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. For example, the fall issue features an interview with Dr. Brandon Gamble, a professor of school psychology at California State University, Long Beach, spotlights the collaboration between a professor and a graduate student participating in the diversity mentorship program, and provides updates on several D16 working groups to which board members have been contributing. In this issue, you'll also find graduate students' reflections on studying school psychology in Portugal the difficulties and opportunities associated with Hurricane Sandy. Also, don't miss the edifying pieces on how the hippocampus supports memory and the effectiveness of CBT for adolescents with bipolar. The issue closes with an article highlighting the scholarly, enjoyable, and philanthropic activities of the SASP Chapter at the University of Arizona.

Call for Nominations to SASP Executive Board

Those interested in joining the SASP Executive Board team should begin to prepare application materials, as a formal Call for Nominations will be distributed to the listserv on September 30th. Nominations will be accepted until 10/28. Voting will be conducted from 11/4 to 11/25 and election results will be announced 12/2. The SASP Executive Board is an excellent opportunity to gain leadership experience in the field of school psychology and we look forward to your applications!

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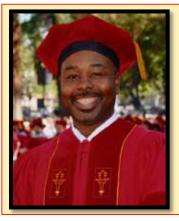
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SASP and Division 16 Application

Luminaries in the Field

Interview with Dr. Brandon Gamble: Past-President of the California Association of School Psychologists

W. Jeremy Rime, B.S., M.A., P.P.S., Co-Editor



Brandon Gamble, Ed.D., Assistant Professor, California State University at Long Beach & Past-President of the California Association of School Psychologists

How did you become interested in school psychology?

When I was in the 4th grade I spent a lot of time in the principal's office. I went to a Christian school and prayed a lot. Whatever that means it led to a strong vision where I saw myself working in a school, not as a teacher, but as a helper to kids who found themselves in the principal's office or struggling with anger issues like I did. I had almost forgot about those visions until my mother, a graduate student in the administration program at San Diego State (SDSU) sent me a brochure for SDSU's school psychology program while I was completing my bachelor's program in Alabama. Little did I know that SDSU would fund my master's program and they just seemed like they were focused on tackling issues I was interested in. I was very fortunate to attend SDSU.

What are your current and past research interests, and how have these changed over time?

San Diego State University's "African Centered Project" got me on my way and I am still after answers related to the issue of overrepresentation of Black students in special education as well as their overall achievement in K-16 schools. My recent efforts as CASP president have extended the arc of my training in this area, at both research and applied levels, and have better prepared me to address the overrepresentation of Black students from different angles. Also, I credit my dissertation chair, Dr. Ricardo Stanton-Salazar, who helped me to broaden my research and applied perspectives. He is a sociologist who specializes in social capital networks that educational leaders can use to have a positive impact on minority youth who are served by those leaders.

Currently I am completing a manuscript with Dr. Katina Lambros from San Diego State University pertaining to minority access to mental health. My main argument is that minority students, particularly Black students, are often exposed to poor quality mental health and instruction and, thus, we need to shift our focus to improving the quality of these services as opposed to things like worrying about which test kits to use. I admit this is not easy

work, but very rewarding. Along these same lines, I am interested in examining how students are, or are not, able to access health services. More specifically, I am interested in finding ways to better utilize, on behalf of students, the social capital that many of our community and program leaders possess. The first step is to encourage more thinking along these lines. We as school psychologists are in a position to do this. For example, better linking school services with existing community organizations such as Boys and Girls clubs, church-based entities and a host of others, is within our reach as school psychologists. I have found that conducting this type of research proves challenging given that I am not totally immersed in a school or district setting as a practitioner anymore. However, having been a practicing school psychologist for a significant amount of time has provided me with a lot of ideas. Perhaps because of my extensive practical experience, I tend to view myself as an "action researcher."

I am a very applied scholar on purpose and to some degree it creates a gap between my colleagues and I at the university. Minority scholars are often knocked for providing high levels of service at the detriment of their scholarship. I tend to lean toward the idea that there is something important about a minority scholar, like myself, being *more* accessible to minority students, as well as community members, to help solve real world problems. The university values scholarship more than service, but as much as I want to fulfill my role as a team player at the university, I have a duty to those who came before me to connect with the community. I am the *only* Black male tenured professor in the college of education at my university, which is just the opposite of my most recent job as a school

psychologist where I worked with at least 20 Black men at a high school in Long Beach, CA (e.g. administrators, coaches, counselors, custodians, staff assistants, etc.). The majority of my applied efforts are steered by a desire to orient myself with people who not only understand my culture but who are making it better by helping young men be successful academically at the high school and university levels.

How does your cultural/ethnic background inform your applied and research activities?

My background has informed my school psychology activities in several ways. Based on my own life experiences, I am particularly interested in examining African American parents who have raised at least one son who has gone to at least two years of college. What did the parents do right? What does it look like when you get your kid to the point of success? Ideally I would start by interviewing parents and subsequently their children to get an overall picture. I have just completed collecting data for a research study aimed at answering these questions.

Many of my mentors were African
American women educators who migrated
from the segregated South of the 1960s to
Southern California and were willing to
share with me their life stories and
perspectives on empowerment in
challenging times. Many of these women
who mentored me had worked for 20-30
years prior to my association with them.
Also, both of my parents were teachers and
part of a wave of educators who integrated
the teaching staffs in Southern California

during the 1970s. Some of my mentors, like my parents, had been "the first Black teacher or administrator" at a school site or even a district. The dignity, consistency, and resolve they possessed, shaped in large part by the times, I can only hope to strive for and emulate, but never match. Their sacrifice has greatly affected my career in school psychology and education. In addition, my involvement with The Association of Black Psychologists (AB Psi) has provided me an intellectual anchor with which to dock my ship of ideas. To extend the metaphor, elder members in AB Psi scrape the barnacles off my ship and see if my ideas will float. As a school psychologist for over 10 years, I applied the theories developed by the AB Psi, as well as the lessons from my mentors, as I served students and families of many different ethnicities. My dissertation was inspired by my experiences with my mentors in Long Beach and with AB Psi. For my dissertation I examined how program leaders of African American male youth groups use their social capital networks on behalf of their youth. Learning about networking in a way congruent with African Americans in Southern California has helped to enhance my scholarship as well as my career.

What is your greatest advice for current school psychology graduate students?

I don't know about great advice but I hope all my students have a clear purpose as to what they are doing beyond just the case-to-case experiences. By this I mean I would hope that they are also trying to make a difference regarding some of the seemingly intractable problems we as school psychologists face (e.g., better understanding of autism, disproportionality, school climate, crisis response, etc.). I would encourage school psychologists in training to resolve to make an impact not just one case at a time but also at district, state, regional and national levels. Affecting change at these levels may take years so your time in graduate school is an ideal time to begin to plan and envision the successful outcome of your aspirations by developing a solid foundation on which to build your career. Last but not least, I would suggest developing and pursuing your research interests sooner rather than later. Do not wait for the "right time" because a child, perhaps even a community, has been waiting long enough. Tomorrow may be too late.

What texts or books would you assign, or recommend, every school psychology student read?

Dr. Janine Jone's book *The Psychology of Multiculturalism In the Schools: A Primer For Practice, Training and Research*http://www.nasponline.org/publications/booksproducts/multicultural.aspx

Dr. Gamble can be contacted at: brandon.gamble@csulb.edu

News from the APA Convention: Student Research Forum

SASP and D16 would like to thank all of the participants and attendees that helped to make the 2013 Student Research Forum a success! There were a total of seven poster presentations on an array of topics. The attendees had a wonderful time interacting with one another and having the opportunity to network with fellow students in school psychology and professionals in the field.

Dr. Nastasi gave a dynamic and interactive presentation on School Psychologist as Advocates for Child Rights and Social Justice. Dr. Nastasi's presentation was not only informative but also eye opening and applicable to our daily lives. The takeaway for each attendee was that we all have the power to be agents of advocacy and social justice in our everyday lives with the children and families we serve, no matter what job title we hold.

The SASP Executive Board would like to personally thank D16 for all of their help and support in putting together this event!

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:

- o Potential for increasing the well-being of children by advancing the field of school psychology
- o Degree to which the research and/or findings add to extant evidence-based literature
- o 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)

The purpose of *School Psychology: From Science to Practice* is two-fold: to disseminate student-focused articles pertaining to the study and practice of school psychology as well as circulate news relevant to the Student Affiliates of School Psychology (SASP), the student-led organization of American Psychological Association's Division 16: School Psychology. The newsletter is prepared by Editor, Aaron Haddock (ahaddock@education.ucsb.edu), and Co-Editor, Jeremy Rime (wjereboa@yahoo.com). Expressed opinions do not necessarily reflect or infer the positions of SASP, Division 16, or the American Psychological Association. For more information about SASP or previous newsletters, visit http://www.apadivisions.org/division-16/students/index.aspx.

Update on APA Division 16 Working Groups

Cait Hynes, *Membership Chair*Katherine A. Stoll, M.C., *Student Interest Liaison*David Cheng, M.S., *President-Elect*

Report from the Mental Health Working Group

The Mental Health Working Group is one of four established working groups of the APA, Division 16. Given the recent national attention for increasing the availability of mental health services, including the implementation of the Affordable Care Act, the Division 16 Executive Committee (EC) approved a motion earlier this year to convene this working group with a focus on mental health service delivery in the school setting. There are currently 10 members and 2 student members participating in this group, with Drs. James DiPerna from Pennsylvania State University and Stacy Overstreet from Tulane University operating as the co-chairs. The recent discussions of the Mental Health Working Group focused on three key areas: mental health promotion, school-based mental health systems, and trauma-focused services. Members of this working group are collaborating with one another to gather linguistically, culturally, and ethnically sensitive and inclusive information on the training, practice, policy/advocacy, and potential or existing products available in each of these three broad areas. Although this working group is in the beginning stages of development, the overall goal is to identify, articulate, and advance understanding of mental health issues relevant to school psychology in the near future.

Report from the Early Career Working Group

The newly formed Early Career Working Group of the APA's Division 16 was created to assist in better addressing the needs of early career members in the field of School Psychology. The group is currently composed of six early career members and two student members. At the most recent Business Meeting, the Executive Committee approved a proposal for the group to focus on two key areas of growth: recruitment of early career professionals to Division 16 and increasing the programming directly aimed at early career members. Planned recruitment efforts include the use of social media as well as outreach to members of related groups such as the Trainers of School Psychology (TSP), Council of Directors of School Psychology Programs (CDSPP), and National Association of School Psychologists (NASP). A targeted recruitment campaign will also be used to encourage graduating student members to remain involved with Division activities as they transition into their new roles as early career professionals. Members of the group are currently collaborating to develop increased programming directed towards those members at the beginning stages of their careers at the annual APA Convention, in *The School* Psychologist, and by adding an Early Career page to the Division website to provide information related to career planning, financial opportunities, research, networking, and other resources.

Report from the Globalization of School Psychology Working Group

The initial objective of the *Globalization of School Psychology Working Group* was to develop a database of readings and material on basic areas of school psychology science and practice with a focus on with transnational/multicultural perspectives. This database would be of value to scholars, faculty members, students, professionals, and researchers around the world who possess interest in school psychology as a transnational/multicultural discipline.

One of the most valuable resources created is the annotated bibliography of the *Globalization of School Psychology Working Group*. This annotated bibliography examines important issues in theory, research,

service delivery, education and training of school psychology at a national/multicultural and international/global level with the optimal goal to promote future partnerships and professional collaboration among faculty, graduate students and practitioners in this field. The major thematic subgroups in school psychology and respective coordinators are: a) Assessment, b) Prevention and School-Based Prevention Programs, c) Transnational/ Multicultural School Psychology, d) Consultation, e) Crisis Intervention, and f) Evidence-based Intervention.

Recognizing and promoting the internationalization of school psychology discipline will further develop and foster a multicultural/transnational professional identity.

Diversity Mentorship Program Spotlight

Kennetha Frye, Diversity Affairs Chair

Hi SASP Members,

Below, please find the September SASP Diversity mentorship program spotlight. This spotlight features Dr. Patricia Sanchez Lizardi, an affiliate in the College of Public Health at the University of Arizona, and Milka Marcelo, a third year doctoral student in the School Psychology program at Fordham University.

Best,

Kennetha

Mentor: Patricia Sánchez Lizardi, Ph.D.

What is your opinion on the future of multiculturalism within School Psychology?

I think multiculturalism within School Psychology has gradually received more attention over the years and will continue to do so in the future, which I find extremely important considering schools' diverse population. During this mentorship, Milka and I have reviewed NASP and APA statements on multiculturalism, as well as research papers, and have perceived that it is not only an issue about School Psychology's practice, but also about training and research in multicultural issues in all areas of psychology. The practice of School Psychology provides us with the possibility of encountering students from different cultures and backgrounds. Therefore, multicultural knowledge will continue to positively influence the day-to-day practice of school psychologists, informing their training standards, as well as motivating research programs in School Psychology. So, in general, I am optimistic about

the future of multiculturalism within School Psychology.

However, and having said the above, I also believe that there is a long road ahead of us. I think there is an overall perception that multiculturalism is relevant only to minority groups and, in my experience, I have only met a few colleagues, not considered part of a minority group, to be interested in multiculturalism. Thus, I believe we still have to work on making multiculturalism a broader and better informed practice within School Psychology, especially because there are school districts, whose school psychologists still do not represent the diversity of the population they serve. Also, School Psychology training programs need to promote, not only multicultural knowledge, but create environments to recruit faculty and students representative of this multicultural diversity.

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

What comes to mind is my own experience becoming aware of multiculturalism. I grew up in Mexico City, where there are many indigenous groups within the population; however, I always thought my cultural background as very homogeneous, and it might be so when compared to the U.S. I can remember that ever since I was a graduate student, multiculturalism was present in different courses and we even had a "Testing of Minorities" class, and a "Socio-cultural Context in Human Development" course where we studied and discussed topics about test bias and cultural and ethnic differences in the conceptualization of psychological constructs such as intelligence, among others. Over the years, I have had the opportunity to interact closely with other cultures (through

marriage, friendship, and living in Brazil's Amazon rainforest), thus expanding my interest and knowledge about multiculturalism. But this is never a complete process and there is always something new to learn. The Diversity Mentorship Program offers this opportunity. It has been over a year since Milka and I have been mentee/mentor and I always enjoy our skype meetings. We have not been able to meet in person yet, but I have learned a lot from our readings and discussions. I believe the field of School Psychology would greatly benefit by having more students, like Milka, actively involved in learning more about multiculturalism.



Patricia Sánchez Lizardi is an affiliate in the College of Public Health at the University of Arizona. She received her PhD in School Psychology from the University of Arizona and is a National Certified School Psychologist. She has worked as a school psychologist in Arizona and California. She was a visiting Professor in the Science Education program at the Universidade do Estado do Amazonas, Brazil. Dr. Sánchez Lizardi researches multicultural inclusion practices with diverse learners and cultural differences in children and adolescents' psychological well-being. She is also interested in studying how students learn science in order to better prepare science teachers in diverse cultural contexts. Email: patricia.s.lizardi@gmail.com

Mentee: Milka Marcelo

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

The Diversity Mentorship program has afforded me the opportunity to develop a professional relationship with an experienced school psychologist, particularly one with a background in international settings and diverse populations. Despite our busy schedules, Patricia and I look forward to our biweekly meetings, and we always seem to end our sessions feeling invigorated. Patricia ties in her experiences to the topic at hand, allowing me to gain a greater understanding of the strengths and challenges found across various school settings. Her insight, combined with my own academic and professional work, has enhanced my perspective on issues of diversity in school psychology. Furthermore, as a Latina, it has been an inspiration to be mentored by a Latina practitioner. We are able to share those unique aspects of our experiences as school psychologists of color. Our relationship is certainly evolving from a solely professional one to a more personal one, as well. And it has been a delight.

What topics with regard to diversity have you discussed with your mentor?

During our sessions, Patricia and I review journal articles of interest. One major theme of our discussions has been that of assessing diverse populations. We are interested in research that explores instruments and techniques for measuring comparable factors across racial/ethnic groups and across international settings. The goal is to be able to assess children from different backgrounds accurately and efficiently. We have also looked into scholarly articles about experiences with microaggressions, whether in school psychology graduate programs or among school-aged children. We discussed the need not only for continued multicultural education but also for candid and open conversations about issues of diversity

throughout the field.

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

We do not have any plans pending for collaboration on research. Nevertheless, my sessions with Patricia have been instrumental in honing my own research interests and in preparing for my dissertation. If the opportunity for collaboration arises in the future, I would gladly oblige.



Milka Marcelo is a third-year doctoral student in School Psychology at Fordham University. Her research interests are in bilingual education and urban youth.

SASP Diversity Mentoring Program Mentee Recognition Award

Kennetha Frye, Diversity Affairs Chair

Dear Mentors and Mentees,

I'm writing to share some exciting news. This year will mark the inaugural year of awarding the SASP Diversity Mentoring Program Mentee Recognition Award. The purpose of this award is to, on an annual basis, recognize one outstanding mentee who has demonstrated (or has the potential to make) significant contributions to diversity efforts within the field of school psychology.

Mentors will be invited to nominate their mentees by completing a brief survey and nomination statement (no more than 300 words). Nominated mentees will also be required to submit a personal statement (no more than 300 words). Submissions will be judged by members of SASP's Executive Board and Diversity Committee through a blind review process, and mentees will be evaluated in the following areas: (a) their level of engagement in the Diversity Mentoring Program; (b) their potential to make important contributions to diversity efforts in school psychology; and (c) their level of professionalism, leadership and service. The 2013 selected mentee will receive a \$75 cash reward, be featured in the *From Science to Practice* publication, and be recognized at the 2014 American Psychological Association's Annual Convention.

The nomination period for the award will close on September 15, 2013 and mentees will be notified of their nomination by September 22, 2013. Personal statements to be submitted by nominated mentees will be due on October 15, 2013 and the selected outstanding mentee will be announced in December 2013. If you have any questions, please don't hesitate to contact me at kennethafrye@yahoo.com

Warm Regards,

Kennetha

Kennetha Frye, M.S. Division 16 SASP Diversity Affairs Chair

SASP Diversity Scholarship Program

Kennetha Frye, Diversity Affairs Chair

Hello School Psychology Students!

SASP and Division 16 support students from under-represented cultural backgrounds as they endeavor to become a part of the inspiring profession of School Psychology. SASP and Division 16 are aware of the financial pressures that graduate students experience and thus, through generous support from Division 16, the Diversity Scholarship Program was created to provide monetary support to aid students from diverse cultural backgrounds entering the field. SASP offers the following three awards each year for student support. Please note that this year there are two incoming student awards in the amount of \$500 instead of one \$1000 scholarship:

Incoming Student Diversity Scholarship: Two annual awards of \$500 each are given to masters/specialist or doctoral students who will be entering their 1st or 2nd year of graduate training (beginning in Fall 2013) to help defer some of the costs acquired through graduate study. This is a one- time award; individuals granted the awards may not reapply in subsequent years.

For students will be starting their 1St year in Fall 2013 proof of an offer of admittance and acceptance into a school psychology program will be required.

Advanced Student Diversity Scholarship: One annual award of \$1000 is given to an advanced masters/specialist or doctoral student who will be entering their 3rd, 4th, or 5th year of graduate training (beginning in Fall 2013) to help defer some of the costs acquired through graduate study and/or in preparation for internship. This is a one-time award; individuals granted the award may not reapply in subsequent years. Please note that the individual who wins this award is required to present a poster highlighting their research at the Annual SASP Student Research Forum (SRF) at the American Psychological Association convention in Honolulu, HI.

For more information about these awards, please visit http://www.apadivisions.org/division-16/students/diversity-scholarship/index.aspx to download the application form and supplemental materials. The application package must be emailed to the Diversity Affairs Chair, Kennetha Frye at kennethafrye@yahoo.com by May 13th, 2013. Please send all of the documents (including signed recommendation letters) in one email. Late applications will not be accepted.

If you have any question, please feel free to contact me at kennethafrye@yahoo.com or at 713-309-0266. We are looking forward to receiving your applications, and to honoring three of our fellow School Psychology students!

Warm wishes,

Kennetha Frye, M.S. Division 16 SASP Diversity Affairs Chair

A Reflection on Winning the SASP Advanced Diversity Scholarship

Charity Brown Griffin

I was thrilled to learn that I would be the recipient of the Student Affiliates of School Psychology (SASP) 2013 Advanced Diversity Scholarship. Since entering the graduate program in School Psychology at the University of South Carolina, I have sought to integrate principles from multiple disciplines to elucidate the complex set of factors guiding the achievement motivation and mental health outcomes of African American youth. In particular, my research interests seek to explore the influence of cultural factors (racial socialization; racial identity; racial discrimination experiences), on adjustment outcomes in African American youth. Also, given the demographic disparity between school psychologists and the school-age population served, my career goals are focused on the recruitment and retention of African American students in doctoral school psychology programs, and training school psychologists in culturally sensitive service delivery.

SASP and Division 16 have given much effort in supporting students from under-represented cultural backgrounds as they endeavor to become a part of the inspiring profession of School Psychology. This award is a great example of one of these efforts. As a result of receiving this award, I was able to subsidize my attendance at the 2013 American Psychological Association Convention (APA) to disseminate findings from my dissertation research in the format of a poster presentation. More importantly, I was also able demonstrate my commitment to the advancement of the field of School Psychology through professional development. I knew that by attending the convention, I would have the opportunity to hone and craft my professional skills and network with a host of experts in the field. I was also able to attend and participate in the Student Research Forum (SRF) being held during the APA Convention. The SRF was a great opportunity for me to network with graduate students from all over, to gain additional presentation experience and develop as a professional. I must say that these educational opportunities would not be possible without the generous support from the SASP Advanced Diversity Scholarship.

I gladly seek to continue to fulfill the mission and goals of Division 16, SASP, and this prestigious award through my commitment to diversity issues in the field of School Psychology. I will continue to promote educational and mental health outcomes among ethnic minority youth and am committed to increasing the visibility of school psychologists of color in both the academy and community. Thank you SASP and Division 16 for your generous support and for enabling me to achieve these goals!

A Study Abroad Experience: Reflections on the GEDS Program

Shannon Lewis, M.A. University of North Carolina at Chapel Hill

This article describes one female graduate student's experience of studying abroad in Porto, Portugal as part of the Global Education and Developmental Studies (GEDS) program during the spring of 2011. The school psychology program at the University of North Carolina at Chapel Hill provided students with this unique opportunity. I received training related to Portuguese programs in education, health, and social services, research related to Portuguese special education policy, and cultural immersion activities. My participation in the GEDS program provided invaluable experiences that helped me to further develop skills related to cultural competence, especially as it relates to children and families.

GEDS Program Background

The University of North Carolina at Chapel Hill (UNC-CH) school psychology doctoral program offered students an opportunity to develop competence in Global Education and Developmental Studies (GEDS) via integration of the UNC-CH curriculum with a study abroad experience. The Transatlantic Consortium on Early Childhood Intervention developed the GEDS program through the affiliation of three U.S. universities (UNC-CH; Vanderbilt University; University of Colorado, Denver) with three European universities (Jönköping University, Sweden; Ludwig-Maximilians University, Germany; University of Porto, Portugal). The goals of the program are twofold: (1) to provide graduate students with skill and knowledge related to education

policy, evaluation, practices, and research in the U.S. and E.U., and (2) to prepare graduate students to undertake future leadership positions in the field of education, especially roles focused on the provision of early childhood intervention services.

In addition to myself, students from a number of disciplines, including school psychology, education, nursing, social work, occupational therapy, and early childhood education participated in the study abroad experience. E.U. graduate students studied at U.S. universities, and U.S. students studied at E.U. universities for a semester or for 2.5 months over the summer. While studying in other countries, participants completed courses aligned to their interests, enrolled in language courses, participated in field visits to government and non-government affiliated program facilities, health, and social services agencies, and developed a manuscript for publication. Additionally, students took part in various cultural activities and experiences while abroad.

My Training Experience

I completed my training experience at the University of Porto in Porto, Portugal over a four-month period. A major objective of the GEDS program is to facilitate one's learning about the systems and programs available to serve children. To this end, I engaged in several field visits during my time in Portugal. These included visits to public schools, private

schools serving children with special needs, private clinics serving children with disabilities, and attending public policy meetings concerning services for children with disabilities. One of the private institutions I was particularly impressed with was the Associação Social e de Desenvolvimento de Guifões (ASDG) because they simultaneously provided daytime preschool services for infants and children, up to five years of age, and adult day care services. This arrangement fostered positive interaction among children and the elderly participants, as the adults were involved in the children's activities and care. This unique pairing provided rewarding and stimulating experiences for the older adults that are often not available in other elderly care facilities (e.g., nursing homes).

Another unique experience involved observing a five-year old girl diagnosed with multiple sclerosis along with a team of psychologists during a field visit to a public preschool. This visit took place before I began my Portuguese language course. Thus, many of my observations were based on the student's nonverbal behaviors and peer interactions. My experience provided the team with an interesting perspective, as it is often difficult to tease apart verbal and nonverbal behaviors during an observation. During the consultation meeting with the student's parents, teachers, and other relevant individuals, I shared my observations and suggested interventions that might be useful in fostering more positive social interaction with this particular student's peers.

Additionally, while in Porto, I was afforded the opportunity to become familiar with the Portuguese special education eligibility criteria. Due to relatively recent changes in Portugal's special education law, which took place in 2008 (see Miranda-Correira, 2010; Sanches-Ferreira et al., 2012), I was able to attend several workshops that further educated me on core changes in the law and proposals on how to implement those changes. One of the more

salient changes to Portuguese education law, involved implementing use of the International Classification of Functioning, Disability and Health - Children and Youth Version (ICF-CY; Miranda-Correira, 2010). Portugal's special education law now requires use of the ICF-CY when developing a student's individual education plan (IEP) and providing the designated services (Miranda-Correira, 2010; Sanches-Ferreira et al., 2012). Related to this, I had the opportunity to attend a workshop that taught participants about the history behind the ICF-CY and how to use it effectively. In addition, part of the workshop involved the use of vignettes as a way to practice using the ICF-CY. Another experience involved my travelling to Lisbon to attend a town hall meeting that focused on implementation on the ICF-CY in Portugal. During this meeting, experts answered questions posed by teachers, parents, and other stakeholders regarding their concerns related to the ICF-CY as well as challenges associated with using the system. At the conclusion of my experience in Portugal, I was given the opportunity to present a lecture to Portuguese students in an undergraduate course at the University of Porto discussing similarities and differences among Portuguese and U.S. special education policies.

In addition to the training and learning activities I was involved in, my host professor arranged for me and the other GEDS students to participate in several culturally related activities and experiences. For example, we traveled to different towns in northern Portugal and attended their Carnaval celebrations, which are annual festivities that take place just prior to the Lent season. Also, we toured different small towns in the more rural areas or northern Portugal.

Program Reflections

The GEDS program provided a diverse and unique study abroad experience. I learned about different service delivery systems for

children with disabilities and special needs. Taking part in the program provided experiences that caused me to reflect on the strengths and limitations of both Portuguese and U.S. special education law, and to consider how each might compliment the other. In addition to reflecting on legislation and policies for children with special needs, I was able to study different aspects of service delivery at the micro level, by observing and participating in consultation meetings, and learning about Portuguese assessment procedures. Lastly, the program encouraged immersion within the Portuguese culture by providing Portuguese language courses, incorporating participation in cultural festivities and celebrations, and facilitating engagement with local community members. Consequently, I further developed multicultural related skills and competencies while learning more about cultural diversity. These experiences have increased my multicultural awareness and sensitivity, which will allow me to better fulfill my role as a school psychologist as I serve children and their families from various cultural groups.

Implications for School Psychologists

Studying abroad can provide an invaluable opportunity to immerse one's self into a foreign culture by providing opportunities to observe and experience - even practice - different societal customs, traditions and norms. Such experiences can serve to increase cultural awareness and, in turn, aid school psychologists who serve children and families from diverse backgrounds. As school psychologists we must strive to acquire the competencies necessary to best serve children from various cultures, ethnicities, backgrounds, and life circumstances. My study abroad experience has added greatly to my repertoire of skills and knowledge pertaining to multicultural awareness. Such knowledge and awareness will undoubtedly aid me as I conduct assessments, recommend and provide interventions, and work to improve the

educational experiences and outcomes of children from different cultural backgrounds. In addition, studying and understanding how other countries approach the provision of services to children with disabilities and special needs can greatly enhance one's ability to be an effective school psychologist. Such knowledge and understanding can broaden and refine one's approach to providing services to children in schools and the community. Also, it can help provide school psychologists with the ability to better understand difficult or sensitive situations from the perspective of others.

Conclusion

In closing, and based on my experience, studying abroad is an effective and enjoyable way to increase one's multicultural competency and awareness. Regardless, however, of whether one is able to study abroad, I would encourage school psychology students to become aware of the different strategies and approaches that other states and other countries utilize to serve children with special needs. Having such awareness, can only serve to enhance and compliment one's ability to be an outstanding and fully competent school psychologist.

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Lessons from the Field Reflections on Hurricane Sandy: The Gifts of Giving and Receiving

Cait Hynes, Fordham University

Hurricane Sandy was the deadliest and most destructive hurricane of the 2012 Atlantic hurricane season, as well as one of the costliest storms in United States history. As Sandy swept across the eastern seaboard leaving destruction in its wake, one of the areas hardest hit was the Rockaway peninsula in Queens, New York. Rockaway was frequently featured in the news in the weeks following the storm due to the damage done not only by water and wind but by fire as well. As the Atlantic Ocean swept across the town to reach Jamaica Bay on the other side, water hit above-ground electrical equipment. The 15 foot flood waters prevented fire vehicles from being able to reach the impacted areas, so the fires traveled unimpeded from house to house, destroying entire blocks. No one had ever imagined anything like that could happen and no one had known how to prepare for something of that magnitude.

When Mayor Bloomberg gave the order for the Rockaways to be evacuated prior to the storm, there was a decidedly mixed response from the residents. Some people argued that they had evacuated in 2011 for Hurricane Irene and hadn't experienced much damage to their homes so they had no intention of leaving again. Others, including my family, left immediately, knowing the city would close the bridges once the storm picked up, leaving no chance for a change of heart. We gathered the essentials- birth certificates and other important papers, some photo albums, a few 9/11 mementos we kept in honor of my dad, and my sister's supply of insulin- and

went our respective ways to bunker down. My mother booked a room at a hotel in midtown, my two younger sisters stayed in dorms at their respective colleges, and I returned to my Fordham graduate student housing. Since my apartment was located as far inland as it is possible to be in Manhattan, we thought that it would be the safest space to store our rescued belongings. I settled in expecting a fairly quiet evening, to be spent watching updates on television on what was going on in more vulnerable areas.

By the afternoon leading up to the storm there was very little rain but the wind was already tremendous. Up the block from my apartment a crane on the site of a new skyscraper snapped and was left dangling 70 stories in the air. The entire block was evacuated during the height of the storm as the winds prevented workers from being able to stabilize the swaying arm. I was taken in by some undergraduates for the night when the FDNY told me that it wasn't safe to travel the ten blocks to my mother's hotel. From there, I watched in horror as the Facebook and twitter updates of those still in Rockaway told the story of the flooding, the power failures, the boardwalk snapping cascading down the streets, and the transformer fires. Shortly before midnight the internet at Fordham cut out, leaving me frantic for news of family and friends. In the morning, I got clearance to leave campus for my mother's hotel and we tried to tease out fact from the rumors that were flying online and on the news. The gas shortage that followed the storm prevented us from getting back to see the damage for ourselves for almost a

week. When we finally managed to get there, what we found was not good. While water had destroyed everything on the basement and main floor of my house, the one-story home that my aunt and cousins lived in had been completely destroyed. The Harbor Light- a local restaurant that my dad had owned while he was alive and that served as one of the hearts of the neighborhood- had burned to the ground. Everyone we knew had taken varying degrees of damage, and many were forced to seek displacement housing while the long process of recovery began.

One of the most difficult things for me in the aftermath was not the loss of my things or my home, but the feeling of helplessness and dependency that accompanied the loss. I had left my apartment with my wallet, phone, laptop, and a blanket, so when school reopened I was still wearing the same outfit I had been wearing the day of the storm and had to rely on my classmates for a set of clothes to wear to work. Everyone I knew was more than generous in making sure I had everything I needed, from money to clothes to extra time on assignments, but I felt uncomfortable to be seen as needing this help. As budding school psychologists, most of us are more accustomed to be providing support to others than asking it for ourselves. Yet even as I found myself yearning to help those I saw around me, I was also forced to admit that my family needed help. Being on the receiving end was more challenging than I could possibly imagine. As practitioners, we are constantly assuring those we work with that there is no shame in accepting help or admitting that we can't do it all on our own- why then was it so difficult for me to admit the same limitations for myself? I'd never characterize myself as superhuman and I'd certainly never consider myself as somehow better than the individuals I work with, yet some part of me still struggled to accept those limitations that I so easily accepted in others. It struck me how much we take for granted that the students we work with will be

able to understand and accept their limitations because we tell them there is nothing wrong with needing a little help

Yet receiving does not prevent you from giving as well. The students at the school where I worked as an extern-people whom I viewed as it being my role to serve and provide support for- collected bottled water for me to take to my family or others who might need it after the storm. When I found out, I was embarrassed that my students would see me so vulnerable, but as I spoke to them I realized how excited some of them were to have an opportunity to help. Living in the South Bronx, most of these students had very little and needed a great deal of support themselves, and I believe that many of them had never been given the opportunity to help someone they knew in need before. It was a valuable reminder for me that not only does everyone need help at some point or another, but everyone has something they can give to those who need help at the same time.

What has stayed with me most throughout this experience has been the countless stories of bravery, kindness, and selflessness that I have seen people demonstrate in spite of their own losses. In Rockaway during the days following Sandy, my parish became the center of activity for people to meet and get what they needed. Outside individuals and organizations brought in warming tents as well as donated food and clothing, but just as many people from the neighborhood came to contribute whatever they could in return. People whose attics had escaped the flood pulled out whatever winter clothes they had to be shared as the weather got colder. Others maxed out their credit cards buying contractor bags, masks, and work gloves to be distributed to residents and volunteers alike as cleanup began. People appeared to take solace in their ability to help their neighbors even as they struggled with the idea of accepting assistance themselves. The stories of sacrifice and bravery during the storm itself were countless. One of the most notable

was 23 year old Dylan Smith, who saved multiple people from burning homes by escorting them across the waters to safety on his surfboard. Dylan died less than two months later in a surfing accident, a harsh reminder that no matter what the scope of homes and possessions were lost, it will never compare to the things that really count.

As I write this, it has been about 11 months since Hurricane Sandy and my life is very different from what it was a year ago. My family is still in the process of rebuilding, but we hope to be able to go home before the year is over. Rockaway still has a long road ahead in terms of recovery, and many people may not return there at all. Yet these experiences have helped me to some humbling yet valuable lessons. There truly is no shame in vulnerability, and while allowing ourselves this vulnerability can be difficult, it can also provide an opportunity for others to recognize their own gifts. People are amazingly resilient, and no matter how bad the situation they find themselves, they may still find ways to reach out to and connect to others in need. I believe these are lessons that will deeply impact my own growth as both a person and as a practitioner, and I hope that I can help impart a sense of them to each child I work with who has experienced difficulties, be they academic, social, or personal.

Forum

Hippocampus Involvement in Explicit Memory Processes Related to Trauma

Thomas J. Gross, Oklahoma State University

Abstract

This brief paper provides a review of some of the literature regarding the constructs and nature of memory as formed through the hippocampus. It examines the processes of explicit memory, key neurotransmitters as well as structural differences with internal functioning in the hippocampus. These are viewed in terms of trauma and clinical treatment.

Hippocampal Explicit Memory Processes and Trauma

There is broad interest in the psychological phenomena of memory development specifically, how individuals develop explicit memories, the structures and neurochemicals associated with their formation, as well as their role in response to trauma. Explicit memory allows us to gain access to the world around and inside of us. It is the gate way to awareness. The role of the hippocampus is remarkable given such a small structure handles vast functions. It functions in multiple capacities and there are differentiated responsibilities within the hippocampal structures. Along with separation of duties, its responses to various neurotransmitters allow us to understand how it impacts the encoding and recall of memories. This, in turn, offers insight into its role in trauma responses and may offer insight into potential treatment for those who experience problematic trauma based behaviors. Such possibilities underscore the importance of pre-professional school psychologists to consider, more in depth, their roles for developing memories and conceptualizing treatments for those they serve.

The purpose of this paper is to examine the phenomenon of memory, the function of the

hippocampus, including its response to trauma, and to speculate how these relate to treatment for Post-Traumatic Stress Disorder (PTSD). Such speculation is based largely on existing research and is rooted in the notion that this research can be interpreted in a manner that offers a cohesive (although limited) model for interpreting trauma responses while, at the same time, satisfying empirical skepticism. Put more succinctly, this manuscript aims to further the reader's understanding of the role of explicit memory, as mediated by the hippocampus, in the experiences of those with PTSD

Function of Memory

Memory

Memory, according to Siegel (1999), is the how the past affects future outcomes, which is enacted by the firing of a similar profile of neurons as when an event occurred. It is what allows us to construct our reality through noesis and autonoesis. Noesis is the factual knowledge of the world, where autonoesis is the knowledge of the self (Siegel, 1999). These constructs allow for near consistent representation and re-representation of events to a person over time. They are inherently biological events, which are ever presently active in constructing the individual's reality.

Explicit Memory

Siegel (1999) further describes the construct of explicit memory as distinctly recollecting semantic or episodic events. It is a neurological pulse that allows us to consciously, verbally, and expressively represent events or acquire knowledge of the environment (Eichenbaum, 1997; 2001). This is what allows one's access to specific personal experiences (Berry, Shanks, & Henson, 2008). Explicit memory requires the conscious attempts to

retrieve information for the sake of emitting or altering behavior. Conversely, implicit memory is the unconscious retrieval of information to emit or alter behavior (Stewart, Buffet-Jerrott, Finely, Wright, & Gomez, 2006). These two neurologically based systems are dissociated from each other (Eichenbaum, 1997). The principal components of explicit memories are contextual dependence for encoding and storage (Siegel, 1999). Explicit memories are influenced by priming and recognition (Berry et al., 2008).

Explicit memory involves encoding and willful remembrance of events, which arise to form the forefront of our experience of the world. It is, at its core, an event of interconnected neurological firing, which becomes our consciousness of the experienced world. Merely knowing of these processes, however, does not explain where these neurons are firing from. Thus, an increased understanding of the dynamics and development of explicit memory requires a more thorough knowledge of the brain structures involved.

The Hippocampus and Memory

Hippocampus

The hippocampus is a structure located in the midbrain and is part of the limbic system. The hippocampus is essential for recognizing familiar and specific events. It works in concert with the amygdala to create, for example, classicalconditioning in animals (Lovallo, 2005). Additionally, it maps sequences and allows for individuals to understand that events happen in space and time (Siegel, 1999). Perhaps most importantly, the hippocampus encodes and retrieves long-term memories when attention is focused toward a particular experience (Siegel, 1999) while simultaneously integrating newly acquired information into working memory (Lovallo, 2005). Research results have indicated that chronic stress and trauma decrease these capacities by compromising hippocampal functioning (Siegel, 1999).

The primary task of the hippocampus is to develop and extract conscious information. In doing so, this universal brain structure not only facilitates remembering, but determines the scope and shape of one's subjective and psychosocial reality. Ideally, clients are able to formulate a functional sense of

"what is" via the accumulation of experiences along with the ability to sensibly incorporate those experiences into the present.

Explicit Memory Model

From an overall standpoint, understanding what experiences and structures relate to explicit memory is only a small piece of the puzzle. A model for the actions that facilitate explicit memory is necessary for understanding why an individual may have difficulty with certain aspects of explicit memory. Furthermore, it may be fruitful to conceptualize this process in terms of brain structure and function, and neurotransmitter influence.

Three stage model. Eichenbaum (2001) proposed a three stage model of explicit memory, where the hippocampus acts as the gateway. In the first stage the hippocampus mediates the recording of sequential and contextual information about events for the development of an episodic memory (Eichenbaum, 2001). Next, the hippocampus identifies common representative features between past and present events. Finally, it links together these representations and composes a memory space that supports the use of inferences essential for learning (Eichenbaum, 2001). Nonetheless, the hippocampus does not perform these operations in "neurological isolation."

Memory network. Eichenbaum (1997) has also outlined a cortical-hippocampal circuit for explicit memory. In this model three areas of the brain play a crucial role: the cortex, the para-hippocampal region, and the hippocampus. These structures communicate in a serial pattern and have bidirectional loops. The cortex organizes and establishes what is to be remembered while the hippocampus and para-hippocampal area modify how persistent and organized representations of events are (Eichenbaum, 1997). Accordingly, an intact cortex helps with attending to what needs to be remembered, while an intact hippocampus and para-hippocampal area allows for persistence and understanding of memories across time.

Since the hippocampus is imbedded in a three structure memory system, it must deal with a steady stream of information coming from and going to others structures while an individual experiences and responds to the environment (Eichenbaum, 2001). As the perceived complexity of

the environment increases, hippocampal firing increases to accommodate for memories specific to the situation as well as to encode associations similar to other situations. This aids with the cortex interpreting distinctness and similarity of behavioral contexts (Eichenbaum, 2001).

Unfortunately, damage to the hippocampus degrades the integrity of semantic memories (Zaidel, Esiri, & Beardsworth, 1998), reduces encoding of new environments, reduces the ability to develop associations between relevant stimuli, and alters neural firing patterns dependent upon stimuli configurations (Eichenbaum, 2001). Consequently, persons with compromised hippocampal functioning may struggle with acquiring new vocabulary necessary for reinterpreting their environment. Such individuals will likely experience persistent deficits in creating appropriate or new associations between current behaviors and environmental feedback. In short, damage to the hippocampus adversely affects hippocampal neural responding which, in turn, adversely alters the acquisition of novel behavioral responses. It is these novel behavioral responses that allow for continuous adaptation to one's environment.

Intra-Hippocampal Workings

Systems within the hippocampus also impact the development of explicit memory. Similar to brain function as a whole, the hippocampus has specialized functions relative to both hemispheres of the brain (Zaidel et al., 1998). These hippocampal hemispheres house complimentary functions. Important to the development of explicit memories is the left hippocampus as it is associated with language and delayed recall. The right hippocampus is associated with automatic processing of information (Zaidel et al., 1998). Interestingly, both hippocampal hemispheres respond to damage or abnormal functioning by increasing their respective activities to compensate for decreased capacity. Regardless, however, of this compensatory mechanism, if there is relatively decreased activation explicit memory abnormalities are more likely (Yasuno et al., 2000).

Accordingly, as school psychologists, it is important to consider that difficulties with remembering traumatic events may be rooted in

suboptimal hippocampal functioning and not attributable, merely, to avoidance. Examining this hypothesis in a typical therapeutic setting may not be feasible however. Fortunately, if a clinician is informed about a client's brain injury, especially one involving the hippocampus, then the clinician may have some insight into the client's seeming reluctance to recall prior events. This is important as the client may respond in a manner consistent with an experience (implicit memory), but not be able to recall the event or key environmental cues associated with it (explicit memory).

Neurotransmitters and the Hippocampus

Exploring the macro and micro mechanisms of explicit memory and the hippocampus without considering the role of neurotransmitters would be to neglect a key facet of memory. Lovallo (2005) states that epinephrine and cortisol increases in the hippocampus are associated with increased memory retention. Conversely, high levels of cortisol over extended periods of time are associated with deficient memory and inappropriate behavioral decisions during times of high stress (Lovallo, 2005). Furthermore, high levels of cortisol in the hippocampus are associated with reduced size and functioning of the hippocampus and poor explicit memory abilities (Monk & Nelson, 2002).

Other glucorticoids such as hydrocortisone and cortisone have similar effects. Cortisone in high doses impairs retrieval of information, but not encoding or consolidation. In very high doses it may disrupt working memory. Hydrocortisone primarily affects the hippocampus and acts to shift attention to novel stimuli rather than familiar stimuli (Monk & Nelson, 2002). In some cases these stress hormones may act to reduce one's ability to remember, impair one's ability to recall information, and compromise one's ability to attend to germane information in favor of attending to novel information when under duress.

Another neurotransmitter of interest is serotonin. Serotonin receptors are highly concentrated in the mid-brain structures, including the hippocampus, and have a role in behaviors that require high cognitive demand (Yasuno et al., 2003). The receptors specifically for serotonin called 5-HT_{1A} are associated with memory. Decreased 5-HT_{1A} binding in the hippocampus is associated with

increased explicit memory. There are distinct associations with 5-HT_{1A} receptor density and lower explicit memory functions of verbal and general memory (Yasuno et al., 2003). Such findings indicate that if a client is given medication to increase serotonin or to decrease its reuptake, the individual may be more susceptible to lapses in memory or difficulty with describing past events. This implies that there may be a need to help with regulating serotonin agonist and antagonist medications for individuals with pathology such as depression who are experiencing difficulty with recall.

Some neurotransmitters affecting the hippocampus have effects beyond memory alone. GABA_A receptors are associated with decreased anxiety symptomology and are found in the hippocampus, para-hippocampal region, and the orbitofrontal cortex (Crestani et al., 1999). People with deficits in transduction of GABAA in the hippocampus are prone to anxiety disorders and these deficits contribute to misinterpretation of cues as threats, selection bias for threatening cues, and bias to recall threatening explicit memories (Crestani et al., 1999). Additionally, low GABAA levels may promote associations between unconnected stimuli. Some animal studies point to hyperactivity of the hippocampus when it is deficient in GABA_A receptors (Crestani et al., 1999). Important to the discussion of GABA_A receptors is that low transduction of GABA_A may lead an individual's hippocampus to connect unrelated information in their explicit memory network, which is primed to find and retrieve threats.

Lastly, some psychoactive chemicals act to reduce the overt presentation of threat response behaviors. Still, they may have unintended consequences for explicit memory. Benzodiazepines have anxiolytic, sedative, and relaxant properties; however, they can induce anterograde amnesia (Stewart et al., 2006). Anterograde amnesia is failure to recall information that is presented after a specific event (Stewart et al., 2006). Benzodiazepine-induced explicit memory reduction can occur without sedation of the individual or disrupted attention to task. The reduced explicit memory is found across children and adults. Furthermore, the administration of benzodiazepines prohibits conscious recall of stressful events while preserving implicit memory of the events (Stewart et al., 2006). This information conveys the importance of knowing the effects of medications used for anxiety

and their effect on phenomena regulated by the hippocampus. That is, while trying to regulate exaggerate stress related response, we may inadvertently diminish the individual's ability to draw appropriate connections between environmental stimuli.

Taken together neuroactive chemicals have a profound impact on the structure and function of the hippocampus. High levels glucorticoids shrink the hippocampus, reduce its ability to retrieve memories, and inhibits a person's connections with familiar information and disinhibits seeking novel stimuli. Similarly, over saturation of serotonin is associated with decreased explicit memory. This appears to indicate that increased hyperarrousal impairs explicit memory for glucorticoid and serotonin systems. This impacts the individual as fight or flight chemical responding ultimately diminishes our ability to remember and make sense of our stressful experiences.

Moreover, reduced levels of GABAA contribute to maladaptive stress responses because this deficit leaves the individual prone to selecting and remembering threatening cues from the environment while connecting threat experiences to discontiguous stimuli. Unfortunately, the use of benzodiazepines to quell exaggerated stress responses may inhibit the production or recall of explicit memories that are necessary for individuals to work through stress that surpasses relative thresholds. Ultimately, the individual is left with a disconnection between what was experienced in the environment and what is translated into neurological firing. As a result, how one responds to the environment and to other people will appear out of sync.

The Hippocampus and Trauma

Some experiences are so far beyond an individual's threshold capacity that their responses become asynchronous with their environment. Such traumatic events often impact the individual to such a degree that profound changes occur at neurochemical and/or structural levels. These changes continue to impact the individual by disrupting their ability to remember events and make meaningful connections with previously learned stimuli. Lastly, the person is so affected that this chain of responses begins to impair perceptions of the environment along with responses to events,

areas, and/or others.

Post-Traumatic Stress Disorder

One outcome associated with one's experiencing severe trauma is Post-Traumatic Stress Disorder (PTSD). PTSD is a psychological disorder as defined by the American Psychiatric Association's Diagnostic and Statistical Manual Fourth Edition, Text Revision (DSM-IV-TR; APA, 2000). It involves the exposure of an individual to a traumatic event that involved actual or threatened death or injury to self or others, along with intense fear, helplessness or horror. The exposed individual persistently and subjectively re-experiences the traumatic event, avoids trauma-associated stimuli, and experiences persistent and increased arousal. Significant impairment of one's daily functioning whether social, occupational or otherwise is also a sign of PTSD (APA, 2000).

Often, PTSD involves a sense of dissociation and disorganized and intrusive memories that are often associated with nightmares (Brewin & Saunders, 2001). The combination of high arousal and dissociation creates a powerful impairment agent for the encoding of events during a trauma experience. Additionally, intrusive thoughts and dissociations are moderated by disrupted perceptual/imagery and verbal memory (Brewin & Saunders, 2001). There is a multidirectional impact of events, in which a trauma event triggers a psychological effect of high arousal and a behavioral effect of dissociation. Given our current understanding of responding from a biological standpoint, it makes sense for one to consider the underlying structures responsible for encoding and recalling events.

Function of the Hippocampus

Exposure to traumatic events is thought to alter the shape and function of the hippocampus. Researchers have discovered that combat soldiers experiencing PTSD often have less right hippocampal volume while lower left hippocampal volume is more often seen in adults who experienced physical and sexual abuse during childhood (Stein, Koverola, Hanna, Torchia, & McClarty, 1997). Nonetheless, greater severity of dissociation and experiencing of PTSD symptomology was related to a reduction in left

hippocampal volume. Research has yet to fully determine whether severe trauma leads to hippocampal atrophy or whether smaller hippocampal volumes predispose individuals to more sever PTSD symptoms (Stein et al., 1997).

Some research findings suggest that changes in hippocampal volume are associated with specific groups of individuals with PTSD. For example, fire fighters with PTSD often have smaller right hippocampal volumes than their typically functioning peers (Shin et al., 2004). Additionally, traumatized firefighters showed greater blood flow to their hippocampus during recall tasks. The amount of blood flow, however, was not dependent upon task difficulty. This increased compensatory blood flow to the hippocampus may limit resources necessary to regulate the amygdala, which can compromise the brains ability to bring memoryassociated imagery to consciousness. In this way, low hippocampal volume may be a risk factor for developing PTSD (Shin et al., 2004).

Differences in right and left hippocampal volume, when comparing childhood abuse victims to firefighters and combat soldiers, seems to indicate that social role may be an important consideration when examining brain structure response with regard to PTSD (Shin et al., 2004). One's perception of their ability to impact a stressful environment may alter how a traumatic event is processed in the brain. For instance, when one has a role of power and responsibility, trauma may inhibit the ability to automatically process information. This may, in turn, help one to apply useful labels and connections to a particular experience. The trade off is a loss of control over what is automatically brought to our awareness via other structures associated with memory. This could leave a person incapable of regulating what is brought to awareness and what useful connections it has with our current environment. On the other hand, if one feels a lack of control, semantic processing and recall of prior events may be inhibited. This allows us to keep a running log of what is harmful or safe, similar to the way in which classical-conditioning works, while simultaneously being unable to make sense of the experience through language and recollection of similar events. This would leave a person incapable of deciphering why and what to do with their stress responses.

Conclusion

Memory remains the essential conduit through which we experience our world. It allows us to sensibly understand events as they unfold in our environment and to determine our agency within that environment. In order to understand reality we must have an integrated internal log of external and internal events. Explicit memory is essential for this process. Using prior experiences to predict future events, and assembling them in space and time, allows one to assemble a coherent picture of life. To effectively do so requires a well orchestrated interaction of biology, psychology, and social constructs.

A tremendously complicated biological system allows for the development of explicit memories. The hippocampus is central to this system. It determines which memories are formed and how memories affect conscious and unconscious behaviors. The hippocampus aids awareness of present and possible experiences and allows for the creation of different schemata. Yet, it does not function in isolation. What occurs at both biological and psychological levels impacts one's interactions with the environment. The environment reciprocally impacts psychology and biology. Thus, when working with individuals who experienced trauma related difficulties, such as PTSD, it is imperative that practitioners consider all three factors when developing and following a treatment plan.

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Research Review

The Effectiveness of Cognitive-Behavioral Therapy (CBT) for Adolescents With Bipolar

Matthew Pagirsky, M.A., St. John's University

Prevalence and Characteristics of Bipolar Disorders in Youth and Adolescents

Bipolar disorders are psychiatric disorders characterized by at least one manic episode and typically one depressive episode across the lifespan (Diagnostic and Statistical Manual - Fourth Edition -Text Revision, DSM-IV-TR, American Psychiatric Association, 2000). Although onset of bipolar disorders has often thought to occur in late adolescence or early adulthood (Klein et al., 1998), there has been little attention on the disorder in youth until the last decade (Carbray & McGuinness, 2009; Youngstrom, 2007). Whereas bipolar disorder was rarely ever diagnosed prepubertally, it is now one of the more frequent diagnoses in mental health settings (Youngstrom, 2007). While epidemiological studies estimate that bipolar disorders appear to affect roughly 1-2% of youth and adolescents nationwide (Lewinsohn, Klein, Seeley, 1995; McClellan, Kowatch & Findling, 2007), there is great variability in rates with some community mental health centers reporting doubled rates of diagnosis in the last decade alone (Youngstrom, Youngstrom & Starr, 2005).

While speculation regarding the cause of the increase in rates is still very much a topic of discussion in the scientific community and the public (Carbray & McGuinness, 2009), symptomatology of the disorder and its functional impairment nonetheless requires immediate attention and treatment with effective interventions. Youth diagnosed with bipolar disorder exhibit mixed mood states, rapid cycling, excessive elevated mood, marked levels of irritability and frequent comorbid psychiatric disorders (West et al., 2009). These youth tend to report impaired functioning in relationships with peers, disruptions in academic productivity and other school problems, and high levels of hostility with parents and siblings (West et al., 2009). Additionally, affected youth engage in significantly more suicide attempts and receive a significantly greater amount of mental health treatment compared to both clinical and non-clinical populations (Lewinsohn et al., 1995).

Bipolar disorders are highly co-morbid with other psychiatric disorders; primarily anxiety related disorders (e.g. separation, panic), disruptive disorders (e.g. conduct disorder), and attentiondeficit/hyperactivity disorder (Lewinsohn et al., 1995). Research suggests that roughly 33% of adolescents diagnosed with a bipolar disorder also exhibit psychotic symptoms (Birmaher et al., 2006). Furthermore, studies have indicated that bipolar disorder develops in an estimated 20-40% of children and adolescents with major depressive disorder (Birmaher, Brent & Benson, 1998). In sum, youth diagnosed with a bipolar disorder tend to exhibit chronic, debilitating, recurring symptomology throughout their development, and present with various co-morbid psychiatric disorders, which appears to have a substantial impact on their global functioning.

For school-based practitioners seeking to employ interventions, treatment may focus on psychosocial programs designed to reduce levels of affective instability, which in turn has the potential to improve problem-solving skills (Carbray & McGuiness, 2009). Educating families regarding the biological basis of their child's emotional dysregulation may also be helpful in reducing the amount of parental frustration, negative parentinteractions child-sibling conflict and (Pavuluri et al., 2004). The following sections will discuss the development and efficacy of two models based on principles of cognitive-behavioral therapy for school-based practitioners to help treat youth with bipolar disorder.

Child- and Family- Focused Cognitive-Behavioral Therapy (CFT-CBT)

Child- and Family-Focused Cognitive-Behavioral Therapy (CFT-CBT) is a 12-week session adaptation of Miklowitz & Goldstein's Family-Focused Therapy model (FFT; Miklowitz et al. 2006). CFT-CBT and the family-based approaches share a similar theoretical background. Both treatments are founded on the vulnerability-stress model of psychopathology, such that psychosocial or environmental stressors interact with the individual's genetic or biological predisposition to produce psychological distress.

In youth with bipolar disorder, stressful events, negative familial communication styles, or other environmental facilitators such as substance abuse may trigger recurrences of manic or depressive episodes (Pavuluri et al., 2004). In addition, both family-based approaches and CFT-CBT promote similar treatment components including parental psychoeducation and the maintenance of coping skills for parents and youth. Despite the inherent similarities between CFT-CBT and the family-based approaches, there are distinctions that make CFT-CBT a unique treatment option. Theoretically, CFT-CBT includes an understanding of the dysfunction of the affective brain circuitry and how that may interact with environmental stressors in the family and at school. Practically, CFT-CBT utilizes principles of cognitive-behavioral therapy to reduce symptomatology and functional impairment of the affected youth in tandem with interpersonal psychotherapeutic techniques to alleviate high levels of interpersonal distress associated with the disorder. Furthermore, CFT-CBT emphasizes direct and active assistance to parents in coping with their frustration.

Pavuluri and colleagues (2004) developed CFT-CBT and tested its effectiveness in a sample consisting of 34 children and adolescents (ages 5-17) diagnosed with bipolar disorder using the Washington University in St. Louis Schedule for Affective Disorder and Schizophrenia for School-Age Children (WASH-U-KSADS; Geller et al., 1998). The primary outcome variable was the Clinical Global Impression Scale for Bipolar Disorder (CGI-BP; Spearing et al., 1997), which was completed by the first author of the study (who was also the sole therapist), at the initiation of treatment, the conclusion of each session and at the end of

treatment. The first author/sole therapist of this study also completed the Children's Global Assessment Scale (CGAS; Shaffer et al., 1983) at the beginning and end of treatment for each participant. Participants' parents/caretakers completed a satisfaction survey at the end of treatment, which contained items that were rated on a 5-point Likert scale. Treatment integrity was measured by review of an integrity checklist that listed each treatment component or therapeutic concept that should be implemented during specific treatment sessions.

Results indicate that youth in this study exhibited marked reductions in symptoms related to ADHD, aggression, psychosis, depression and sleep disturbance from pre- to post- treatment. Overall improvement in bipolar scores on the CGI-BP was also reported. In addition, the youth in this study displayed significant overall improvement in functioning as measured by CGAS scores. While the positive results of this study are encouraging, the vast amount of methodological limitations (e.g. lack of a control group, bias issues related to the first author/sole therapist delivering treatment and rating outcomes, no control for concurrent medication usage by participants, etc.) restricts the generalizability and utility of their findings.

West et al. (2009) conducted a study using CFT-CBT in a group treatment format. The group format was introduced as an adjunctive treatment to pharmacotherapy to the participants in the study. Their sample consisted of 26 participants (ages 6-12) diagnosed with a bipolar disorder based on the WASH-U-KSADS. The primary outcome measures were the Children's Depression Inventory (CDI; Kovacs, 1985) and the Child Mania Rating Scale -Parent Version (CMRS-P; Pavuluri et al., 2006). Parents and their affected youth also completed the Strengths and Difficulties Questionnaire (SDQ; Goodman et al., 2000) to measure overall psychosocial functioning pre-treatment compared to post-treatment. In addition, at pre- and posttreatment, parents completed the Parental Stress Scale (Berry & Jones, 1995) and the Therapy Outcomes Parent Scale (TOPS) to evaluate parental stress, feelings and perceptions regarding their youth's bipolar disorder.

Results of the study indicated that while mania symptoms were significantly reduced in the affected youth, depression scores did not change significantly. In addition, although parental ratings of their youth's psychosocial difficulties yielded

positive significant changes, self-report measures completed by the youth did not indicate any significant change. Furthermore, analyses of measures of parental stress and parental coping yielded no significant improvements following completion of the CFT-CBT program. In sum, it appears that while the group CFT-CBT module was effective in reducing certain bipolar youth symptomatology and potentially improving parental and youth psychosocial functioning, there were still many areas of non-improvement.

Individualized CBT Intervention

While CFT-CBT focuses primarily on inclusion of the family in treatment, other recently developed psychosocial approaches place less emphasis on parental involvement (Danielson et al., 2004; Feeny et al., 2006). Researchers at Case Western University developed an individualized 12-session acute phase treatment that incorporates many elements of CFTpsychoeducation, discussion (e.g. medication compliance, teaching problem solving skills), but also places emphasis on homework assertiveness assignments, training, implementation of relaxation techniques. Included in this treatment is a maintenance phase with three sessions (one per month) directly following treatment, and biannual follow-up sessions to review materials learned and reinforce previously taught techniques.

In their original proposal of this intervention, Danielson et al. (2004) provided a case study example of the treatment with a 13-year-old male. The narrative included a qualitative account of the treatment approach and techniques along the 12session format, as well as a presentation of pre- and post-treatment scores on measures of depression, mania, and global functioning. Results indicated the treatment was effective in reducing scores on depression and mania measures of improvement in overall global functioning, however no statistical analyses were conducted.

Feeny and colleagues (2006) conducted a pilot study using this intervention model with a sample of 16 adolescents (ages 10-17) diagnosed with a bipolar disorder. The treatment group was matched with a control group taken from an ongoing pharmacological study of adolescents with bipolar disorder. Primary outcome measures included the

Youth Mania Rating Scale (YMRS; Young, Biggs, Ziegler & Meyer, 1978), the Inventory of Depressive Symptomatology (IDS; Rush, Gullion, Basco, Jarrett & Trivedi, 1996), and the General Behavior Inventory (GBI; Depue, Krauss, Spoont & Arbisi, 1989).

Results indicated that in comparison to the control group, participants in the CBT condition at post-treatment did not report significantly lower scores on the YMRS or IDS. Similarly, no significant improvement in global functioning was observed in the CBT condition based on self-report GBI scores. Nevertheless, effect sizes calculated for each of these self-report measures were large (e.g. IDS, d = 0.90) to moderate (e.g. YMRS, d = 0.62). In contrast to self-report, parent reports indicated significant findings. Specifically, parents reported a significant decline from pre- to post-treatment on measures of manic and depressive symptoms and global functioning. Effect sizes were large once again for both depressive and manic symptoms. The authors of this study discuss the fact that due to their small sample size, statistical power to detect significant change was limited. Nevertheless, their study provided some evidence for the effectiveness of CBT-based modules for youth with bipolar disorder.

Summary of Evidence and Future Directions

In sum, it appears there is some preliminary evidence for the effectiveness of CBT-based modules as a method for reducing symptomatology in youth with bipolar disorder. However, as previously mentioned, studies examined in this review contained a substantial amount methodological limitations, which should addressed in future research. A potential factor that may have potentially accounted for the lack of significant findings was the inability of the affected adolescent to adequately rate his/her own symptoms, behaviors and overall functioning. Future research may address differences in ratings of bipolar symptoms with regard to self-report compared to parental report. In addition, future research may wish to focus on whether CFT-CBT alone can produce significant changes in youth with bipolar disorder. The majority of participants in the studies were being treated with psychotropic medication and the psychosocial interventions were used as an additive component. Based on a review

of the literature, no such study examining CFT-CBT or other psychosocial interventions as a primary treatment for youth with bipolar disorder has yet been conducted. With the push towards understanding the cognitive and affective bases of bipolar disorder in youth, it is possible that future research will be able to develop more effective and targeted psychosocial methods for treatment of this disorder.

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Matthew Pagirsky is a third year school psychology doctoral student at St. John's University in Queens, NY. He received his Master of Arts (M.A.) in General Psychology from City University of New York, Queens College. His broad areas of research interest are cognitive-behavioral interventions for youth and neuropsychological assessment.

Committee on Early Career Psychologists CALL FOR NOMINATIONS

representatives from SPTA and APA Divisions, and facilitates activities, projects and programs that foster joint membership and participation between the Early Career Psychologists memberships of APA and SPTAs. In addition, it is likely that this individual will be invited to attend the State Leadership Conference in March. Applicants for the SPTA Slate will be evaluated on leadership experiences within SPTA governance and program activities, as well as a general history of leadership and governance work.

Candidates must be an APA member within seven years' receipt of their doctorate degree on January 1, 2014. In addition, you must be able to attend mandatory committee meetings; one in the spring, and two in the fall. Some committee members may be asked to attend additional meetings depending on their position. Meeting expenses are reimbursed by APA. Although not reimbursed, committee members are highly encouraged to attend and participate in early career programming annually at the APA convention. The committee works extensively through listserv and email. Applicants should expect to spend a minimum of 5 hours per week engaged in committee activities.

All candidates should include:

- 1. Statement of Interest from the Nominee
- 2. Current Curriculum Vitae
- 3. One Letter of Recommendation

Nomination materials must be received by **August 16, 2013**. Applicants will be notified in mid-December.

Please submit all materials in a single Word or PDF document. Put your name and the name of the slate that you are applying for in the subject line and as the name of your document (e.g. **Jane Smith, Education Slate**). Email all materials to Sonja Wiggins at earlycareer@apa.org.

CECP seeks to represent the interests and concerns of early career psychologists throughout APA. For more information about the committee and other early career resources, please visit the APA early career website at www.apa.org/earlycareer. If you have any questions, please contact the current Chair, Ayse Ciftci, PhD at ayse@purdue.edu

The Committee on Early Career Psychologists (CECP) is seeking nominations for two representatives to serve a three-year term (2014-2016):

Education Representative:

Current work experience as an educator, experience working with and the ability to represent the interests of Early Career Psychologists to the education community in the field, experience working with committees and other groups in promoting education and training of students, and experience in initiating and implementing projects.

State, Provincial, and Territorial Psychological Associations (SPTA) Representative:

Promotes early career member interests and leadership experiences in State, Provincial, and Territorial Associations (SPTAs), and represents the interests of SPTAs related to Early Career Psychologists within APA. This position co-directs a network of Early Career Psychologists



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.

Student Affiliates of School Psychology Chapter Spotlight: University of Arizona

Katherine A. Stoll, M.C., Student Interest Liaison

The SASP chapter at the University of Arizona, located in Tucson, Arizona, was established in 2005. Our chapter strives to promote interest and awareness in the field of school psychology; provide professional development opportunities for students and community members; and encourage collaboration and networking between the current students and professionals in the field. In addition, our chapter offers several social gatherings and occasions to volunteer in the community.

Every month, the UofA SASP chapter officers bring student members together for a meeting to discuss relevant business matters and to provide an outlet for student questions and concerns about our program. On the lighter side, SASP also plans a happy hour for students and faculty members throughout the academic year, with the first one following the incoming student orientation.

One of the goals for the UofA SASP chapter this past year was to increase our presence in the community with philanthropic events. We diligently raised money through several means including hosting a proceeds night at a local restaurant and through bowling. Our efforts paid off as we were able to sponsor a local middle school classroom from a lower socioeconomic demographic with gifts for the holidays. During the 2012 "School Psychology Awareness Week," we also provided local school psychologists from larger school

districts in our area and our department faculty/staff with personalized thank you notes and small gifts of gratitude for their continued support of the students in our program. In addition, SASP members took time out of their busy schedules to volunteer at Ben's Bells, a wonderful non-profit organization with a local, national, and global outreach, spreading the message of kindness.

The UofA SASP chapter is also proud to host its annual 'Spring Speaker Series,' an event aimed at providing students and community members the opportunity for professional development. By attending this event, certified or licensed professionals in the educational field can earn free continuing education credits. This past academic year, we were fortunate to have Dr. William Erchul from North Carolina State University present to our students and greater community on the topic, "Behavioral Consultation: Celebration of Its Past, Present, and Future." This year, we also decided to implement a 'Fall Speaker Series' that featured presentations from two of our newest faculty members: Drs. Katie Eklund and Michael Sulkowski.

Another successful event that is hosted by our SASP chapter is the annual 'Internship Experience Panel' luncheon. Students who have currently endured the APA/APPIC Match process or have applied for other local and national internships are invited to speak to

students about their experience. This gathering serves as an informational session with the goal of helping students who will be going through the internship process in later years.

Although the UofA SASP chapter has evolved tremendously over the last several years, we strive to continue expanding our role not only at the university level, but also in the larger Tucson community. For instance, our chapter is looking for ways to reach out to the undergraduate population at UofA who may be interested in school psychology. We have also expanded our leadership opportunities within SASP, such as creating a position for a fundraising chair and another to coordinate our resources with the hopes of having a greater influence in the community in the future. The UofA SASP chapter is committed to working together to reach these goals.

"Coming together is a beginning. Keeping together is progress. Working together is success." ~ Henry Ford

About the Author

Katherine Stoll, M.C., is a doctoral student in the School Psychology program at The University of Arizona. She has spent over a decade in the field of education as both a teacher and a school counselor. Her primary research interests are diverse and include childhood behavioral disorders and interventions, juvenile delinquency, schoolbased mental health services, and pediatric obesity. She hopes to contribute to the working group in the area of school-based mental health systems.



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Division 16 membership activities, benefits, and services include:

- Engaging in the national and international conversation on school psychology. Division 16 is active in advocating for the interests of school psychologists on issues both within the broader field of psychology as well as with constituent school psychology organizations.
- Receiving cutting edge publications such as School Psychology Quarterly, the Division's APA journal and the high quality peer-reviewed newsletter The School Psychologist.
- Networking with colleagues and leaders in the field who share your interest in School Psychology.
- Contributing to the Science for Policy and Practice in School Psychology during Division 16 programming at the APA annual convention via round table discussions, symposia, poster sessions, workshops and the superlative Division 16 Hospitality Suite and Social Hour.
- Joining the Division 16 listsery to keep up to date with current trends, professional opportunities, and the on-going dialogue on school psychology matters.
- Recognizing outstanding achievements. Division 16 honors Students (e.g., APF-Paul Henkin travel awards, minority scholarships, AGS outstanding scholarship awards), Early Career Scholars (e.g., Lightner Witmer Award), and substantial contributors to the field (e.g., Fellow, Senior Scientist, Jack Bardon Distinguished Service Award, Lifetime Achievement Award).
- Becoming involved in Division 16 governance. There are many opportunities to join committees and run for executive office in the Division.

Additional benefits for student (SASP) members include:

- Links to national and international leadership in school psychology and psychology as a whole.
- Student activities at national conferences (e.g., SASP Student Research Forum at the APA Convention)
- Resources and financial supports (e.g., Division 16/SASP Diversity Scholarships and the Student Research Forum Travel Awards).
- Information on current topics pertaining to school psychology and forums to build connections with other school psychology professionals (e.g., SASP listserv, Facebook page, and website).
- 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.
- Opportunities to become involved in SASP governance.