

## A Web-Based Mental Health Program: Reaching Parents at Work

Diane K. Deitz,<sup>1</sup> PhD, Royer F. Cook,<sup>1</sup> PhD, Douglas W. Billings,<sup>1</sup> PhD, and April Hendrickson,<sup>2</sup> MA  
<sup>1</sup>ISA Associates, Inc., and <sup>2</sup>OMNI Institute

**Objective** The purpose of the project was to test a web-based program providing working parents with the knowledge and skills necessary for prevention and early intervention of mental health problems in youth.

**Method** Study sample consisted of 99 parents who were randomized into either an experimental (program use) or waitlist control condition. Analysis of covariance and paired *t*-tests were used to compare response outcomes for the two groups. **Results** Parents receiving the intervention had greater knowledge of youth mental health issues and greater self-efficacy in handling these issues compared to controls. **Conclusions** Findings suggest that referring parents to a multimedia web-based program can improve parents' knowledge of children's' mental health and their confidence in addressing mental health issues. Web-based programs can be offered to individuals in multiple settings, including the workplace, thereby reaching large numbers of parents.

**Key words** parenting; parent empowerment; web-based education; web-based training; workplace; youth mental health.

### Introduction

#### Purpose

Over the past two decades, major advances have been made in psychosocial interventions designed to address childhood and adolescent depression and mental illness (Asarnow, Jaycox, & Tompson, 2001). Traditional pathways of information dissemination have been expanded to reach the caregivers of youth in multiple settings and through multiple mechanisms (Substance Abuse and Mental Health Services Administration, Center for Mental Health Services, 2007). This project was initiated to test the effectiveness of a web-based mental health program delivering prevention and early intervention materials to parents of youth in a workplace setting.

#### Background

The workplace is increasingly recognized as an important environment for delivering health promotion and disease management programs (Pelletier, 2005). More than one-third (37.2%) of the labor force consists of parents of minor children (Barnett & Gareis, 2004), and the workplace has become a place where parents can be reached with health improvement interventions. Mental health concerns have a substantial impact on the overall health of

a workforce (Bennett, Cook, & Pelletier, 2003), and the mental health of workers' children can be an important part of this dynamic. The prevalence of mental disorders in youth is substantial (Brent et al., 1997); however, these disorders often go unrecognized by parents and those closest to them (Wu et al., 2001). Efforts aimed at involving parents and strengthening the parent-child relationship hold much promise for workplace health promotion and children's mental health. Specifically, interventions that aim to empower parents (Cochran, 1987; Heflinger, 1997), foster positive communication in the family (Seiffge-Krenke, 1989), increase parental awareness and recognition of youth mental health problems (Logan & King, 2001), and build understanding of professional treatment options (Logan & King, 2001) would appear to have particular merit.

The mode of delivering parenting messages and materials varies widely. Web-based programs are increasing in popularity for a number of reasons including cost, privacy, lessening the effects of stigma, and flexibility in delivery (Griffiths, Lindenmeyer, Powell, & Thorogood, 2006). Web-based programs that are interactive, media rich, and incorporate personal assessment tools and the opportunity for individualized learning constitute one of the most promising recent advances in this important area of health

All correspondence concerning this article should be addressed to Diane K. Deitz, ISA Associates, 201 North Union Street, Suite 330, Alexandria, VA, 22314. E-mail: ddeitz@isagroup.com

*Journal of Pediatric Psychology* pp. 1-7, 2008

doi:10.1093/jpepsy/jsm108

*Journal of Pediatric Psychology* © The Author 2008. Published by Oxford University Press on behalf of the Society of Pediatric Psychology. All rights reserved. For permissions, please e-mail: journals.permissions@oxfordjournals.org

education (Billings, Cook, Hendrickson, & Dove, 2008; Christensen, Griffiths, & Korten, 2002; Evers, 2006). These programs aim to take full advantage of the available technologies and provide programs that are broadly accessible, individually tailored, and media rich (Crossman, 1997; Ritterband et al. 2003; Rothert et al., 2006).

### ***Aim and Hypotheses***

The web-based program, Youth Mental Health: A Parent's Guide (YMH), was designed to increase parents' ability to detect signs of depression and anxiety and facilitate prevention and early intervention of problems. Depression and anxiety were chosen as the focus of the program because of their high prevalence and risk of comorbidity (Lewinsohn, Hops, Roberts, Seeley, & Andrews, 1993). Our approach was to provide a web-based intervention targeted at working parents of elementary, middle, and high school youth. To accomplish this goal, the program provided information on the nature and symptoms of anxiety and depression, understanding treatment options, and recognizing the importance of good communication in fostering stronger family bonds. Central to our approach was the belief that a web-based program would offer an effective means of increasing both knowledge and self-efficacy through interacting with the program (enactive attainment) and viewing audio-narrated scenarios and real-life testimonials (vicarious learning and modeling). These constructs have been tested in previous studies and have been associated with empowerment of caregivers (Heflinger, 1997).

We hypothesized that compared to the control group, parents receiving the web-based program would exhibit significant gains in important outcomes, including (a) knowledge of mental health issues in youth; (b) self-efficacy in handling mental health issues in youth; (c) better family cohesion, adaptability, and positive communication; and (d) more positive attitudes toward seeking mental health services.

## **Method**

### ***Field Test Design and Procedures***

The design of the YMH study was a randomized controlled trial with pretest–posttest comparisons in each group. Parents or primary caregivers of elementary, middle, and high school youth were randomly assigned to either an experimental group that received access to the YMH Web site or a waitlist control group. The intervention period was for 2 weeks, and participants in the experimental group were encouraged to view the program as often as possible within that time period.

The 99 participants in our study were recruited from a worksite with a pool of 350 employees who were caregivers of youth between the ages 5 and 21 (size of the pool estimated by the company's wellness director). Participants were required to have a child currently living at home but were not required to have a child currently experiencing a mental health difficulty.

Participation was voluntary and was accomplished during a cafeteria-based campaign. Potential participants were told about the nature of the study and the content of the web-based program. The program was described as an educational tool designed to assist parents in the prevention of emotional problems in youth, as well as the early identification of problems and guidance on treatment when necessary. Incentives included access to a potentially interesting program, \$50 for completing the surveys (\$25 each administration) and entry into a \$500 raffle.

All participants were required to sign an informed consent document describing study procedures and steps taken to protect confidentiality. The study procedures were approved and periodically reviewed by the Institutional Review Board of ISA Associates.

### ***Sample***

Of the 99 participants enrolled into the study, 54 were men and 45 were women. The mean age was 42. The majority of participants were Caucasian (92.9%), married (80.6%), and had an annual income of 50,000 and above (82.6%). Twenty participants reported a child receiving previous mental health treatment, 7 reported a child currently receiving treatment, and 22 currently suspected a child with a mental health problem. There were a total of 37 unique cases of a known or suspected mental health problem given overlap in problem reporting, and 62 participants indicated that they did not have a previous or current mental health concern. The experimental and control groups did not differ significantly in chi-square analysis on any of the demographic characteristics of interest.

After the pretest and review period, all participants (experimental and control conditions) were asked to complete the posttest survey. Of the 99 employees who completed the pretest survey, 96 completed the posttest survey. Multiple reminders to complete the posttest were sent to the nonresponders, but were unsuccessful for three subjects.

### ***Survey Measures***

The measures contained in the online surveys are listed below. The majority of these measures have been used in previously published studies and have shown evidence of reliability and validity.

**Family Functioning Measures: The FACES III Scales**

The FACES III Scales (Olson, Portner, & Lavee, 1985) measures family cohesion and adaptability. Each scale consists of 10 items answered on a 5-point Likert scale. Alpha reliability for the cohesion scale is .83 and for adaptability .79. Higher scores reflect higher cohesion and adaptability.

**Parent–Adolescent Communication**

The Barnes and Olson's (1982) Parent–Adolescent Communication measure consists of two scales of 10 items, each assessing open family communication and problems in family communication. The items are answered using a 5-point Likert scale. Alpha reliability is .87 for the open family communication scale, and .78 for the problems in family communication scale. Higher scores reflect higher communication skills.

**Knowledge of Childhood Depression and Anxiety**

A series of 32 true/false items were constructed for the field test to assess parents' knowledge of depression, anxiety, treatment, and parenting as they are presented in the program. Separate subscales (with eight questions) were constructed for each of the content areas covered in the program. The overall alpha reliability for the knowledge scale is .76. Higher scores reflect more correct answers.

**Attitudes About Seeking Professional Psychological Help and Attitudes About Emotional and Mental Health Problems in Youth**

It is a 15-item scale adapted and expanded from the 10-item, unidimensional version of Fischer and Turner's 29-item scale measuring attitudes toward seeking professional psychological help (Fischer & Farina, 1995). Items are scored using a 5-point Likert scale. Cronbach's alpha for the original scale is .84. Scores are averaged, and higher scores reflect positive help-seeking attitudes.

**Treatment Seeking Self-Efficacy and Confidence in Ability to Address Mental Health Issues in Children**

It is an attitude scale consisting of 9 items answered on a 5-point response scale, assessing the extent of the participants' confidence and ability (self-efficacy) to effectively handle a mental health problem with their children. Cronbach's alpha for the self-efficacy scale is .83. Scores are averaged, and higher scores reflect greater self-efficacy and confidence.

**Reaction to the Program**

Experimental group participants were asked to rate the web-based program content on dimensions of clarity, usefulness, appeal, and ability to motivate. These questions were developed for the project and were scored on a

5-point Likert scale. Higher scores indicated a more positive reaction to the program.

**Intervention**

The web-based YMH program consists of four modules that are multimedia rich, fully narrated, and interactive. The program was constructed in accordance with the principles of social cognitive theory, including increasing self-efficacy and behavioral improvement through observational learning and mastery of skills (Bandura, 1986; Eng & Gustafson, 1999). The use of a multimedia approach (as opposed to the usual "click and read" programs) was designed to make the program more appealing and engaging, while providing opportunities for behavioral modeling and raising self-efficacy, with the intent of leading users to adopt new attitudes, beliefs, and behaviors. A brief description of the program is summarized below.

**Anxiety and Related Disorders**

This section contains information on the types of anxiety disorders, the typical signs and symptoms a child might exhibit, biochemical aspects of anxiety, and an interactive of the brain.

**Depression**

This section contains facts and statistics on the prevalence of depression, a description of the common signs and symptoms that youth can experience, an assessment tool, and discussion of special concerns including suicide.

**Treatment Options**

This section contains information on where to start, choosing the right provider, medications, and psychotherapy; discusses the assessment phase, the decision-making phase, and the services phase of the process; and contains printable sheets to take to the doctor.

**What Parents Can Do**

This section was designed to build parents' skills in the areas of communication, interpersonal relationships, and healthy lifestyles. The premise of this section was that a strong parent–child relationship could buffer many of the difficulties experienced by youth and families with mental health issues.

**Resources**

The resources section contains links to more advanced information and specific mental health issues.

**Data Analysis**

Analysis of covariance (ANCOVA) was the primary analytic technique used to test differences between the

experimental and control groups on outcome variables of interest. Pretest findings were entered as the covariate in all ANCOVA analyses. Paired *t*-tests were also conducted on these same outcomes to assess within-group changes. Subanalyses (ANCOVA) were also conducted on parents with a self-reported children's mental health problem, testing for differences in outcomes between the experimental and control groups. Finally, we conducted a program dosage analysis to look for differences between high and low utilization of the program and a descriptive analysis of reactions to the program for all participants and those with a mental health concern about their children.

## Results

Ninety-nine employees enrolled in the program, resulting in a participation rate of 28% of the company-estimated pool of potential participants. The response rates were similar for the intervention (96%) and control groups (98%). Missing values were imputed for those completing at least 80% of the scale under consideration. Intent-to-treat analyses were conducted on all experimental participants, including 11 individuals who reported that they did not view the online program (22%).

## Analyses

Table I summarizes the ANCOVAs for the knowledge and the self-efficacy measures. The total knowledge score was significantly greater for the experimental group than for the control group, as were the scores for the knowledge subscales of anxiety, depression, and treatment options. The only knowledge subscale that did not show significant differences between the groups was the parenting subscale. Paired *t*-test analysis of pretest to posttest differences in the experimental group indicated that mean scores rose in the

expected direction for all subscales and were statistically significant for knowledge of treatment ( $t = -2.92$ ,  $p = .006$ ) and total knowledge ( $t = -7.96$ ,  $p = .000$ ). These analyses did not reach significance for knowledge of anxiety, depression, and parenting. Paired *t*-test analysis of pretest to posttest differences in the control group were nonsignificant for all measures except total knowledge ( $t = -6.69$ ,  $p = .000$ ). There were no significant differences between the groups on the measures of family communication, adaptability, cohesion, and attitudes toward mental health issues.

There was a significant difference between the experimental and control groups on self-efficacy in handling mental health issues in their children ( $F = 12.73$ ,  $p = .001$ ). Also significant was the paired *t*-test analysis of increases in self-efficacy from pretest to posttest among the individuals receiving the intervention ( $t = -3.20$ ,  $p = .003$ ). Subanalyses investigating dosage of intervention, differences between families with known or suspected mental health problems, and reactions to the program were also conducted, but were not significant, and are not reported in this brief. Reactions to the YMH program are summarized in Table II. These data indicate that participants in the experimental group rated the program favorably on important dimensions of the content such as overall interest, appeal, and ability to motivate. Independent samples *t*-tests showed no significant differences on these ratings between general participants (those who did not have a child in treatment or with a concern) and parents with specific concerns about their children's mental health.

## Discussion

The study results demonstrate that parents receiving a web-based intervention had significantly greater knowledge of children's mental health issues and greater self-efficacy

**Table I.** ANCOVAs Comparing Web-Based Intervention vs. Waitlist Control

Measure	Web pretest	X (SD)	Web posttest	X (SD)	Waitlist pretest	X (SD)	Waitlist posttest	X (SD)	F*	P*
Total knowledge (All questions)	15.54	(2.89)	21.18	(5.36)	14.04	(3.86)	17.35	(5.24)	7.43	.008
Knowledge										
Anxiety	5.13	(1.44)	5.61	(1.42)	4.68	(2.01)	4.56	(2.0)	5.58	.021
Depression	4.00	(1.78)	4.60	(1.73)	2.79	(1.78)	2.82	(1.74)	10.25	.002
Treatment Options	3.50	(1.40)	4.32	(1.85)	2.82	(1.59)	3.08	(1.67)	4.95	.029
Parenting skills	6.70	(1.02)	6.79	(1.44)	6.64	(1.22)	6.54	(1.53)	0.52	.474
Open family communication	35.96	(5.40)	38.81	(6.17)	35.00	(7.45)	38.77	(6.83)	0.158	.692
Problem family communication	36.02	(5.35)	35.29	(6.46)	35.12	(7.43)	34.33	(6.78)	0.124	.726
Adaptability (Faces III)	27.16	(4.29)	27.31	(4.88)	26.00	(5.49)	26.25	(4.91)	0.127	.722
Cohesion (Faces III)	39.85	(5.41)	39.60	(5.51)	39.63	(5.55)	39.69	(5.65)	0.201	.655
Self-efficacy	2.64	(0.613)	2.89	(0.627)	2.60	(0.549)	2.55	(0.541)	12.73	.001
Mental health attitudes	3.07	(0.357)	3.13	(0.399)	3.15	(0.331)	3.23	(0.300)	0.273	.602

\*Values are for main effects between groups at posttest.

**Table II.** Reactions to the Program (Experimental Group) All and Parents with MH Concerns

Item	Means ( <i>SD</i> )		
	All experimental ( <i>N</i> = 42)	Parents with MH concerns ( <i>N</i> = 17)	Parents without MH concerns <sup>a</sup> ( <i>N</i> = 25)
Program content clear	4.07 (.712)	4.18 (.636)	4.00 (.764)
Program comprehensive	3.93 (.640)	3.94 (.748)	3.92 (.572)
Program informative	3.86 (.814)	3.94 (1.029)	3.80 (.645)
Program useful	3.81 (.804)	3.88 (.993)	3.76 (.663)
Program interesting	3.69 (.924)	3.82 (1.074)	3.60 (.816)
Program appealing	3.81 (.740)	3.94 (.899)	3.72 (.614)
Program motivating	3.48 (.773)	3.71 (.686)	3.32 (.802)

<sup>a</sup>Independent samples *t*-test comparing parents with and without MH concerns nonsignificant.

in handling these issues compared to waitlist controls. These findings indicate that the YMH program can be an effective intervention for improving parents' knowledge of children's mental health problems and boost their confidence in handling such issues. No significant effects of the intervention were found in family cohesion, adaptability, communication, and attitudes toward mental health and help-seeking.

The study findings lend support to the growing literature on the utility of offering web-based multimedia programs to improve the health of the general population (van Straten, Cuijpers, & Smits, 2008) and to provide insights for future efforts. The program was rated as appealing and useful to parents with a child in treatment or with a mental health concern, as well as to parents with no specific concerns at the time of viewing the program. Web-based programs like YMH can be an effective means of increasing knowledge and building skills in parents and have the advantage of ease of administration and broad-based application. These findings support the provision of web-based programs to all parents, and to parents in at-risk families, since knowledge of mental health issues and self-efficacy are often linked with greater parental involvement and an improved parent-professional partnership (Heflinger, 1997). Much empirical evidence supports Bandura's contention that self-efficacy beliefs touch many aspects of people's lives, including how they motivate themselves to persevere in the face of adversities and their ability to effectively address difficult issues such as mental health problems in children (Bandura, 1986; Pajares, 2002). Moreover, there has been a general recognition in the mental health field that educating parents and strengthening their skills provide a foundation for increasing the

resilience of at-risk children, and for minimizing or preventing the development of future problems (Weissman et al., 2005).

The reasons why measures of parenting and family functioning were not changed merit consideration. It is possible that the dosage provided by the program was insufficient to achieve desired changes in parenting knowledge and behavior. Also plausible is that the period between the pretest and posttest might have been too short (~1 month) to effect significant changes, or to adequately measure change related to such deeply entrenched concepts as patterns of communication and family bonding. Perhaps the most plausible explanation for the lack of effects on these outcomes is that these are very complex multifaceted behaviors, shaped over many years and by a variety of powerful influences, and are unlikely to change as a result of spending a few hours in a web-based program, no matter how well constructed the program. These attitudes and behaviors may be more firmly embedded in the base structure of the family dynamic and may require more intensive supplements or follow-ups to web-based interventions.

Finally, the participation rate of 28% compares quite favorably to other web-based programs in the workplace, where participation rates to date have rarely exceeded 10% of the target population (Cook, Billings, Hersch, Back, & Hendrickson, 2007; Rothert et al., 2006). Together with the low attrition rates (which also compare favorably to those of past studies of workplace web-based programs) and high user ratings, these data suggest that parents have interest in web-based programs like YMH and find them useful. These findings stand in some contrast to our team's previous research on in-person parenting programs in the workplace, indicating that parents are reluctant to participate in a workplace parenting program for fear that other employees might think that they have problems with their children (Deitz, Cook, & Hersch, 2005).

### Limitations

There were limitations to the study design that require mention. First, a potential concern with any web-based intervention is the "dose" or level at which participants completed their review of the program. We could not adequately control for individuals who simply skimmed through the program or those who had minimal interest in the program content. Another limitation relates to the lack of external validity—the extent to which the findings are generalizable to other, more diverse workforces and populations—as all participants were white and relatively well educated, and the majority did not have a known or

suspected mental health concern with their child(ren). Finally, the cafeteria-based recruitment procedure probably led to some selection bias in the sample.

### **Clinical Implications**

There is little doubt that parents are a vital and integral component in the referral, assessment, and treatment of childhood and adolescent mental health problems. These findings suggest that referring parents to clear comprehensive information and guidance contained in a multimedia web-based program could be a beneficial addition to clinicians' direct services. Web-based programs can also be offered to individuals in multiple settings, including the workplace and at home, thereby reaching large numbers of parents. As use of the Internet continues to grow in the general population and in multiple settings such as the workplace, these kinds of programs hold promise for reaching large numbers of parents who are concerned with their children's mental health. Future research could compare the added value of web-based interventions to traditional clinical intervention.

### **Acknowledgment**

The authors wish to thank the National Institute on Mental Health for their financial support of this project.

*Conflicts of interest:* None declared.

*Received February 25, 2008; received and accepted September 16, 2008*

### **References**

- Asarnow, J. R., Jaycox, L. H., & Tompson, M. C. (2001). A review on psychosocial interventions for depression in children and adolescents. *Journal of Clinical Child Psychology, 30*(1), 33–47.
- Bandura, A. (1986). *Social foundations of thought and action: A social-cognitive theory*. Englewood Cliffs, NJ: Prentice Hall.
- Barnes, H., & Olson, D. H. (1982). Parent adolescent communication scale. In D. Olson, H. I. McCubbin, H. Barnes, A. Larsen, M. Muxen, & M. Wilson (Eds), *Family inventories*. St. Paul: University of Minnesota Family Social Sciences.
- Barnett, R., & Gareis, K. (2004). Report of findings. *Community, families & work program. Parental after-school stress project*. Brandeis University. Retrieved November 16, 2006 from <http://www.nsba.org/site/docs/37600/37588>.
- Bennett, J. B., Cook, R., & Pelletier, K. (2003). Toward an integrated framework for comprehensive organizational wellness: Concepts, practices, and research in workplace health promotion. In J. C. Quick, & L. E. Tetrick (Eds), *Handbook of occupational health psychology* (pp. 69–96). Washington, DC: American Psychological Association.
- Billings, D. W., Cook, R. F., Hendrickson, A., & Dove, D. (2008). A web-based approach to managing stress and mood disorders in the workplace. *Journal of Occupational and Environmental Medicine, 50*(8), 960–968.
- Brent, D. A., Holder, D., Kolko, D., Birmaher, B., Baugher, M., Roth, C., et al. (1997). A clinical psychotherapy trial for adolescent depression comparing cognitive, family, and supportive therapy. *Archives of General Psychiatry, 54*(9), 877–885.
- Christensen, H., Griffiths, K., & Korten, A. (2002). Web-based cognitive behavior therapy: Analysis of site usage and changes in depression and anxiety scores. *Journal of Medical Internet Research, 4*(1), e3.
- Cochran, M. (1987). Empowering families: An alternative to the deficit model. In K. Hurrelmann, F. Kaufmann, & F. Losel (Eds), *Social intervention: Potential and constraint* (pp. 105–120). New York, New York: Mouton de Gruyter.
- Cook, R. F., Billings, D. W., Hersch, R. K., Back, A. S., & Hendrickson. (2007). A field test of a web-based workplace health promotion program to improve dietary practices, reduce stress, and increase physical activity: randomized controlled trial. *Journal of Medical Internet Research, 9*, e17.
- Crossman, D. M. (1997). The evolution of the World Wide Web as an emerging technology tool. In B. H. Kahn (Ed.), *Web-based instruction* (pp. 19–25). Englewood Cliffs, NJ: Educational Technology Publications.
- Deitz, D., Cook, R. F., & Hersch, R. (2005). Workplace health promotion and utilization of health services: Follow-up data findings. *Journal of Behavioral Health Services & Research, 32*(3), 306–319.
- Eng, T. R., & Gustafson, D. H. (1999). *Wired for health and well-being: The emergence of interactive health communication*. Washington, DC: U.S. Government Printing Office.
- Evers, K. E. (2006). eHealth promotion: The use of the internet for health promotion. *American Journal of Health Promotion, 20*(4), e40.

- Fischer, E. H., & Farina, A. (1995). Attitudes toward seeking professional psychological help: A shortened form and consideration for research. *Journal of College Student Development, 36*(4), 368–373.
- Griffiths, F., Lindenmeyer, A., Powell, J., & Thorogood, M. (2006). Why are health care intervention delivered over the Internet? A systematic review of the published literature. *Journal of Medical Internet Research, 8*(2), e10.
- Hellinger, C. (1997). A theory-driven intervention and evaluation to explore family caregiver empowerment. *Journal of Emotional and Behavioral Disorders, 5*(3), 184–191.
- Lewinsohn, P. M., Hops, H., Roberts, R. E., Seeley, J. R., & Andrews, J. A. (1993). Adolescent psychopathology. I: Prevalence and incidence of depression and other DSM-III-R disorders in high school students. *Journal of Abnormal Psychology, 102*(1), 133–144.
- Logan, D. E., & King, C. A. (2001). Parental facilitation of adolescent mental health service utilization: A conceptual and empirical review. *Clinical Psychology: Science and Practice, 8*(3), 319–333.
- Olson, D. H., Portner, J., & Lavee, Y. (1985). *FACES III*. St. Paul: University of Minnesota, Family Social Science.
- Pajares, F. (2002). *Overview of social cognitive theory and of self-efficacy*. Retrieved October 23, 2005 from <http://www.emory.edu/EDUCATION/mfp/eff.html>
- Pelletier, K. R. (2005). A review and analysis of the clinical and cost-effectiveness studies of comprehensive health promotion and disease management programs at the worksite: Update VI 2000-2004. *Journal of Occupational Medicine, 47*(10), 1051–1058.
- Ritterband, L. M., Gonder-Frederick, L. A., Cox, D. J., Clifton, A. D., West, R. W., & Borowitz, S. M. (2003). Internet interventions: In review, in use, and into the future. *Professional Psychology, Research and Practice, 34*(5), 527–534.
- Rotherth, K., Strecher, V. J., Doyle, L. A., Caplan, W. M., Joyce, J. S., Jimison, H. B., et al. (2006). Web-based weight management programs in integrated health care setting: A randomized control trial. *Obesity, 14*, 266–272.
- Seiffge-Krenke, I. (1989). Problem intensity and the disposition of adolescents to take therapeutic advice. In M. Brambring, F. Losel, & H. Skowronek (Eds), *Children at risk: Assessment, longitudinal research, and intervention* (pp. 457–477). New York: Walter de Gruyter.
- Substance Abuse and Mental Health Services Administration, Center for Mental Health Services (2007). *Promotion and prevention in mental health: Strengthening parenting and enhancing child resilience* (DHHS Publication No. CMHS-SVP-0175). Rockville, MD.
- Van Straten, A., Cuijpers, P., & Smits, N. (2008). Effectiveness of a web-based self-help intervention for symptoms of depression, anxiety, and stress: Randomized controlled trial. *Journal of Medical Internet Research, 10*(1), e7.
- Weissman, M., Wickramaratne, P., Nomura, Y., Warner, V., Verdelli, H., Pilowsky, D., et al. (2005). Families at high and low risk for depression. *Archives of General Psychiatry, 62*, 29–36.
- Wu, P., Hoven, C. W., Cohen, P., Liu, X., Moore, R. E., Tiet, Q., et al. (2001). Factors associated with use of mental health services for depression by children and adolescents. *Psychiatric Services, 52*(2), 189–195.