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*The Ohio Psychologist:“Evolving Health Care Structures: Psychology’s Place at the Table”*

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**From the Editor**

**Audrey E. Ellenwood, PhD**

"Expanding Health Care Structures: Psychology’s Place at the Table" is the focus and theme of the 2014 Ohio Psychologist (OP). This theme helps to remind psychologists that we do have an integral place in the health care system. The theme prompts psychologists in practice to reflect upon how they can be advocates and expand their knowledge and expertise into a number of settings. The theme further helps to remind us of the OPA’s mission to advance psychology as a science, as a profession, and as a means of promoting human welfare. What better way is there to advance psychology then through making ourselves available within various structures? Remember as psychologists we need a voice across a number of health care structures.

Hopefully, the 2014 Ohio Psychologist will inspire you to reflect upon how you might expand the need for psychology into various health care structures, think about your ethical approach when advertising, and learn about current research being conducted by students in the field of psychology.

As you reflect upon the enclosed content, keep an open mind and allow yourself to be challenged to think about how to influence, and secure the future of psychology as it analyzes, grapples with and embraces the role of psychologists within health care structures. In particular, changes in health care are upon us and will directly impact the way we think, act, and serve our clients. The 2014 OP addresses how to expand the field of psychology into various health care structures through the avenues of advocacy, practice and science.

**Advocacy**

Allen McConnell, MS and Richard Sears, PhD present in their article, “Mindfulness in Organizations,” general principles of mindfulness interventions in organizational settings, at both the individual executive level and the larger organizational level, and explore the potential impact of such interventions. Their article helps to remind us that psychologists have the potential to employ consultation skills to play an active role in the evolution of organizational systems.

**Practice**

Keeping psychology’s place at the health care table may necessitate advertising. Elizabeth Swenson, PhD overviews in her article, “Advertising Your Services: What Does the Ethics Code Mandate?” three ethical prohibitions on psychologists’ advertising one’s services. This article suggests that as we expand our place at the table we need to be cautious as to how we proceed in presenting ourselves. Leah Gongola, PhD, Jennifer Gonda, MSEd, Jennifer Loudon, PhD, and Carrie Fiol, MEd in their article “Social Skills Instruction in School Settings for Children with Autism: A Cognitive Behavior Therapy Approach” remind of us our role in the educational system as we collaborate with a number of professionals in regards to children with special needs. Kristine Woods, PhD and Erica Eisenman, PsyD in their article “Incorporating Apps into Mental and Behavioral Health Treatment” encourage mental health providers to consider ways of incorporating technology into their treatments, and suggest free apps for consideration. They share that a new host of mental health structures are available for enhancing our practices.

**Science**

Students who were recognized at the 2013 OPA Poster Session submitted articles describing an overview of their research. Stephanie Henley, Teresa Markis and Coner McLennan, PhD of Cleveland State University, who received the Graduate Empirical Category Award, in their article, “Examining the Relationship Between Eating Disorder Symptomology and the Processing of Body Image Words in Females” investigated the use of the Eating Disorder Inventory (EDI) as a predictive measure of our at-risk non-clinical sample using their performance on a visual lexical decision task. Results of the study concluded that there is a significant negative relationship between scores on the EDI and response times to body related words, supporting the use of the EDI as a predictive measure when determining our at-risk non-clinical samples for cognitive investigations. Wright State University students Samantha Sanderson and Emily Kiourtsis, winners of the Graduate Non-Empirical Award, in their article, “Concussion Connection” they introduce this program dedicated to increasing education and awareness about sports-related concussions and supporting athletes through their concussion recovery. Their article is timely as it encourages psychologists to think about expanding their roles into the health care structure of sports injuries and impact on an individual’s daily and emotional functioning.

The 2014 Ohio Psychologist

The Ohio Psychologist is a peer-reviewed publication. Each article submitted has been carefully reviewed by peer reviewers, their feedback has been provided to every author and changes to each manuscript have been made before the acceptance of the article was official.

Furthermore, Heather Gilbert, OPA’s managing editor, was highly instrumental in helping to publish the Ohio Psychologist. Her continued level of commitment and hours of work to produce this publication cannot be understated. We at OPA are very thankful for the expertise that she continues to bring every year to the OP publication.

The 2014 Ohio Psychologist is a peer-reviewed publication. Each article submitted has been carefully reviewed by peer reviewers, their feedback has been provided to every author and changes to each manuscript have been made before the acceptance of the article was official.

I would like to end by thanking our author’s who have contributed to the 2014 Ohio Psychologist. Your contributions are an invaluable contribution to both the Ohio Psychological Association and the profession. Your writings are the beginning of a voice that expands our place at the table in the arena of health care structures.

Audrey E. Ellenwood, PhD
Editor, Ohio Psychologist
**Mindfulness in Organizations**

*Allen J. McConnell, MS & Richard W. Sears, PsyD, MBA, ABPP*

*Union Institute & University*

**Abstract**

The ever-changing nature of organizations and the economy, especially related to health care delivery, often evoke a sense of anxiety and helplessness for individual providers. However, psychologists have the potential to employ consultation skills to play an active role in the evolution of organizational systems. The growing research base on mindfulness, an intervention which involves fostering conscious attention and awareness, also offers promise as a vital tool for making sound and appropriate decisions at the systems level. This article will describe some general principles of mindfulness interventions in organizational settings, at both the individual executive level and the larger organizational level, and explore the potential impact of such interventions.

**Introduction**

As health care structures continue to evolve, psychologists have the potential to make a profound impact within those structures. Consultation is one of the seven core competencies in psychology doctoral training programs as listed by the National Council of Schools and Programs of Professional Psychology (NCSP; Kenkel & Peterson, 2009). Psychologists are uniquely suited to apply their expertise in human behavior to implementing change in organizational settings (Sears, Rudisill, & Mason-Sears, 2006). Since every human being is affected by the evolution of our health care system, all stakeholders must learn to bring clear attention to the current situation, have a clear vision of future goals, and develop a plan to get there with careful consideration of the potential impact of each decision. Psychologists can utilize interventions such as mindfulness, which has been developed explicitly to improve attention and awareness, to influence these systems on an organizational level.

Increasing attention is being given to the clinical applications of mindfulness in reducing various psychological difficulties, such as stress, anxiety, burnout, and depression (Sears, Tirch, & Denton, 2011; Siegel, Germer, & Olendzki, 2009; Wolever et al., 2012). Mindfulness practices are beginning to be integrated into workplace wellness programs to improve work productivity and reduce the risk for employee illness, injury, and stress (Wojcik, 2011; Wolever et al., 2012). Mindfulness has recently gained the attention of organizational executives (Morrish, 2012). Mindfulness techniques may be attractive because they can be simple and short, which allows mindfulness to be easily incorporated into the workday. The principles of mindfulness may also have a positive impact upon the organization itself and how it interacts with the external environment.

**Mindfulness within an Organization**

A basic understanding of mindfulness is needed in order to understand its potential advantages within an organizational setting. A popular definition is “the awareness that emerges through paying attention on purpose, in the present moment, and nonjudgmentally to the unfolding of experience from moment to moment” (Kabat-Zinn, 2003, p. 145). An alternative definition is “a psychological state in which individuals engage in active information processing while performing their current tasks such that they are actively analyzing, categorizing, and making distinctions in data” (Krieger, 2005, p. 127). Both definitions combined lend support to the cognitive flexibility that occurs through mindful practices and the utility of mindfulness in completing work-related tasks. Individuals who learn stress management techniques, such as mindfulness, are able to focus their attention on their thoughts, feelings, behaviors, and physical sensations while temporarily suspending judgment or interpretation (Wolever et al., 2012). This enables individuals to stay present and learn to recognize automatic patterns of reacting that may ultimately be unproductive and unhealthy (Brown & Ryan, 2003). Interestingly, the concept of mindfulness can be applied at both the individual and organizational levels. Individual employees can utilize mindfulness techniques within the workplace to improve their work performance and job satisfaction. Similarly, an organization can engage in what Weick, Sutcliffe, and Obstfeld (1999) refer to as “collective mindfulness” in order to maintain organizational success.

**Mindfulness at the Individual Executive Level**

Executives are responsible for monitoring business trends and making decisions that ultimately promote the success of an organization. Executives have responsibility for managing the work production of employees, overseeing organizational goals, and promoting a healthy psychosocial work environment. Given the hierarchical nature of organizations, middle managers are especially prone to stress from the pressure of both superiors and subordinates (Sapolsky, 2005). Therefore, executives are at a greater risk for psychological difficulties, such as stress and burnout, compared to other employees (Sears, Rudisill, & Mason-Sears, 2006).

Mindfulness is a practice that may assist executives in remaining present-focused in order to comprehensively assess the current functioning of the overall organization, which is crucial to making decisions about future strategies. The ability to maintain attention to detail also offers those in leadership an opportunity to develop multiple interpretations of data that may foster more creative decision-making strategies (Khisty, 2010). Executives can learn to attend to the positive and productive interpretations and consciously discard unproductive or negative interpretations that hinder work performance (Avey, Wernsing, & Luthans, 2008). Ultimately, mindfulness offers a strategy that can foster more awareness and help improve an executive’s ability to understand, monitor, and respond to situations at work (Seiling & Hinrichs, 2005; Valentine, Godkin, & Varca, 2010). In comparison, less intentional activity or patterns of behavior, or running on “auto-pilot,” ignores today’s dynamic business environment (Weick & Sutcliffe, 2001). Without awareness, executives often mindlessly rely on previous business strategies and rigid routines that may no longer be as effective (Khisty, 2010; Seiling & Hinrichs, 2005).
In general, employees who practice mindfulness appear to have a competitive advantage in today's business environment. For example, some studies found that business leaders who practice mindfulness are often described as being more creative and exhibiting better leadership skills (Langer, 1989; Langer & Moldoveanu, 2000). Langer (1989) concluded that this results in leaders being more flexible, productive, and innovative. Furthermore, other studies suggest that individuals practicing mindfulness at work are more likely to report greater employer-employee relationships, have a higher level of job satisfaction and work productivity, and experience improved concentration, memory, learning ability, and creativity (Dolman & Bond, 2011; Wojcik, 2011). Dolman and Bond (2011) also found mindfulness to be associated with a reduction in staff turnover, absenteeism rates, and the cost of health insurance premiums for the overall organization.

Hunter and McCormick (2008) found that employees practicing mindfulness were more attuned to their work responsibilities compared to other employees. Employees also had more realistic work goals, more selfless behavior and attitudes at work, a greater enjoyment in their work, and had more positive interpersonal relationships with their co-workers. In addition, they were found to be more externally aware, more accepting of their work situation, more adaptable, better able to cope with difficult situations at work, less concerned with material acquisition and wealth, and more likely to derive meaning in life from other sources outside work.

### Mindfulness at the Organizational Level

Mindfulness can also be implemented on the organizational level in order to improve the psychosocial work environment. Weick and Sutcliffe (2006) suggest that organizations adopting a “collective mindfulness” are better equipped for success, and are described as being “highly reliable” by potential investors and customers. These “highly reliable organizations” not only promote the application of mindfulness techniques at the individual employee level, but mindfulness can also be adapted as a mindset to help guide organizational goals, mission and values, work practices, and business dealings.

There are five characteristics of “collective mindfulness” indicative of organizational success (see Weick, Sutcliffe, & Obstfeld, 1999; Weick & Sutcliffe, 2006). These characteristics are representative of an attitude and belief system that can permeate the quality of work conducted by all members of an organization. First, organizations practicing “collective mindfulness” avoid having a preoccupation with failure. Organizations who focus solely on success, and ignore past failures, present obstacles, and future challenges will experience limited success (Weick & Sutcliffe, 2006). Instead, an organization should remain present-focused and encourage the open discussion of mistakes or problems in order to maintain awareness of the current functioning of the organization.

The second characteristic involves being resistant to oversimplify interpretations of data (Weick et al., 1999; Weick & Sutcliffe, 2006). Often, executives of an organization will rely on heuristics or rigid rules and strategies that may no longer be effective (Ray, Baker, & Plowman, 2011). Mindfulness can help executives consciously monitor the suitability and effectiveness of their strategies and decision-making patterns.

Third, organizations practicing “collective mindfulness” will have a commitment to resilience (Weick et al., 1999; Weick & Sutcliffe, 2006). Being innovative, focused and maintaining awareness of details will assist an organization in identifying unexpected situations and determining the most effective management strategy in addressing the situation based on the data available (Ray et al., 2011). Similarly, another characteristic of “collective mindfulness” within an organization involves being sensitive to daily operations (Weick & Sutcliffe, 2006). In other words, employees at all levels are encouraged to maintain awareness and alertness to the current functioning of the organization.

Lastly, organizations promoting “collective mindfulness” are more likely to defer to expertise rather than position (Weick et al., 1999; Weick & Sutcliffe, 2006). Mindful executives tend to acknowledge their limitations, which results in pursuing advice from other experts within the organization (Ray et al., 2011). Executives are responsible for creating this type of environment and should have knowledge of how to appropriately utilize the expertise of all their employees in order to achieve organizational success.

The concept of “collective mindfulness” raises the question of how organizations can implement these attitudes, beliefs, and behaviors. There are currently no practical recommendations outlined in the literature on how to make “collective mindfulness” a reality, but promotion of changes to promote psychological and physical well-being often starts at the executive level (Sears, Rudisill, & Mason-Sears, 2006). The bulk of the research on work wellness programs, which may or may not include mindfulness techniques, is aimed towards employees in general and may not be reflective of the organizational mindset. Teaching non-management staff effective stress management and mindfulness techniques will likely help them cope with stress and other psychological difficulties. However, a majority of these employees return to unhealthy work environments after participating in a work wellness program (Flaxman & Bond, 2010). Therefore, executives must work to shift the culture toward a healthy psychological environment for the overall organization.

### Summary

Though the ever-changing, dynamic nature of organizations and the economy can evoke a great deal of fear and anxiety, psychologists have an opportunity to play an active role in these changes. Psychologists can leverage their expertise by using their knowledge of consultation and interventions such as mindfulness to impact thousands of lives. This will be especially true in the realm of health care delivery systems.

### References


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**About the Authors**

**Allen McConnell, MS** is a doctoral student in the clinical psychology program at Union Institute & University. He previously earned his master’s degree in human development and family science at The Ohio State University. His research interests include co-parenting, family systems, developmental disabilities, and the integration of psychology and spirituality. Professionally, Allen has 15 years of experience working with individuals with chronic medical conditions and developmental disabilities. He resides in Gahanna, Ohio with his wife and three children.

**Richard W. Sears, PsyD, MBA, ABPP,** is a psychologist in Cincinnati, where he runs a private psychology and consultation practice, and is core faculty in the PsyD Program at Union Institute & University. Dr. Sears is lead author of “Mindfulness in Clinical Practice” and “Consultation Skills for Mental Health Professionals”. His forthcoming books include: “Mindfulness: Living Through Challenges and Enriching Your Life in This Moment” (Wiley-Blackwell); “Perspectives on Spirituality and Religion in Psychotherapy” (PR Press); “Building Competence in Mindfulness-Based Cognitive Therapy” (Routledge); and “Mindfulness-Based Cognitive Therapy for PTSD” (Wiley-Blackwell). His website is www.psych-insights.com.

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Advertising Your Services: What Does the Ethics Code Mandate?

Elizabeth V. Swenson, PhD, JD, John Carroll University

Abstract

Keeping psychology’s place at the health care table may at times necessitate advertising. In this article the three ethical prohibitions on psychologists’ advertising their services are discussed, preceded by a brief history of their evolution. The Federal Trade Commission has made it inadvisable for professional associations to do anything that might be shown to restrain trade in the profession. Thus, there are three ethical rules for advertising. The three rules are: 1) Tell the truth; 2) Do not try to obtain testimonials from current psychotherapy clients/patients; and, 3) Do not engage in in-person solicitation or “chase ambulances.” Vignettes illustrate each rule.

“Many a small thing has been made large by the right kind of advertising.”
- Mark Twain

Keeping psychology’s place at the health care table may at times necessitate advertising. Was Mark Twain referring to your practice of psychology? If so, the ethics of advertising psychologists’ service have certainly changed since the 1800s!

History

The American Psychological Association did not make its first statement about the ethics of advertising until 1963, when it advised "modesty, scientific caution and due regard for the limits of present knowledge..." and the avoidance of misrepresentation. (APA, 1963, p. 57). In the 1981 Ethical Principles of Psychologists, the public statement principle had grown to 12 standards with a precise and lengthy statement of what could ethically be included in advertising, as well as what could not, emphasizing good taste and non-tackiness (APA, 1981, p. 635).

Sometime after 1981 ethical restrictions on advertising changed dramatically. The Federal Trade Commission, an agency of the executive branch of the United States government, with its focus on antitrust practices and consumer protection, got involved in the regulation of advertising by professional associations. This began, not unsurprisingly, with the regulation of advertising by attorneys. (See Goldfarb v. Virginia State Bar, 1975, wherein the United States Supreme Court struck down fee schedule regulation.) It became apparent in the mid-eighties to APA that if the ethics code regulation on advertising did not change, the FTC would do something about it. This resulted in revisions made in the 1990 Code (APA, 1990). A history of these developments is found in Koocher and Keith-Spiegel (2008). The current ethics code recognizes three restrictions on the advertising of psychologists’ services. (APA, 2010)

Tell the Truth

Consider Standard 5.01 (b), Avoidance of False or Deceptive Statements, of the Ethics Code.

Psychologists do not make false, deceptive or fraudulent statements concerning 1) their training, experience or competence; 2) their academic degrees; 3) their credentials; 4) their institutional or association affiliations; 5) their services; 6) the scientific or clinical basis for or results or degree of success of, their services; 7) their fees; or 8) their publications or research findings.

Although it is relevant to a broad array of activities, this standard has direct applicability to advertising psychologists’ services. In its simplest terms it means to tell the truth, and to not intentionally mislead the reader.

Harvey Harbinger, ABD, assisted in a one-credit hour summer workshop at Eastern Western State University. In the flyers that he distributed he wrote "Harvey Harbinger, ABD, specializes in cognitive behavioral therapy for PTSD, chronic anxiety in any situation, phobia reduction, enuresis, dream therapy, and most any psychotic disorder. He has a 95 percent cure rate and a 100 percent patient satisfaction rate. He teaches at Eastern Western State University, where many students are also his patients.” Any mental health professional would immediately find flaws in this paragraph. But would it be deceptive and/or false to some prospective patients? Referring to Standard 5.01 (b), it is apparent that Mr. Harbinger has not been up front about his specialties, his license, his degree (“ABD” is deceptive) or his university affiliation. Some commentators note that a percentage of success rate can be construed as deceptive as well. (Fisher, 2013).

Testimonials

Ethics Code Standard 5.05 states “Psychologists do not solicit testimonials from current therapy clients/patients or other persons who because of their particular circumstances are vulnerable to undue influence.” This does not preclude soliciting testimonials from former clients/patients, but does give us pause to consider their well-being and their particular vulnerability. What could they be vulnerable to? I think the Code presupposes that either they may not feel able to turn down the request or that the giving of the testimonial or the effects of being exposed in this way may be harmful. Testimonials need to be freely given with due regard for being informed. This seems like informed
This turns out to be a very useful list of criteria for several different post-termination activities.

Think about the following example. Marcia Multiple, PhD marketed her practice by presenting educational talks at the local public library. Her favorite topic was resilience. She liked to say that a number of her clients had increased their resilience through her thoughtful resilience exercises. These were available on DVD for purchase after the program. She found that sales of the DVD as well as treatment sessions “soared” after the presentations when former clients just happened to be in the audience to attest to the change in their lives after treatment by Dr. Multiple. Most individuals were delighted to substantiate these improvements, but some did so only because Dr. Multiple’s recommendation might be useful in the future for them and they did not want to disappoint her by refusing.

In-Person Solicitation
Ethics Code Standard 5.06 advises Psychologists do not engage, directly or through agents, in unwarranted in-person solicitation of business from actual or potential therapy clients/patients or other persons who because of their particular circumstances are vulnerable to undue influence. However, this prohibition does not preclude 1) attempting to implement appropriate collateral contacts for the purpose of benefiting an already engaged therapy client/patient or 2) providing disaster or community outreach services.

In-person solicitation is like “ambulance chasing,” but, of course, it does not have to be that blatant. It might mean handing out brochures in hospital emergency rooms or crisis pregnancy centers. In the previous example, Dr. Multiple also did something else to market her practice. Just after the talk on resilience a confederate of the psychologist walked around and selected some audience members whose appearance was problematic. She said to them that it seemed that they could use some resilience training and then offered them a brochure with a special discount lasting for the next week. This was accompanied by words to the effect that the person definitely looked like she needed to be more resilient. The brochures alone, if available, would have supervisory, evaluative or other authority such as clients/patients, students, supervisees, research participants and employees.”

It should be noted that Standard 5.06 specifically excludes inviting family members or other collateral contacts in to therapy with a current client and/or serving in a disaster-relief role. In addition, Standard 10.04, Providing Therapy to Those Served by Others, should also be distinguished, when a client seeks out an alternate opinion or therapist. In the latter case, the potential client initiates the contact, not the psychologist, and therefore it does not qualify as in-person solicitation.

General Principles
The Ethics Code Standards are mandatory. Not following them makes a psychologist eligible for sanctions by the APA, the licensing board, and/or the courts. These standards form the basis of complaints against psychologists. The General Principles, on the other hand, are aspirational. Psychologists aspire to behave according to the General Principles, as do we all, but these do not form the basis of complaints. Although all of the General Principles are important in the field of advertising, two especially stand out in this discussion of the ethics of psychologists. These are Principle A, Beneficence and Nonmaleficence, and Principle C, Integrity. Principle A reminds us that in our work as psychologists we should strive to do good and not to harm those with whom we work, in whatever capacity. Principle C inspires us to be honest and truthful in all things. In the broader scheme, we have the discipline of psychological science and the well-being of humankind as the basis for our profession. We should always be mindful of our ethical obligations.

Conclusion
This article has discussed the three rules for psychologists’ advertising: 1) Tell the truth; 2) Do not try to obtain testimonials from current psychotherapy clients/patients; and 3) Do not engage in in-person solicitation or “chase ambulances.” These derive from our ethical obligations to strive to do good, to avoid harm, and to behave with integrity.

References

About the Author
Elizabeth V. Swenson is a Professor of Psychology at John Carroll University. She earned her BS from Tufts University, MA and PhD from Case Western Reserve University in educational psychology, and J.D. from Cleveland State University. Her teaching interests are in professional ethics, legal psychology, children and families in the legal system, and the effects of hospitalization on children’s development. Dr. Swenson is a fellow of the American Psychological Association, the Midwestern Psychological Association, and the Phi Beta Kappa Society. She is a psychology department consultant for the Society for the Teaching of Psychology and a team leader/consultant-evaluator for the Higher Learning Commission of the North Central Association.

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Abstract
The recent increase in identification of autism necessitates that practitioners pay careful attention to evidence-based practices in effort to streamline progress for students with this diagnosis. Because social deficits are a defining feature for individuals with autism, Cognitive Behavior Therapy and social skills instruction are vital to support the social success for learners across school and community settings. This paper will address important elements of CBT and social skills instruction to include dosage in addition to specialized tools available to assess and target the individualized social needs of learners on the autism spectrum.

Cognitive and Behavioral Therapy
When programming for social skills, cognitive and behavioral approaches can be incorporated and hold merit for inducing positive change for students with autism. Cognitive and behavioral approaches include the practices of cognitive behavior therapy (CBT) and applied behavior analysis (ABA; Dowd, Clen, & Arnold, 2010). To begin, CBT is a general term and package of behavioral interventions such as skills training and cognitive interventions (Sturmy, 2012). CBT often involves the examination of cognitive schemas and distortions (Dowd et al., 2010) with an emphasis on the notion that our thoughts cause behavior, not external situations. By contrast, ABA has roots in behaviorism and is widely held as an effective strategy for educating students with autism (Kimball, 2002). B. F. Skinner, the father of operant behavior, set forth the paradigm known as the three-term contingency, in which observable behaviors are influenced by stimulus changes that have followed the behavior in the past (i.e., consequences; Cooper, Heron, & Heward, 2007).

With the influx of children with autism being serviced in school-based settings, it is critical for educators to evaluate and program for functional skills necessary for daily living activities, specifically social skills, during the Individualized Education Programs (IEP) process. Educational goals for students with autism often need to address language and social goals that are not part of standard curricula (National Research Council, 2001). This paper will provide a rationale for incorporating social skills instruction into the school-based setting, the history of cognitive and behavior therapy, frequency of services, and specialized tools available to assess and program for the individualized social needs of students with autism. The presented information is seminal for clinically based service providers as well, because treatment needs to integrate a collaborative approach across service providers and settings in effort to promote consistency and generalization of newly learned skills.

Social Skills Rationale for Social Skills Programming
Social skill deficits can include a lack of understanding reciprocity, empathy, and body language, thus, impacting a student’s ability to develop and maintain relationships (Bellini, Peters, Benner, & Hopf, 2007). As a result, in school settings, many students with autism are at risk of experiencing social anxiety, failure, or isolation by same-age peers (Bellini, 2008). Social skill targets are an increasingly important part of a student’s educational programming as the skills are building blocks of emotional, cognitive, and academic development (Bellini et al., 2007). Even though many students with autism are cognitively able to achieve academic success at a level that is equal to or above that of their peers (Schafer-Whitty, Travers, & Harnik, 2009); some academic environments may not be conducive to learning because of the inherent social demands. Thus, careful attention to teaching social skills for both academic and social success is vital as part of a holistic educational approach.
Table 1: Assessment Tools

<table>
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<tr>
<th>Tools</th>
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<tr>
<td>ABLLS™-R (Partington, 2008)</td>
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<td>AFLSTM (Partington &amp; Mueller, 2013)</td>
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<td>Social Skills Profile (Bellini, 2006)</td>
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Table 2. Example Goals

Expressing pride in academic work measured by not tearing up, throwing away, or balling up completed work in 4 out of 5 opportunities across three consecutive weeks.

Identifying and stating three positive self-statements without teacher prompts in 4 out of 5 opportunities across three consecutive days.

When provided with a visual support, identifying the current level of anxiety on a 5-Point Scale and problem solving the situation in 4 out of 5 opportunities across three consecutive weeks.

Table 3: Social Skills Curriculums and Resources

<table>
<thead>
<tr>
<th>Curriculums and Supports</th>
<th>Resources and Websites</th>
</tr>
</thead>
<tbody>
<tr>
<td>Worksheets for Teaching Social Thinking and Related Skills (Winner, 2007)</td>
<td>You are a Social Detective (Garcia Winner &amp; Crooke, 2008)</td>
</tr>
<tr>
<td>Building Social Relationships (Bellini, 2008)</td>
<td>The Incredible 5-Point Scale (Dunn Buron &amp; Curtis, 2012)</td>
</tr>
<tr>
<td>Navigating the Social World (McAfee, 2002)</td>
<td>The New Social Story Book (Gray, 2000)</td>
</tr>
<tr>
<td>Superflex... A Superhero Social Thinking Curriculum (Madrigal &amp; Garcia Winner, 2008)</td>
<td><a href="http://autismteachingstrategies.com/autism-strategies/">http://autismteachingstrategies.com/autism-strategies/</a></td>
</tr>
</tbody>
</table>
Assessing Social Skills

A number of tools are available to help educators and other team members identify specific areas to target during cognitive and behavioral therapy (see Table 1). When considering communication, social skills, and behavioral domains, The Assessment of Basic Language and Learning Skills-Revised (ABLLS™-R) and The Assessment of Functional Living Skills (AFLSTM), both provide baseline information to drive development of goals and curriculum. The main purpose of the ABLLS™-R and AFLSTM is to identify specific skill strengths in addition to disruptive or interfering behavior that can impede acquisition of new skills (Partington, 2008). A third tool that educators and therapists can employ is the Social Skills Profile (Bellini, 2008). This tool is not as specific as the previous tools discussed, but serves as a guide to identify critical skills that hinder social performance as well as skills needed for social success. Before and during cognitive and behavioral therapy, practitioners should utilize multiple assessment methods to include interviews with the student and behavioral observations (Dowd et al., 2010). From assessment to generating skills, the student is a key team member (Friend & Cook, 2009) and should assist in developing and self-monitoring target goals (see Table 2).

Social Skills Curriculums and Resources

Once team members have identified specific goals to address, coordinating curriculums and supports is the next step in the process. There are several social skills programs used during cognitive and behavioral therapy to develop communication and coping skills (see Table 3). A trained practitioner should use pre-identified curriculums in addition to supplemental supports such as social skills books, social stories, interactive worksheets, and varied visual supports (e.g., Social Behavior Map®). Worksheets for Teaching Social Thinking and Related Skills (Winner, 2007), Navigating the Social World (McAfee, 2002), and Building Social Relationships (Bellini, 2008) are three curriculums that break down social concepts into smaller steps and help individuals monitor their own social behavior. All curriculums and supports should focus on helping individuals reduce anxiety, learn coping skills, increase communication skills, and practice appropriate responses to situations that have previously resulted in socially negative interactions. The resources listed have the flexibility to be used during one-on-one and group sessions. Practitioners must keep in mind that the rate of social skill acquisition is variable from student to student and is process oriented. Instruction must be adjusted contingent on the strengths and needs of the student and also, on current environmental demands that warrant immediacy.

Frequency and Design of Therapy

Students with autism and social skills deficits need a carefully crafted integration of one-on-one direct therapy paired with group instruction. To start, individual direct therapy should occur daily. For example, this instruction can take place when the student transitions into school, in the morning, for a preview of the day and goal setting with instruction occurring once again at the end of the day to reflect on progress and areas of focus. Social skills learning should use a combination of intensive direct therapy in addition to interactive practice opportunities. To reinforce the skills learned in the one-on-one therapy environment, instruction should also occur within a small group format at least twice per week. The group format affords the opportunity to practice newly learned skills with same-age peers (Bellini, 2008).

In regards to treatment dosage, research specifies that 2.5 hours per week of social skills instruction results in minimal therapeutic gains (Gresham, Sugai, & Horner, 2001). With this in mind, a cognitive and behavioral approach to social skills should occur intensively and frequently. Incidental social opportunities should be arranged to ensure maintenance and transfer of learned skills into the natural environment across school and community settings (e.g., general education classroom setting, playground, cafeteria, birthday party).

Collaboration and a Therapeutic Team Approach

Cognitive and behavioral therapy emphasizes practicing skills in and out of the structured therapy environment, thus deeming all environments as therapeutic for the child. This has direct collaborative implications between members of the child’s comprehensive treatment team to include educators, school psychologists, clinical psychologists and clinical counselors, and parents. Because of this comprehensive and collaborative approach, cognitive and behavioral therapy is proven to be effective and has shown tangible results for students with autism (Wood et al., 2009). Team members should use a fluid system of communication to ensure that all parties are targeting similar areas and also, so that common language is used to teach and reinforce social skills for the student. This is particularly salient considering that many children with autism have broad systems of care to include school-based and clinical specialists. Teams must focus on a streamlined communication model so that members can support the child using consistent approaches.

Social skills deficits for students with autism often impact achievement in school and community based environments (Bellini et al., 2007); however, social skills therapy using a cognitive and behavioral approach can lead to successful outcomes when implemented frequently and with integrity. This approach identifies thoughts leading to behavior that can isolate individuals with autism. Socially inappropriate behaviors are replaced with appropriate behaviors that then lead to acceptance from same-age peers. Practitioners should strongly consider the use of cognitive and behavioral tools, curriculums, and evidence-based practices to meet the individualized needs of students with autism and bolster their social success across environments.

References


### About the Authors

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Carrie Fiol, MEd is an Intervention Specialist at Canfield High School. She works as an in-home ABA Tutor for students with behavioral needs. In addition, Carrie is a lead teacher at Camp Sunshine of Aurora, a summer camp to meet the individualized needs of students with disabilities.
Incorporating Apps into Mental and Behavioral Health Treatment
Kristine Woods, PsyD & Erica E. Eisenman, PsyD

Abstract
The use of technology is everywhere in our society today. The large majority of the U.S. public owns a smartphone or tablet device, including adults and children. In our technology-driven society, many individuals use online searches and eHealth interventions for medical and mental health information. The creation of apps allows for easier access to many medical and mental health “tools” such as monitoring logs, symptom checklists, relaxation techniques, and strategies and tips to treat a particular condition. These apps allow users to access information in an efficient and engaging manner, and can be used in combination with traditional medical and mental health services. Many apps are available for free, whereas others require purchase to access the full version of the app. Mental health providers are encouraged to consider ways of incorporating technology, such as apps, into their treatments, and we have identified a handful of free apps for consideration.

Introduction
We live in a technology-driven society with approximately 77 percent of U.S. households owning a computer and 84 percent owning a cell phone (Wellman, Smith, Wells, & Kennedy, 2008). Similarly, eHealth interventions have increased in popularity (Fox, 2008), and online informational searches related to depression, anxiety, stress, or mental health issues rank among the top ten most popular searches (Fox, 2006). Many users reported that information gathered online changed their thinking about lifestyle changes such as diet and exercise, and some users reported that the information changed their methods of coping with a chronic condition. Software applications, referred to as apps, are used for a variety of purposes, and Apple, Inc. estimated 20 million apps were downloaded from iTunes in 2012 (as cited in Wearing, Nollen, Befort, Davis, & Agemy, 2014).

Researchers have started to examine the use of apps in health care for a variety of conditions (Boulos, Wheeler, Tavares, & Jones, 2011; Kailas, Chong, & Watanabe, 2010; Abroms, Padmanadhan, Thaweethai, & Phillips, 2011). Many teenagers and school-age children are using apps on smartphones and iPads, and research suggests apps may be of educational value, assisting with comprehension and behavior change in children (as cited in Wearing et al., 2014).

As clinicians, there are a variety of opportunities to incorporate apps into treatment for purposes such as tracking devices for targeted symptoms (e.g., pain logs, medication logs), assistive relaxation devices for home practice (e.g., relaxation exercises, breathing pacers), and monitoring forms (e.g., monitoring of thoughts associated with depression or anxiety). Whereas many apps require the user to purchase the app, several high-quality apps are available for free, making access to this type of intervention tool cost-effective.

Considerations and Precautions of App Use
To ensure credibility of information included in apps, readers are encouraged to download and experiment with all apps prior to recommending them to clients. This review will allow the clinician to identify features applicable to the treatment and provide the opportunity to customize use of the app for a client’s specific presenting concerns. Some general guidelines for selecting apps...
include: seeking information from a credible source, understanding who benefits from purchasing the app, being objective and trusting one’s instincts regarding the app, avoiding apps developed by pharmaceutical and medical device companies, and avoiding apps designed to provide a diagnosis (Torrey, 2012). Many apps provide written reviews and feedback from other users, and these comments may be useful in the decision to recommend an app to a client. However, these reviews are not regulated and are a subjective rather than an objective assessment of the app. Experimenting with apps provides clinicians with information about ease of use and how much time may be spent in session for a client to understand how to utilize an app for use outside of treatment sessions.

When reviewing apps, readers are encouraged to consider the app creator, particularly as anyone is permitted to create an app for distribution online. Although the Federal Trade Commission (FTC) does not regulate the distribution of apps, the FTC has become involved when formal complaints have been filed (Torrey, 2012). Currently, no clinical data on effectiveness or clear professional guidelines are available (Fuscaldo, 2013), and our suggestion to use apps in treatment is intended to assist with implementation and tracking of targeted behaviors rather than to replace traditional medical or mental health services. Clinicians may also educate clients about the use of apps as tools to assist in treatment, and explain it is best not to utilize apps as a treatment in and of themselves, independent from work with medical or mental health professionals.

The apps listed in Tables 1-3 are a small selection of free apps that may be of interest to readers. Certain apps are not compatible with all devices, and we attempted to provide recommendations for each device. Additional apps are available through iTunes, Google Play and Amazon.

Practical Implementation of Apps

Our work within a children’s hospital has allowed for the opportunity to use many of the apps for managing chronic medical conditions. For example, the apps listed in Table 3 are frequently recommended to teenagers participating in treatment for headache as a way of pacing and practicing diaphragmatic breathing. Feedback from teens has been positive and suggests that the apps engage them in the activity in a manner they find helpful. Of the apps listed in Table 3, BioBreathing is most often recommended to our teens due to ease of use and simplicity of the app.

Of the apps listed in Table 2, iHeadache is most often recommended by the first author (KW) as an alternative to a paper headache log. This app is more complex and would not be recommended for younger children to use without assistance from a parent. However, for teenagers and adults, the app offers a convenient method of tracking information pertinent to headache patterns, and teens have given positive feedback after using the app to track their headaches. Carb Counting with Lenny is geared towards younger children and developmentally, it may be too childish for teens and adults. When incorporated into treatment, it should not be used for daily carbohydrate counting due to the limited food database, and instead is intended for assisting young children to learn about carbohydrate values in common foods. Dosecast offers a convenient method of tracking medication management. In experimenting with the app (EE), Dosecast was an easy and effective method of recording when a medication was taken, and the medication reminder feature was useful in consistency of administration.

Several of the apps in Table 1 were selected for inclusion based on their potential applicability to readers of the Ohio Psychologist. Each app was downloaded by one of the authors, who experimented with using the app for its intended purpose. Both the Depression CBT Self-Help Guide and the Worry Box: Anxiety Self-Help Guide apps offer a selection of quality relaxation recordings which are suitable for home practice of relaxation techniques. The most useful feature of the T2MoodTracker is the ability to view progress and changes over time for each of the scales selected. In sessions, using this feature may be a helpful tool for showing clients mood or behavior change throughout the course of treatment. One benefit of using SleepCoach is the ability to customize settings on several sleep hygiene domains (i.e., setting reminders for practice of relaxation exercises at a designated time daily) and turn features off if they do not apply to the user’s specific sleep concerns (i.e., an alarm at a designated time of day reminding the user to discontinue caffeine consumption).

<table>
<thead>
<tr>
<th>Table 1. Apps for Mental Health Treatment</th>
<th>App Name</th>
<th>App Components</th>
</tr>
</thead>
<tbody>
<tr>
<td>Depression CBT Self-Help Guide$^1$, $^2$, $^3$</td>
<td>Education about depression, assessment of symptoms using the PHQ-9, suggestions for coping skills, thought diary, and audio tracks for emotion training, mindfulness, and relaxation</td>
<td></td>
</tr>
<tr>
<td>The Worry Box-Anxiety Self-Help Guide$^2$, $^3$</td>
<td>Education about anxiety, modification of worry thoughts, and audio tracks for emotion training, mindfulness, and relaxation</td>
<td></td>
</tr>
<tr>
<td>T2MoodTracker$^1$</td>
<td>Tracking on 6 scales (depression, anxiety, stress, post-traumatic stress, brain injury, general well-being) and has an option to custom build a scale to monitor other moods/behaviors; track daily events, medication changes, and other treatments used</td>
<td></td>
</tr>
<tr>
<td>ReliefLink$^1$</td>
<td>Developed for suicide prevention and allows the user to track mood and thoughts, create a safety plan, using coping techniques such as mindfulness, locate the closest hospital or mental health clinic during crisis, and access help through a therapist, support group, or emergency call to 911</td>
<td></td>
</tr>
<tr>
<td>SleepCoach$^1$</td>
<td>Sleep tips and guidelines, screening questionnaire to assess risk of a sleep disorder, and tracking of quantity and quality of sleep</td>
<td></td>
</tr>
<tr>
<td>PTSDCoach$^1$, $^2$</td>
<td>Designed for Veterans and active duty military with PTSD, and it allows the user to access information about PTSD, professional services for treatment of PTSD, a self-assessment tool, and tips for managing stress associated with living with PTSD (i.e., relaxation skills, positive self-talk, anger management)</td>
<td></td>
</tr>
</tbody>
</table>

$^1$iPhone, $^2$Android, $^3$Kindle Fire
### Table 2. Apps for Physical Health Treatment

<table>
<thead>
<tr>
<th>App Name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>iHeadache&lt;sup&gt;1&lt;/sup&gt;</td>
<td>Track frequency, duration, severity, disability and impact on functioning, associated symptoms, triggers, medication use and notes about the headaches</td>
</tr>
<tr>
<td>LoseIt&lt;sup&gt;1, 2&lt;/sup&gt;</td>
<td>Food tracker to set a daily calorie goal, calorie counter with barcode scanner, meal planning, exercise tracker, exercise planning</td>
</tr>
<tr>
<td>MyFitnessPal&lt;sup&gt;1, 2&lt;/sup&gt;</td>
<td>Caloric counter with large database of food calories, tracks all major nutrients (calories, fat, protein, carbs, etc.); tracks weight and measurements; tracks cardio and weight training</td>
</tr>
<tr>
<td>RunKeeper&lt;sup&gt;1&lt;/sup&gt;</td>
<td>Track running, walking, cycling, cardio, and weight training; calculates speed, distance, calories burned; provides suggested routes using phone GPS; offers motivation and coaching; can be synced with other health/wellness apps</td>
</tr>
<tr>
<td>LiveStrong My Quit Coach&lt;sup&gt;1&lt;/sup&gt;</td>
<td>Personalized plan to quit immediately or gradually reduce nicotine use, daily tracking of nicotine consumption and allowance; ability to set own motivations, option to earn badges and rewards, offers tips and facts</td>
</tr>
<tr>
<td>Carb Counting with Lenny&lt;sup&gt;1, 2&lt;/sup&gt;</td>
<td>Assists children in learning to count carbohydrates for management of diabetes; includes small database of foods with amount of carbohydrates per serving (ability to add foods of your own), games to learn about carbohydrates in a fun, engaging manner</td>
</tr>
<tr>
<td>Glooko&lt;sup&gt;1, 2&lt;/sup&gt;</td>
<td>Synes with various meters (ACCU-CHEK, Buyer, CareSens, FreeStyle, GLUCOCARD, OneTouch, ReliOn) to provide logbook of blood glucose levels, statistics for all readings and by meal type, and allow setting goals for adherence and healthy habits</td>
</tr>
<tr>
<td>Dosecast&lt;sup&gt;1, 2&lt;/sup&gt;</td>
<td>Lists medications with dosage, strength, personal directions for medication, and schedule; provides reminders to take medication on a schedule, at intervals, or as needed; premium edition available for purchase with additional features (multiple drug types, dose history and adherence, quantity tracking and refill alert, multi-person support, doctor and pharmacy tracking, drug images, drug database)</td>
</tr>
<tr>
<td>Catch My Pain: The Pain Diary&lt;sup&gt;1, 2&lt;/sup&gt;</td>
<td>Tracking of experience of pain (duration, intensity, localization, and description of pain), list medication for pain, log of medications taken, and sharing pain diary through email; pro edition available for a fee, and includes log of emotional state during pain and medication reminders</td>
</tr>
</tbody>
</table>

<sup>1</sup>iPhone, <sup>2</sup>Android, <sup>3</sup>Kindle Fire

### Table 3. Apps for Stress/Relaxation

<table>
<thead>
<tr>
<th>App Name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Breathe2relax&lt;sup&gt;1, 2, 3&lt;/sup&gt;</td>
<td>Video demonstration of diaphragmatic breathing with instructions, psychoeducation on stress and the effects of stress on body systems, guided breath pacer with adjustable inhalation and exhalation rates</td>
</tr>
<tr>
<td>MyCalmBeat&lt;sup&gt;1, 2&lt;/sup&gt;</td>
<td>Manage stress through slow breathing, calculate personal best breathing rate</td>
</tr>
<tr>
<td>BioBreathing&lt;sup&gt;1&lt;/sup&gt;</td>
<td>Breath pacer which can be adjusted individually based on inhalation and exhalation speed</td>
</tr>
<tr>
<td>PacedBreathing&lt;sup&gt;2&lt;/sup&gt;</td>
<td>Breath pacer which can be adjusted individually based on inhalation and exhalation speed; offers custom breathing profiles</td>
</tr>
</tbody>
</table>

<sup>1</sup>iPhone, <sup>2</sup>Android, <sup>3</sup>Kindle Fire
Conclusions

Utilizing technology in treatment, such as the apps described in this article, may provide additional tools for engaging clients in behavior change. As the number of adults and children with access to computers and smartphones rises (2013 estimate of smartphone ownership is 64.7 percent of the US market; Sterling, 2013), access to apps is readily available. Use of these apps may provide innovative ways of engaging clients in practice of skills, behavioral monitoring, and lifestyle changes. As most adults and youth carry phones and electronic devices with them throughout the day, these apps offer convenient ways to monitor symptoms and behaviors.

Many of the apps listed in Tables 1-3 are available for free. However, several apps offer additional features that require purchasing the extended version of the app. For many users, the free version will be an adequate addition to their standard medical and mental health treatment, thus eliminating the need to purchase the full app. Readers are encouraged to allow time to personally review apps prior to recommending in treatment to ensure the app is of high quality and contains appropriate content for the user. With the increased use of technology in society today, access to treatment-related apps is expected to increase and recommending the use of reputable apps is one of many therapeutic tools available for psychologists and behavioral health providers.

References


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Examining the Relationship Between Eating Disorder Symptomology and the Processing of Body Image Words in Females

Stephanie A. Henley, Teresa A. Markis & Conor T. McLennan, PhD Cleveland State University

Abstract

Research has demonstrated that individuals with an eating disorder selectively attend to stimuli related to their concerns. However, there has been relatively little consistent evidence with at-risk non-clinical samples. One possible reason is the measure used to determine the at-risk non-clinical sample. The current study investigated the use of the Eating Disorder Inventory (EDI) as a predictive measure of our at-risk non-clinical sample using their performance on a visual lexical decision task. Our results demonstrate that there is a significant negative relationship between scores on the EDI and response times to body related words, supporting the use of the EDI as a predictive measure when determining our at-risk non-clinical samples for cognitive investigations.

Introduction

Attentional biases have been studied in both clinical and non-clinical samples of individuals at-risk for an eating disorder (Dobson & Dozois, 2004; Markis & McLennan, 2011). Dobson and Dozois (2004) conducted a meta-analysis of attentional biases in individuals with eating pathology and found evidence for an attentional bias for body words in anorexic and bulimic individuals. Bulimic individuals also demonstrated an attentional bias for food-related words.

Vitousek and Hollon’s (1990) cognitive theory of eating disorders further explains this attentional bias. Their theory suggests individuals with eating pathology develop self-schemas around their preoccupation with the body. Accordingly, these individuals are thought to demonstrate facilitation for schema-congruent information (e.g., fat stimuli) and interference from schema-incongruent information (e.g., thin stimuli). One way this attentional bias is investigated is through the use of a lexical decision task, in which participants decide on each trial whether the presented stimulus is a word or a nonword (e.g., Meyer & Schvaneveldt, 1971). According to Vitousek and Hollon’s (1990) cognitive theory, the use of a lexical decision task with clinical as well as non-clinical samples, would demonstrate faster reaction times (RTs) to schema-congruent body related words (e.g., fat words).

Cassin et al. (2008) used a lexical decision task to investigate this attentional bias in an at-risk non-clinical sample. To determine their at-risk non-clinical group, Cassin et al. (2008) used the internalization subscale of the Sociocultural Attitudes Towards Appearance Questionnaire (SATAQ; Heinberg, Thompson, & Stormer, 1995) and the Eating Disorders Examination-Questionnaire (EDE-Q; Fairburn & Beglin, 1994). Inconsistent with other studies (Ferraro, Andres, Stromberg, & Kristjanson, 2003), Cassin et al. (2008) did not obtain any evidence of facilitation toward fat words. One possible explanation may be related to the measures used to determine their at-risk non-clinical sample. While the measures used in their study are considered reliable in helping to assess individuals at-risk for an eating disorder, these measures may not encompass a sufficient number of the traits of clinically diagnosed eating disordered individuals.

The Eating Disorder Inventory (EDI; Garner, Olmstead, & Polivy, 1983) is a 64-item self-report questionnaire that assessed both psychological and behavioral traits common in anorexic and bulimic individuals. It assesses these traits by using eight subscales: 1) drive for thinness; 2) bulimia; 3) body dissatisfaction; 4) ineffectiveness; 5) perfectionism, 6) interpersonal distrust; 7) interoceptive awareness; and, 8) maturity fears. The first three subscales (e.g., drive for thinness, bulimia, and body dissatisfaction) assess behaviors and beliefs related to body shape and eating. The remaining five subscales measure traits found in individuals with eating pathology as identified by clinical theorists (Garner, Olmstead, & Polivy, 1983). The EDI was found to have high reliability in determining an individual at-risk for an eating disorder. Given the various psychological and behavioral traits the EDI encompasses, we predicted that the EDI would be a more reliable predictor of being at-risk for an eating disorder, and thus should be used in cognitive investigations when determining the at-risk non-clinical sample.

Purpose of the Study

In the current study, we investigated the relationship between the EDI and RTs in a visual lexical decision task to a specific type of body-related words (i.e., fat words) in a non-clinical sample. Understanding the nature of this relationship may have important theoretical and practical implications. For example, our results may serve as the basis for novel methods of determining which individuals in a non-clinical sample may be at-risk for developing eating disorders.

Hypothesis

We hypothesized that scores on the EDI would be significantly correlated with RTs to fat words in a lexical decision task. More specifically, we predicted that the subscales designed to assess body shape and eating (e.g., drive for thinness, bulimia, and body dissatisfaction) would be significantly negatively correlated with participants’ RTs in the lexical decision task. We predicted no relationship between the remaining five subscales (e.g., ineffectiveness, perfectionism, interpersonal distrust, interoceptive awareness, and maturity fears) and RTs to fat words.

Method

Participants

Female undergraduate psychology students (n=76) at Cleveland State University voluntarily participated in this study and received research credit for their participation. All participants were native speakers of American English. The sample consisted of Caucasian (60.5%), African American (19.7%), mixed ethnicity (11.8%), Hispanic (3.9%), Asian American (2.6%), and European American (1.3%). Participants had a mean age of 21.6 (SD=6.6) and a mean of 1.8 years (SD=1.1) of post-secondary education.
Measure

Eating Disorder Inventory (EDI, Garner, Olmstead, & Polivy, 1983)

The EDI is a 64-item self-report questionnaire consisting of eight sub-scales that measure: 1) Drive for Thinness; 2) Bulimia; 3) Body Dissatisfaction; 4) Ineffectiveness; 5) Perfectionism; 6) Interpersonal Distrust; 7) Interoceptive Awareness; and, 8) Maturity Fears. It was designed to assess psychological and behavioral traits common in individuals with maladaptive eating behaviors (e.g., anorexia, bulimia).

Visual Stimuli

The visual lexical decision task used four types of word stimuli: 20 fat (e.g., obese, huge), 20 thin (e.g., skeletal, slim), 40 neutral (e.g., humid, casual), and 80 nonwords (e.g., ain, fuclter). The word stimuli were matched on mean log frequency (Francis & Kucera, 1982), familiarity (Nusbaum, Pisoni, & Davis, 1984), mean number of letters per category, number of abstract and concrete words per category, and frequency weighted neighborhood density (Vitevich & Luce, 1998).

Apparatus

The stimuli were presented with SuperLab 4.0.7b software (Cedrus Corporation, San Pedro, CA). RTs in milliseconds were recorded using an RB-730 response box from the onset of the presentation of the stimulus word until the onset of the participant’s response.

Procedure

All participants were tested individually. Participants began by completing informed consent and a demographics questionnaire. Participants then completed the EDI. Upon completion of the EDI, participants completed a lexical decision task in which they were instructed to respond to each stimulus as quickly and accurately as possible by pressing a button with their left hand to respond “nonword” and a button with their right hand to respond “word.” Participants were debriefed and given credit for their participation.

Results

Prior to the main analysis, we removed outliers, as is typically done with lexical decision task RT data. Specifically, we excluded RTs to all incorrect responses. Next, we excluded all RTs for correct responses greater than two standard deviations (SDs) above or below the mean for each word category. Finally, using the overall mean of each participant’s word category, we replaced means greater than two SDs above or below the overall mean for the word category. Overall we included 97 percent of all RTs to correct responses.

In order to investigate the relationship between RTs to the fat words and scores on the EDI and the eight subscales, one-tailed correlation analyses were performed. Consistent with our hypothesis, EDI scores were significantly negatively correlated with RTs to fat words, r = -.253, p = .014. Analysis of the subscales revealed drive for thinness, bulimia, body dissatisfaction, and ineffectiveness were all significantly negatively correlated with RTs to fat words (Table 1). Perfectionism, interpersonal distrust, interoceptive awareness, and maturity fears were not correlated with RTs to fat words (Table 1).

Discussion

The purpose of our investigation was to examine whether RTs to fat words were negatively correlated with scores on the EDI. Consistent with our predictions, we found a significant negative correlation between RTs to fat words and scores on the EDI. Our results are consistent with previous research that demonstrates, in a lexical decision task, at-risk non-clinical individuals may demonstrate facilitation toward fat words (Ferraro, Andres, Stromberg, & Kristjanson, 2003). The significant negative correlation between RTs to fat words and the EDI demonstrates that as scores on the EDI go up (i.e., individuals who are more likely to be at-risk for an eating disorder), RTs to fat words get faster.

Consistent with our predictions, drive for thinness, bulimia, and body dissatisfaction were all significantly negatively correlated with RTs to fat words, suggesting subscales interested in attitudes and behaviors toward the body (Garner, Olmstead, & Polivy, 1983) are most predictive of RTs to fat words. These relationships demonstrate support for both attentional bias and Vitousek and Hollon’s (1990) cognitive theory. Individuals preoccupied with their body will have an attentional bias toward those words most related to their body concerns (i.e., fat words). Interestingly, ineffectiveness was also significantly negatively correlated with RTs to fat words. According to the EDI (Garner, Olmstead, & Polivy, 1983), ineffectiveness is defined as a feeling of inadequacy, lack of security, lack of control, and having a negative self-concept. The

<table>
<thead>
<tr>
<th>Variables</th>
<th>M</th>
<th>SD</th>
<th>r</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Fat Words</td>
<td>609.54</td>
<td>79.39</td>
<td>-</td>
</tr>
<tr>
<td>2. EDI</td>
<td>2.77</td>
<td>.67</td>
<td>-25*</td>
</tr>
<tr>
<td>3. Drive for Thinness</td>
<td>3.04</td>
<td>1.24</td>
<td>-29**</td>
</tr>
<tr>
<td>4. Bulimia</td>
<td>1.95</td>
<td>.88</td>
<td>-20*</td>
</tr>
<tr>
<td>5. Body Dissatisfaction</td>
<td>3.17</td>
<td>1.29</td>
<td>-27**</td>
</tr>
<tr>
<td>6. Ineffectiveness</td>
<td>2.19</td>
<td>.83</td>
<td>-23*</td>
</tr>
<tr>
<td>8. Interpersonal Distrust</td>
<td>2.88</td>
<td>.90</td>
<td>-13</td>
</tr>
<tr>
<td>9. Introspective Awareness</td>
<td>2.36</td>
<td>.86</td>
<td>-12</td>
</tr>
<tr>
<td>10. Maturity Fears</td>
<td>2.87</td>
<td>.72</td>
<td>.02</td>
</tr>
</tbody>
</table>

* Correlation is significant at the 0.05 level (one-tailed).
** Correlation is significant at the 0.01 level (one-tailed).
relationship between ineffectiveness and a negative self-concept might explain the negative relationship with RTs to fat words. Consistent with the cognitive theory of eating disorders (Vitousek & Hollon, 1990) words that are consistent with our self-schemas are facilitated (e.g., if I think I'm fat, then I'm going to demonstrate facilitation toward fat stimuli) whether or not these self-schemas are accurate.

Perfectionism, interpersonal distrust, interoceptive awareness, and maturity fears were not significantly correlated with RTs to fat words. One of the determining factors is Cassin et al.'s (2008) study was the internalization subscale of the SATAQ (Heinberg, Thompson, & Stormer, 1995). This subscale determines how much an individual internalizes the media ideal body. While the EDI does not have the same exact subscale, it would be closely related to the perfectionism subscale of the EDI. The media ideal body is often times viewed as the "perfect body," an individual striving for this body computation would likely score high on the perfectionism subscale of the EDI and the internalization subscale of the SATAQ. As our study demonstrates, while there was a trend toward a negative relationship between RTs to fat words and perfectionism, this trend failed to reach significance, suggesting that this measure may not be sufficiently sensitive to determine an at-risk non-clinical sample.

Although the present study appears to support the use of the EDI as a stronger measure for determining our at-risk non-clinical sample, there are some possible limitations that need to be addressed. First, our participants exhibited a limited range of scores on the EDI (i.e., M = 2.76, SD = .67). It is possible that a larger and more heterogeneous sample would have produced a greater variability in EDI scores, which in turn may result in some of the trends reaching significance. Second, in order to ensure that our results are not task specific and limited to a lexical decision task, future studies should investigate these findings using other tasks (e.g., mouse-tracking, eye-tracking). Finally, this study was limited to undergraduate females with a mean age of 22. Future research should investigate these findings with other age groups and with male participants.

### References


### About the Authors

**Stephanie A. Henley** is a second year master’s student in the Experimental Research Program at Cleveland State University. She accepted an offer into the Experimental Research Program at the University of North Dakota and will begin her doctoral studies this fall. Her research interests include empirical investigations of how sociocultural factors (e.g., parents, peers, and media), social comparison, and internalization affect various aspects of self-development (e.g., self-esteem, self-schema, self-worth). Stephanie currently works as a Research Assistant in the Language Research Laboratory.

**Teresa A. Markis** is a fourth year doctoral candidate in the Adult Development and Aging Program. Her research interests include thin ideals, body image and body dissatisfaction and how they relate to information processing and attention in young and middle age females. Additionally, Tracy is investigating the use of a variety of methods (i.e., eye tracking, mouse tracking) to understand the effects of body dissatisfaction on information processing.

**Conor T. McLennan** is a PhD in psychology from Cleveland State University. Dr. McLennan is also currently serving as the Interim Associate Vice President for Research. His research program, which has received funding from the National Institutes of Health: National Institute on Deafness and Other Communication Disorders, explores the representations and processes involved in the perception of spoken language in younger and older adults. Read more about the research being conducted in the Language Research Laboratory by visiting facebook.com/languageresearch.

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Introduction

In 2008, the third International Conference on Concussion in Sport produced the most current working-definition of a concussion: “a complex pathophysiological process affecting the brain, induced by traumatic biomechanical forces” (McCrory, et al., 2009, p. 250). A concussion can result from a direct blow to the head or from a blow to another part of the body that causes a transmitted force to the head (Echemendia, 2012). The American Medical Society for Sports Medicine estimates 3.8 million sports-related concussion occur per year with as many as 50 percent remaining unreported (Harmon, et al., 2012).

There are a wide range of concussion symptoms that can be separated into four categories: psychological, cognitive, somatic, and sleep disturbance (Echemendia, 2012). Psychological symptoms include emotional lability, sadness, anxiety, and irritability. Common cognitive symptoms are memory dysfunction, attention problems, mental “fogginess,” cognitive slowing, and fatigue. Somatic symptoms such as headache, nausea/vomiting, balance problems, dizziness, fuzzy/blurry vision, low energy/fatigue, light and noise sensitivity are often reported. Difficulty falling asleep and sleeping more or less than usual are also complaints following a concussion (Echemendia, 2012).

Experts agree that physical and cognitive rest is pertinent to recovery, but length depends on the individual as concussion recovery can range from seven days to a year or more (McCrory, et al., 2009). Although rest is important, the lack of physical activity, fear of losing one’s spot on a team, decreased academic ability, and feeling isolated from friends and teammates can lead to depression (Echemendia, 2012). In addition, anxiety has been found to account for 45 percent of chronic post concussion symptoms (King & Kirwilliam, 2011). The overlap of psychological distress with post-concussion syndrome highlights the importance of addressing concussion management from the psychological perspective.

Importance of Support and Education

A difficult issue for concussion recovery is the invisibility of the injury. From the outside, athletes with concussions look normal which can be frustrating for the recovering athlete since they do not wear a cast or sling (Echemendia, 2012). Due to the uniqueness of concussions, support may play a crucial role in recovery. Based on a study by Udry, Gould, Bridges, and Tuffey (1997) athletes have a negative perception of support after an injury. High school students tend to value peer support over support from adults, and students with a disability value peer support more than those without a disability (Demaray & Malecki, 2003). Concussions can lead to accommodations at school such as an Individualized Education Plan in which peer support may become more important.

Various types of support are important for the injured athlete. The internet is a valuable tool for athletes needing support after a concussion (Ahmed, Sullivan, Schneiders, & McCrory, 2010). In a study conducted by Demaray and Malecki (2003) that examined online support following one or more concussions, males had high participation in online support regardless of their overall value of support being low compared to females (Ahmed, et al., 2010). In addition, athletes who have an opportunity to share their concussion story may positively affect recovery (Ahmed, et al., 2010).

In addition to support, psychoeducation on concussion symptoms and the expected course of recovery from concussions positively affects outcome (Mittenberg, Tremont, Zielinski, Fichera, & Rays, 1996). Emotional distress and anxiety stemming from having a concussion, pressure to return to play, and fear of re-injury can contribute to prolonged recovery and the development of Post-Concussion Syndrome (Kontos, Collins, & Russo, 2004). Efforts to minimize psychological distress and outside pressure will likely shorten recovery time.
Contents of Concussion Connection

Mission Statement: Concussion Connection is dedicated to increasing education and awareness about sports-related concussions and supporting athletes through their concussion recovery.

Concussion Connection includes concussion information (e.g., signs and symptoms, state laws, frequently asked questions, news and research) and a concussion community (e.g., discussion topics and support). The “Share Your Story” feature encourages athletes to submit their concussion stories and provide information about their individual recovery process, treatments they have tried, difficulties they have encountered, and triumphs they have achieved. Each athlete provides the amount of information with which they are comfortable. They also have the option to use a contact form for others to send them encouragement and support without their contact information being available publicly. Additional resources are included such as concussion-related books, movies, smartphone apps, links, and downloads. Finally, the co-founders provide reviews about concussion documentaries and current concussion articles as well as various concussion topics from personal experience.

History of Concussion Connection

Co-founders Samantha Sanderson and Lauren Long met through an online blog while they were both coping with the long-term effects of multiple concussions. Based on their understanding of one another’s experience, they launched Life After the Game on January 1, 2013, an internet blog detailing each other’s journeys. Life After the Game brought a response from the online community that highlighted the need for a place where athletes can share their stories and connect with others who understand sports-related concussion recovery. In response to this need, Life After the Game was transformed to Concussion Connection. The name was changed to reflect the fact that most athletes recovering from a concussion will attain a full recovery and return to play their sport.

Concussion Connection launched on August 1, 2013. The weekly blogs from the co-founders have been replaced by a “Share Your Story” feature where athletes can write about their concussion journey and receive encouragement and support from the online community. In addition, review of recent research and answers to frequently asked questions are provided. As of October 28, 2013, over 7,000 people have visited the Concussion Connection website.

Future Directions

Mental Health

Professionals still avoid labeling emotional symptoms as psychological in the concussion community. For example, McCrory, et al. (2009) labels symptoms such as irritability as a behavioral symptom. However, a full recovery cannot be attained without addressing the psychological effects as research indicates emotional distress prolongs recovery (Kontos, Collins, & Russo, 2004). Due to stigma, doctors who do refer athletes to psychologists are finding the athletes do not follow up. As a result, some doctor’s offices employ psychologists to meet with athletes routinely at their appointments. Concussion Connection will continue to educate about the importance of mental health in concussion recovery.

Expert Panel

Since this poster presentation on November 1, 2013, Concussion Connection has officially launched the Expert Panel. The Expert Panel consists of Dr. Steven Cuff, sports medicine; Dr. Leah Lagos, sports psychologist; Ron Walker, athletic trainer; and Briana Scurry, professional athlete. In addition, in the first six months Concussion Connection reached 24,000 visits. Concussion Connection spoke at the Youth Sports Safety Summit in Washington, D.C. on March 10, 2014 and provided information on concussion recovery from the athlete’s perspective.

The Expert Panel aims to increase the exposure to concussion information from different disciplines while also highlighting the importance of approaching concussion treatment from an integrated perspective. Medical fields currently involved in concussion management: sports medicine, general practice, neurology, neuropsychology, psychology, athletic training, speech therapy, occupational therapy, physical therapy, and alternative medicine such as chiropractics, acupuncture, and massage therapy. Due to the diversity of concussion management, the Expert Panel will continue to grow.

Support and Education

Concussion Connection continuously explores new avenues to reach athletes, provides a platform for athletes to share their individual journey, and connects athletes with others who understand their recovery. Since athletes should limit their exposure to electronics during recovery, Concussion Connection promotes forming offline support groups and is examining means to make this a reality for communities nationwide. Finally, Concussion Connection is striving to become a nonprofit organization to promote concussion education, and awareness through offline means such as speeches, pamphlets and books.
Summary

Concussion Connection is an online resource for athletes who are on their journey through concussion recovery. Research, facts and expert knowledge on concussion-related topics are provided. The most important aspects of Concussion Connection include a platform for athletes to share their story and the support forum where athletes can connect with other athletes. Concussion Connection strives to promote a multidisciplinary approach to concussion recovery with an emphasis on including psychological treatment as a standard part of concussion management. While Concussion Connection is currently solely online, there are opportunities for growth offline, such as support groups, which will be pursued moving forward.

References


Special Acknowledgement

A special thanks to Lauren Long, the co-Founder of Concussion Connection for allowing this information to be presented.

Website: www.concussionconnection.com

About the Authors

Samantha Sanderson is a second year clinical psychology student at the School of Professional Psychology at Wright State University. Samantha was a Division I Women's Soccer Player at the University of Miami (FL) where she earned her bachelor's degree in psychology. Her personal experience with concussions drives her passion for working with athletes especially in relation to concussion recovery and career ending transition. Outside of her academic program, Samantha is co-founder of Concussion Connection and is committed to providing education and awareness around concussions and ensuring recovering athletes have the support they need. Her dissertation will cover the topic of online support and concussion recovery.

Emily Kiorpatisis, BA is a second year clinical psychology doctoral student at Wright State University. She earned her BA in psychology with a minor in women and gender studies from Ohio Wesleyan University. She is currently working at Wright State University's counseling center, providing individual, group, and assessment services to college students. Her particular interests involve mental health stigma and the college population. She enjoys expounding on these interests as an Active Minds member and soon-to-be Active Minds president, a chapter on her campus devoted to mental health advocacy and eradicating mental health stigma. For her dissertation, she plans to utilize data from Wright State University's counseling center to look at the relationship between presenting distress and one's level of self-compassion.
Recalibrating Gender Perception: Face Aftereffects and the Perceptual Underpinnings of Gender-Related Biases in Social Perception

David Lick, University of California Los Angeles

Despite decades of research and proposed solutions, interpersonal prejudice continues to occur at epidemic rates and to deleterious ends. My research addresses three questions about such persistent biases: 1) What are the perceptual processes that make prejudice so pervasive? 2) How might we disrupt these processes in order to ameliorate bias? 3) How does such ongoing prejudice affect the health and well-being of its targets? Located at the intersection of social cognition, visual perception, and intergroup relations, my program of research brings interdisciplinary methods to bear on these questions in order to provide novel answers to one of psychology’s- and humanity’s- most enduring problems.

In 2013, I received a Michael Sullivan Diversity Scholarship to further my work on the first two questions. I proposed to test whether a technique from cognitive psychology – adaptation aftereffects – could be harnessed to reduce prejudice against women with gender-atypical facial appearances. The theory suggests that visual exposure to gender-atypical phenotypes does indeed reduce prejudice against gender-atypical women; however, those studies were limited to synthetic faces that lacked external validity. My proposal sought to extend these findings to faces of real women that varied naturally in their gender typicality.

I tested my hypotheses in a study that was recently accepted for publication in the Journal of Experimental Psychology: General (Lick & Johnson, in press). As described in the paper, I gathered 14 facial photographs of real women who varied in their gendered features (hyper-masculine and hyper-feminine). I recruited 197 Internet users from Amazon’s Mechanical Turk. Participants first evaluated six of the faces (three hyper-masculine, three hyper-feminine) across four items measured on 11-point rating scales, where higher values indicated more favorable ratings (Pretest). Next, participants were randomly assigned to adaptation conditions, repeatedly viewing the four remaining hyper-feminine faces (Feminine Adaptation) or the four remaining hyper-masculine faces (Masculine Adaptation) for three seconds each for a total of three minutes. Finally, participants re-evaluated the same target faces from pretest (Posttest). As expected, participants showed a marked bias against gender-atypical female faces at pretest (p < .001). The masculine adaptation did not change these evaluations (p=.828); however, the feminine adaptation condition led to even more bias against gender-atypical women at posttest relative to pretest (p=.005). These findings provided partial support for my hypotheses. First, perceivers indeed expressed prejudice against hyper-masculine women after mere glimpses of their faces. Second, perceivers who were experimentally exposed to feminine faces developed even stronger biases against masculine faces over time. Unexpectedly, however, adaptation to masculine faces did not reduce this prejudice. Thus, findings from this study enhance our knowledge of the ways in which gender-related biases develop in the first place: Repeated exposure to highly feminine female faces leads to pronounced biases against masculine female faces. Although it is difficult to interpret exactly why the masculine adaptation condition did not reduce this prejudice, several possibilities deserve mention.

First, the stimuli were less tightly controlled than the synthetic faces in my previous work. Thus, the masculine faces may have varied in unexpected ways that the feminine faces did not (e.g., viewpoint), reducing our chances of obtaining a significant effect for masculine adaptation. It is also possible that features in the feminine faces were more extreme than features in the masculine faces, improving the chances of obtaining a feminine adaptation effect in this study. Indeed, the feminine faces were rated as being extremely feminine (9.47 on a 10-point scale ranging from masculine to feminine) whereas the masculine faces were only slightly below the midpoint of the scale (4.69 on a 10-point scale ranging from masculine to feminine). In the future, stimuli that incorporate tighter control as well as more masculine features might help to bolster the masculine adaptation effect.

In terms of future directions, I am pursuing several new projects that extend the implications of visual adaptation to different target populations (e.g., obese and racial minority targets) and that further probe basic aspects of these findings (e.g., viewpoint and decay). In time, I hope my work will enhance scientific knowledge of the ways in which interpersonal biases develop, eventually helping to guide the creation of targeted interventions to reduce such biases. The Michael Sullivan Diversity Scholarship was instrumental to this progress, and I am extremely grateful for the support.

Relevant Publication:
The major purpose of this two-part study was to examine counseling utilization and non-utilization of racial/ethnic minority college students. Study 1 employed a retrospective, archival database of students utilizing university counseling services to examine the extent to which there were racial/ethnic differences in the types of problems and the clinical severity of those problems. Study 2 examined a sample of non-treatment-seeking college students with elevated levels of psychological distress, to understand what kinds of attitudinal or knowledge-related barriers may hinder help-seeking. With elevated levels of psychological distress, to understand what kinds of attitudinal or knowledge-related barriers may hinder help-seeking.

**Progress of Study 1:**

The archival dataset of counseling center clients examined individuals who utilized counseling services between July 1, 2008 and June 30, 2012. A total of 5,472 clients identified their race/ethnicity as being Asian American (38.9%), Latino/a (14.9%), and White/Caucasian American (46.2%). Other racial/ethnic minority groups could not be examined due to small sample sizes. In comparing differences in levels of initial severity across the three racial/ethnic groups using the Outcome Questionnaire 45 (OQ-45; Lambert et al., 2004), findings indicated a statistically significant racial/ethnic differences in distress scores using multivariate analysis of variance. Asian American students had higher distress scores in comparison to White American (p < .001) and Latino/a students (p < .001), whereas there was no significant difference between White American and Latino/a students. Based on an established cutoff score to indicate clinically significant distress, 70.1% of Asian American, 62.2% of Latino/a, and 57.0% of White American students were considered to be in the clinical range at intake. Chi-square tests examining differences in proportions indicated that these differences were statistically significant when comparing Asian American students to White American students (p < .001), and Latino/a students to White American students (p < .05). In terms of session count, across all racial/ethnic groups, the mean number of sessions was 4.0 (SD = 3.8). Initially there were no racial/ethnic differences in the mean number of sessions used. However, follow-up regression analyses controlled for level of distress at intake, and results indicated that Asian American students utilized fewer sessions of counseling in comparison to Latino/a and White American students (p < .05). Results of a logistic regression analysis also indicated that relative to White American students, Asian American students were 1.6 times more likely to terminate counseling after one session (odds ratio = 1.58, p < .001). There were no significant differences for Latino/a students in comparison to White American students. In terms of presenting concerns, the most common presenting concerns were academic concerns, anxiety, depression, interpersonal concerns, and issues related to identity. Currently, data is being analyzed to examine these presenting concerns may vary across racial/ethnic groups. These initial findings are being prepared in manuscript form to be submitted to Cultural Diversity and Ethnic Minority Psychology.

**Progress of Study 2:**

This study particularly examined the phenomenon of underutilization of mental health services among Asian Americans, as this has been one of the most enduring mental health disparities. Prior research shows that psychological distress is high among Asian American students but rates of services use remain low. Thus, the major purpose of this study was to examine what types of attitudinal and knowledge-related barriers hinder individuals from seeking help, when structural barriers (e.g., cost) are relatively controlled as is in a college campus. This study applied the Health Belief Model (Rosenstock, 1966) to theoretically understand why individuals in distress may not seek help, when there is in fact a need for services. Specifically, the study examined the extent to which functional impairment, mental health literacy, perceived benefits of help-seeking, and stigma related to help-seeking predict intentions to seek help among a sample of Asian American students and a comparison group of White American students who were experiencing elevated levels of psychological distress. Data were collected from 395 Asian American students and 261 White American students who qualify as having moderate or high distress as measured by the K6 (Kessler et al., 2002). Using multiple group analysis in a structural equation modeling framework, results indicated measurement invariance of the model across both racial/ethnic groups. Data are continuing to be analyzed, but initial analyses indicate that this model may be structural non-invariant. That is, different factors appear to account for non-help-seeking among Asian American and White American students. It appears that functional impairment and perceived benefits of help-seeking account for help-seeking intentions among White American students, whereas both aforementioned factors and help-seeking stigma relates to help-seeking intentions for Asian American students. Interestingly, mental health literacy appears to have no influence on help-seeking. As this study is part of my dissertation study, all analyses will be completed by June 2014.

The Michael Sullivan Diversity Scholarship Fund is supported by generous gifts, grants and contributions from individuals and organizations who seek to honor Dr. Sullivan and advance important diversity initiatives or research in states, provinces and territories. Additional information is available at www.ohpsych.org/visitors/foundation.
Record Breaking Competition
Ohio Science Day 2014

By: Michael Ranney, MPA, OPA Executive Director

The 2014 Ohio Science Day was held at French Field House on the campus of The Ohio State University on Saturday, May 10. Over 1,200 students in grades five through 12 participated, showing projects that had advanced through local and district science fairs to make it to Ohio Science Day. The first Ohio Science Day was held in 1949, the same year that OPA was founded.

OPA has a long history of supporting Science Day and judging the behavioral science category. This year we saw a record number of projects. Many thanks to our exceptional team of volunteer judges who did a superb job selecting 14 winners from the 165 projects we looked at. Our judges were: Rose Shaw, Sarah Greenberg, Tony Ameche, Linda Sirosky Sabdo, Jeremiah Shaw, Nancy Duff Boehm, Peg Mosher, Jim Broyles, Heather Derry, Gail Gailwitz, Angela Ray, Matt Dunatchik, Cathy McDaniels Wilson, Michele Evans, Britt Buttler, Mary Miller Lewis, Lindsey DeMuth, David Hayes, John Forette and Michael Ranney. It is really fun seeing all of these projects and interacting with the students. Judges have to stick to a rigid schedule so that we complete judging all of our projects and turn in our winners list in a three and a half hour period.

Projects are judged on several criteria:

- Knowledge achieved
- Use of the scientific method
- Clarity of expression
- Originality/Creativity

Thanks to donations from members and the support of regional psychological associations we are able to offer the following awards to qualified projects:

- Grades 5-6: 1st place $50; 2nd $25
- Grades 7-8: 1st place $75; 2nd $50; 3rd $25
- Grades 9-12: 1st place $75; 2nd $50

Our 2014 winners were:

**Grade 5**
- First: Brogan Steimel, Millersburg Elementary School, Millersburg
- Second: Scott Kuckuck, East Richland Christian School, St. Clairsville

**Grade 6**
- First: Grace Kosco, National Inventor’s Hall of Fame School, Akron
- Second: Payton Shoemaker, Worthington Elementary School, Chillicothe

**Grade 7**
- First: Jonathan Ben-Porath, National Inventor’s Hall of Fame School, Akron
- Second: Snehi Shah, Incarnate Word Academy, Parma Heights
- Third: Johnny Gilbert, Our Lady of Perpetual Help, Grove City

**Grade 8**
- First: Jackson Tankersley, National Inventor’s Hall of Fame School, Akron
- Second: Rohit Rambhatla, Solon Middle School, Solon
- Third: Kathryn Willis, Sycamore JS, Cincinnati

**Grade 9**
- First: Conner Graham, Bloom Carroll High School, Carroll
- Second: Madeline Moser, Louisville High School, Louisville

**Grade 10**
- First: Gani Perez, Hudson High School, Hudson
- Second: Nicole Lehman, Hudson High School, Hudson

**Grade 11**
- First: Amelia Pompilio, Carroll High School, Dayton
- Second: Sophia Yu, Springfield High School, Springfield

**Grade 12**
- First: Andrea Fox, Miami Valley Career Tech Center, Clayton
The 2014 OP Quiz for Continuing Education

The articles selected in this issue are sponsored by the Ohio Psychological Association. OPA is approved by the American Psychological Association to provide CE for this home study. Complete this form in its entirety. A total of 80 percent of responses must be correct to receive 1 CE credit. Submit this form and payment (OPA members: $20; Non-Members: $25) to OPA OP Home Study, 395 East Broad Street, #310, Columbus, OH 43215. Pending successful completion of this test, you will receive a certificate of completion within 14 business days of receipt.

For each question below there is only one possible choice. Please select the correct letter for each question.

1. Which standard code does Swenson indicate specifically excludes inviting family members or other collateral contacts in to therapy with a current client and/or serving in a disaster-relief role?
   A. 10.04  
   B. 5.06  
   C. 5.05  
   D. 10.08

2. One of the problems reported by Sanderson and Kiourtsis is that concussions often:
   A. Can be easily detected  
   B. Leave external scars  
   C. Are easily faked by athletes so they do not need to play in a game  
   D. Are invisible

3. Woods and Eisenman cite that research examining use of apps in children suggests:
   A. Apps may be of educational value  
   B. Can assist children with comprehension  
   C. Help with behavior change  
   D. All of the above

4. According to Gonzales et.al if left untreated, social skills deficits can lead to:
   A. School maladjustment  
   B. Delinquency  
   C. Mental health issues later in life  
   D. All of the above

5. McConnell and Sears reported that employees who practice mindfulness tend to:
   A. Develop poor work goals  
   B. Develop an external locus of evaluation  
   C. Find greater enjoyment in their work  
   D. Have less positive interpersonal relationships with their co-workers

6. Henley et. al. reported that thinness, bulimia, and body dissatisfaction were:
   A. Significantly negatively correlated with RTs to fat words  
   B. Subscales interested in attitudes and behaviors toward the body are not predictive of RTs to fat words  
   C. Significantly positively correlated with RTs to fat words  
   D. Have no correlation to body dissatisfaction

True/False
Please answer the following by selecting True or False:

7. McConnell and Sears reported that employees are at a greater risk for psychological difficulties, such as stress and burnout, compared to other executives.  T_____  F______

8. The purpose of Henley’s et. al.’s investigation was to examine whether RTs to fat words would be positively correlated with scores on the EDI. T_____  F______

9. According to Swenson, the Ethics Code Standards are only guidelines for best practice. T_____  F______

10. Sanderson and Kiourtsis reported that emotional distress and anxiety stemming from having a concussion, pressure to return to play, and fear of re-injury can contribute to prolonged recovery and the development of Post-Concussion Syndrome. T_____  F______

11. The Social Skills Profile (2008) serves as a guide to identify critical skills that enhance social performance as well as skills needed for social success (Gonzales). T_____  F______

12. As clinicians, apps are a significant risk and would not be beneficial in the treatment with both children and adults (Woods & Eisenman). T_____  F______

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Office space available in Maumee, Ohio starting August, 2014. Space consists of an office, waiting room, kitchenette, and storage. Contact David Cislo (419-897-7877 or drcislo@bex.net) for more information.  
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