Cellular Phone-Enhanced Home Visitation Parenting Intervention. *Pediatrics*. 2013;132 Suppl 2:S167–173.
- McCurdy K, Daro D. Parent involvement in family support programs: An integrated theory. Fam Relat. 2001;50:113–121.