FROM SCIENCE TO PRACTICE AND POLICY

Student Affiliates of School Psychology

In This Issue

From the Board

SASP Student Research Forum:								
Research Productivity								
Maribeth Wicoff	2							

Luminaries in The Field

An Interview with	Robin Codding
-------------------	---------------

```
Sarah Babcock ...... 4
```

Lessons from The Field

Culturally Considerate and Strength-Based Approaches to Supporting Refugee Students

Angelina Lee and Simon Lisaingo 8

Collaboration Between the Occupational Therapy Practitioner and School Psychologist: Meeting the Needs of Diverse Student Learners

Original Research

The Contemporary Homework Battle: Homework Challenges for Spanish-speaking Families

Rachel Stein 19



Greetings SASP Readers!

Letter from the Editors

We are excited to present the Fall 2016 issue of *From Science to Practice <u>and</u> Policy*. That's right, the SASP executive board had a nice discussion, and we decided that it made more sense conceptually to change the second "to" to "and." We are sorry for the delay in publication, but it has been a busy time of year!

We have an issue full of interesting topics. First, we have an update from Maribeth Wicoff on how things went with the Student Research Forum at the APA convention, then we have an interview with professor and former recipient of the Lightner Witmer award, Robin Codding. Following, we have some interesting pieces providing both commentary and original research on working with diverse populations. We hope you enjoy this long-awaited issue!

Jacqueline Canonaco, *Outgoing Editor* Sarah Babcock, *Incoming Editor (previous Editor Elect)*

Please submit your original research manuscripts, book reviews, lessons from fieldwork, chapter spotlights, and policy pieces to Sarah Babcock at <u>s.kimo.babcock@gmail.com</u>. We look forward to reading your work! Deadline for submission is January 27.

The purpose of School Psychology: From Science to Practice and Policy (FSPP) is two-fold and includes disseminating student scholarship pertaining to the study and practice of school psychology and circulating news relevant to the Student Affiliates of School Psychology (SASP). SASP is a student-led organization appended to Division 16: School Psychology, of the American Psychological Association (APA). FSPP is prepared by Outgoing Editor, Jacqueline Canonaco (Jacqueline.canonaco@gmail.com), and incoming Editor, Sarah Babcock (s.kimo.babcock@gmail.com). The content and views expressed in this publication do not necessarily reflect or infer the positions of SASP, Division 16 of APA, or of APA itself. For more information about SASP or **FSPP** please visit http://apadivision16.org/sasp/from-science-to-practice-to-policyfspp/



SASP Student Research Forum: Research Productivity

Report from SASP Executive Board Member, Maribeth Wicoff

This year's APA Convention in the Mile-High city did not disappoint. There were numerous opportunities for graduate students to interact with other students who share their interests as well as many symposia and presentations that show the growth of the School Psychology field.

The Student Research Forum has grown each year since its inception, and this past year

was no exception. I have had the opportunity to be SASP's Convention Chair for the past two vears and have seen the interest in the event continue to flourish through the breadth and depth of research participants, as well as in the number of attendees, despite the early Saturday morning time slot. I am not sure what student would turn down free, delicious food early on a Saturday morning, but nonetheless we had great opportunities to listen to graduate students present their original research, as well as network with other students and faculty in the field. Some of the original research included learning about progress monitoring for counseling cases, the impact of sport-based training on anxiety and academics, cultural factors that impact the Guyanese and high suicide rates. These are just a few of the digital presentations that took place during the forum. Please see below for a list of all the presenters and their research. Often these presentations



led to the development of more research ideas when the engaged audience asked further questions.

Additionally, for the past two years I have had the opportunity to introduce prolific researchers in the field as our guest speakers at the Forum. This year we welcomed Dr. Robert Volpe, Associate Professor at Northeastern University, to speak about "Research Productivity." His speech capitalized on some of the important issues that we have as graduate students, including making time for research, as well as making it a priority. Dr. Volpe offered a plethora of tips and valuable insight into his own research productivity, and I know from talking to other students at the Forum, he inspired and ignited (or reignited) our passion for being productive researchers.

Thank you to those students and faculty who attended this year's forum, it was a great success and hopefully gave everyone some food for thought about research. We hope to continue to see more students and faculty attending the forum, so please look for future information about next year's event. Hope to see all of you in Washington DC next August!

"Progress Monitoring in Individual Counseling: A Case Study and Guide" by Whitney Kleinert, M.Ed., PhD Candidate

"Improving Informed Consent: An Exploratory Investigation" by Ryan Holt

"Assessment of Adolescent Praise and Reward Preferences Regarding Academic Behavior" by Cynthia Shuttleton, M.Ed., Sarah Fefer, PhD, and Julia DeMagistris, M.Ed.

"Treatment Effects of an Evidence-based Teacher Training on Improving Academic Achievement and Behavioral Performance for Children with Aggression" by Chi-ching (Gigi) Chuang, M.Ed., Wendy Reinke, PhD, and Keith Herman, PhD

"Remote Application of Parent Training Programs for Autism Spectrum Disorder" by Marina Donnelly and Sarah Fefer, PhD

"A's in School and Life: Impact of Sport-Based Positive Youth Development Initiative on Anxiety and Academics" by Akanimo Akpan, MS, M.Ed.*

"Suicide Prevention for Guyanese School Children: A Needs Assessment" by Sarika Persaud, MA* and Prerna Arora, PhD

*Diversity Scholarship Award Winner



Luminaries in The Field

An Interview with Robin S. Codding, Ph.D. Sarah Babcock

What are some noteworthy or surprising findings that have emerged from your research on the implementation of academic interventions? For example, are there any specific interventions, or strategies to support implementation, that are on the rise in practice and/or research? Is there an area of the field that you believe deserves more attention through research?

A central aim of my research has been to establish the link between assessment and selection. intervention With respect to instructional decision making my research has focused on the application of the instructional hierarchy (IH), as defined by Haring and Eaton (1978) and adapted to mathematics by Rivera and Bryant (1992), as well as brief experimental analysis to identify an appropriate treatment by skill match. My colleagues, students, and I have attempted to align intervention components, or what we think are active treatment ingredients, with stages of skill development. Preliminary evidence suggests that strategies theoretically aligned with building acquisition of computation skills are more beneficial for students that fall in the frustration than instructional range of performance according to Curriculum-Based Assessment (CBA). We have some comparable evidence suggesting that a similar pattern may operate with elements consistent with developing skill fluency for students whose initial CBA performance falls in the instructional range

but it is less convincing. We also have generated some evidence suggesting that developing fluency on component math skills, such as single-digit subtraction, results in generalization to higher level skills in the same mathematics content area.

As far as academic interventions are concerned. I continue to be surprised about how little is available in the areas of mathematics and writing. A paucity of academic intervention studies are published in both special education (15%) and school psychology journals (9%) (Mastropieri et al., 2009; Villarreal, Gonzalez, McCormick, Simek, & Yoon, 2013) and much of this research is dominated by reading interventions. Evidencebased clearinghouses (e.g., What Works Clearinghouse, National Center on Intensive Intervention) reveal only a handful of standard protocol math interventions that meet effectiveness criteria. Even the IES practice guide directed toward applying the Rtl framework to mathematics (Gersten et al., 2009) reveals that only two of the eight recommended practices are supported by strong evidence.

In a 2009 paper my colleagues and I (Codding, Hilt-Panahon, Panahon, & Benson), identified 12 different strategies to address computation difficulties, only 50% of which were examined in more than one study. Generally these interventions were effective, but for some improvement depended on the outcome measure [i.e., percentage accuracy, fluency (digits correct), or general mathematics achievement (according to criterion- or normreferenced tests)]. Maintenance of student outcomes was only assessed in 38% of studies and generalization of learned skills was analyzed in far fewer studies (11%). These findings replication suggested that of effectiveness findings is warranted and that knowing what intervention strategy to implement is necessary but not sufficient.

Knowledge of student specific skill levels and appropriate treatment match according to level of skill proficiency (treatment x skill interaction) might also be useful, particularly for students experiencing the most difficulty. Finally, whether intervention effects are maintained and generalize to other applications is largely unknown.

You've been active in service to universities. the profession, and the community. Can you speak to the importance of this aspect of your career? How do you balance service with your other responsibilities (e.g., mentoring students, research, teaching)?

I am passionate about being a school psychologist and I want to be in a position to promote the good work that we do as a field. As a result, I find myself interested in engaging in local and national service to the profession. Some of these endeavors were directed toward enhancing the training opportunities of school psychology students that were provided at our institution (at the time I was at the University of Massachusetts Boston). Others included participating in Division 16 of APA as a convention chair and later as a part of the executive committee. These national pursuits provided me with a helpful glimpse into how our profession is connected to other related professions as well as how we can work collectively with others to promote important outcomes for children that address, and



From Science to Practice and Policy

possibly change, policy. As an extension of my training as a graduate student at Syracuse University I also have always attempted to connect my research endeavours to the community by solving problems that are actually occurring in schools and partnering with schools to engage in scholarship around shared interests. The key to "balance" in my mind is to choose service activities that you enjoy and integrate those activities with your research and teaching. In this way, the three aspects of academe - research, teaching, and service - are not separate entities but integrated components that connect to your interests and passions.

Your involvement in editorial pursuits is also notable. How have these activities been important in your professional development? How do you recommend graduate students begin to gain editorial experience?

For me, one of the most wonderful opportunities that I was presented with as a junior faculty member was serving as an Associate Editor for the Journal of School Psychology. I received tremendous mentoring from Editors that I worked under. learned a great deal about protecting the integrity of the peer review process, and was also able to keep up with advances in the literature. I liked it so much that I have served in the role of AE for three different journals since 2009. Participating in the peer-review process also demystified the publication process for me. I think serving as an ad-hoc reviewer and eventually as part of an editorial board is a wonderful activity for early career professionals to pursue. Reaching out to editors and inquiring about serving as a reviewer is one way for early career scholars to participate in the peer review process. Some editorial boards invite student reviewers to participate but a student's commitment does not have to be so formal. Asking your advisor or

mentor if you can collaborate with him or her on a manuscript review is a great learning experience.

Do you have any other recommendations for students interested in getting involved in your area(s) of research?

Many unanswered questions remain pertaining to what academic interventions work, with whom, and under what conditions. These questions are important to answer through empirical studies. Thinking about this line of research in the context of multi-tiered systems of support or evidence-based practice is also useful because it changes the scope and nature of the questions examined to also include the acceptability, usability, feasibility, intensity, and implementation of interventions by key stakeholders.

You're also a board certified behavior analyst. In your view, where is the field of school psychology headed in terms of its relationship with ABA? What challenges have you experienced in bridging the gap between school psychology and ABA? Do you have any advice for student who want to obtain their BCBA?

I am sure there are many diverse perspectives on this topic. For me, the principles of applied behavior analysis underlie many aspects of research and practice as a school psychologist. Knowledge of ABA was central to my role as an educational and behavioral consultant during my pre- and postdoctoral experiences at the May Institute and underlies my thinking as a researcher. At the University of Massachusetts Boston I redesigned a course to offer a broader perspective of behavior therapy that included ABA. Also at the University of Massachusetts Boston, I worked with an already existing program that offered board certification as a From Science to Practice and Policy

behavior analyst to help interested students in our school psychology program become certified by taking three additional courses (outside of the standard school psychology curriculum). This meant that I worked with the BACB (Behavior Analyst Certification Board) to obtain approval of three existing school psychology courses, taught by faculty with their BCBA, as meeting the appropriate credentials. We also worked with local agencies that could provide supervision so that students could get NASP. meet APA. and BACB field requirements. Some of my current advisees are pursuing their BCBA while completing their doctoral internship by taking courses through online ABA programs approved by the BACB. These students are in APPIC approved internship sites that can also offer supervision for the BCBA. Any students interested in BCBA obtaining their should visit the requirements listed on the BACB website (http://bacb.com/).

Given that you received the Lightner Witmer Award in 2010, what advice do you have for students getting ready to begin their career in academia? What tips do you have to ensure that they plan and implement a productive research program from the beginning?

There are many types of academic positions so it is useful to consider the type of academic career that you want to pursue. Do you want to



engage primarily in teaching? Would you like a relative balance of the three pillars (research, service, teaching) of academe? Do you want to focus on research? Once you have identified your preferred type of academic position, then you can match your professional goals to the program and institution. For example, if you are interested in focusing on research, then locating top tier research institutions that have school psychology programs is useful because these universities are able to provide supports that facilitate research engagement. I found it helpful to spend my first semester in academia developing a research agenda that covered the next six years. I planned out multiple studies that connected to one another - advancing research questions systematically. Because I was fortunate to have a reduced course load across my first two years in academia, I was able to initiate this plan, identify possible funding avenues, develop relationships with local schools, and reach out to possible collaborators. I also spent time planning how my role as a practicum instructor could also be used to develop shared research projects with local schools. For the most part, I followed the plan that I created during that first semester. When approached with new opportunities, I found it helpful to consider how those opportunities fit into the larger research plan I had created before making a decision. My mentors at Syracuse University shared the 2-2-2 heuristic, which I have since interpreted as 2 manuscripts in preparation, two manuscripts in the data collection phase, and 2 in the planning By striving toward (not necessarily phase. meeting) this rule of 2s I have been consistently engaged in an active research agenda. Although I never had this opportunity, pursuing a post-doctoral fellowship that emphasizes research is a terrific way to develop a research agenda as well as gain grant writing skills. Coming to an academic career with grant writing skills is more important now than ever and obtaining opportunities to learn about the grant process is helpful before entering an academic position.

Luminary Background Biography

Dr. Codding is an Associate Professor of School Psychology at the University of Minnesota. She earned her Ph.D. in School Psychology from Syracuse University. Dr. Codding completed her APA-Approved predoctoral internship and post-doctoral fellowship at the May Institute where she served as an educational and behavioral consultant for students with acquired brain injuries as well as students with developmental, learning, and socio-emotional/behavioral disabilities. She is a licensed psychologist and board certified behavior analyst. Dr. Codding was selected in 2010 as the co-recipient of APA Division 16's Lighter Witmer Early Career Scholar award. Dr. Codding's research interests focus on the intersection of intervention and implementation by developing and exploring the effectiveness of school-based interventions, the factors that contribute to student responsiveness of those interventions, and strategies to support intervention implementation. Dr. Codding's work has emphasized academic interventions and associated assessment for data-based decision making, particularly in the area of mathematics. Dr. Codding is currently an Associate Editor of the School Psychology Review and has previously served in the role of Associate Editor for the Journal of Behavioral Education and the Journal of School Psychology. (University of Minnesota Department of Educational Psychology Faculty Page, 2015)

Contact: rcodding@umn.edu

Lessons from The Field

Culturally Considerate and Strengths-Based Approaches to Supporting Refugee Students

> Angelina Lee and Simon Lisaingo University of British Columbia

As part of our master's internship training through the School Psychology Internship Consortium at the University of British Columbia (UBC), we had an opportunity to learn from and contribute to the field regarding how to support refugee students in schools. In this article, we first summarize the context for the large influx of Syrian refugee students in Canada, specifically in the province of British Columbia (BC), and share how school districts have prepared for the new wave of refugee students entering schools. Further, we discuss how our program has been involved in supporting refugee students in schools and provide an example of a strengths-based approach to working with refugee students (i.e., Tree of Life activity).

Context

In response to the largest humanitarian crisis in recent history, the Government of Canada has committed to resettling refugees and has welcomed approximately 33,000 Syrian refugees to Canada between November 2015 and November 2016 (Citizenship and Immigration Canada, 2016). Over 1,500 of these government-assisted Syrian refugees (also referred to as newcomers) have arrived in the province of BC (Carmen, 2016). Given that approximately 40% of the Syrian refugees arriving in BC are school-aged children, school districts across BC are faced with many challenges as they strive to meet their new refugee students' diverse educational and

From Science to Practice and Policy

social emotional needs. This sudden increase in need for services in schools and community necessitates joint efforts of school psychologists and various organizations in supporting refugee children and their families. In light of the influx of refugee students, the School Psychology Internship Consortium at UBC has been making collaborative efforts with school districts to both learn from as well as give back to the field.

Learning from the Field

As an internship consortium, we visited a local school district, the Surrey School District, with the largest settlement of refugee families for an advanced training workshop on providing psychoeducational supports for refugee students. Surrey is BC's second largest city by population, and is known for its culturally and linguistically diverse communities including a growing Middle Eastern community. Nearly half of the government-assisted Svrian refugees have settled in Surrey due to its relatively affordable offers of housing. Since February 2016, Surrey School District has accepted the highest number of 265 new refugee students in BC (Carmen, 2016). .

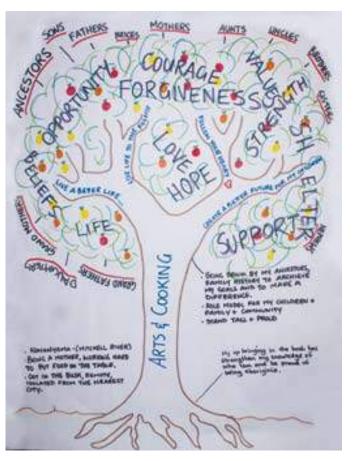
At the workshop, we learned about their English Language Learner (ELL) Welcome Centre, and how to apply Universal Design for Learning (UDL) in working with ELL students at universal (tier 1), targeted (tier 2), and intensive (tier 3) levels. The district opened their Welcome Centre in 2008 with a settlement grant which was awarded to a number of school districts across BC. At the Welcome Centre, Settlement Workers (SWIS) and Multicultural Workers (MCW) assist new students and their families with their integration into the school system and community by offering school orientation and registration support as well as with appropriate placement through initial needs and language assessments. The Welcome Centre also offers the Bridge programs, which provide 6 to 8 weeks of

intensive settlement support in addition to the regular support and educational program. These programs are designed to facilitate adjustment and transition into the school system or workplace, and increase school and community connectedness for refugee children and youth who are considered at-risk or particularly vulnerable.

Overall, we learned that in assessing and supporting ELL students, it is important to always consider their native/primary languages and cultures and incorporate them into general classroom instruction. In addition, we found that the purpose of assessments and interventions should be to inform student functioning within the context of cultural and linguistic diversity.

Strengths-Based Approach

As we reviewed the literature for evidence-based practice with refugee children and youth, we recognized a paucity of strengths-based approaches with refugee populations. Previous research and practice with refugee populations have been influenced by a trauma-based perspective, which emerged from clinical work with a wave of Indochinese refugees after the Vietnam War (Schweitzer & Steel, 2008). They mainly examined their mental health problems and maladaptive developmental outcomes, and focused on risk factors such as poverty and exposure to trauma (Tienda & Haskins, 2011). This trauma-focused approach advocates the need for specialized support for refugee people, strengths-based approaches are needed in order to avoid stigmatizing experiences refugee and portraying refugee children and families as victims of trauma using a pathological model (Rousseau & Guzder, 2008; Schweitzer & Steel, 2008). Therefore, when working with refugee children, it is important to focus on their individual strengths as well as the protective familial and environmental factors in their lives.



Tree of Life

As part of her master's thesis project, the primary author, Angelina Lee, used a strengthsbased and therapy-based storytelling activity called the Tree of Life as an elicitation device in conducting semi-structured interviews with refugee children. Tree of Life was initially developed by Ncazelo Ncube (2006), a child psychologist from Zimbabwe, with the support David Denborough, community of а practitioner, to work with children affected by HIV/AIDS in southern Africa. In this narrative activity, a child is asked to use a tree as a metaphor to trace his/her background or history in the roots, outline his/her current life and discuss his/her strengths in the main trunk, describe his/her hopes and dreams in the branches, and talk about important people and special gifts in the leaves and fruit. By inviting children to map out their lives and build rich

descriptions of themselves, this activity is designed to reinforce children's identity and help them identify sources of their social support. These types of arts-based, creative

Figure 1

Tree of Life Sample Questions Introduction

First, tell me what you know about trees. What are some of the different kinds of trees you see in your neighbourhood? Tell me about the different parts of a tree (roots, trunk, branches, leaves, and fruits). This activity is called the Tree of Life. In this activity, we are going to draw a tree on this big piece of paper (bring out the paper). Don't forget to draw the different parts that we just named. As you are drawing your tree, I want you to imagine that you are a tree and think of the parts of your life as the parts of a tree. After you are done, if you want to, you will get a chance to share your drawing and your story. Do you have any questions?

Roots

Let's start with the roots of the tree. The roots represent where you come from. (Give child time to draw.) Tell me about where you come from (i.e. village, town, country).

- prompt: What were some of your favourite things about home?
- prompt: Do you have any special memories?

<u>Ground</u>

Let's draw the ground above the roots. The ground represents your life now. (Give child time to draw.) What is living in Canada like for you now?

- prompt: Where do you go to school?
- prompt: What are some of the activities that you do in your regular daily life?

<u>Trunk</u>

Let's draw the trunk of the tree. This is the most important part of our activity. This is an opportunity for you to talk about talk about some of your skills and talents. (Give child time to draw.) What are do you think are your strengths? How would you describe your strengths?

- prompt: What are you good at?
- prompt: What are some things that you have accomplished and are proud of?

- prompt: What do you think others like about you?
- prompt: How do you use your strengths?
- prompt: How long have you had these strengths/skills?
- prompt: How did you learn or where did they come from?
- prompt: How do those strengths make you feel?
- prompt: What do your strengths mean to you?

Branches

Let's move onto the branches. The branches are for your future. (Give child time to draw.) Tell me about your hopes, wishes, and dreams for the future.

- prompt: How long have you had these hopes and dreams?
- prompt: How did you come up with these hopes and dreams?
- prompt: How do you hold onto these hopes and dreams?

<u>Leaves</u>

Let's draw some leaves between the branches. The leaves represent people that are important to you. (Give child time to draw.) Tell me about people who mean a lot to you. They can be people who are alive today or people who passed away. They can still be important and connected to you.

prompt: Why are these people special to you?

<u>Fruits</u>

Let's draw some fruits in the tree. (Give child time to draw.) Tell me about gifts that you have been given. These gifts may be not necessarily be material gifts but something like friendship, acts of kindness, or care from other people.

• prompt: Why do you think that the person gave this to you?

Final Reflection

What does it mean to you to talk about your strengths? What does it mean to you to talk about people who have supported you?

The Tree of Life method was originally developed by Ncazelo Ncube-Mlilo (REPSSI) and David Denborough (Dulwich Centre Institute of Community Practice <u>www.dulwichcentre.com.au</u>). Copyright © REPSSI 2007

expression activities have been effectively used in intervention programs for immigrant and refugee children (Rousseau & Guzder, 2008). Other examples of activities include sand play with cultural figurines, artwork about characters, myths, tales, or legends from nondominant cultures, and improvisational theatre. These programs are designed to create a safe space in which children can share their stories, help them construct identity and meaning in their personal stories, as well as establish a bridge between the past and the present.

Based on the original activity of Tree of Life, questions were developed for the purpose of the research project. The following sample questions (Figure 1) were adapted from the initial interview schedule of the master's thesis to be used as a welcoming/rapport building activity with new refugee students in one of our sites.

Giving Back to the Field

As part of his internship experience, the co-author, Simon Lisaingo, collaborated with his school district to implement the adapted version of the Tree of Life activity with Syrian refugee children. To meet the needs of the recent influx of refugee students, the school district developed a small-scale, classroombased Welcome Centre at one of the schools. The Welcome Centre was led by an ELL teacher who introduced refugee students to classroom and cultural routines. The teacher assisted with the implementation of the Tree of Life activity. During the activity, when drawing the "roots" of their tree, the students seemed to be excited about drawing different types of trees from Syria to represent where they come from. They used an iPad to access online images and translate Arabic words. When drawing the "ground," one student drew a picture of himself playing hockey with other students to represent his life now. When drawing the "trunk," another student drew math symbols to represent her strengths in math. The Welcome Centre

teacher decided that it would be best to implement the remaining parts of the activity, the branches, leaves and fruit, after the students have had more post-migration transitioned to experiences and regular classrooms in the district. The teacher mentioned that the activity would serve as a useful tool for introducing the strengths and interests of refugee students to their regular classroom teacher. This would also allow the teacher to reconnect and support the students at a later date.

Working with the Welcome Centre was a unique and rewarding opportunity that supported the development of strengths-based approaches to welcoming newcomers to the school system. This experience highlights the collaborative role that school psychologists can play in promoting such practices with refugee students.

Going Further

In response to the urgency in BC schools to address the unique educational needs of refugee students, the UBC School Psychology program has been collaborating on a project with other faculty and graduate students in the Faculty of Education at UBC. Together, we have taken steps towards bridging the gap between research and practice and connecting with educators and frontline workers in schools and the community to discuss ways to best support refugee students and their families. We have been working toward developing an inservice professional development workshop for school districts. Specifically, we have invited front line workers in schools and the community as expert panelists and reached out to agencies and organizations to consult, in order to identify possible speakers for the event and to connect with them for opportunities to contribute to their work and join their efforts. Moreover, we are planning service projects to directly work with refugee children and families in the community, and compiling resources to disseminate using a website.

About the Authors

Angelina Lee, B.A., M. A., is a first year doctoral student in the School Psychology program at the University of British Columbia (UBC). She completed her Bachelor of Arts in Psychology at UBC. Prior to graduate studies, Angelina worked as an early childhood education assistant, an educational assistant, and the lab coordinator for two developmental psychology labs at UBC. Angelina is primarily interested in investigating strengths and resilience of children from refugee backgrounds and children from low-income families. Angelina currently serves as the SASP Chapter Representative for UBC.

Simon Lisaingo, B.Sc., B.Ed., M. A., is also a first year doctoral student in the UBC School Psychology program. After completing his Bachelors in Education and teaching across Canada, he entered graduate studies with hopes to utilize his experiences in the classroom to better inform his new path. He is interested in studying how students overcome challenges they face at school and at home.



When not at school or at work, he can be found on the soccer field or in the great outdoors.

References

Carmen, T. (2016, August 27). Return to school a challenging milestone for Syrian refugees. *The Vancouver Sun*. Retrieved from

http://vancouversun.com/news/localnews/ret urn-to-school-a challenging-milestone-forsyrian-refugees

Citizenship and Immigration of Canada (2016). #WelcomeRefugees: Canada resettles Syrian refugees. Retrieved from http://www.cic.gc.ca/english/refugees/welco me

- Ncube, N. (2006). The Tree of Life Project: Using narrative ideas in work with vulnerable children in Southern Africa. *The International Journal of Narrative Therapy and Community Work*, *1*, 3–16.
- Rousseau, C., & Guzder, J. (2008). Schoolbased prevention programs for refugee children. *Child and Adolescent Psychiatric Clinics of North America*, *17*, 533-549. http://dx.doi.org/10.1016/j.chc.2008.02.002
- Schweitzer, R., & Steel., Z. (2008). Researching refugees: Methodological and ethical considerations. In P. Liamputtong (Ed.), *Doing cross-cultural research* (pp. 87-101). New York: Springer.
- Tienda, M., & Haskins, R. (2011). Immigrant children: Introducing the issue. *The Future of Children, 21,* 3-18. Retrieved from http://www.jstor.org.ezproxy.library.ubc.ca/st able/41229009



THE UNIVERSITY OF BRITISH COLUMBIA

Lessons from the Field

Collaboration Between the Occupational Therapy Practitioner and School Psychologist: Meeting the Needs of Diverse Student Learners

Ashley Wood, Thais Perocelli, Aaron Gubi, and Jennifer Gardner Kean University

School psychologists regularly encounter students who experience a range of fine motor, visual motor, neurodevelopmental functioning, adaptive living skills, and sensory needs that impact the schooling and life experience of the youth (Splett, Fowler, Weist, McDaniel, & Dvorsky, 2013). Such challenges well-being, can impact the academic achievement, and occupational potential of students, thereby making the topic an area of concern for school psychologists. Occupational therapy practitioners provide services for students with special needs in the schools as determined through the Individualized Education Plan (IEP) process, and it is thus important to recognize that occupational therapy practitioners hold a prominent role within the schools to aid students with diverse learning (American Occupational needs Therapy Association, 2014; American Occupational Therapy Association, 2016). As school psychologists, we are particularly interested in helping all students succeed, despite the adversities they encounter in life. Therefore, it is incumbent upon us to become

better acquainted with the roles and scope of practice of occupational therapy practitioners.¹

Scope of Practice of Occupational Therapy Practitioners

Occupational therapy practitioners work in a variety of hospital, rehabilitation, home health, clinic, and school settings. The American Occupational Therapy Association describes occupational therapy а healthcare as profession that provides services to individuals across the lifespan, from infants to adults, through individual and group modalities, to support participation in valued occupations (American Occupational Therapy Association, 2014). Occupational therapy practitioners conduct evaluations and interventions to address a range of functional domains, including activities of daily living, instrumental activities of daily living, work, leisure, rest and sleep, play, social participation, and other realms that relate to learning and schooling (American Occupational Therapy Association, The role of occupational therapy 2014). practitioners can be defined in a variety of ways, depending upon the needs of the individual or organization and/or setting. However, a broad definition is that they are concerned with supporting and enhancing the way a person conducts all aspects of their daily life. Within schools, both public and private, occupational therapy practitioners provide services for students within general and special education.

In relation to the academic setting, the daily life activities which a student must complete include, but are not limited to, paying attention in class, completing assignments, taking tests, doing homework, making friends and socializing with peers, eating lunch in the cafeteria, going to the bathroom, and playing at

¹ Occupational therapy practitioners refer to both occupational therapists and occupational therapy assistants, both of whom work in the school setting. Although the occupational therapist supervises the occupational therapy assistant in all settings, both are focused on supporting the students' sensory, motor, and functional capabilities to promote learning, academic achievement, independence and occupational success (American Occupational Therapy Association, 2016).

recess. Therefore, all of these activities are potentially evaluated and treated by the occupational therapy practitioner in collaboration with other educational and allied professionals. including school health psychologists. Services that are provided within the school setting can be that of promotion, prevention, and/or intervention, depending upon the identified needs of the individual student and/or the school itself (American Occupational Therapy Association, 2014).

Role of Occupational Therapy in the Schools

In the schools, the occupational therapy practitioner serves several unique needs in multiple areas of the academic milieu. Schoolbased occupational therapy (OT) is utilized to address the needs of the student in relation to his or her school day and academic performance. Traditionally, occupational therapy practitioners were thought to hold a addressing primary role in handwriting difficulties, as this is the "occupation" that many professionals and parents felt needed to be addressed by the school-based occupational therapy practitioner (Case-Smith, 2002). What psychologists manv school and other stakeholders often fail to realize is that the scope and practice of the occupational therapy practitioner extends far beyond handwriting. Occupational therapy practitioners have expertise related to sensory needs, motor skills, and visual and perceptual difficulties and the way they impact a student's functional capabilities in a variety of realms (Hoffman, 2016). By addressing these areas of need, the occupational therapy practitioner can prepare a student for success not only with handwriting, but in other areas critical for success in school and life. In particular, the occupational therapy practitioner can inform the practice of school psychologists and other school professionals

while simultaneously promoting the well-being among students experiencing difficulties with sensory and perceptual processing, motor and movement skill sets, self-care and activities of daily living, and an array of neurodevelopmental challenges (American Occupational Therapy Association, 2016).

Sensory and Perceptual Strategies

Occupational therapy practitioners can provide sensory and perceptual strategies that allow a student to participate more fully in the classroom learning environment. They can be instrumental in setting up and modifying the environments allow educational to for educational access, including reducing barriers that limit participation, and consulting on both low and high assistive technology that can allow access to classroom learning. In addition, school-based occupational therapy practitioners professional provide can development opportunities teachers. for paraprofessionals, school psychologists and others regards to modifications. in accommodations, and other supports that may be helpful to a student who exhibits sensory, or perceptual challenges. Occupational therapy practitioners can also conduct groups within the schools to address learning and sensoryprocessing related barriers experienced by many student learners (Bream, 2013).

Motor and Praxis Skills

Occupational therapy practitioners provide assistance with a myriad of fine/gross motor and praxis (i.e., the ability to engage in purposeful movement) skill deficits. Beginning in preschool, OT is an evidence-based treatment for students with under-developed fine, gross motor, and visual-motor skills. Research indicates that students who receive OT services at an earlier age develop these motor skills at a significantly faster rate when

compared with similar therapeutic needs who do not receive OT at an early age (Dankert, Davies & Gavin, 2003). In addition, research that students with complex indicates exceptional needs benefit from treatment through the occupational therapy practitioner. For example, children who are deaf or hearing impaired and have balance and motor impairments have been found to demonstrate improvements in functional mobility through OT treatment (Gronski, 2013).

Activities of Daily Living, Self-care, and Transition Planning

Occupational therapy practitioners assist students with activities of daily living and are helpful team members in helping to craft a transition plan for high school students as they began to plan their adult lives. Occupational therapy practitioners are trained and skilled at working with exceptional learners who need assistance to attain greater independence in a range of daily activities. The occupational therapy practitioner works to enhance the autonomy of exceptional learners with regard to their abilities to engage in activities of daily living (ADL) and instrumental activities of daily living (IADL). ADLs are defined as activities orientated toward "taking care of one's own body," (American Occupational Therapy Association, 2014, p. S41). ADLs involve selfcare activities such as bathing, showering, feeding/eating and functional mobility. The occupational therapy practitioner aims to also facilitate instrumental activities of daily living (IADL) to promote the child's autonomy in home, school, and community. IADLs involve skills needed for independent living such as financial management, home management, community mobility. and meal The OT therefore can play a preparation. leading role in helping students acquire

greater autonomy and self-determination as they transition towards adulthood by providing scaffolding and interventions needed to help students master critical life skills (Wehmeyer, Similarly, occupational therapy 2007). practitioners are important team members regarding transition planning. The occupational therapy practitioner can hold a critical role in helping school professionals and child study teams (CST) address student transitional needs within the IEP as the student and the CST plan for the transition out of high school and into adulthood (American Occupational Therapy Association, 2016).

Neurodevelopmental Deficits

Occupational therapy practitioners can provide many resources and treatments for students impacted by neurodevelopmental disabilities, including autism spectrum and attention-deficit and hyperactivity related challenges. The occupational therapy practitioner is skilled at addressing the sensory and perceptual needs of the child, to alleviate behavioral problems and to promote the child's ability to self-regulate their behaviors and emotional experiences (Chu and Reynolds, 2007). The occupational therapy practitioner also has skill sets to address the frequency of restrictive and repetitive behaviors (Tanner, Hand, O'Toole, Lane, 2015). Similarly, the occupational therapy practitioner can also work directly with the child or collaborate with the school psychologists and other school personnel to improve social skills and communication of the child, through teaching non-verbal forms of communication (e.g., pointing or gazing, aesturina). verbal communication (e.g., turn taking, initiating and answering questions), and related social skills (e.g., maintaining acceptable physical space during conversation) individually with the child and through group-based training. Children

experiencing challenges with attention, hyperactivity other related or neurodevelopmental difficulties including organization or physical coordination deficits can also benefit from assessment and an intervention plan completed by the occupational therapy practitioner (Kalpogianni, Frampton & Rado, 2001).

Consultation

Consultative OT services are another method for delivery of services in the schools' environment. Consultation involves the collaboration of occupational therapy practitioners with school psychologists and others who have contact with children who need an array of sensory, motor, and functional supports to fulfill their potential as learners. Occupational therapy practitioners provide consultation to school psychologists and teachers about how gross and fine motor visual-motor integration, abilities. visualperceptual processes. and neurodevelopmental skills intersect with classroom design and how these relationships impact the functional capabilities of the child within the school, home, and community (Hoffman, 2016). The occupational therapy practitioner is trained to identify functional and sensory impairments within the child, and is able to provide recommendations on how to increase his or her participation in learning leisure activities and self-care. contexts. Research suggests that involvement with the occupational therapy practitioner results in improvements among children with developmental challenges in attaining their goals as identified on their IEP than direct intervention alone (Case-Smith, 2002). The OT consultation role continues to expand within the



schools and holds the promise of bringing more efficient and widespread use of occupational therapy practices into the classroom (Bayona, McDougall, Tucker, Nichols & Mandich, 2006).

Potential Roles of School Psychologists in Collaborating with Occupational Therapy Practitioners

Collaboration psychologists between occupational practitioners and therapy increasingly occur within school settings. School psychologists may determine a need to refer their students for an OT evaluation for sensory, motor, or other functional impairments that may impact the ability of the child to engage in learning or related contexts. Conversely, often there are times when there is no psychologist on staff in outpatient and community occupational based therapy settings, thereby making referrals to the school psychologist for such services relevant and necessary to meet the needs of the child.

Schools Psychologists and occupational therapy practitioners can collaborate on many school-based issues to help maximize the learning and well-being of all children. An occupational therapy assessment can be an important tool in assisting the school psychologist and the Child Study Team (CST) with determining appropriate classification and placement. In addition, an occupational therapy practitioner and school psychologist can work together in determining appropriate classroom strategies, accommodations, and modifications to be included in an Individualized Education Plan (IEP) based on assessment and observation results. Lastly, input from the school psychologist may help the occupational therapy practitioner conduct assessments and interventions that best meet the functional needs of the student (American Occupational Therapy Association, 2016).

Conclusion

School psychologists are increasingly called upon to work with and address the learning of diverse children. School needs psychologists and occupational therapy practitioners are key players in the provision of a free, appropriate public education to students with a wide array of processing, sensory, learning and health needs. Although there is some scope of practice overlap between the two professions, both school psychology and occupational therapy involves specialized training and encompasses unique roles and expectations in the assessment and treatment of children. An occupational therapy practitioner's input can greatly assist a school psychologist in crafting educational and behavioral recommendations, to support a behavioral intervention plan, IEP, or to address the learning needs of children in general. An occupational therapy practitioner can provide sensory support suggestions as well as determine what is meaningful and motivating to an individual student based on the student's occupational profile. The occupational therapy practitioner can also be a valuable professional resource in assisting the school psychologist and CST in determining how the student's environment and their personal capabilities are impacting behavioral functioning and academic performance. The collaboration between the two areas of expertise can advance the functional capabilities and learning outcomes of exceptional students in the classroom and in life.

About the Authors



Ashley M. Wood, M.A., is a doctoral student in the Combined and Integrated School and

Clinical Psychology (PSY.D.) program at Kean University. Ms. Wood has clinical and research interests in the areas of child and adolescent development, and has worked primarily with children in clinical settings.

Thais K. Petrocelli, MHA, OTR, is the Academic Fieldwork Coordinator for the Department of Occupational Therapy at Kean University. As a licensed occupational therapist, Ms. Petrocelli has worked in a variety of clinical settings including inner citv schools and early intervention with interests in sensory integration, mental health care. and interdisciplinary care.

Aaron A. Gubi, Ph.D., is an Assistant Professor in the Combined and Integrated School and Clinical Psychology (PSY.D.) program at Kean University. A licensed psychologist and nationally certified school psychologist, he has clinical and research interests in the areas of child maltreatment/trauma, multicultural competency practices and autism spectrum disorders

Jennifer Gardner, OTD, OTR, is an Assistant Professor in the Department of Occupational Therapy at Kean University. A licensed occupational therapist, Dr. Gardner provides evaluation and treatment of children, adolescents and adults with emotional and mental disorders, as well sensory processing disorders.

References

American Occupational Therapy Association. (2014). Occupational therapy practice framework: Domain and process (3rd ed .). *American Journal of Occupational Therapy, 68(Suppl . 1)*, S1– S48 . http://dx .doi .org/10 .5014/ajot .2014 .682006

- American Occupational Therapy Association. (2016). *Occupational therapy in school settings* [Fact Sheet]. Retrieved on May 20, 2016 from http://www.aota.org/-/media/Corporate/Files/AboutOT/Professio nals/WhatIsOT/CY/Fact-Sheets/School%20Settings%20fact%20she et.pdf.
- Bayona, C., McDougall, J., Tucker, M., Nichols, M., & Mandich, A. (2006). School-based occupational therapy for children with fine motor difficulties: evaluating functional outcomes and fidelity of services. *Physical* & Occupational Therapy in Pediatrics, 26(3), 89-110 22p.
- Bream, S. (2013). The history of occupational therapy in adolescent mental health practice. *OT Practice, 18*(5), 19-25.
- Case-Smith, J. (2002). Effectiveness of schoolbased occupational therapy intervention on handwriting. The American Journal of Occupational Therapy, 56, 17-25.
- Chu, S., & Reynolds, F. (2007). Occupational therapy for children with Attention Deficit Hyperactivity Disorder. *British Journal of Occupational Therapy, 70*(9), 372-383.
- Dankert, H., Davies, P., & Gavin, W. (2003). Occupational therapy effects on visualmotor skills in preschool children. *American Journal of Occupational Therapy*, *57*(5), 542-549 8p.
- Gronski, M. G. (2013). Balance and Motor Deficits and the Role of Occupational Therapy in Children Who Are Deaf and Hard of Hearing: A Critical Appraisal of the Topic. *Journal of Occupational Therapy, Schools & Early Intervention, 6*(4), 356-371. doi:10.1080/19411243.2013.860767

- Hoffman, A. O. (2016). What Parents Need to know about School-Based Occupational Therapy. Retrieved June 17, 2016, from http://www.aota.org/about-occupationaltherapy/professionals/cy/articles/schoolconsumer.aspx
- Kalpogianni, E., Frampton, I., & Rado, T. (2001). Joint working between occupational therapy and clinical psychology in a school setting: A neurorehabilitation case study of a child with an acquired developmental disability. *British Journal of Occupational Therapy*, 64(1), 29-33.
- Splett, J. W., Fowler, J., Weist, M. D., McDaniel, H., & Dvorsky, M. (2013). The critical role of school psychology in the school mental health movement. *Psychology in the Schools, 50*(3), 245-258.
- Tanner, K., Hand, B. N., O'Toole, G., & Lane,
 A. E. (2015). Effectiveness of interventions to improve social participation, play, leisure, and restricted and repetitive behaviors in people with autism spectrum disorder: A systematic review. American Journal of Occupational Therapy, 69, 6905180010. http://dx.doi.org/10.5014/ajot.2015.017806
- Wehmeyer, M. L. (2007). *Applying self determination theory to special education*. New York: Guilford.

Original Research

The Contemporary Homework Battle: Homework Challenges for Spanish-speaking Families

Rachel Stein

Throughout the last century, homework has been promoted and scorned as opinions surrounding its benefits have fluctuated (Bang, Suarez-Orozco, Pakes, & O'Conner, 2009; Cooper & Valentine, 2001). Despite variations in how stakeholders view homework, it continues to be a mainstay of the American education system, with 90% of parents and teachers indicating that the completion of homework helps to achieve school-related goals (e.g., good grades, graduation; Van Voorhis, 2011). According to research, parents think they should monitor their children's homework and consider it an important aspect of education (Epstein & Van Voorhis, 2001). Parents rank helping with homework as the most important way to be involved, as well as the primary area where they want to be involved, in their child's education (Epstein & Van Voorhis, 2001).

Parent participation has been associated with increased student attention to homework, homework completion, and better more homework performance (Hoover-Dempsey et al., 2001). However, research has found that parents' level of involvement in homework is closely related to whether they feel efficacious in their ability to offer help (Hoover-Dempsey et al., 2001) as well as their own experiences with formal education (Epstein & Van Voorhis, 2001). Specifically, parents who feel more comfortable helping with homework or who have had more formal education themselves are more likely to offer homework aid; parents with a greater perception of their ability to help are more involved (Epstein & Van Voorhis, 2001). Despite this connection, parents indicate that they oftentimes feel unprepared to help with homework (Van Voorhis, 2011).

Parents who have limited experience with formal education, speak a language other than English, or struggled in school themselves may face significant barriers to helping their children complete homework (Bang, Suarez-Orozco, & O'Connor, 2011). This is particularly considering important the changing demographics of schools in the United States. For example, according to the 2010-11 U.S. Census Bureau, 10 percent of U.S. students English Language Learners, which are represents an increase of thirty six percent since 1993-94 (U.S. Department of Education, National Center for Education Statistics, 2013), with continued projected growth. Additionally, 80% of individuals who are learning English as a second language are of Latino descent and speak Spanish at home (U.S. Department of Education, 2007). Thus, it is particularly important to determine how efficacious parents of Latino descent feel, as well as work towards supporting parents' perceptions of their ability to aid with homework.

The current study surveys bilingual and Spanish-speaking parents to better understand the purposes ascribed to homework by parents and teachers, as well as challenges families face when completing homework. Ultimately, a better understanding of impediments to homework completion for bilingual and Spanish-speaking families is needed so that schools can aid with parent efficacy and involvement with homework. Specifically, this paper will outline challenges that families face when working to complete homework assignments. Parents' unique role in the homework process and teachers' perspectives

on homework will be explored. The literature examining homework is an educational practice are briefly addressed and findings are discussed in terms of potential implications for homework practices.

Challenges to Homework Completion

Homework completion requires a myriad of prerequisites, including: time (e.g., time free from other responsibilities), resources (e.g., computer, craft supplies), and the assistance of others (e.g., adult with requisite knowledge). Unfortunately, however, some parents have difficulty providing environment an or assistance conducive for homework completion. Parents indicate they sometimes feel as though the help they offer is of poor quality or that they are unable to help with some subjects (Van Voorhis, 2011). These challenges are compounded for parents who are not fluent in the English language, have limited educational backgrounds, went to school in other countries, or struggled in school themselves (Bang et al., 2011). Further, while poverty is problematic for all children, and may result in less support for homework completion. there is an increased likelihood for children from immigrant families to live in households that are classified as low income or below the poverty line (National Center for Children in Poverty, 2013). This may be particularly salient for parents identifying as Hispanic, as recent statistics indicate that of those identifying as Hispanic in the United States, 35% also said that they were born in another country (Census Bureau, 2012).

Despite the perception that parents should play a role in homework, there are often impediments to this type of interaction (Vera, et al, 2012). Individual (e.g., motivation, learning style), environmental (e.g., quiet setting), and community (e.g., school/community violence) characteristics are all influential, and can ask as impediments, to homework completion (Bang,

Suarez-Orozco, & O'Conner, 2011). Additionally, diverse demographic factors (e.g., language, culture, socioeconomics) may also impact homework experiences, necessitating additional investigation (Brock, Lapp, Flood, Fisher, & Han, 2007). While most families face some challenges to homework completion (e.g., uncooperative child), some families experience considerably more difficulties than others. This is particularly salient when considering a more diverse population that includes families with variation in parents' school experiences, available resources, time available to allocate to homework, and the role of children within the house (Brock et al. 2007). Epstein (1995, 1997) provides a framework that can help conceptualize parental involvement in children's education (cited in Vera et al., 2012). For example, parents may work long hours to support their family, and rely on children to engage in work that helps support the family, whether economically or by assisting with household responsibilities (Orellana, 2001), which can interfere with teacher-assigned homework completion.

Children of immigrant parents are frequently the first in their family to attend formal schooling in the United States and learn English (Buriel, Perez, De Ment, Chavez, & Moran, 1998). As parents adapt to their new environment, they may rely on the English skills their children learn in school to gather information from text or from individuals in their surroundings (Weisskirch & Alatorre Alva, 2002). Once children become acquainted with the English language, they may begin to serve as translators of written work or interpreters of verbal communication for their non-fluent parents and family members (Morales & Hanson, 2005). Although research has not shown this directly, it is hypothesized that children of immigrant parents, or who are immigrants themselves, engage in a similar process when seeking homework assistance

from their parents. Children may provide direct translations of homework instructions or interpretations of the information acquired in the classroom to their parents to help alleviate the language barrier.

Parents Role in Homework

Hoover-Dempsey et al. (2001) found that parents believe that being involved with homework will have a positive effect on their children's school experience and that parents participate in homework in a variety of ways. When parents become involved in homework they generally engage in four broad activities: valuing validating (e.q., homework's importance), monitoring (e.g., ensuring homework completion), assisting (e.q., scaffolding homework skills), doing or homework (Epstein & Van Voorhis, 2001). Specifically, parents help establish structures surrounding homework completion, such as setting aside a time or space for this purpose; oversee homework completion by asking about homework assignments or requesting verification of its completion; help scaffold skills (e.g., breaking assignments into smaller parts. providing explanations); demonstrate problem solving techniques; try to make homework engaging; or assist in learning strategies (Hoover-Dempsey et al., 2001). Parents often perceive certain types of homework assignments as an invitation for involvement (Hoover-Dempsey et al., 2001), though teachers often underestimate the amount of time that parents are involved in homework aid (Van Voorhis, 2011). Regardless of time spent, parents perceive that they should be monitoring their children's homework practices and completion (Van Voorhis, 2011). Parental monitoring, including the degree to which parents provide structure in their child's environment, is а predictor of student achievement (Annunziata, Hogue, Faw, &

Fall 2016

Vera et al. (2012) extended the findings about parents and homework, by looking at a population of parents of English learners. Amongst this sample they found that in-home monitoring, such as homework aid, was still the most common form of parents' educational involvement. Ultimately, regardless of the type of input towards homework completion, parents are often motivated to be involved due to a perception that being involved in homework is beneficial for their children. While the experiences within homework vary from family to family, it is likely that the challenges to homework parents' involvement are compounded in families where the parents are not native English speakers or do not speak English. These families may struggle with the language components of homework, but they may also face additional challenges (e.g., using children to serve as language translators) that make homework even more difficult.

Does Homework Matter?

The importance and benefits of homework have long been debated in the literature. Despite numerous attempts to clarify whether homework is worthwhile for students' learning, it is difficult to determine the impact of homework on academic outcomes (Trautwein & Koller, 2003). Research examining the benefits of homework for elementary school students is particularly unclear. Studies have indicated that the positive effects from homework are not as strong for elementary school students as secondary school students (Cooper, Robinson, & Patall, 2006), and some research has even suggested that homework may have negative elementary students' effects for attitude towards academics (Cooper, 1989a cited in Brock, Lapp, Flood, Fisher, and Han, 2007). However, longitudinal studies to assess the long-term effects of homework on work habits

and self-regulation are lacking; most studies focus on elementary students' short-term attitudes or short-term achievement. Homework at the elementary level may be beneficial because it builds self-regulatory skills and good homework attitudes over the long term, rather than benefitting students' shortterm achievement, yet, the literature to date has not studied these distinctions.

Cooper, Robinson, and Patall (2006) conducted a meta-analysis to synthesize homework research from 1987-2003. Thev found that of the 69 correlations between homework and achievement, 50 showed a positive relation to achievement and 19 showed a negative relation to achievement. While the overall trend was toward positive relationship between homework and achievement, a number of studies did find negative relations. It is also important to note that the meta-analysis included a large range of outcome measures to evaluate achievement in addition to numerous study designs, grade levels, and academic subjects that were all considered in the same analysis. Thus, it is not clear how much can be extrapolated from this meta-analysis, other than that the trend generally suggests positive effects of homework. Despite some more recent studies that have found positive correlations between time spent on homework and achievement, particularly at the class-wide level, Trautwein and Koller (2003) ultimately conclude that even though there is a large body literature looking at homework and of achievement, it is still difficult to draw appropriate conclusions.

The extensive literature looking at homework and its impact needs to be considered alongside methodological challenges within this area of study. As outlined above, there is inconsistency in measurement (e.g., achievement based on grades or test scores; whether time spent is measured weekly or daily), study design (e.g., differences across instructional levels), and numerous variables complicating instructional (e.g., quality, student support at home). The research is further complicated by the conflation between student and class level effects throughout the literature, which makes understanding the correlates true and implications of homework complicated (Trautwein & Koller, 2003). Additionally, it is important to consider that even among those studies that have found positive effect sizes between homework and achievement, many of the samples used are outdated and may not accurately reflect a more contemporary and diverse student population.

Teachers and Homework

Even though homework is a multi-step process (assigning, completing, turning in), its inception begins with teachers who are responsible for designing and implementing homework (Epstein & Van Voorhis, 2001). Teachers often value homework as a useful tool for improving academic achievement because it requires students to engage in study skills at home and is seen as reinforcing classroom learning (Bang et al., 2009). Homework is frequently promoted not only for academic content but also because it can be a way for students to learn responsibility and foster the connection between home and school (Bang et al., 2009). Broadly, Epstein and Van Voorhis (2001, p. 181) articulated ten goals that teachers typically ascribe to homework: "practice, preparation, participation, personaldevelopment, parent-child relations, parentteacher communications, peer interactions, policy, public relations, and punishment." Homework is often dictated as part of a school or district's educational practice and some research suggests that good schools and teachers are those that, among other things, assign homework (Epstein & Van Voorhis, 2001). Even when teachers are not required to

assign homework, it is frequently seen as an important part of teaching and students' educational attainment. Further, research implies that assigning more homework is frequently interpreted as a sign of a good teacher (Epstein & Van Voorhis, 2001). Despite the fact that the benefits of homework are unclear, teachers continue to assign homework for a wide range of reasons.

When considering student performance and success, teachers indicate that homework is one metric used to grade and assess students (Bang et al., 2009). Teachers often group students who complete their homework into the category of "good students" (Bang et al., 2011). Although homework is something that teachers consider in their subjective opinion of students, surveys asking about practices homework indicate that most homework is graded as either satisfactory or unsatisfactory, without additional nuanced feedback (e.g., correct or incorrect answers, ways to improve the quality of work). Particularly at the elementary school level, homework practices rarely evaluate the quality or accuracy of homework completion (Brock et al., 2007), making it an evaluation of effort and responsibility rather than academic skill or knowledge.

Because of the large and growing population of students in the U.S. who live in households that are culturally and linguistically diverse, Brock et al. (2007) explored teachers' purposes for assigning homework to students from diverse backgrounds. Schools that qualified for inclusion in the study consisted of at least 25% of the student body identifying as English Language Learners and at least 36% of students at each school gualifying for free and reduced lunch (Brock et al., 2007), a metric that is often used to assess socioeconomic means. Qualitative data from the study indicated that teachers used homework for skill practice that was related to, or reinforcing for, what was

being covered in class. Other purposes that teachers noted for assigning homework included: using it for discipline, to help teach responsibility, because the parents wanted or expected homework, and because it was district policy to assign homework (Brock et al., 2007). Teachers surveyed said they thought about the types of resources, or lack of resources, available to their students and worked to design homework that included the necessary materials (e.g., extra paper) or was not resource intensive. Frequently, teachers also indicated that they varied the homework assignments based on student need and ability (e.g., assigning remedial work or lessening the volume of work). Two thirds of respondents said that students were allowed to do homework at school and that homework was designed with the intention to be completed without requiring the aid of an adult (Brock et al., 2007). However, when a sample of teachers were interviewed following the initial survey, Brock et al. (2007) found that many teachers said that they provide students with guidance about when and where to seek adult help with homework. In sum, Brock et al. (2007) found that the teachers they sampled were sensitive to the diverse needs of the students whom they taught and how student's life circumstances impacted their ability to do homework. However, teachers frequently adopted a standard style and type of homework. without offering deeper а consideration of whether these practices benefited their students. While Brock et al. (2007) provided insights about culturally and linguistically diverse students, the sample focused only on teachers perceptions of their students' homework practices. without gathering information from parents. Furthermore, the literature has not fully considered two crucial factors when thinking about homework: a) home-life impediments to homework completion and b) parents' frequent desire and belief that they should be involved in homework.

Present Study

Due to the prevalence of homework for American school elementary children it is important to explore correlates and challenges to homework completion among a sample of students that is representative of today's school population. Indeed, Bang et al.'s (2011) study looking at immigrant students and homework called for research-examining teachers' purposes when assigning homework and a greater consideration of multiple perspectives (e.g., teachers and parents) when thinking about the ecology of homework. While the literature has tried to address this (see Brook et al., 2007), the population considered is still not reflective of many American families and the schools that their children attend. With this in mind the present study sets out to address the following research questions. Among a population of parents who are primarily low income and Spanish speaking:

- 1. What are the perceived benefits of homework?
- 2. Do the perceived benefits of homework among parents align with the perceived benefits among classroom teachers'?
- 3. What are the greatest perceived challenges to homework completion?
- 4. Are the perceived challenges to homework completion aligned with teachers' perceptions of the challenges to homework completion?

Methods

Participants. Participants in the study were the parents of first and sixth grade students at a school on the central coast of California. According to the School Accountability Report Card for the 2012-2013 academic year the school is 94.4% Hispanic, 3.7% white, and 1.9% other or multi-racial. One hundred percent of students are classified as socioeconomically disadvantaged and 79.1% are English Language Learners. The first and sixth grades were targeted as a pilot effort, with the potential to expand the program to the entire school at a later date. First grade is the first time in students' formal school experience where homework is an integral part of the curriculum, and sixth grade was selected to help gauge homework practices prior to the transition to junior high school, which coincides with an increased expectation for students to work independently.

Procedures. Survey materials were sent home to all 129 students in the first and sixth grades. Materials were available in both English and Spanish. Parents were asked to complete and return the survey. Fifty-five surveys were returned (43%), 21 from first grade families (30% of first grade families) and 31 from sixth grade families (53% of sixth grade families). Of the surveys that were returned, 64% were completed in Spanish and 36% were completed in English. The survey was attached to a flier about a bilingual homework workshop that parents had the option of attending, regardless of whether they completed the survey.

Measure. The survey consisted of eight questions, some of which required qualitative open-ended responses and some of which were multiple choice or relied on a Likert scale response options (see the appendix). For instance, parents were asked why they thought homework was important (e.g., to get good grades, to practice what is learned in school). Using a Likert scale (i.e., 1= not at all true, 5 = completely true), parents rated various challenges they face to homework completion in their household (e.g., my child doesn't like homework, I do not understand the work well enough to help, we do not have the appropriate supplies). In addition to providing rankings about specific challenges, parents could also

write additional challenges that inhibit homework completion. Originally the survey was written in English and then translated to Spanish and reviewed by multiple native Spanish speakers prior to implementation. Teachers completed a survey similar to the parent survey in English that changed pronouns to be applicable to teachers instead of parents; the same questions were asked. Please see the appendix for the surveys that were given to parents and teachers.

Results

Due to the small sample size and nonexperimental design of this study, the results obtained are exploratory. Results provide information about homework completion and challenges to homework completion among bilingual and Spanish-speaking families with elementary school children.

Benefits or Purpose of Homework. Overall, 53% of parents (n = 32) said that homework is important because it allows students to practice what they learned in school. Forty-two percent of parents (n = 23)said that homework was important to get good grades. Fifty percent of sixth grade parents (n = 18) responded that the benefit of homework is to practice what is learned in school, 33% of sixth grade parents (n = 12) responded that the purpose of homework is to get good grades, and 3% of sixth grade parents (n = 6)responded that homework is important because it is part of school. Amongst the first grade parents, 58% (n = 14) said that homework is important to practice what is learned in school and 46% (n = 11) of parents indicated that homework is important because it is part of getting good grades. Table 1 summarizes these findings.

Parent and Teacher Perceived Homework Benefits. All five of the teachers (100%) surveyed indicated that homework is important because it allows students to practice what is learned in school. Teachers endorsed a number of other reasons for homework completion, but every teacher endorsed different reasons why they thought homework was important. When examining only the first or only the sixth grade teachers there were few why teachers commonalities in thought homework was important. Rather. the individuals provided responses such as "to teach responsibility" or to "finish work that did not get completed in class."

Challenges. Homework Parents reported that their child's dislike of homework was a challenge (M = 2.35, SD = 1.30), with sixth grade parents (M = 2.64, SD = 1.37) indicating that this to be a greater challenge than first grade parents (M = 1.90, SD = 1.09). There were significant differences between first and sixth grade parents with sixth grade parents more frequently reporting that their child dislikes homework (U = 452.50, z = 1.97, p < .05). Similarly, parents of sixth graders (M = 2.32, SD = 1.53) and first graders (M = 2.10, SD = 1.09) said that their children complaining about homework was a challenge to homework completion; the difference across grades was not statistically significant. Significantly more sixth grade parents (M = 1.91, SD = .79) indicated that their child's homework was too hard when compared to first grade parents (M = 1.33, SD = .58; U = 502, z = 2.739, p < .05).Parents also reported significantly different levels of not always being aware that their child had homework (U = 422.50, z = 2.221, p < .05), with this being more of a challenge for sixth (M= 1.66, SD= 1.18) than first grade parents (M =Children's' dislike and 1.14, SD = .65). complaints about homework were reported as the biggest homework difficulty for all families, followed by parents not understanding their child's homework well enough to help, which was similarly problematic for sixth (M = 2.33, SD = 1.24) and first (M = 1.92, SD = .97) grade families.

Parent Teacher and Perceived Homework Challenges. Teachers consistently thought that the two greatest challenges to homework completion are that students do not like doing homework (M = 3.25, SD = 1.26) and that parents do not understand the work well enough to help (M = 3.25, SD =.5). Parents also indicated that these areas were impediments to homework completion, but to a lesser degree than teachers. Generally, teachers anticipated more challenges to homework completion than parents actually reported. Table 2 offers a comparison of all challenges to homework completion reported by teachers and parents.

also Eighteen parents provided additional qualitative responses in regards to challenges to homework completion. While parent responses ranged from things such as "Activities such as sports [interfere]" to "it is challenging to keep him focused," two patterns emerged from parents' open-ended responses. First, five parents (27% of open-ended responses) noted that not speaking English or struggling to understand assignments was a difficulty for them. Second, five parents also wrote about having a hard time providing the structure, discipline, or motivation to help their child complete homework (27% of open-ended responses). Smaller numbers of parents also noted concerns with having enough time for homework once other activities (e.g., after school programs) were completed and finding time to complete homework due to their own work schedule.

Discussion

Anecdotal evidence indicates that parents frequently struggle to help their children complete homework, despite viewing it as an important responsibility. Parents who are bilingual, do not speak English, or have limited may financial resources face additional challenges, even if they endorse the

importance of parent involvement in homework. In particular, these families may not be able to read assignments, may have limited personal educational experience, may have few options to seek affordable outside help (e.g., tutoring), and may have time constraints or living situations that provide less than ideal circumstances for completing homework. This study sought to attain information in order to better understand the purpose and challenges of homework among a population of primarily Latino, Spanish-speaking families.

According to the current study results, parents most frequently perceived the benefits of homework as being either to practice what was learned in school or to get good grades. This varied somewhat from teachers, who consistently described the purpose of homework as to practice what was learned in school. Individual teachers also ascribed other purposes to homework such as to finish work or help teach responsibility. While the small sample size of teachers does not allow for a meaningful statistical comparison, these results suggest that teachers and parents may not always ascribe the same purpose to homework. Although the intent behind parents and teachers responses varied, in that teachers were focused almost exclusively on learning, whereas parents were focused somewhat more on external rewards (good grades), ultimately the responses of both teachers and parents indicated that they thought homework was a part of success in school.

Despite parents and teachers placing importance on homework, challenges often make homework completion difficult. Parents' responses to the survey suggest that their child's reluctance to do homework or complaining related to homework is a big impediment. Additionally, parents noted that their own lack of understanding regarding homework content or instructions, related to either language barriers or personal lack of educational background, made homework completion difficult. While it is likely that all parents sometimes have to contend with a child who does not want to do homework, not being able to understand directions or assignments may be more limited to samples of immigrant or non-English speaking families. Teachers had similar concerns to parents in regards to challenges to homework completion, although some teachers noted challenges (e.g., lacking appropriate supplies) that were not generally endorsed by parents as problematic.

Generally, the data from this study previously literature examining support homework challenges and benefits (Bang, Suarez-Orozco, Pakes, & O'Conner, 2009; Cooper & Valentine, 2001). Specifically, parents and teachers place importance on homework. However, all parents seem to face some level of difficulty to homework completion. This sample of parents specifically indicated that language and comprehension make helping with homework difficult for them, which may not be true of all parents. As literature has found a link between how much parents help with homework and parent efficacy (Hoover-Dempsey et al., 2001), it is important that schools consider ways to increase parent efficacy.

Limitations

The current study is primarily limited by the small sample size. Information was gathered by surveying parents across two grade levels in one elementary school. While there is no specific reason to believe that the information gathered is different than what would be found at other schools with similar demographic profiles, future research needs to examine larger samples of parents. It is important to keep in mind that the information representative aggregated here is of heterogeneous families and may not offer a glimpse of the full spectrum of parent

experiences with homework.

Recommendations for Future Research and Practice

While extensive literature exists looking at homework and academic outcomes, few studies have looked closely at the homework experiences of families and children from Latino This is especially important backgrounds. increasingly ethnicallv aiven the and linguistically diverse population of students in schools in the United States. Future research should seek to find out more about the homework experience for these families and the ways they help, and struggle to help, Additionally, research support homework. should examine homework practices and their effectiveness in facilitating the learning of a more representative population of students. Since mainstream homework practices have remained stable for many years, it is important that research provides information for schools and teachers as to whether these practices are useful in aiding student learning.

While the current study was only able to provide exploratory findings due to the limited sample, a reconsideration of homework practices is needed. Schools will benefit from assessing their population's needs in order to match homework practices to the community. This may include schools determining what proportion of parents speak English, the socioeconomic status of families (which is linked to the availability of resources), and whether parents in the school have had exposure and experience with the United States education system. Additionally, schools need to be aware of community-based homework assistance: Are there low cost or free after school homework assistance options? Are community-based free or low cost homework tutoring programs available? ls there a lack of affordable homework assistance for families? Once a school has determined the

needs relevant to their school population there are specific steps that schools may consider. Table 3 provides considerations that schools can take when thinking about how to revise and reconsider homework practices.

Summary

Over the course of public education in the United States, homework has been a part of most individuals' educational experience. Yet. changes and accommodations to support the changing demographics of the student population have not always been made. The present study investigated the challenges faced by Spanish-speaking parents when trying to support their children's homework efforts. Results show that Spanish-speaking parents faced some challenges similar to those faced by many families, but also some challenges that may be more unique to a diverse and contemporary population. It is important for schools to continue to work towards supporting parents' homework efforts.

References

- Annunziata, D., Hogue, A., Faw, L., Llddle, H.A. (2006). Family functioning and school success in at risk inner-city adolescents. *Journal of Youth and Adolescence, 35*, 105-113. doi: 10.1007/s10964-005-9016-3
- Bang, H.J., Suarez-Orozco, C., Pakes, J., & O'Conner, E. (2009). The importance of homework in determining immigrant students' grades in schools in the USA context. *Educational Research, 51*, 1-25.
- Bang, H.J., Suarez-Orozco, C., & O'Connor, E.
 (2011). Immigrant students' homework: Ecological perspective on facilitators and impediments to task completion. *American Journal of Education, 118*, 25-55.
- Brock, C.H., Lapp, D., Flood, J., Fisher, D., & Han, K.T. (2007). Does homework matter? An investigation of teacher perceptions

about homework practices for children from non dominant backgrounds. *Urban Education, 42*, 349-372. doi: 10.1177/0042085907304277

- Buriel, R., Perez, W., De Ment, T. L., Chavez, D. V., & Moran, V. R. (1998). The relationship of language brokering to academic performance, biculturalism, and self-efficacy among latino adolescents. *Hispanic Journal of Behavioral Sciences, 20*(3), 283-297. Retrieved from http://search.proquest.com/docview/61935 8500?accountid=14522
- Cooper, H., Robinson, J.C., & Patall, E.A. (2006). Does homework improve academic achievement? A synthesis of research, 1987-2003. *American Educational Research Association*, *76*, 1-62.
- Cooper, H., & Valentine, J.C. (2001). Using research to answer practical questions about homework. *Educational Psychologist, 36*, 143-153.
- Epstein, J.L. & Van Voorhis, F.L. (2001). More than minutes: Teachers' roles in designing homework. *Educational Psychologist, 36*, 181-193.
- Hoover-Dempsey, K.V., Battiato, A.C., Walker, J.M.T., Reed, R.P., DeJong, J.M., & Jones, K.P. (2001). Parental involvement in homework. *Educational Psychologist, 36*, 195-209.
- Morales, A., & Hanson, W. E. (2005). Language brokering: An integrative review of the literature. *Hispanic Journal of Behavioral Sciences, 27*(4), 471-503. doi:http://dx.doi.org/10.1177/07399863052 81333
- National Center for Children in Poverty (2013). Retrieved from: http://www.nccp.org/topics/childpoverty.htm I
- Orellana, M.F. (2001). The work kids do: Mexican and Central American immigrant

children's contributions to household and schools in California. *Harvard Educational Review, 71*, 366-390.

- Trautwein, U. & Koller, O. (2003). The relationship between homework and achievement—still much of a mystery. *Educational Psychology Review, 15*, 115-145.
- U.S. Department of Education, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 1992, 1994, 1998, 2000, 2002, 2003, 2005, 2007, 2009, and 2011 Reading Assessments. (Table prepared June 2012).
- U.S. Department of Education, National Center for Education Statistics (2013). *The Condition of Education 2013*: *English Language Learners*. Retrieved from: https://nces.ed.gov/fastfacts/display.asp?id =96
- Van Voorhis, F.L. (2011). Costs and benefits from family involvement in homework. *Journal of Advanced Academics, 22*, 220-249.
- Vera, E.M., Israel, M.S., Coyle, L., Cross, J., Knight-Lynn, L., Moallem, I., Bartucci, G., & Goldberger, N. (2012). Exploring the educational involvement of parents of English learners. *School Community Journal, 22*, 183-202.
- Weisskirch, R. S., & Alva, S. A. (2002).

Practice

50 (18)

58 (14)

53 (32)

100 (5)

Table 1

Sixth Grade Parents

First Grade Parents

All Parents

Teachers

Percentage of respondents endorsing reasons it is important to complete homework (N for each question in parentheses)

Part of School

3 (10)

0 (0)

17 (10)

0 (0)

Finish work

0 (0)

4 (1)

2 (1)

20(1)

Good Grades

33 (12)

46 (11)

38 (23)

0 (0)

From Science to Practice and Policy	

Language brokering and the acculturation of latino children. *Hispanic Journal of Behavioral Sciences, 24*(3), 369-378. doi:http://dx.doi.org/10.1177/07399863020 24003007

Fall 2016

Table 2

Mean Endorsement of Homework Challenges (with Standard Deviation in Parentheses)

Homework	Child	Parent	Work	Time	Homework	Quantine	Child
Challenges	Dislike	Understanding	Difficulty	Time	Awareness	Supplies	Complaints
	2.35	2.16	1.70	1.80	1.45	1.90	2.24
All Parents	(1.30)	(1.15)	(0.77)	(1.19)	(1.03)	(1.27)	(1.37)
	1.90	1.92	1.33	1.86	1.14	1.86	2.10
All First Grade	(1.09)	(0.97)	(0.58)	(1.28)	(0.65)	(1.39)	(1.09)
First Grade	2.00	2.20	1.50	1.00	1.75	1.50	2.50
Teacher 1	(1.15)	(1.10)	(0.58)	(0.00)	(1.50)	(1.00)	(1.91)
First Grade	2.22	1.67	1.44	2.33	1.00	1.78	2.33
Teacher 2	(1.20)	(1.00)	(0.73)	(1.32)	(0.00)	(1.39)	(0.71)
First Grade	1.50	2.11	1.13	1.75	1.00	2.13	1.63
Teacher 3	(0.93)	(0.93)	(0.35)	(1.39)	(0.00)	(1.64)	(0.92)
	2.64	2.33	1.91	1.76	1.66	1.91	2.32
All Sixth Grade	(1.37)	(1.24)	(0.79)	(1.15)	(1.18)	(1.22)	(1.53)
Sixth Grade	2.61	2.42	1.95	1.78	1.65	2.05	2.32
Teacher 1	(1.46)	(1.30)	(0.91)	(1.21)	(1.37)	(1.27)	(1.67)
Sixth Grade	2.67	2.13	1.87	1.73	1.67	1.73	2.33
Teacher 2	(1.29)	(1.29)	(0.64)	(1.10)	(0.98)	(1.16)	(1.40)
	3.25	3.25	1.75	2.00	2.75	2.50	2.00
All Teachers	(1.26)	(0.50)	(0.50)	(0.82)	(2.06)	(1.73)	(0.82)

Table 3

Considerations for Supporting Homework Practices What can schools do?

- Schools should consider whether they can offer homework help, such as:
 - o Hire tutors

o Pay teachers to offer some additional time

- Partner with another organization (high school, community college, senior living center) to offer homework assistance.
- Make sure homework goals and assignments align
 - For instance, if homework is to practice what is learned in class then assignments should be very similar to content that students learn in class.
- Form school -family partnerships
 - o Hold English classes on the school campus (such as through adult education)
 - Be creative- One school began a weekly homework dinner program where parents and students were invited weekly for dinner and side-by-side homework help. The school has sustained the program through grants and community donations

(http://manzanomesa.aps.edu/homeworkdiner)

What can teachers do?

- Communicate to parents the intention and expectations for homework
- Provide information on homework assignments directly to parents (e.g., in a weekly letter or class webpage)
- Alert parents about the kinds of supplies recommended

- Inform parents about their expected role in homework
- Teachers should make appropriate modifications to ensure students are able to complete assignments. For instance, a student who is asked to babysit siblings after school might require a shorter assignment due to limited time.
- Provide interested parents with resources to help parents' efficacy for homework completion. For example, this may include monthly parent math nights or including a list of parent resources along with assignments

What can parents do?

- Parents can provide an infrastructure for homework completion. This may include setting up a schedule of when their child is going to do homework, trying to create a space for homework completion, or asking questions about the quality and type of homework their child has been assigned.
- Parents who do not speak English can help their child with homework by asking them to translate their assignment directions from English to their native language. Once the assignment instructions are in a language that the parent does understand they can offer help and then the child can translate it back into English. This type of repetition can aide in learning and understanding.
- Reading and storytelling are important parts of learning regardless of what language they are done in. Parents should be encouraged to read, tell stories or listen to books on tape in any language to help build pre literacy and literacy skills.

FROM SCIENCE TO PRACTICE AND POLICY

Student Affiliates of School Psychology

Call for Submissions

Winter 2016-2017

Manuscript submissions are now being accepted for the Winter 2016/17 and beyond issues of School Psychology: From Science to Practice and Policy (FSPP), the quarterly publication of the American Psychological Association Division 16's Student Affiliates in School Psychology (SASP). FSPP includes 8 sections for which manuscripts are accepted: Scholarship, Research Reviews, Lessons from the Field, Forum, Chapter Spotlight, Commentary, Perspectives, and Book Reviews.

Please review the Manuscript Submission Guidelines at: http://apadivision16.org/sasp/from-science-to-practice-to-policy-fspp/ for more information about each of these sections.

Please submit all manuscripts and/or questions to Sarah Babcock, Editor, at <u>s.kimo.babcock@gmail.com</u> or the Editor-Elect, James Geiger, at <u>jamesgeiger@email.arizona.edu</u>.

WINTER 2016-2017 ISSUE SUBMISION DEADLINE: JANUARY 27, 2017