School Psychology: From Science to Practice

In this Issue of FSTP

This issue of FSTP features a number of outstanding articles by graduate students along with informative updates on SASP activities. The current President of SASP, Jennifer Cooper, opens the issue with a reflection on SASP goal achievements and upcoming plans. Relatedly, subsequent articles put the spotlight on a pair of early career scholars participating in the diversity mentorship program and announce the winners of the 2013-2014 Diversity Scholarship. In this issue, you’ll also find original research by Shahrokh Shahroozi examining the use of videotaped self-modeling and functional attributional styles to build test-taking skills as well as research reviews of PTSD in children and adolescents and the nature of English Language Learners. The issue closes with a piece highlighting the fun, enriching, and charitable activities of the SASP Chapter at Florida State University!

The SASP Student Research Award

Beginning this year SASP will be awarding a $75 cash prize for the most outstanding student research manuscript accepted for publication in FSTP. The prize will be awarded subsequent to publication of the Winter 2014 issue. The winning manuscript will be selected based on the following criteria as determined by a panel of experts:

- Potential for increasing the well-being of children by advancing the field of school psychology
- Degree to which the research and/or findings add to extant evidence-based literature
- Practical applicability for school psychologists (i.e., potential for bringing Science to Practice)
- Quality and fit of research design (i.e., statistical methodology, analysis, interpretation)
- Quality, clarity, and completeness of the manuscript (i.e., readability, grammar, punctuation, references, structure, adherence to FSTP guidelines)
Greetings SASP members!

Summer is here! We hope that everyone is taking some time for some much needed and certainly well-deserved rest and relaxation. With summer here, SASP felt it was important to reflect on what has been done so far this year. We are half way through our term as your Executive Board, and think it’s a great time to reflect on the goals we’ve reached as well as the plans for the rest of the year.

Since beginning our term, our board has strived to offer the highest quality of services we can provide to our graduate student members.

Some highlights include:

- Improvements to the Diversity Scholarship process and the presentation of three Diversity Scholarships for incoming and advanced school psychology students
- Presentation of travel grants for eight students that will present posters at the Student Research Forum to be held during the APA Convention
- Inaugural year for two new SASP student awards – the Student Research Article award and the Mentee Recognition award to be presented in late 2013
- SASP representation on each of the five Division 16 working groups, including the new Mental Health and Early Career Working Groups
- Adding a new Past-President position to enhance the functioning of our board and better connect SASP to early career activities
- Several new features in our From Science to Practice newsletter
- A growing SASP website that is integrated within Division 16 website
- An active Facebook page, offered as another means of getting your latest SASP updates
- Monthly announcements sent via the SASP email list
- Growth of our diversity mentorship program, which connects SASP members of diverse
backgrounds with professionals in the field of school psychology, including SASP’s new Diversity Committee

- Resources provided on our website that are being updated monthly

These are just some of the goals our board has worked hard to achieve this year, and we hope we are meeting your expectations as SASP members. In the months to come, we hope to continue to provide updated services to our members. We will be updating our website to include professional development for our student members, strengthening our connection with local SASP chapters, reaching out to undergraduate psychology programs, and working to improve the functioning of the SASP board and our election process, just to name a few.

In the meantime, our board would like to extend a personal invitation to our members asking you all to join us at the SASP Student Research Forum at the APA Convention in Honolulu. We have lots of great
Hi SASP Members,

In this issue of FSTP we included another mentor/mentee spotlight in order to highlight, for current SASP members, the benefits of having a SASP diversity mentor. This issue's mentor/mentee pair is Dr. Amanda Sullivan and Dr. Prerna Arora. Both have been members of the program since its inception. Amanda Sullivan is an Assistant Professor at the University of Minnesota. Her research interests focus on educational disparities, particularly those related to disability and special education. She is the Secretary of APA Division 16 and serves on the Early Career Workgroup. Prerna Arora is a postdoctoral research fellow at the University of Maryland School of Medicine. Her research interests focus on the dissemination and implementation of evidence-based practices in schools and pediatric primary care settings. She is the chair of the Early Career Workgroup of APA Division 16.

Best,

Kennetha

Mentor: Amanda Sullivan, Ph.D.

What is your perspective on the future of multiculturalism within school psychology?

As someone relatively new to the field (I began my graduate training in 2005), it is interesting to observe the increasing diversity in school psychology in training and research. To a degree, we see recognition of issues of cultural diversity codified in accreditation standards, which are then reflected in the curriculum of our training programs. On that front, there is certainly a ways to go, particularly in moving from standalone “multiculturalism” classes to integrated coursework and field experiences to preparing practitioners and scholars more holistically to be responsive to the increasing diversity in schools. More broadly, I think we need to continue engaging in critical discourse about the way we conceptualize “multiculturalism” and its implications for practice and research in school psychology. While it can be argued that much progress has been made, there is certainly much more to be done and much more school psychology can contribute to improving academic, social, emotional, and behavioral outcomes all children and youth. Thankfully, there are many scholars and trainers who continue to buck the stereotype that school psychology is a field narrowly focused on (certain kinds of) testing. We’ve seen a proliferation of research paradigms, methodologies, theoretical perspectives, and research questions gaining traction, and I hope that will continue as new scholars enter school psychology and we have a sustained, robust, critical dialogue about the needed changes in the field. As a field, we also have a long way to go in increasing diversity in in terms of recruiting and retaining trainees from diverse backgrounds. I think we are a long way from resolving this particular problem, but this program is one element of such efforts.

What comes to mind when you reflect on this mentorship experience?

I am really pleased that SASP is providing this space for mentorship of diverse scholars in school psychology. There are several mentor roles and functions, and no one person can or should fill all of those for another, so it is great that this program exists to expand participants’ mentorship networks. This program allows for a mentoring relationship with a different dynamic than that of the typical advisor-advisee dyad where the parties are engaged in multiple roles simultaneously. Because Prerna and I had no previous or concurrent involvement outside this program, I think it creates a relationship where we can have candid conversations about scholarship and career development. My goal is to serve as a resource and sounding board, and I appreciate the opportunity to be fully transparent and forthright about the research process, faculty development, and other early career topics. As an early career scholar myself, I can appreciate the value of having these kinds of conversations and welcome the opportunity to support such a promising early career scholar.
Mentee: Prerna Arora, Ph.D.

What have you enjoyed the most about the mentor/mentee experience?

At the graduate or even early career stage of training, the opportunity to be supported in the exploration of one’s future in the field, particularly by one who has recently undergone the same process, is invaluable. Additionally, there are often fewer opportunities than may be desired for the graduate student, intern, or even postdoctoral fellow for such open and direct conversations about graduate training, academia, job searches, and the like. The experience of participating in the SASP Diversity Mentorship program has provided me with just this, and has assisted me in this exploration of my interests in an academic future in the field of School Psychology. While I had contemplated this seriously in the past, the information, advice, and resources gained throughout this mentoring relationship has solidified this decision and have made it more a feasible undertaking.

What topics in regard to diversity have you discussed with your mentor/mentee pair?

Throughout the year, my mentor and I have explored areas related to our interests in addressing health and educational disparities in underserved populations, including opportunities for scholarship, funding, or additional mentorship. More than this, however, we have explored the opportunities available to contribute to and “diversify” the field of school psychology through cross-disciplinary work, as well as the recruitment, training, and development of diverse scholars within the field of School Psychology. I have enjoyed using this broader definition of diversity in guiding our talks.

Do you plan to collaborate on any research projects with your mentor?

As I’ve come to learn, one should never be closed to this possibility! While the interests of my mentor and I differ to some degree, there is a great deal of overlap in our interests in terms of our professional development. Through this experience, my mentor has made me of aware of various fellowships, sources of funding directed at early career individuals, and service opportunities, some of which I have already pursued. In fact, it was through her guidance that I learned of an opportunity to help develop and serve on APA Division 16’s Early Career Workgroup, which is an experience I have and continue to greatly value and enjoy. I look forward to continuing to work with Dr. Sullivan and examining the potential for possible collaborations on research projects.
Greetings SASP members,

On behalf of the SASP 2013 board, I would like to thank everyone who applied for the award. This year we had many qualified applicants and it was an arduous task for the committee members to decide on the winners. Please see below for pictures and short bios of our 2013-2014 incoming and advanced winners.

**Advanced Winner:**

The recipient of the 2013-2014 Diversity Scholarship for an advanced student is Charity Brown Griffin. Ms. Griffin is a fifth-year doctoral student at the University of South Carolina. Currently, she is working on her dissertation, which examines relationships among school racial climate, school engagement and academic achievement in African American adolescent youth.

For the past year, Ms. Griffin has been receiving extensive training and supervision in implementing evidence-based interventions with ethnic minority children and families at the university-based Psychological Services Center. In addition Ms. Griffin has implemented Trauma-Focused Cognitive Behavioral Therapy with survivors of sexual and physical abuse and neglect at a local non-profit organization that addresses the effects of child abuse.

Ms. Griffin will be completing her predoctoral internship with Guilford County Schools in Greensboro, North Carolina beginning July, 2013. Afterwards, she plans to pursue her interests related to cultural factors impacting achievement-related outcomes in African American youth.

**Incoming Winners:**

Two students received the 2013-2014 Diversity Scholarship for an incoming student: Megan Sy and Brandis Ruise.

Megan Sy was born and raised in the Philippines. She received her B.A. in Psychology from Ateneo de Manila University, before coming to the US to pursue a graduate degree at New York University. In the fall of 2014, she will be a second year doctoral student at St. John’s University. She has worked on research projects related to immigrant parents’ school involvement, adolescents’ perceptions of unfair treatment, and international school psychology.

Megan’s main research interests involve ethnic minority identity and Filipino/Filipino-American psychology. Specifically, she is interested in experiences of discrimination, internalized oppression, and how these affect...
cultural identification, school adjustment, and academic success.

Brandis Ruise received her B.A. in Women’s Studies from the University of Florida. During her undergraduate career, she worked in the Child Attention & Memory Lab, which engendered her interest in the impact of executive functioning on student outcomes.

In the fall, Ms. Ruise will be entering her second year of the school psychology doctoral program at the University of Rhode Island. This past year, she worked as a research fellow at the Paul V. Sherlock Center on Disabilities. As a fellow, she collaborated on interdisciplinary projects focused on promoting health literacy of families from underrepresented groups. Additionally, she worked as a behavior analyst conducting skill-based assessments and providing consultative services to families of children diagnosed with autism.

Next year, Ms. Ruise will serve as a graduate assistant, teaching various sections of undergraduate psychology courses in child development and personality theories. Her general interests include program evaluation and the development of culturally sensitive interventions for children with developmental disabilities.
The SASP Student Research Forum in a Nutshell

The SASP Student Research Forum (SRF) at the 121st annual APA Convention, on August 1st, 2013 in Honolulu, HI is designed specifically for school psychology graduate students. Before we go any further, you might be asking yourself, “Wait, what happened to the SASP mini-convention?” or “What is the SASP Student Research Forum?” The answer is – they are the same thing. SASP has been working to improve the “mini-convention” via various refinements, including a name that better conveys the purpose of the event and the addition of a research presentation by a student leader in the area of diversity.

So what can you expect if you attend? Well, for starters, the Student Research Forum will be a total of two hours of programming, featuring activities geared toward providing students with relevant resources and opportunities to network with other Division 16 and SASP leaders and members. The forum will feature a keynote address, given by Dr. Bonnie Nastasi of Tulane University, on School Psychologists as Advocates for Childs Rights and Social Justice. This year’s keynote topic was selected based on feedback from SASP’s 2013 Executive Board, and Dr. Nastasi was hand selected as our speaker based on her extensive experience and expertise on this topic. You won’t want to miss this phenomenal learning opportunity!

The forum will also feature a student poster session during which graduate students from around the country will display their work on topics such as Transitional Patterns of Depressive Symptoms in Youth, Online Social Networking and Achievement, and Black Parents’ Perceptions of Autism Spectrum Disorder, and many more. This year’s poster session will also feature a presentation from the 2013-14 SASP Advanced Student Diversity Scholarship recipient focused on exploring school racial climate, engagement and academic achievement for African American high school students.

Additionally, updates on SASP’s ongoing activities and a presentation of this year’s SASP Diversity Scholarship awards will take place. Food and refreshments will be provided! We look forward to seeing you there!

Mark Your Calendars!

Thursday, August 1st: SASP SRF: 9-10:50am
Building: Convention Center
Room Description: Room 328
Room Location: Level III

Further information and a detailed schedule of events for the Forum will be distributed through the SASP and Division 16 listservs in addition to being shared on the SASP Facebook group and Division 16 website, so please be on the lookout! If you have any questions regarding the SASP Student Forum at APA, please do not hesitate to contact Kayla Nichols at nichols.kayla@gmail.com.
Utilizing Videotaped Self-Modeling and Functional Attributional Styles to Build Test-Taking Skills

Shahrokh R. Shahroozi, M.A., P.P.S., N.C.S.P.
University of California, Santa Barbara

Abstract

For years, researchers have detailed the effects of test anxiety on students and how high stakes testing situations have exacerbated the problem. Existing treatment options for students with debilitating levels of test anxiety include progressive muscle relaxation, systematic desensitization, and reattribution training. In this study, reattribution training in tandem with videotaped self-modeling of appropriate test-taking strategies was employed and their effects on participants were analyzed. Qualitative data was collected through a series of videotaped interviews, open-ended surveys, and two videotaped testing sessions. Quantitative data was collected using an anxiety rating scale (pre and post treatment) and analyzed using a paired samples t-test. It was hypothesized that the participants would report feeling more positively about their test-taking experience as a result of the treatment. Post-treatment results suggest that test anxious students felt more at ease and confident in a testing situation, whereas non-anxious students reported little to no benefit.

Test anxiety is a phenomenon that has been studied in the field of education since the late 1950s. It is defined as a problem that often interferes with or impairs people’s capacity to think, plan, and perform on tests. Students with test anxiety feel tense, fearful, and worried in evaluative situations (Spielberger & Vagg, 1995) and do not perform optimally on tests (Hancock, 2001) (See Figure 1). Test-anxious students do not perform well on standardized achievement tests (Everson, Millsap & Rodriguez, 1991), receive poorer grades (Chapell et al., 2005), and are more likely to be retained (Beidel & Turner, 1988) and to drop out of school (Tobias, 1979). The current emphasis placed on high-stakes testing in American public schools has led to increased pressure on students to perform. With increasing numbers of families wanting their children to have access to programs such as GATE (Gifted and Talented Education), it is the children who feel the burden to become eligible (Zuriff, 1997). This pressure may lead to maladaptive behaviors, especially in children with disabilities (Fremont, 2003). These behaviors include, but are not limited to, acting out in class and school avoidance. As test anxiety interferes with student performance and emotional health, in addition to causing school avoidance, it has become imperative that school professionals acknowledge the severity of the problem and dispatch school psychologists to intervene (Zuriff, 1997).

A large body of research informs our understanding of test anxiety and outlines techniques that can be applied to the condition. Of note are Johnson’s (2007) findings, which reported improved classroom achievement and lowered student levels of test anxiety (self-reported) through the combined use of progressive muscle relaxation and systematic desensitization. Another potentially helpful method for treating test anxiety is “Self as a Model,” which was first proposed by Alcantara (1994) and elaborated on by Buggey (1995). This approach has achieved great success in teaching social skills to children with Autism Spectrum Disorder (ASD), Asperger’s Syndrome (AS), and Attention Deficit Hyperactivity Disorder (ADHD). Additionally, over the past 20 years, researchers have found that videotaped self-modeling, in which the subject views himself/herself performing an appropriate social skill successfully, has resulted in
Another important consideration in the discussion of test anxiety is the concept of attribution. Attribution is a social psychological term that refers to how people explain causes of events, the behavior of other people, as well as their own behavior (Heider, 1958). In general, people can attribute success or failure to one of four things: luck, ability, effort, and difficulty. Moreover, Weiner (1985), a widely respected authority on attribution theory and its application to education, asserted that all causes for success or failure can be categorized within the three dimensions of locus (internal or external), stability, and controllability. Attribution theory plays a role in the lives of students as they seek to justify their performance on various tasks (Heider, 1958). Many of the studies that investigate this theory report students with academic challenges attribute their early failures to a lack of ability rather than effort. This is generally explained as a result of students believing that no amount of effort can overcome a deficient in ability (Whyte, 1978). By helping children with disabilities such as ASD and ADHD re-evaluate their attributions, large gains in personal and academic growth are possible (Johnson, 2007).

Though research in the area of test anxiety has unearthed many important findings and possible treatment avenues, to date none have examined the effectiveness of video self-modeling and reattribution training in reducing test anxiety symptoms. Moreover, existing interventions place little priority on the target individual’s attention and motivation, two requisites for successful behavioral change (Bandura, 1994). Finally, the extant literature on the topic is devoid of meaningful qualitative feedback from students regarding their feelings about tests and associated pressures.

**Method**

**Site Selection and Overview**

The research site for the study was the UCI Child Development Center (CDC), which is one of four national Attention Deficit Disorder Centers established by the U.S. Department of Education to identify appropriate assessment and intervention methods offered in a standard school environment. In 1991, the CDC was selected by the National Institute of Mental Health as one of six sites in a national multi-modal treatment study of children with ADHD. The school staff consults with local public schools and offers scientifically supported treatments for children with ADHD and related problems.

**Participants**

The participants for this study were five
students from the Child Development Center’s third and fourth grade and fifth and sixth grade combination classrooms. The five students were identified only by their pseudonyms: Student #1, #2, #3, and so forth. Student #1 was a 12-year-old male in the sixth grade with a diagnosis of Attention-Deficit Hyperactivity Disorder (ADHD) and Generalized Anxiety. He presented with a history of limited academic production, poor writing skills, low self-esteem, and performance anxiety. Student #2 was a 10-year-old male in the fourth grade with diagnoses of ADHD and a sleep disorder. He had challenges with low self-esteem and motivation. Student #3 was a 10-year-old male in the fourth grade with diagnoses of ADHD combined type and Oppositional Defiant Disorder (ODD). This student had a history of distractibility, low work-productivity, and dependence on assistance. Student #4 was a 12-year-old female in the sixth grade with a diagnosis ADHD and an Anxiety Disorder. She experienced difficulties sustaining attention, completing work, and regulating mood (social anxiety). Student #5 was an 11-year-old female in the fifth grade with a diagnosis Asperger’s syndrome. She had a history of non-compliance, low-work productivity, and social anxiety.

Procedures

In a mixed-methods and exploratory study, pre- and post-treatment quantitative and qualitative data were collected through a series of interviews, anxiety rating scales, and two videotaped testing sessions.

Initially, the students were asked to complete the Multidimensional Anxiety Scale for Children (MASC). The students were then asked questions pertaining to: (a) how they thought test anxiety affected their test performance, (b) what their perceived levels of test anxiety were, (c) what effect the training sessions had on their levels of anxiety, (d) what their feelings were before, during, and after a test, and (e) what were their current means of dealing with anxious thoughts and feelings.

A week following the interview each student was given a math, writing, or reading comprehension exam. These exams were chosen after their teachers gave input on what they perceived to be each student’s most challenging subject. The behavior of the participants was observed and videotaped both before and after the intervention. Each student took part in a debriefing session during which they identified their behaviors that they thought were helpful and/or unhelpful when taking a test. Their responses were recorded and used to help discover positive and/or negative effects of test anxiety, reattribution training and videotaped self-modeling. Their responses were also used to help formulate new and more challenging questions that may need further study. The interviews lasted approximately 30-45 minutes. Interviews were separated into three segments and pre-intervention, mid-intervention, and post-intervention data was obtained and utilized to make comparisons. Conducting two testing sessions also allowed for pre and post-intervention data comparisons. The intent of these interviews was to capture participants’ perceptions of the effects of test anxiety on their testing performance, types of behaviors elicited as a result of test anxiety, and effects of the videotaped self-modeling social skills intervention on their test taking behaviors. Following the interviews, participants were given reattribution training, taught test taking strategies (through videotaped self-modeling), and interviewed for their perceived responses to the sessions. During the counseling sessions, the students were individually shown 2-3 minute video montages of their behaviors, including behaviors that were conducive to their performance during the initial examination as well as those which detracted from their performance. At the conclusion of these viewings, the researcher queried the students about their thoughts as they were engaged in the behaviors and worked through the test.

Measures

Anxiety. The Multidimensional Anxiety Scale for Children (MASC) is a self-report instrument that was developed with the goal of identifying and collecting data on a cross-section of anxiety symptoms that are present in anxious youth. It was used as a pre/post measure to determine the efficacy of the study’s interventions to treat test anxiety. The MASC consists of 39 items distributed
across four scales (Physical Symptoms, Harm Avoidance, Social Anxiety, and Separation/Panic—three of which have subscales); a scale measuring Total Anxiety, and two major indexes (Anxiety Disorders and Inconsistency). The MASC utilizes a four-point, Likert-style format in which respondents are asked to rate each item with respect to their own experience. The response options range from “0” for “Never true about me” to “3” for “Often true about me.” Analyses showed that the measure possesses high validity and reliability with a Test-Retest Reliability Coefficient of 0.93 over two separate periods of 3 weeks and 3 months. For the purposes of this study the Social Anxiety Scale (Performance raw scores) and the Total Anxiety Index were used in gauging whether or not the chosen interventions resulted in a significant reduction in symptoms of performance and overall anxiety.

Data Analysis Techniques

The MASC anxiety rating scales were compiled during two periods (pre- and post-treatment) and t-scores related to overall and performance anxiety were compared over the course of three weeks using paired-samples t-tests. To establish the patterns and themes necessary to answer the research questions, observations and interviews were coded categorically. The first and second test observations were given the following codes and, hereafter, will be referred to by their acronyms: positive coping strategy (PCS), negative coping strategy (CS), non-related behavior (NRB), test anxious behavior (TAB), other anxious behavior (OAB), mental coping strategy (MCS), physical coping strategy (PCS), applying attribution strategy (AAS), shift to positive strategy (PSS), shift to negative strategy (NSS), no shift in strategy (ZSS), facilitating anxiety (FA), debilitating anxiety (DA), and latency (L).

The three interview sessions were given the following codes and will also be referred to by their acronyms: acknowledged shift in behavior (ASB), video related shift in behavior (VRSB), facilitating anxiety (FA), debilitating anxiety (DA), externalizing attribution (EA), internalizing attribution (IA), acknowledged positive behavior (APB), acknowledged negative behavior (ANB), rise in anxiety (RIA), decrease in anxiety (DIA), attribution related shift in behavior (ARSB), positive intervention attitude (PIA), and neutral intervention attitude (NIA). For more information regarding the chosen codes and their operational definitions please refer to Appendix A and B.

Results

Overview

The interviews and observations yielded many interesting themes pertaining to children’s perceptions of exams and their behaviors. The pre- and post-interview sessions yielded responses of varying length and complexity, as students who identified as being test anxious were more willing to thoroughly discuss their insights and experiences. The following section will outline the study’s key findings and evidence to support them.

How do students perceive test anxiety affecting their test performance?

During the initial interview sessions, student responses about test anxiety fell primarily in two categories: 1) those that felt it hindered test performance and 2) those that believed it provided them with the added incentive to finish a test more quickly and provided the necessary concentration to do so. Interestingly, students who self-identified as being test anxious noted both negative and positive aspects of test anxiety. For instance, Student #1, who identified as being highly test anxious, reported that test anxiety had limited benefits, in that “it can help you concentrate,” and “it makes you want to finish the test quicker.” Whereas, Student #4 stated that a slight amount of test anxiety could helpful in providing the necessary motivation to complete an exam in a timely manner, saying, “For me I think, if you want to get over this, just finish it up so you don’t have to do it later. It’s one of my motives that get me to finish it faster.”

How do students perceive the value of tests?

Responses were divided among students who identified as being test anxious and those who did...
not. Test anxious students believed that their test performance was related to intellectual ability. Moreover, they believed that if they did well or poorly, this would affect their teachers’ perceptions of them. Conversely, students who did not report anxiety about tests believed that they are simply a measure of what has been learned and an indicator of the areas in which they are proficient as well as those needing improvement.

What differences, if any, were demonstrated between test anxious and non-test anxious students in terms of their perceptions of how they feel before, during, and after tests?

The responses suggested that students who are affected by test anxiety are prone to feeling panic and frustration throughout the course of an exam, but will feel relieved upon its completion. Those students who do not report feeling test anxious direct their thoughts toward the steps needed to complete the exam and focus on fulfilling them until the exam is over. Moreover, these students choose to think about the positive consequences of finishing the exam, such as being excused to recess or allowed free time toward a preferred activity. For example, Student #1 reported that when he first hears that he is going to take a test, he enters what he calls, “mental panic mode,” a condition in which he “freezes and can’t get back on track” with his exam. In another instance, Student #4 reported that she felt some minor anxiety relating to time limits on tests, but that once she “got more relaxed and in the swing of doing it,” she felt better.

What are students’ existing methods of coping with test anxiety?

The interview responses and initial exam observations suggested that most test anxious students do not have access to any positive coping strategies. They tend to be reactive in response to stress and frustration. Moreover, they tend to divert their attention toward comparing their progress on an exam relative to their peers. Some students impulsively pounded their fist and moaned (or sighed) at various times while others used positive self-talk to remind themselves of their past successes. Non-anxious students did not have to devote attention to coping during the exam. Most students in the study could not verbalize coping strategies that they currently use. However, Student #4 reported that before a test she will “think of my happy place” and use self-talk to guide and motivate her to complete test items.

What are some methods students reported that teachers or other school staff could utilize to alleviate anxious feelings related to tests?

Test-anxious students reported that being front-loaded with the structure of tests and being given goals helped them become more familiar and comfortable with the test-taking situation. Other students felt that positive comments and encouragement were helpful to their self-confidence throughout the exam, while some felt that intervention is unnecessary and at times detrimental to their feeling of independence. Student #1 stated that, before a test, he would like his teachers to “kind of walk me through it” and “give me some kind of goal to shoot for.” By contrast, Student #3 reported that he prefers that staff (teachers and aides) do not interfere with him during a test, as “it gets annoying and I want to figure things out by myself.” Students #4 and #5 stated that it would be beneficial to take the test in an alternate setting, or have an opportunity to leave the classroom for a small break to alleviate tension.

How do students perceive video of their test-taking behavior?

Students’ responses were varied, as those who presented with test-anxious behavior were more inclined to recognize maladaptive strategies and show a willingness to improve, whereas those who did not report test-anxious behavior felt that the video had minimal impact on them. For instance, Student #1 pointed out a moment when he “went into shock mode” and was preoccupied with his lack of progress as compared to his peers: “I was thinking that I was going to take the whole time (to take the exam) and they’re not.” In contrast, Student #3 reported that the video “didn’t really affect” him and that he looked “normal,” yet he did notice instances of off-task behavior.
Table 1

Comparison of Pre and Post Overall T-Scores and Performance Raw Scores

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<th>Student #</th>
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Note: Paired samples t-test (MASC Overall); t(4) = 0.48, p >.05; Paired samples t-test (Performance Scale); t(4) = 1.00, p >.05

What observed changes did students make as a result of video self-modeling and reattribution training?

Students who originally reported and presented with test-anxious behaviors were notably more focused, calm, less distractible, and more productive in the follow-up exam. Students who neither reported nor presented with these behaviors did not exhibit any tangible changes in behavior since the initial exam.

To illustrate the positive effects of the intervention, during the second exam, Student #1 appeared to be less preoccupied with task-irrelevant thoughts and more at ease with the test-taking situation. Moreover, he demonstrated improved concentration and reduced distractibility, directing his focus to his own activity rather than to those of the other participants. As a result, Student #1 was able to complete an entire outline of his essay response as well as one page of written work during the allotted time.

Do students perceive video self-modeling and reattribution training having an effect on their levels of test anxiety?

Consistent with other findings in the study, student perceptions of the treatment protocol differed based on the level of presenting and reported test-anxious behaviors and thoughts. The students who reported and presented with test-anxious behavior shared that the treatment condition was helpful in allowing them to access positive thoughts and strategies that aided in their focus and work production. For example, with regard to the video modeling training, Student #1 said that, “it definitely helped. I knew what to expect. I learned not to get frustrated when someone else finishes [a test] before me.”

Is a combined treatment consisting of video self-modeling and reattribution training effective in reducing test anxiety?

Quantitative data that compared pre- and post-self-ratings of the Multidimensional Anxiety Scale for Children suggest that the students’ level of anxiety was not significantly different after the treatment protocol, and is thus inconsistent with the qualitative findings. The lack of statistical significance was probably due, in part, to the small sample size as well as to the MASC’s insensitivity to change (especially in the area of test anxiety).

Table 1 (depicts the pre and post treatment results of the MASC Overall T-scores and Performance Anxiety raw scores. The MASC Overall T-Score is comprised of ratings across the four scales of the MASC, which include: (a) Physical Symptoms, (b) Harm Avoidance, (c) Social Anxiety, and (d) Separation/Panic Scale. Performance Anxiety is a subscale within the Social Anxiety Scale that focuses on symptoms of
performance fears (e.g. I worry about getting called on in class). As a T-score cannot be derived by this subscale alone, the raw score totals for the Performance Anxiety were reported instead. Although there were some minor reductions in overall anxiety and the reporting of symptoms of performance anxiety, the paired samples t-tests in both areas were not determined to be statistically significant (MASC Overall \(t(4) = 0.48, p > .05\); Performance Anxiety Scale \(t(4) = 1.00, p > .05\)). For this reason, the effectiveness of the treatment protocol was deemed by this researcher to be best captured by the qualitative feedback of the participants.

**Discussion**

**Themes and Relation to Prior Research Findings**

In this study, videotaped self-modeling was used in conjunction with reattribution training to treat test anxiety. The results were both consistent with the researcher’s prior assumptions and surprising in many ways. It appears that students place high value on test results. They consider parental satisfaction, teacher satisfaction, and their feelings of self-worth when they take an exam, which may lead to varying degrees of anxiety.

Students regarded test anxiety as negatively impacting their test performance. Most students agreed that a slight amount of anxiety facilitated efficacious behavior during the exam. However, beyond a certain point, they regarded the anxiety as detrimental to their performance. These findings corroborated Spielberger and Vagg’s (1995) test anxiety model discussed earlier. Moreover, the results suggested that students are aware of their behaviors, but may see themselves from a different perspective when they view video observations. This claim was substantiated by the fact that at least two of the subjects in the study consciously changed their behavior for the second exam, and acknowledged they did so because of the video observation. Although the students did not directly claim that reattribution training led to their improved feelings during the second exam, they appeared to embrace the concept of internal and external attributions.

Typical students and test anxious students demonstrated differences in their mentality during testing situations. In this study, students who identified as test anxious felt panic and frustration as a result of being in an evaluative situation, an outcome that is similar to Taylor’s (1956) findings. In contrast, participants who did not present with test anxious behavior did not have to contend with this added layer of pressure. This made it possible for them to devote their full attention to the test items and draw upon past experiences (either homework or classwork) that reinforced their belief in themselves, a finding consistent with Zeidner’s 1998 study.

In terms of existing methods of coping with test anxiety, students who are able to manage their symptoms tend to be those who employ positive self-talk to remind themselves of their exposure to already learned material and past successes. This is consistent with the findings of Bandura (1994), who claimed that students who believe in their own self-efficacy are more likely to find success in the tasks they undertake.

With regard to students’ feelings regarding teacher and staff interventions intended to alleviate test anxiety, test anxious students reported that front-loading and goal-setting are two strategies that help them in a testing scenario, findings consistent with Benjamin, Kirkland & Hollandsworth (1980), as well as those of McKeachie, Lin, and Hollinger (1981). By improving upon test-taking skills, students are better able to encode material learned in class and draw upon it during an exam. Other forms of staff interaction that students prefer during testing situations are verbal encouragement and the opportunity to test in an alternate location. These are important findings for educators who are looking for ways to accommodate students who struggle with testing.

The use of video modeling to treat symptoms of test anxiety appears to be beneficial, with the caveat that this intervention should be reserved for students who are exhibiting behaviors that severely impair their ability to perform on tests. As demonstrated by Kehle et al. (2002), students who demonstrated maladaptive test-taking behaviors were able to replace them with the more functional...
strategies taught in the video counseling sessions. These students also demonstrated increased awareness of their self-talk and sought to replace self-defeating thoughts with self-promoting ones. Furthermore, students were also cognizant of their pacing in answering exam items, thus learning to work on items at a comfortable rate, as opposed to focusing on the answer rate of their peers. In contrast, students who do not present with debilitating levels of test anxiety do not report significant benefits from this type of intervention.

Another important finding of this study was that test anxious students who participated in reattribution and test-taking skills training were observed to make significant changes to their behaviors. Students who originally identified as being anxious during tests were notably more focused, calm, less distractible, and more productive as a result of the treatment they received. This finding is corroborated by the test-taking skills paradigms of Kirkland and Hollandsworth (1980) and McKeachie, Lin, and Hollinger (1981). Moreover, the video modeling process, as detailed by Bellini (2007), was instrumental in helping test anxious students identify areas of weakness and replace non-efficacious behaviors with functional alternatives as a result of the video sessions. A benefit to non-anxious students was that watching themselves succeed in the video clips further reinforced their already established appropriate behaviors.

Limitations and Future Development

This exploratory study had a number of limitations. Firstly, the project was an exploratory study in to an area that few researchers have previously investigated. Few researchers have defined test anxiety, but even fewer still have delved into more direct means of treating this condition. Secondly, it must be noted that this research involved only a small sample (three males and two females) of elementary school students. Therefore, caution must be exercised in trying to generalize the findings to older students or to the general population. In addition, it must also be noted that the school setting in which the study took place was not typical of what most school-aged children encounter. The site was a non-public school, utilized a highly reinforcing behavioral program, had a very favorable teacher to student ratio (1:3), and housed a non-typical population (students with ADHD and other related learning and behavioral disorders). Given these unusual conditions, it is not feasible to assume that these results would generalize to students in every school (public or private). In addition, practice effects may have unduly influenced the students’ perceptions of reduced anxiety, as the testing procedures and type of exam had become familiar over the course of the study.

In terms of the instrument used for obtaining quantitative data, the Multidimensional Anxiety Scale for Children was not very sensitive to change in the specific area of test anxiety. Newer measures, such as the Test Anxiety Inventory for Children and Adolescents (Lowe et. al, 2007), as well as other existing measures such as the Spielberger Test Anxiety Inventory (Spielberger, 1980) and Children’s Test Anxiety Scale (Wren & Brenson, 2004), would likely have given more targeted feedback as to the effectiveness of the treatment protocol.

Despite the information derived from this study, there are questions that were not asked that should be investigated in future research projects. It would be beneficial to obtain teacher feedback regarding the effectiveness of the test anxiety interventions. Although the researcher only received anecdotal feedback from the participants’ teachers, it was generally positive. Skill maintenance would be another highly important question to answer with regard to this treatment modality. Finally, it is vital for researchers to investigate the impact of test anxiety on ethnic minorities and English Language Learners, and be able to discern the contribution of stereotype threat to this condition (Steele & Aronson, 1995).

Conclusion and Implications

The results of this study have implications at every level of the educational system. With special consideration for parents and school staff, it is important that these groups be mindful of the impact of test anxiety on their students. Although it is vital to push students to perform to their potential and draw upon facilitating anxiety, it is equally
imperative that students not be made to feel that
test performance is a measure of self-worth, for
doing so only exacerbates debilitating anxiety.
Furthermore, in consideration of the push toward
high stakes testing due to the No Child Left Behind
program (High School Exit Exam, Gifted and
Talented Education, and state standards testing),
educators need to be cognizant of increased tension
and anxiety in certain students. This highlights the
importance of a preventative curriculum to address
concerns over the amount of pressure to which
students are being subjected.

According to the National Association of School
Psychologists Blueprint for Training and Practice,
the role of the school psychologist is to “provide
counseling, instruction, and mentoring for those
struggling with social, emotional, and behavioral
problems, to increase achievement by assessing
barriers to learning and determining the best
instructional strategies to improve learning, and to
promote wellness and resilience by reinforcing
communication and social skills, problem solving,
anger management, self-regulation, self-
determination, and optimism” (Ysseldyke et al.,
1997). As such, a school psychologist is responsible
for more than purely the academic performance and
behavioral output of his or her students. School
Psychologists are also accountable for the
social/emotional health of their students, which in
turn affects the other areas of school performance
such as achievement and proper social behavior.
Further development of evidence-based
interventions by researchers and practitioners in
this realm will be vital to the advancement of the
field.

References

Alcantara, P. R. (1994). Effects of videotape
instructional package on purchasing skills of
children with autism. Exceptional Children, 61,
40-55.

Alpert, R., & Haber, R. N. . (1960). Anxiety in
academic achievement situations. Journal of

Bandura, A. (1993). Perceived self-efficacy in
cognitive development and functioning.
Educational Psychologist, 28, 117-148.


of test anxiety and other anxiety disorders in
children. Journal of Abnormal Child
Psychology, 16, 275.

modeling and video self-modeling
interventions for children and adolescents
with autism spectrum disorders. Exceptional
Children, 73, 261-284.

Benjamin, M., McKeachie, W. J., Lin, Y. G., &
in information processing. Journal of
Educational Psychology, 73, 816-824.

next step in modeled instruction. Early
Education and Development, 6, 39-52.

process perspective on anxiety. Anxiety and
self-focused attention, 3-8.

Chapell, M. S., Blanding, Z. B., Silverstein, M. E.,
(2005). Test anxiety and academic
performance in undergraduate and graduate
students. Journal of Educational Psychology, 97,
268-274.

achievement motivation: Findings and
implications. The Elementary School Journal,
85, 5-20.

and related interventions. Applied and
Preventive Psychology, 8, 23-39.

Center on Response to Intervention

Dweck, C. S. (1999). Self-Theories: Their role in
motivation, personality, and development.

Everson, H. T., Millsap, R. E., & Rodriguez, C. M.
anxiety: A confirmatory factor analysis of the
Test Anxiety Inventory. Educational and

and adolescents. American Family Physician,
68(8), 1555-1561

Hancock, D. R. (2001). Effects of test anxiety and


# Appendix A

## Observation Codes

<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>PCS: Positive Coping</td>
<td>Coping strategy that involves an appropriate expression of feelings and is conducive to completing an exam in a timely, efficient, and effortful manner (e.g. taking deep breaths, positive self-talk, etc.)</td>
</tr>
<tr>
<td>Strategy</td>
<td></td>
</tr>
<tr>
<td>NCS: Negative Coping</td>
<td>Coping strategy that involves a non-functional expression of negative emotion hinders the student from completing an exam in a timely manner (e.g. moaning, pounding one’s fist, etc.)</td>
</tr>
<tr>
<td>Strategy</td>
<td></td>
</tr>
<tr>
<td>NRB: Non-related</td>
<td>Behaviors not salient to test anxiety</td>
</tr>
<tr>
<td>Behavior</td>
<td></td>
</tr>
<tr>
<td>TAB: Test Anxious</td>
<td>Behaviors that are symptomatic of test anxiety (e.g. constantly looking at the clock or watch, squirming in seat, focused on other students’ progress, etc.)</td>
</tr>
<tr>
<td>Behavior</td>
<td></td>
</tr>
<tr>
<td>OAB: Other Anxious</td>
<td>Anxious behaviors not related to the exam situation</td>
</tr>
<tr>
<td>Behavior</td>
<td></td>
</tr>
<tr>
<td>MCS: Mental Coping</td>
<td>E.g. Goal setting, self-monitoring, positive thoughts</td>
</tr>
<tr>
<td>Strategy</td>
<td></td>
</tr>
<tr>
<td>PCS: Physical Coping</td>
<td>E.g. sighing, pounding one’s fist, rocking in chair</td>
</tr>
<tr>
<td>Strategy</td>
<td></td>
</tr>
<tr>
<td>AAS: Applying Attribution</td>
<td>Student informs researcher that shift in behavior was due to use of an attribution strategy</td>
</tr>
<tr>
<td>Strategy</td>
<td></td>
</tr>
<tr>
<td>PSS: Shift to Positive</td>
<td>Used to denote shift to positive test-taking strategy from follow-up exam</td>
</tr>
<tr>
<td>Strategy</td>
<td></td>
</tr>
<tr>
<td>NSS: Shift to Negative</td>
<td>Used to denote shift to negative test-taking strategy from follow-up exam</td>
</tr>
<tr>
<td>Strategy</td>
<td></td>
</tr>
<tr>
<td>ZSS: No shift in strategy</td>
<td>Used to denote no shift in test-taking strategy from follow-up exam</td>
</tr>
<tr>
<td>FA: Facilitating Anxiety</td>
<td>Student demonstrates anxious behavior that may be conducive to successful test-taking</td>
</tr>
<tr>
<td>DA: Debilitating Anxiety</td>
<td>Student demonstrates anxious behavior that may hinder successful test-taking</td>
</tr>
<tr>
<td>L: Latency</td>
<td>Used to denote time periods in which the student was being unproductive or off-task during the exam</td>
</tr>
</tbody>
</table>
### Appendix B

#### Interview Codes

<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>ASB: Acknowledged shift in behavior</td>
<td>Student acknowledges that a shift in behavior from first to second session</td>
</tr>
<tr>
<td>VRSB: Video related shift in behavior</td>
<td>Student attributes shift in behavior due to video modeling intervention</td>
</tr>
<tr>
<td>FA: Facilitating Anxiety</td>
<td>Student expresses feeling anxiety that was conducive to successful test-taking</td>
</tr>
<tr>
<td>DA: Debilitating Anxiety</td>
<td>Student expresses feeling anxiety that hindered successful test-taking</td>
</tr>
<tr>
<td>EA: Externalizing Attribution</td>
<td>Student attributes test performance to test difficulty or other external factors</td>
</tr>
<tr>
<td>IA: Internalizing Attribution</td>
<td>Student attributes test performance to internal factors such as effort, cognitive ability, etc.</td>
</tr>
<tr>
<td>APB: Acknowledged positive behavior</td>
<td>Student acknowledges that demonstrated behavior was conducive to successful test-taking</td>
</tr>
<tr>
<td>ANB: Acknowledged negative behavior</td>
<td>Student acknowledges that demonstrated behavior hindered successful test-taking</td>
</tr>
<tr>
<td>RIA: Rise in anxiety</td>
<td>Student acknowledges an event during the exam that raised anxiety levels</td>
</tr>
<tr>
<td>DIA: Decrease in anxiety</td>
<td>Student acknowledges an event during the exam that reduced anxiety levels</td>
</tr>
<tr>
<td>ARSB: Attribution related shift in behavior</td>
<td>Student attributes change in behavior due to reattribution training</td>
</tr>
</tbody>
</table>

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**Shahrokh R. Shahroozi**, MA, PPS, NCSP, is a fourth-year doctoral student at the University of California, Santa Barbara. He currently serves as a School Psychologist/Mental Health Specialist for the Santa Barbara County Office of Education. He is also the membership chair for the California Association of School Psychologists.
Posttraumatic Stress Disorder in Children and Adolescents

Diana Capous, B.S.
Kezia Gopaul-Knights, M.Sc.
Aaron Haddock, M.Ed., M.Ed., M.A.
University of California, Santa Barbara

People experience many different types of trauma such as war, natural disasters, physical and sexual abuse, terrorism, and motor vehicle accidents (US Department of Veterans Affairs, 2007). Although it is natural to experience fear and anxiety related to these traumatic events, the persistence of these feelings, and behaviors associated with them, even when a person is no longer in danger is a defining feature of Posttraumatic stress disorder (PTSD) (National Institute of Mental Health, 2013). Individuals with PTSD exhibit symptoms such as re-experiencing the event, avoidance of stimuli associated with the event, as well as increased arousal and hypervigilance (American Psychological Association, 2000). These symptoms impact social, academic, occupational or other important areas of functioning of the individual, making the need for intervention by the mental health professional critical.

Although the focus of most studies on PTSD has been on adults, PTSD is recognized as a disorder that also affects children and adolescents (Mash & Barkley, 2003). The presentation of PTSD across the lifespan highlights the need to examine it from a developmental perspective. The following paper seeks to make the link between the developmental approach and its utility in understanding the development of PTSD in children and adolescents. Importantly, it will use the developmental context to address the epidemiology, etiology, assessment, and treatment of the disorder.

Development and Posttraumatic Stress Disorder

A developmental approach considers how human beings evolve socially, physically, and mentally across the lifespan (Hinshaw, 2008). There are numerous processes taking place across the lifespan including the acquisition of language, identity formation, and the development of cognition, personality, and social skills (Miller, 2002).

Developmental theorists have attempted to explain how these processes unfold across the developmental periods, from birth through late adulthood (Crain, 2010). However, controversy exists over the proposed nature of these processes. One of the major contentions is centered on the role environmental and genetic factors play in the development of an individual (Hinshaw, 2008). Another topic of debate is the extent to which the individual is a passive recipient of his surroundings versus an active participant engaged in a reciprocal interaction with the environment (Miller, 2002). Differing perspectives have also been expressed regarding the notions of continuous development, in which the individual experiences gradual, ongoing changes in development, and discontinuous development, in which development occurs in a stage like manner with different types of behaviors existing at each stage (Hinshaw, 2008). These varying views have influenced how developmental theorists account for behavior and development.
Applying the developmental perspective to the study of PTSD allows for the consideration of the presentation of this disorder across the lifespan. According to Perrin and Smith (2000), very young children may not show many symptoms of PTSD, as they do not have the capacity to verbalize their feelings as adults. They may exhibit separation anxiety, disturbances in their sleep, and loss of skills previously acquired. School-aged children may begin to present some symptoms of PTSD and may engage in posttraumatic play or reenactment of trauma, confuse the timeline of events, or begin to believe that they can detect signs prior to another traumatic event occurring (Perrin and Smith, 2000; Department of Veteran Affairs, 2013). Adolescents may begin to present symptoms congruent with adult symptoms and are more likely than children and adults to behave aggressively or act impulsively (Department of Veteran Affairs, 2013). Examining these presentations across the developmental periods allows for an understanding of the progression of the disorder and its developmental trajectory. Additionally, it allows for assessment and treatment to be tailored to meet the needs of these specific groups.

The application of developmental concepts to the understanding of psychopathologies across the lifespan can lead to a more in depth understanding of PTSD and other mental health disorders. Hinshaw (2008) highlighted several factors that developmental psychopathologists incorporate into their analysis of disorders. These factors include: normal and abnormal development, continuities and discontinuities, risk and protective factors, systemic analysis, the incorporation of different expertise, transactional models, and sociocultural factors (Hinshaw, 2008). Although the Diagnostic and Statistical Manual of Mental Health Disorders (DSM) provides guidelines for the identification of PTSD, it is only with knowledge of normal and abnormal development that an accurate diagnosis can be made. Importantly, the consideration of continuities allows for the understanding of prior behaviors that may be influencing the development and progression of PTSD; this is especially useful in understanding the course and prognosis of the disorder. The evaluation of risk and protective factors and an analysis of multiple levels of factors can inform prevention and treatment efforts for PTSD.

**Epidemiology**

Although presentation of symptoms may vary, PTSD is as prevalent in children and adolescents as it is in adults. Approximately 5% of the total United States population, under the age of 18, experiences PTSD with a higher prevalence in the disorder among girls than boys (Merinkangas et al., 2010). This disparity in gender has been replicated in research conducted outside of the United States. Bokszczanin (2007) found that girls were more likely than boys to develop PTSD following a flood that occurred in Poland in 1997. An additional finding of this study was that younger children (ages 11 to 15) were more likely to develop PTSD than older children (ages 16 to 21).

Research suggests that the percentage of children and adolescents that develop PTSD following trauma varies. Approximately 30-60% of the children and adolescents experiencing trauma go on to develop PTSD (Yule et al., 2000; Michenbaum, 1991). Violent and sexual traumas are associated with higher rates of PTSD in children than any other types of trauma (Copeland, Keeler, Angold and Costello, 2007). The severity, duration, and proximity of the traumatic event contribute to the variance in prevalence rates for PTSD (American Psychological Association, 2000). Over 90% of children and adolescents who develop PTSD, do so within 6 months of the
traumatic event (Yule et al., 2000). Roughly one-third of those suffering with the disorder completely recover within one year; however, about the same amount continue to present symptoms many years following the event (Yule et al., 2000). Examinations of PTSD in war veterans indicate that the presentation of symptoms can follow a pattern of decline in the first few years after the event and then an increase many years later (Solomon and Mikunilincer, 2006; Port et al., 2001).

The prognosis following a single traumatic event is generally good (Copeland et al. 2007), although exposure to multiple trauma increases the risk of negative outcomes in adulthood (Fox and Gilbert, 1994). Individuals who experienced multiple childhood traumas, such as child physical and sexual abuse and alcoholism, are more likely to report depression and anxiety related disorders and/or victimization in adulthood (Shaw, 2009; Fox and Gilbert, 1994).

**Etiology**

The etiology of Posttraumatic Stress Disorder requires a stressor and a predisposition that may be mediated by biological and/or environmental factors (Ozonoff, Pennington & Solomon, 2006). In understanding the etiology of this disorder it is important to consider the trauma in conjunction with the biological, environmental, and cognitive factors that may play a role in the development of PTSD.

**Traumatic Event**

The role of the traumatic event is an important factor to consider in the etiology of PTSD. Symptom severity and risk for developing PTSD are associated with latency of time after trauma exposure, type of trauma, severity of exposure, history of trauma and/or psychopathology, presence of reminders of trauma, age during the trauma exposure, parental trauma related symptoms, and secondary stressors (Foy et al., 1996; Bosquet, 2004). In examining PTSD etiology, various theoretical models recognize the importance of both cognitive and emotional reactions during and after exposure to trauma (Bomyea, Risbrough, & Lang, 2012). Furthermore, higher symptom levels of PTSD are associated with children and teenagers who are exposed to the most severe traumas, yet with family support and milder parental reactions to the trauma, the child’s symptoms are found to be less severe (Bosquet, 2004).

**Biological Factors**

Biological factors are also important to consider as vulnerability or predisposition factors that may be involved in the development of PTSD. Biological factors, including heritability, molecular genetics and personality traits, have been studied in relation to PTSD. Published and replicated molecular genetic studies of PTSD are scarce (Ozonoff, Pennington & Solomon, 2006). Research has found estimates of 46% heritability for posttraumatic stress disorder among a sample of twins (Sartor, et al., 2012).

Genetic influences are considered to be a moderate level of vulnerability factor among the process of developing PTSD post exposure to traumatic stressors (Bomyea, Risbrough, & Lang, 2012). Vulnerability for developing PTSD has been explored through Serotonin, COMT, and FKBP5 genes. Genetic and epigenetic modulation of the expression of 5-HTT is a vulnerability factor for PTSD development; however, this relationship depends on the level of exposure to trauma (Bomyea, Risbrough, & Lang, 2012). Research suggests an environment and gene interaction between the number of types of traumatic exposure and the COMT Val polymorphism in the risk for developing PTSD (Kolassa, Kolassa, Ertl, Papassotriopoulos, & De Quervian, 2010). Polymorphism in FKBP5 has been found to be associated with greater...
risk for PTSD and biologically different PTSD subtypes (Mehta, et al., 2011). The hypothalamic-pituitary-adrenal axis functioning and cortisol secretion in response to the traumatic event should both be considered as potential vulnerability factors for the development of PTSD (Bomyea, Risbrough, & Lang, 2012).

**Cognitive Factors**

There are cognitive vulnerability factors that are important to consider in understanding the etiology of PTSD. The cognitive factors that have been linked to development of PTSD include executive functioning, intelligence, rumination and style of attribution, negative appraisal, fear of emotions, and an affinity for predicting threat within the environment (Bomyea, Risbrough, & Lang, 2012). A greater amount of PTSD symptoms were found to be associated with lower IQ, and neurocognitive functioning (Bellis, Hooper, Spratt, & Woolley, 2009). Furthermore, findings suggest that pre-trauma lower levels of intelligence predict development of PTSD (Bomyea, Risbrough, & Lang, 2012).

**Environmental Factors**

Environmental factors such as the caregiving context, parenting, and family support are important to consider in the etiology of PTSD. Research suggests that parenting behavior (e.g., avoidant or extreme anxiety) influences how the child experiences the stressful traumatic event; the number of PTSD symptoms are found to be affected by witnessing a direct threat to caregiver among children who exhibit externalizing behavior prior to the traumatic event (Ozonoff, Pennington & Solomon, 2006; Scheeringa, et al., 2006; Bokszczanin, 2008). Furthermore, parental support, levels of family conflict/overprotectiveness and the degree of exposure to trauma were found to predict PTSD symptom levels (Bokszczanin, 2008).

**Optimal Assessment Strategy**

To assess Posttraumatic Stress Disorder among children and adolescents it is beneficial to consider taking a comprehensive assessment approach that utilizes both a multi-informant and a multi-method strategy to gather information (Cohen, 1998). Diagnosing PTSD in children relies on descriptions of internal states as part of the diagnostic criteria, which may be beyond the cognitive and verbal ability of a young child. Consequently, the assessor should rely on behavioral observations and other informants (Kaminer, Seedat, & Stein, 2005).

A comprehensive assessment approach gathers information from several informants, which can be helpful for developing a thorough understanding of the child’s experience. The inclusion of children and adults, such as teachers, parents and other caregivers, in the assessment process is important because each individual contributes unique and important information. Child self-reports are particularly valuable since children have been found to accurately assess their level of stress and symptoms, such as subjective anxiety (Bosquet, 2004; Kerig, et al., 2008). Furthermore, adults’ ability to provide accurate information regarding child behavior and details of traumatic events make them critical to the assessment process (Bosquet, 2004; Kerig, et al., 2008).

The importance of utilizing a multi-method strategy for gathering information is to reduce rater bias and to promote reliable diagnosis and assessment of PTSD. Furthermore, the multi-method approach may capture symptoms, such as hyperactivity, developmental skill regression, and impulsivity, undetected by a structured clinical interview (Kaminer, Seedat, & Stein, 2005). Child and adolescent self-report measures that assess symptomatology include
the Trauma Symptom Checklist for Children (Briere, 1996) and the Child PTSD Symptom Scale (Foa, Johnson, Feeny & Treadwell, 2001). Caregiver questionnaire instruments of child symptomatology include: Child Post-Traumatic Stress Reaction Index (Nader, Pynoos, Fairbanks, al-Ajeel, & al-Asfour, 1993) and the Trauma Symptom Checklist for Young Children (Briere, 2005).

Semi-structured interviews administered by a clinician are another common assessment approach to collecting information. Examples of semi-structured interviews that collect information on trauma exposure and symptoms include: the Clinician-Administered PTSD Scale for Children and Adolescents (Nader, Kriegler, Blake, Pynoos, Newman, & Weathers, 1996), the Childhood PTSD Interview (Fletcher, 1996), and the UCLA PTSD Index for DSM-IV (Pynoos, Rodriguez, Steinberg, Stuber, & Frederick, 1998). The Diagnostic Interview Schedule for Children-Version IV (Schaffer, Fisher, Lucas, Dulcan, & Schwab-Stone, 2000) and the Schedule for Affective Disorders and Schizophrenia for School Aged Children (Kaufman, et al., 1997) are two additional semi-structured interviews that have PTSD modules. These semi-structured interviews are often very thorough and capture specific details that are relevant to DSM-IV criteria of PTSD.

Since the emphasis of assessment is to understand factors that may affect the child’s development of PTSD, a truly comprehensive assessment also gathers information about the caregiver and factors that may impact parenting abilities or the parent-child relationship (Bosquet, 2004). Specifically, it is important to consider caregiver psychopathology, stress, and history of trauma, as well as caregiver’s childhood experiences (Bosquet, 2004). Assessment tools that have been found to be reliable in examining caregiver psychopathology include the Structured Clinical Interview for DSM-IV, the Beck Depression Inventory-II, and the Beck Anxiety Inventory (Bosquet, 2004). Two measures that are useful in measuring caregiver stress and history of trauma include the Life Stressor Checklist-Revised and the Davidson Trauma Scale; whereas, childhood experiences are typically measured by the Adult Attachment Interview.

Furthermore, it is important to gather details of other factors that may have an effect on parenting such as parental use of substances, domestic violence, marital status, and involvement with CPS (Bosquet, 2004). Additional relevant information that should be considered includes: child care or school history, living arrangements, child strengths, familial strengths, community strengths, child’s developmental history as well as a history of past and current interventions (Bosquet, 2004).

Optimal Treatment

Over the past fifteen years, the empirical treatment outcome literature has expanded considerably, providing critically helpful information on optimal treatments for children experiencing trauma-related symptoms across the developmental spectrum (The National Center for PTSD, 2008). At present, the empirical evidence presented in the treatment outcome literature indicates that cognitive-behavioral therapy (CBT) treatments are the most widely studied and effective treatments for children experiencing Posttraumatic Stress Disorder (PTSD) (Cohen, Mannarino, Berlinger, & Deblinger, 2000; March, Amaya-Jackson, Murray, & Schulte, 1998; The National Center for PTSD, 2008). As Cook-Cottone (2004) has explained, “It is believed that CBT works by uncoupling the pairing between the traumatic stimuli/cognitive events and the anxiety response and supplants the relaxation response and more logical thinking” (p. 134). Both predominantly cognitive treatments (Ehlers et al., 2005; Monson et al., 2006; Resick et al., 2002) and predominantly behavioral treatments (Foa
et al., 1999; Foa et al., 2005; Schnurr et al., 2007) have been shown to be effective, as are cognitive-behavioral treatments combined with other approaches (e.g., skills training in affective and interpersonal regulation (Cloitre et al., 2002); behavioral family therapy in combination with exposure therapy (Glynn et al., 1999)).

Trauma-Focused Cognitive-Behavioral Therapy (TF-CBT) appears especially promising for children as young as preschool (Cohen & Mannarino, 1996). In randomized controlled trials, TF-CBT was superior to Child-Centered Therapy (CCT; Cohen, Mannarino & Iyengar, 2011; Deblinger, Mannarino, Cohen & Steer, 2006) among samples of children traumatized by intimate partner violence and sexual abuse, respectively. Moreover, clinical researchers have established that TF-CBT is superior to standard community care (Deblinger, Lippmann, & Steer, 1996; Deblinger, Steer, & Lippmann, 1999), nondirective supportive therapy (Cohen & Mannarino, 1996), and wait-list control conditions (King et al., 2000) for children who have been sexually abused.

When selecting a treatment, one must consider the developmental stage of the child since different treatments are more or less appropriate depending on the child’s age. Since the cognitive skills of very young children are more concrete and distinctly different from the cognitive skills of older children and adults, they may not possess the cognitive skills necessary to benefit from CBT-style interventions. In such instances, other treatments such as play therapy are recommended. Furthermore, due to very young children’s reliance on their parents, when appropriate, children’s parents should be included in the treatment intervention as much as possible. Recognizing this, TF-CBT incorporates parents into the intervention by providing training in parenting skills and parent-child communication.

Since many children receive treatment for PTSD at school, CBT-style interventions are also appropriate in the school setting. Research indicates that stress management, psychoeducation, skill building, and cognitive restructuring techniques are the most appropriate for school settings since in-vivo exposure and direct exploration of the trauma have the tendency to exacerbate symptoms and have the potential to create extreme anxiety reactions (Cook-Cottone, 2004; Merrell, 2001 cited in Nickerson et al., 2009). In general, research suggests that mild PTSD symptoms can be treated at school, but moderate to severe PTSD symptoms are likely best treated outside the school by experienced mental health professionals and agencies. Cognitive-Behavioral Intervention in the Schools (CBITS), a treatment very similar to TF-CBT, has been shown to be an effective school-based treatment that can significantly reduce children’s symptoms and is superior to wait-list control conditions (Berger et al., 2007; Jaycox et al., 2010; Stein et al., 2003).

Finally, the empirical literature suggests that optimal treatment involves addressing the specific PTSD-related symptoms in conjunction with treatment for other mental health symptoms (e.g., dysregulation of affect, behavior, and/or cognition; problems with trust, shame, self-esteem, and interpersonal relationships) and resiliency factors (e.g., attachment, social skills, prevention of displacement) since these can both exacerbate and buffer the severity of the individual’s stress disorder (The National Center for PTSD, 2008).

**Conclusion**

Posttraumatic Stress Disorder is an anxiety disorder that occurs after seeing or experiencing a traumatic event, which significantly impairs an individual’s functioning (National Institute of Mental Health, 2013). Although children may experience PTSD, they often present with
symptoms different from adults (e.g., separation anxiety, disturbances in their sleep, and loss of skills previously acquired). Prevalence studies consistently indicate that there is a gender disparity in the incidence of PTSD. Higher rates of PTSD exist for females than males. Although many children are able to recover within a few months of a traumatic event, some continue to experience symptoms of PTSD for years following the traumatic event. Exposure to multiple traumas appears to increase the likelihood of negative outcomes in adulthood.

Several factors contribute to the development of PTSD. Among the most important are the severity, duration, and proximity of the individual to the traumatic event, biological vulnerability factors, environmental factors, risk and protective factors, and individual cognitive facets. Empirical research supports a comprehensive assessment approach to PTSD. Multiple informants and methodological strategies should be employed to gather information, including information about the child’s caregivers and environmental factors that may put the child at greater risk for developing PTSD (Bosquet, 2004; Cohen, 1998). It is critical that assessment and diagnosis consider developmental differences in the presentation of symptoms between children, adolescents, and adults.

The empirical literature indicates that cognitive-behavioral therapy treatments for PTSD are the most widely studied and effective treatments for children experiencing Posttraumatic Stress Disorder. Trauma-Focused Cognitive-Behavioral Therapy appears especially promising for children as young as preschool. When selecting a treatment, one must consider the developmental stage of the child since different treatments are more or less appropriate depending on the child’s age. Finally, the empirical literature suggests that optimal treatment involves addressing the specific PTSD-related symptoms in conjunction with treatment for other mental health symptoms and resiliency factors since these can both exacerbate and buffer the severity of the individual’s stress disorder.

Whether those affected are children experiencing violence in their communities and schools or veterans returning from war, it is imperative for the clinical research community to continue to push our understanding of PTSD forward from a developmental psychopathology perspective in order to clarify the pathways that lead to adaptive and maladaptive outcomes. Given the epidemiology of PTSD and the deleterious outcomes associated with the diagnosis, the need for effective, evidence-based, and developmentally-appropriate treatment is apparent.

References


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About the Authors

Diana Capous, B.S. is a 2nd year doctoral student at the University of California, Santa Barbara. Her research interests include developmental psychopathology, trauma, and promoting positive coping and resiliency in youth.

Kezia Gopaul-Knights, M.Sc. is a 1st year doctoral student at the University of California, Santa Barbara. She is a credentialed school psychologist within the state of California and worked in this capacity for two years prior to pursuing a doctoral degree. Her research interests include bullying and victimization, international school psychology, and the social and emotional development of Caribbean immigrants.

Aaron D. Haddock, M.Ed., M.Ed. School Psychology, M.A. is a 3rd doctoral student at the University of California, Santa Barbara and the current Editor of School Psychology: From Science to Practice. He holds a Multiple Subject Teaching Credential and enjoyed teaching fourth grade for six years before returning to graduate school. His research interests include: human development, social & emotional learning, elementary education, school climate, international school psychology, and education and mental health policy.
The United States is experiencing a rapid linguistic diversification. There is a steady increase in the number of individuals who speak languages other than English at home. According to the 2000 United States Census Bureau, 17.9% of the U.S. population speaks a language other than English at home. During the 2004-2005 school year, Payán and Nettles (2007) reported that approximately 10.5% of students in schools were identified as English language learners (ELL). Seventy-nine percent of those ELLs were identified as Spanish speakers.

The achievement disparities between ELLs and native English-speakers are tremendous and attributable to a multitude of factors such as limited English vocabulary, weak comprehension skills, poor reading achievement, and the absence of first language formal academic instruction (August, Carlo, Dressler & Snow, 2005; Burgoyne et al., 2009). Consequently, ELLs are demonstrating low academic achievement and falling increasingly behind their native English-speaking peers (Chang, 2008).

English language learners are burdened with the extra task of learning English in order to communicate with teachers and peers, while trying to progress academically. These factors place ELLs at an immediate academic disadvantage. Students reading in their native language will have acquired 5,000-7,000 words before they receive formal reading instruction in schools (August, Carlo, Dressler, & Snow, 2005). Even if ELLs acquire approximately this number of words, they still face the challenge of achieving linguistic competence in English. It typically takes 1-2 years for ELLs to develop basic interpersonal communication skills (BICS) and an additional 5-7 years to develop cognitive academic language proficiency (CALP) (Schon, Shaftel, & Markham, 2008).

The objective of the present literature review was to examine the plethora of factors that affect language learning and academic performance among ELLs. Examined were factors that impede academic success for ELLs, the effects of English-only education, and various elements of the second language acquisition process. Throughout the course of conducting this research, the author utilized EBSCOhost and PsychINFO to identify the range of issues affecting the academic attainment of ELLs.

**Major Themes**

In reviewing the literature, four major themes became apparent. These included: (a) conceptualization of the English language learner, (b) factors contributing to academic difficulties among English language learners, (c) concerns of English-only education, and (d) aspects of second language acquisition.

**Conceptualization of the English Language Learner**

This section serves to orient the reader to the variety of terms used to classify individuals whose native language or dominant language
spoken is a language other than English. These terms include but are not limited to: English Language Learner (ELL), English as an additional Language (EAL), culturally and linguistically diverse (CLD), language minority (LM), minority language (ML), and limited English proficient (LEP).

Factors Contributing to Academic Difficulties Among English Language Learners

Academic achievement among ELLs pales in comparison to their native English-speaking peers. Results obtained from the National Assessment of Educational Progress (NAEP) indicated that 41% of ELLs scored one year below grade level and 29% scored 2 or more years below grade level in tests of reading and language arts (Ortiz, Wilkinson, Robertson-Courtney, & Kushner, 2006). Regarding Hispanic fourth graders, only 44% scored at or above basic reading level on the NAEP (Ortiz, Wilkinson, Robertson-Courtney, & Kushner, 2006). In contrast, 75% of native English-speaking Anglo American students scored at or above basic reading level. Of Hispanic youth between the ages of 15 and 17, 40%-50% are enrolled in courses below grade level (Ortiz, Wilkinson, Robertson-Courtney, & Kushner, 2006). Cognitive-linguistic factors, socioeconomic factors, and cultural and familial factors represent a host of challenges that ELLs experience in attempts to obtain academic achievement relative to their native English-speaking peers (Ouyang & Cooley, 2007).

Cognitive-Linguistic Factors

English language learners must learn a second language while making significant academic strides in their native language and second language (Fletcher, Bos, & Johnson, 1999). These challenges complicate the acquisition of skills such as reading, vocabulary, and comprehension, which represent areas in which ELLs demonstrate the greatest deficits (Kieffer, 2008; Martin-Beltrán, 2010). Continued academic success is contingent upon acquisition of these skills given that formal US schooling is additive in nature, becoming progressively more complex as grade level increases. Thus, if ELLs begin school with a poor foundation in their native language, it will likely be difficult for them to make the same academic strides as their native English-speaking peers.

Burgoyne and colleagues (2005) investigated the comprehension skills of children identified as learning English as an additional language (EAL). Ninety-two third year students (ages 8-9) participated in this study. Forty-six were identified as EAL and 46 as native English speakers. Students were assessed in terms of the following factors: reading accuracy and comprehension, listening comprehension, and receptive and expressive vocabulary. Results indicated that EALs exhibited greater comprehension difficulties than their English-speaking peers (Burgoyne, et al., 2005). EALs also exhibited difficulty in comprehending written and spoken text and demonstrated lower scores in expressive and receptive vocabulary. In this study, vocabulary tended to predict the reading and listening comprehension scores of both EALs and native English speakers. Notably, however, comprehension difficulties of EALs were not attributed to poor decoding skills but to poor vocabulary (Burgoyne, et al., 2005). These findings have two important implications. First, comprehension skills bear a significant relationship to academic achievement (Burgoyne, et al., 2005). If students do not possess adequate comprehension skills, it is unlikely that they will be able to make significant academic strides. Second, vocabulary is the key to comprehension. The more vocabulary acquired, the more likely it is that EALs will comprehend English and, in turn, achieve more.
Socioeconomic Factors

Low socioeconomic status also plays a major role in ELL underachievement. ELLs who attend impoverished schools are more likely to underachieve and are at greater risk for failure (Kieffer, 2008; D’Angiulli, Siegel, & Maggi 2004). Poverty often equates with a lack of access to educational resources in languages other than English (Kieffer, 2008). Moreover, even though non-native English speaking families often have high educational aspirations for their children, their limited English proficiency impedes their ability to provide guidance in homework and assist their children in pursuit of such aspirations (Gibbs, et al., 2003).

D’Angiulli, Siegel, and Maggi (2004) examined the relationship between socioeconomic status and word-reading skills development in thirty ELL and L1 (English as a first language) students by administering a literacy-intensive curriculum at the beginning of kindergarten. The Wide Range Achievement Test-Third Edition (WRAT-III) was used to assess word-reading skills. The researchers assessed socioeconomic status based on employment and household income and educational and immigration background (D’Angiulli, Siegel, & Maggi 2004). The researchers compared the results obtained from the WRAT-III to the socioeconomic status of each respective student and found that word-reading achievement was related to SES. Word-reading achievement gaps among ELLs and L1 students were manifested during kindergarten but narrowed as they advanced to Grade 5 (D’Angiulli, Siegel, & Maggi 2004). The researchers concluded that the similarities found between ELLs and L1 students were attributable to strong instructional practices whereas the differences were attributable to SES of ELLs and L1 children (D’Angiulli, Siegel, & Maggi 2004).

Concerns of English-Only Education

English-only education requires all students, regardless of linguistic background, to receive instruction in English. Arizona, California and Massachusetts enforce laws that restrict the extent to which teachers can provide instruction to students in their native language (Rolstad, Mahoney, & Glass, 2005). In the state of California, Proposition 227 was passed which requires English to be the sole language of instruction for all children in public schools (California Secretary of Education, 1998). According to Article 2 under the heading English Language Education, Proposition 227 states that:

All children in California public schools shall be taught English by being taught in English [emphasis added]. In particular, this shall require that all children be placed in English language classrooms. Children who are English learners shall be educated through sheltered English immersion during a temporary transition period not normally intended to exceed one year. (California Secretary of Education, 1998)

Arizona’s Proposition 203 and Massachusetts Question 2 are based on California’s Proposition 227 and use similar jargon. Proposition 203, Question 2 and Proposition 227 all posit that implementation of English only education is necessary because English is the dominant language of the United States and, therefore, young immigrant children will become fluent in English if they are exposed to it at an early age via classroom instruction (Arizona Department of Education, 2000; Massachusetts Secretary of

There is a serious issue with implementation of English-only education. Even though English only education was established as a means for ELLs to become fluent in English, it has had a detrimental effect. Complete immersion into English only education does not allow ELLs to learn at the same speed as their native English-speaking peers. English only education is problematic also because it heightens the risk for loss of native language and cultural identity (Wright 2004).

**Loss of Native Language**

ELLs who receive English-only education may lose proficiency in their native language (Wright, 2004). ELLs are especially vulnerable to losing the native language during the early years of schooling (Cummins, 2003). English becomes the dominant language of communication because it is the sole language of instruction in schools, which provides ELLs with multiple opportunities to practice English in a variety of settings. Conversely, native language practice is often limited to a few select settings. The opportunities to strengthen English become more numerous as they are presented through a variety of mediums such as television, books, and music.

**Loss of Cultural Identity**

English only education may affect the maintenance of one’s native cultural values and traditions. When ELLs become less able to communicate with their parents or other family members, in their native language, the maintenance of cultural values and traditions can be adversely affected (Wright, 2004). Speaking the native language often plays an overarching role in determining an individual’s personal and cultural identity. Thus, if native language is lost, identity may also be lost (Gibbs & Huang, 2003). Additionally, pressure to conform to American society may compromise the maintenance of language and culture. Some ELLs adopt views and follow social norms that are in direct contrast to their native culture. Some parents of school-aged ELLs remain resistant to acculturation. This resistance to acculturation exacerbates the “acculturation gap” between parents and ELLs (Gibbs & Huang, 2003). The more “Americanized” the attitudes and values of ELLs, the less likely they are to adhere to native cultural values (Wright, 2004).

**Aspects of Second Language Acquisition**

Some education professionals erroneously assume that the language learning deficiencies can be wholly isolated from academic issues and that those deficiencies can be aptly addressed through acquisition of English (Collier, 1995). In reality, a host of issues affect language learning and these issues ought to be addressed. In order to better understand the nature of second language learning, education professionals must first understand the factors that affect acquisition of a second language including those that impede such acquisition.

**Factors Impeding Second Language Acquisition**

Competence in one’s native language and the extent of time it takes to acquire one’s native language are two factors important to consider when examining second language learning. It is essential to establish a good foundation in one’s native language before learning a second language (Sparks, Phillips, Ganshow, & Javorsky, 1999). Many ELLs have never received formal instruction in their native tongue, which makes it incredibly difficult to be receptive to a new language (Gibbs & Huang, 2003). Sparks, Phillips, Ganshow, and Javorsky
(1999) posited that successful acquisition of a second language is dependent upon one’s ability to master successfully one’s native language. Developing native language competencies in phonology (sounds), orthography (writing), syntax (grammar), and semantics (meaning), enable an individual to adapt to the intricacies and irregularities of a second (foreign) language (Sparks, Phillips, Ganshow, & Javorsky, 1999). If individuals are unable to read in their native language or cannot perform mathematical operations, it will be difficult for them to perform or acquire these skills in a second language.

Cummins (1979), a pioneer in the field of language development, proposed that there are two ways that individuals can learn language: basic interpersonal communication skills (BICS) and cognitive academic language proficiency (CALP). BICS and CALP are two language skills developed by individuals learning a second language (Schon, Shaftel, & Markham, 2008). BICS refers to an individual’s ability to converse in social settings and engage in conversation with peers as it pertains to the context of the situation. Typically, it takes about two years to develop BICS. CALP refers to an individual’s ability to work successfully in the academic environment. It typically takes 5-7 years to acquire CALP. Clearly, one year is not an appropriate length of time to acquire a second language.

Implications for the Practice of School Psychology

When conducting psychoeducational assessments for ELLs, school psychologists are met with the daunting challenge of determining whether academic difficulties are the result of poor language acquisition, poor educational instruction, learning disabilities, cognitive processing disorders, attention problems, or any combination of these (O’Bryon & Rogers, 2010). Best practices for the referral process advocate determination of the student’s proficiency in both languages. Assessments for language proficiency should include formal measures such as testing and informal measures such as observations, questionnaires, and language samples (O’Bryon & Rogers, 2010). The question of who is best suited to conduct language proficiency evaluations with ELL students also merits attention. Bainter and Tolefson (2003) proposed that bilingual school psychologist are best suited to conduct ELL assessments, however there seems to exist no definitive “best practice” for doing so, nor is there a consensus of what this term means among practicing school psychologists.

Perhaps meeting the needs of ELLs requires changing the way school psychologists are trained. For example, school psychology training programs might consider the possibility of requiring graduate students to identify and acquire a second language that would be useful for practice. Additionally, more school psychology training programs should consider integrating curriculums that prepare school psychologists to deliver services to bilingual students for example requiring that some coursework and practicum training be provided under the supervision of a bilingual supervisor (O’Bryon & Rogers, 2010).

In conclusion, as the ELL student population continues to increase, so does the need for research to determine best practices for helping these students succeed academically and socially (Fletcher, Bos, & Johnson, 1999). In addition to possessing the expertise to help conduct this research, school psychologists are ideally situated to put into practice any associated findings. Adherence to this science to practice model affords school psychologists the greatest opportunity for helping to improve the educational experience and plight of ELL students and their families.

References


About the Author

**Miriam E. Thompson** is a fourth year Ph.D. student in the School Psychology Program (APA and NASP accredited) at the University of Arizona. Presently, Miriam is completing her second year working as a Graduate Tutor Coordinator for the New Start Summer Program, which helps incoming freshman from low-income and underrepresented backgrounds acclimate to the university setting. During the academic school year, Miriam works with students, tutors, and other professional staff as a Tutoring Graduate Assistant at the University of Arizona’s THINK TANK. Her current research interests include: foreign language acquisition, bilingualism, culture and diversity, multiculturalism, learning disabilities, English language learners, and classroom learning and instruction.
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The field of School Psychology has become so diverse over the past 15 years. School Psychology is not only a discipline that is practiced in the United States, but internationally. If you are interested in getting involved with school psychology on an international level, you should check out the International School Psychology Association, which brings school psychologists together from around the world through research and advocacy. This year the annual conference will be held in Porto, Portugal from July 17th through July 20th. The theme for the conference is “The Future of School Psychology Services: Linking Creativity and Children’s Needs.” Please check out this website and consider attending http://www.ispaopp2013conference.pt/.
This year, the chapter’s primary goal was to increase community involvement and fundraising for relevant nonprofit organizations. The chapter’s secondary goal was to increase Florida State University’s presence at state and national conferences.

The Florida State chapter of SASP was formed in the mid-2000s and became officially recognized as a student organization by Florida State University in 2010. Formally, the FSU SASP chapter was utilized primarily as a social club and a means of communication between cohorts, but this year the members became more interested in community outreach and involvement as well as fundraising for nonprofit organizations and conference participation.

This year, the chapter’s primary goal was to increase community involvement and fundraising for relevant organizations. In February, SASP members contributed to a bake sale in FSU’s College of Education building to raise awareness about adolescent depression, bipolar disorder, and suicide. Not only did the organization sell baked goods, but they also disseminated information about suicide awareness. The bake sale raised $300, which was donated to Families for Depression Awareness for their “Sweeet! Baking for Healthy Minds” program.

In the month of March, SASP members volunteered and participated in Capital City Youth Service’s (CCYS) Celtic 5k. CCYS is a private, nonprofit agency, which offers a continuum of services for runaway, homeless, truant, ungovernable, and other at-risk youth and their families in the Tallahassee area. Proceeds from the 5k will go towards CCYS’s new Transition Living Program, serving older homeless youth in the Tallassee area. Since the club did not historically participate in fundraising or community outreach, the chapter is proud of their activism and involvement this year.

The chapter’s secondary goal was to increase our presence at state and national conferences. In October, eight SASP members presented at the Florida Association of School Psychology’s 39th Annual Conference in Orlando, Florida. Presentation topics included Moving on Up: Helping High-Functioning ASD Students Transition to Middle School and Improving Social Skills among Foster Care Children: A Group Curriculum. Over 75% of the chapter’s members and two of the school psychology program’s professors attended our state conference. In February, six students presented at the National Association of School Psychology’s Annual Convention in Seattle, Washington.
Presentation topics included *Traumatic Brain Injury: Improving Social, Emotional, and Behavioral Functioning* and *Improving Social Skills among Foster Care Children: A Group Curriculum*. Over 25% of the chapter’s members and two of the school psychology program’s professors were able to attend the NASP convention on the opposite side of the country. The chapter’s goal of increasing presence at state and national conferences was successful. Although the attendance rates improved significantly this year, the chapter’s members are most proud of the increase in SASP member presentations.

The chapter is currently applying for a grant in hopes of holding its first annual research/case study symposium at the end of the spring 2014 semester with a focus on home and school collaboration. With the amount of enthusiasm and contribution demonstrated by FSU SASP members, the 2013-2014 school year looks promising, and the chapter plans on doubling their community involvement and fundraising. Similarly, with many promising projects in the works, the chapter hopes to continue increasing presentation and attendance rates at upcoming conferences. Through hard work and dedication of FSU’s SASP members, the chapter hopes to continue helping and enriching the local community as well as developing professional skills to help their members reach their full potential.

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**About the Authors**

**A. Paige Blankenship**, BS, is a second year PhD student in the combined school psychology/counseling psychology program at Florida State University and is the FSU SASP Chapter Vice President. Paige received her BS in psychology from the University of Florida in 2008. She has worked as a graduate assistant for the MS/EdS school psychology/counseling program at Florida State University since 2011. Paige also works as an evaluator at the Adult Learning Evaluation Center at FSU and in the Quality Assurance Department of the State of Florida’s Department of Children and Families, with prior experience as a Guardian ad Litem. Paige’s research interests include traumatic brain injury, crisis intervention, response to intervention, and suicidality.

**Katelyn A. Kuchta**, BS, is a second year EdS/MS student in the school psychology/counseling psychology program at Florida State University and is the FSU SASP Chapter President. Katelyn received her BS in Psychology from the University of Central Florida in 2011. Katelyn currently holds an assistantship through the Louise R. Goldhagen Multidisciplinary Evaluation and Consulting Center and also works as an evaluator at the Adult Learning Evaluation Center at FSU. Katelyn will be beginning her school psychology internship in a Florida school district in the fall of 2013. Katelyn’s research interests include crisis intervention, response to intervention, emotional behavioral disorders, and suicide prevention.
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- Opportunities to get involved in activities that will further strengthen this discipline in the future. Opportunities to disseminate research and to share ideas through the SASP publication, School Psychology: From Science to Practice.
- Connections to a national network of local SASP chapters as well as guidance in building a local SASP chapter at your institution.
- Mentoring opportunities (e.g., SASP’s Diversity Mentoring Program) that create relationships between students and professionals in the field.
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