Summer 2011 Issue
School Psychology: From Science to Practice
The Research Issue

Student Affiliates in School Psychology (SASP) is the student-led organization of the American Psychological Association's (APA) Division 16. School Psychology: From Science to Practice (FSTP) is the quarterly periodical of SASP. It serves as a multipurpose platform for promoting and disseminating graduate student scholarship; sharing applied knowledge and valuable practicum experiences; exchanging information and perspectives on critical issues in the field of school psychology; propagating scientific and applied insight from current faculty, practitioners, and interns; and informing the membership of relevant activities, opportunities, resources, and happenings within the organization.

Manuscript Guidelines can be found on the SASP website. All submissions should be submitted directly to the editor via email at colleen.mocco@okstate.edu.

Next Submission Deadline: Monday, September 12th

Scholarships

Congratulations to the SASP Diversity Scholarship Winners:

Sierra Brown from Duquesne University for the incoming student award

Imad Zaheer from Lehigh University for the advanced student award

Scholarships

Exploring Informational Text Literacy Skills in Second Grade
Sarah M. Stebbe and Kristen S. Girard
Michigan State University

Author Note

Sarah M. Stebbe, Department of Counseling, Educational Psychology, and Special Education, Michigan State University; Kristen S. Girard, Department of Counseling, Educational Psychology, and Special Education, Michigan State University.

This project used previously collected data from the Concepts of Comprehension Assessment (COCA) in Action Project by Nell Duke, Allison Billman, and Sara Bolt.

Abstract

Informational text writing is often missing from early literacy instruction and assessment (Duke, 2000). In order to examine written expression development related to informational text, the informational text writing samples and oral reading fluency scores of 84 second graders were collected and analyzed. Correlational analyses were used to examine relationships between writing quantity and quality, and between reading and writing quantity in order to inform educational assessment practices. The results found a statistically significant moderate relationship between writing quantity and quality, and a significant but small relationship between reading fluency and writing quantity. Implications for elementary literacy assessment are discussed.

Keywords: informational text, reading, writing, elementary

Exploring Informational Text Literacy Skills in Second Grade

The alarming number of students who struggle with reading and writing necessitates a greater focus on these skills in American educational practice and research. According to the National Center for Education Statistics (2008), only 57% of eighth grade students were writing at the basic level, which indicates only a partial mastery of the skills needed to write proficiently at the student's grade level (National Center for Education Statistics, 2008). Also, only 31% of fourth grade students were reading at or above a proficient level on the recent National Assessment of Educational Progress (NAEP) in reading (National Center for Education Statistics, 2009). Fifty percent of the NAEP passages were in a genre called informational text.

The purpose of informational text is to communicate information about the natural or social world (Duke, Purcell-Gates, Hall, & Tower, 2006). Although important in academic and personal contexts, this literary genre may be particularly challenging for students to use effectively. Despite the fact that students must be able to communicate through informational text, this genre is often ignored in early literacy instruction (Duke, 2000). The 2002 NAEP results indicated that more students earned excellent ratings on narrative writing than informative writing (Persky, Daane, & Jin, 2003). According to the *Progress in International Reading Literacy Study (PIRLS),* an international study of fourth graders' reading performance, student achievement was stronger on literary (i.e., narrative) reading than informational reading (Mullis, Martin, Kennedy, & Foy, 2007). More research in informational text literacy may inform assessment and instruction in this genre and improve students' literacy achievement.

Informational Text Writing

In order to improve student achievement, psychologists and educators need to understand and use writing assessment tools that can identify struggling writers early. Proper assessment helps inform and improve writing instruction and intervention. Existing research has most frequently measured writing quality through standardized tests with multiple-choice questions. However, the National Commission on Writing (2003) emphasized the importance of using direct assessment measures that analyze authentic writing samples rather than measures that rely on multiple-choice questions. Additionally, direct assessment of writing, including produc-

tion-dependent measures (e.g., total words written, words spelled correctly, correct word sequences), have been shown to produce valid and reliable measurements of students' written expression skill level (Malecki, 2008). Writing assessment research needs to utilize these direct measures to inform the knowledge base surrounding writing development.

Currently, more needs to be known about the relationship between various measures of informational text writing ability to inform educational assessment practices. One research study in narrative text confirmed that significant relationships exist between vocabulary and writing quality in second grade (Olinghouse & Leaird, 2009). Less is known about the relationship between different writing variables such as writing quantity and writing quality in informational text.

By measuring writing quality with analytic rubrics, the unique relationship between writing quantity and writing quality in informational text writing may be explored. This study will use direct writing assessment methods to explore the relationship between writing quantity (i.e., total words written) and writing quality (i.e., rubric scores) for the informational text writing of second grade students. The first research question is: How are writing quantity and writing quality in informational text related?

Reading and Writing Connections

Written expression skills are closely related to reading skills and a better understanding of the reading -writing connection can help improve literacy instruction and improve students' writing abilities (Belanger, 1987). Researchers are currently attempting to understand the relationship between reading and writing development. Second grade is a time when reading and writing quantity are emphasized in both instruction and assessment. As a result, it is important to know if and how these skills are related. This study will explore the relationship between writing quantity (i.e., product-dependent writing measures) and reading fluency, as measured by reading curriculum-based measurements, across the course of the school year. The second research question is: How are informational text writing quantity and reading fluency related?

Method

Participants and Setting

Participants of this study included 84 second-grade students enrolled at four different elementary schools within a single Midwest school district. Of these 84 students, 55% (N= 47) were male and 44% (N=37) were female. Additionally, 81% were Caucasian (N=69), 5% were Hispanic (N=4), 2% were Asian American (N=2), and 8% were other ethnicities (N=7). The ethnicity of two students was unreported. Due to student absences during data collection, the number of participants analyzed for each research question is slightly less than the total sample of 84 students.

Procedure

In the fall of 2007, curriculum-based measurement scores in oral reading fluency were gathered using the median score from three DIBELS benchmark probes. These probes were administered and scored by classroom teachers according to DIBELS standardized procedures. Additionally, writing samples from a 30-minute informational text writing prompt were collected in the fall of 2007. The writing prompts were administered to groups of students and scored for quantity and quality by trained graduate students.

Measures

Writing quantity. Two trained graduate students scored the writing prompts for total words written (TWW) in thirty minutes. Methods for counting total words written followed guidelines found in Rathvon's *Early Reading Assessment* (2004). Forty writing samples were double-scored and the percent exact agreement between the two raters was 95%.

Writing quality. Three trained graduate students rated each writing prompt on five different rubrics (i.e., informational text traits, vocabulary, organization, voice, and illustrations). Scores for individual rubrics ranged from zero to six and were combined to create a composite score (ranging from zero to thirty) as an overall measure of informational text writing quality. At least 85% of double-scored rubrics received ratings within one point across raters. Other published studies have used similar measures of informational text writing quality and reported similar levels of inter-rater agreement (Purcell-Gates et al., 2007).

Reading fluency. DIBELS Oral Reading Fluency (ORF) scores (measuring words read correctly per minute) were collected from participants as measures of their reading fluency. DIBELS ORF has been shown to have adequate reliability (alternate form: .92; test-retest: .92-.97; Good et al., 2002). Similarly, DIBELS ORF has been shown to have acceptable lev-

els of predictive and concurrent validity for elementary students when compared to other measures such as the Woodcock-Johnson Reading Tests (Reschly, Busch, Betts, Deno, & Long, 2009; Roehrig, Petscher, Nettles, Hudson, & Torgesen, 2008). The average concurrent validity coefficients were .80 and the average predictive validity coefficients were .66 (Good et al., 2002). **Data Analysis**

Correlational analyses of the reading and writing measures for the second-grade students were used to explore the relationship between writing quality and writing quantity and to explore the relationship between writing fluency and reading fluency. Due to the ordinal nature of the writing rubrics measuring quality, a Spearman rho was used for the first research question. Writing fluency and oral reading fluency were both interval data so a Pearson r correlation was calculated for the second research question. For all analyses, the .01 alpha level was used as the cut-point for statistical significance.

Results

The results of the first research question found a significant relationship between writing quantity and writing quality (r=.35, n=74, p<.01). The relationship was medium in magnitude. See Figure 1 for a scatterplot of the correlation between writing quality and quantity.

The results of the second research question found a significant relationship between writing quantity and reading fluency (r=.29, n=67, p<.01). The relationship was small in magnitude. See Figure 2 for a scatterplot of the relationship between writing quantity and reading fluency.

Discussion

The purpose of this study was to examine if informational text writing quality and quantity and if writing quantity and reading fluency were related. The results of this study confirmed a significant, moderate relationship between informational text writing quantity and writing quality. Also, this study confirmed a significant, although small, relationship between writing quantity and reading fluency.

The moderately strong relationship between writing quantity and writing quality in informational text suggests that writing quantity might not fully explain variation in quality and vice versa. Measuring both quantity and quality may provide a more complete picture of a student's writing abilities in this genre and may better direct instruction.

The small but significant relationship between writing quantity and reading fluency supports previous research that suggests while reading and writing may have some similar underlying skill and knowledge bases, the two constructs still rely on unique skill sets (Belanger, 1987; Shanahan & Lomax, 1986). The small strength of the relationship suggests that students who write large quantities are not necessarily fluent readers and vice versa. Measuring both reading fluency and writing quantity will give educators a better understanding of students' literacy skills and will guide more effective literacy instruction. Future research may study the effect of literacy skill instruction on informational text literacy achievement. Additionally, more research is needed to test more complex predictive models of informational text reading and writing abilities.

Limitations

Although this study added to the current literature on informational text literacy, there were several limitations. The 30-minute writing prompts allowed students to draw illustrations so the writing quantity measure is not a true writing fluency measure due to the variation in time that students spent on illustrations. Also, the inter-rater reliability for rubric ratings was only strong when counting scores within one point agreement. While higher inter-rater reliability would be desirable, current research continues to use similar levels of reliability (Purcell-Gates et al., 2007). In addition, the reading fluency measure was not a specific measure of informational text literacy. Future research should investigate reading-writing connections with only informational text fluency passages to determine if a stronger relationship exists.

Conclusion

This study contributes to the research on written expression assessment in schools. Writing

small but significant relationship between writing quantity and reading fluency, suggesting both shared and unique underlying constructs between reading and writing.

References

Belanger, J. (1987). *Reading achievement and writing proficiency: A critical review of research*. Paper presented at the annual meeting of the Canadian Council of Teachers of English, Winnipeg, Manitoba, Canada.

Duke, N. (2000). 3-6 minutes per day: The scarcity of informational texts in first grade. *Reading Research Quarterly, 35*, 202-224. doi: 10.1598/RRQ.35.2.1

Duke, N. K., Purcell-Gates, V., Hall, L. A., & Tower, C. (2006). Authentic literacy activities for developing comprehension and writing. *Reading Teacher, 60*, 344-355. doi: 10.1598/RT.60.4.4

Good, R. H., III, Kaminski, R. A., Moats, L. C., Laimon, D., Smith, S., & Dill, S. (2002). DIBELS: Dynamic Indicators of Basic Early Literacy Skills, Sixth Edition.

Malecki, C. (2008). Best practices in written language assessment and intervention. In A. Thomas & J. Grimes (Eds.), *Best practices in school psychology V* (pp. 477-488). Bethesda, MD: NASP Publications.

Mullis, I. V. S., Martin, M. O., Kennedy, A. M., & Foy, P. (2007) *PIRLS 2006 international report: IEA's progress in international reading literacy study in primary schools in 40 countries*. Chestnut Hill, MA: International Study Center Boston College.

National Center for Education Statistics. (2008). *The nation's report card: Writing 2007*. Retrieved from http://www.nationsreportcard.gov/writing_2007/

National Center for Education Statistics. (2009). *The nation's report card: Reading 2009*. Washington, D.C.: Institute of Educational Sciences.

National Commission on Writing. (2003). *The neglected "R": The need for a writing revolution*. Retrieved from http://www.writingcommission.org/

Olinghouse, N., & Leaird, J. (2009). The relationship between measures of vocabulary and narrative writing quality in second-and fourth-grade students. *Reading and Writing, 22*, 545-565. Doi: 10.1007/s11145-008-9124-z

Persky, H. R., Daane, M. C., & Jin, Y. (2003). *The nation's report card: Writing 2002*. Washington, D.C.: National Center for Educational Statistics.

Purcell-Gates, V., Duke, N. K., & Martineau, J. A. (2007). Learning to read and write genre-specific text: Roles of authentic experience and explicit teaching. *Reading Research Quarterly, 42*, 8-45. doi: 10.1598/RRQ.42.1.1

Rathvon, N. (2004). *Early Reading Assessment: A Practitioner's Handbook*. New York: Guilford Press.

Reschly, A., Busch, T., Betts, J., Deno, S., & Long, J. (2009). Curriculum-based measurement oral reading as an indicator of reading achievement: A meta-analysis of the correlational evidence. *Journal of School Psychology, 47*, 427-469. doi: 10.1016/j.jsp.2009.07.001

Roehrig, A. D., Petscher, Y., Nettles, S. M., Hudson, R. F., & Torgesen, J. K. (2008). Accuracy of the DIBELS oral reading fluency measure for predicting third grade reading comprehension outcomes. *Journal of School Psychology, 46*, 343-366. doi: 10.1016/j.jsp.2007.06.006

Shanahan, T., & Lomax, R. (1986). *An analysis and comparison of theoretical models of the reading-writing relationship*. Paper presented at the annual meeting of the American Educational Research Association, San Francisco, CA.

About the Authors

Sarah M. Stebbe, Department of Counseling, Educational Psychology, and Special Education, Michigan State University; Kristen S. Girard, Department of Counseling, Educational Psychology, and Special Education, Michigan State University.

This project used previously collected data from the Concepts of Comprehension Assessment (COCA) in Action Project by Nell Duke, Allison Billman, and Sara Bolt.

Correspondence concerning this article should be addressed to Sarah Stebbe, Department of Counseling, Educational Psychology, and Special Education, Michigan State University, 447 Erickson Hall, East Lansing, MI 48824

About our training program: The foundation for the School Psychology program at The Ohio State University (OSU) is based on the ecological model and socio-cultural theories of psychological and educational practices with youth. Socio-cultural theories encompass social cognition and social behavioral principles of understanding and working with a diversity of youth in America's schools. Children do not experience life in a vacuum, but do so within socio-cultural contexts such as school, home, and community. The focus of the School Psychology program is service delivery across many different settings with a particular emphasis on children in urban settings. The OSU program is committed to preparing school psychologists to work in not only suburban and rural areas but to also acquire a better understanding of the psychological and educational dynamics related to stressors in urban settings. Recognizing that children in urban areas experience additional challenges related to population density (e. g., poverty, family and community violence), the urban specialty focus allows students to understand issues of poverty in particular and how these issues influence the lives of children in any setting. The training program at OSU also has a strong commitment to issues of social justice within the context of school psychology practice and a commitment to diversity at the research, training, and service level.

The EdS program focuses on practitioner training for the delivery of comprehensive school psychological services primarily in school settings. In addition to practitioner skills, EdS students are trained in a "scientist as consumer" model that emphasizes the use of research findings in clinical decision-making, both in terms of creating interventions as well as evaluating their efficacy. The doctoral program builds on the practitioner focus of the EdS program and seeks to prepare school psychologists whose main contributions will be through research and academic careers, perhaps as future trainers of school psychologists and/or future leaders in the

field of school psychology. Doctoral students are trained in more advanced design and statistical techniques to meet the "scientist as producer" model of the program. Clinically, doctoral students are also trained to develop skills as case managers, clinicians in comprehensive school and mental health settings, and supervisors of others who provide educational and psychological services to children, adolescents, and families.

About our student organization: The School Psychology Student Organization (SPSO) was first established and recognized as a student organization at OSU in 1991. SPSO was organized to facilitate communication between school psychology graduate students, faculty, professional organizations and colleagues in order to increase student awareness regarding issues of professional development and service.

In December of 2010, OSU started an active and enthusiastic Student Affiliates in School Psychology (SASP) chapter. Since we already had a strong student organization (SPSO), we decided to keep the same mission statement and goals, but re-structured the organization to better align with SASP's national model. In becoming part of the SASP network of school psychology training programs, our hope is to give our student organization a niche for doctoral students and provide all students with additional opportunities to publish, network, and share their concerns as part of a national student organization. In our first year, we were successful in recruiting 100% of our current students to join SASP and APA's Division 16!

The SASP chapter at OSU aims to:

- Develop in prospective members an understanding of the organization.

- Provide for the members a voice in matters affecting them.

- Influence the conditions under which mem-

bers are being prepared for their professional role in society.

- Advance the interest and welfare of members.

- Advance the profession of School Psychology.

The Executive Committee (EC) of OSU's SASP Chapter is elected at the end of Spring quarter. The EC includes a President, President-Elect, Secretary, Treasurer, Social Justice Chair, Communications Chair, and Internship Representative. Several of these positions were created when we re-structured the organization. For example, we changed the Vice President to President-Elect, to better align with SASP's national model and to promote continuity within the organization. We also changed the Community Service position to Social Justice Chair to better align with our training program's strong emphasis on social justice issues within the practice of school psychology. Lastly, we added a new position of Internship Representative to keep students on internship connected to the program and give voice to their concerns and questions.

What we do: Each year, we introduce our student organization to the incoming students at their orientation before Fall quarter begins. Our SASP chapter meets once per quarter to discuss any issues of importance to the School Psychology program, address concerns, and discuss upcoming fundraising events, and volunteer opportunities. During the 2010-2011 year, our chapter was able to raise enough funds to give each member attending the NASP convention a stipend to help with the cost of the convention. Some community service events we participated in last year include: Walk Now for Autism Speaks, Parent Training Summit for Columbus City Schools district, Read Across America and Special Olympics Ohio. We hope to continue volunteering for these events in the upcoming school year and also participate in the Reach Out and Read pro-

gram through Nationwide Children's Hospital of Columbus.

Who we are: The SASP boards from 2010-11 and 2011-12 include:

2010-11: Charley Eschenbrenner (Co-President & Webmaster), Jen Wilson (Co-President), Monica Kumar (Vice-President), Rachel Lee (Treasurer), Elizabeth Durst (Secretary), Kelly Roudabush (Fundraising Chair), Tracy Dush (Social Chair), Ginny Paciorek (Community Services Chair), and Jennifer Cooper (SASP Representative).

2011-12: Jennifer Cooper (Co-President), Charley Eschenbrenner (Co-President), Amy Bremer (President-Elect), Rachel Lee (Treasurer), Elizabeth Durst (Secretary), Lindsay Matthews (Social Justice Chair), Audrey Tucholski (Communications Chair), and Jen Wilson (Internship Representative).

*Our current website: http://spso.org.ohio-state.edu/index.php

Please note that we are in the process of transitioning to our new website, which will be: http://sasp.org.ohio-state.edu/index.php

If you have any questions about how to start a new SASP chapter at your school, please do not hesitate to contact our Membership Chair, Jacqueline Brown, at jbrown@education.ucsb.edu or Jennifer Cooper at cooper.1858@osu.edu

About the Authors

Jennifer M. Cooper, M.A., and Charlotte Risby Eschenbrenner, M.A., are third-year doctoral students and current Co-Presidents of SASP at The Ohio State University.

Lessons From the Field
Cari Fellers, Ph.D.
Oklahoma State University

I am currently completing my APA-approved pre-doctoral internship at the Florida State University Regional Multidisciplinary Evaluation and Consulting Center, which is a non-profit organization that provides diagnostic and therapeutic services in the panhandle region of northern Florida. Clients are referred to the Center by 18 school districts, university organizations, and a number of community medical agencies. FSU provides a unique internship experience for school psychology graduate students. When I was going through the internship application and interview process, I was looking for an experience that would provide me with well-rounded training. FSU offers the essential components of a school psychology internship, such as, school mental health services, assessment, consultation, etc in rural, underserved school districts. However, interns are also provided with a comprehensive clinical component. Clinical experiences have included a rotation between an autism clinic and an attention disorders clinic, as well as, various private evaluations and group therapy services provided at a local health agency. Perhaps the most interesting facet of my internship experience has been the opportunity to participate in a state-wide system change. The Florida Department of Education published its Response to Instruction/Intervention (RtI) Implementation Plan in June 2008. Since that time schools have been transitioning from the traditional discrepancy model to a RtI model of problem solving and special education identification. Coming into this internship experience, I had a lot of experience with RtI implementation. I had worked as a RtI Specialist in Oklahoma and all of my research had focused on RtI. I was excited to get to apply my experience and training in a setting that had mandated RtI and was not just using it as a precursor to traditional testing, which is what commonly occurs in districts that are 'trying out' the RtI process. Florida schools do not have a choice. Its RtI or bust. Going into the 2010-2011 school year, I had the knowledge, background, and passion necessary to be successful; however, what I was not prepared for was the amount of resistance

that exists. Any change is difficult. This type of dramatic paradigm shift is no different, and I underestimated what I was walking into. Throughout my work with individual teachers, I began to see the amount of frustration that existed. There were tense moments, tears, and opposition. I had to alter the way I approached consultation based upon a teacher's knowledge and opinion of RtI. I had to pull out all the old consultation tricks: frequent performance feedback, altering my verbiage to make words like 'data' less threatening, etc. I encountered some teachers who absolutely would not buy into the tiered intervention process, and no matter what I did, I could not provide them with an option they would be happy with; however, I started to have small consultation successes. Slowly, school staff members who initially misunderstood the process began to generate and run interventions on their own. Individual successes were celebrated and others began to see the value of RtI for not only special education identification, but in improving general education as a whole. I have been asked to stay at FSU to complete a post-doctoral fellowship, and a large part of my role will be to provide on-site consultation regarding the RtI process. While there are still some mountains to climb, this year has allowed me to affect small changes. Hopefully, these small changes will lead to larger changes during the next school year. Given the unique challenges I have faced this year, I have grown significantly as a consultant. It has been a great year, and I cannot wait for what the next year holds!

About the Author

Cari Fellers recently graduated from Oklahoma State University with a Ph.D. in Educational Psychology: School Psychology. She is now working on her postdoctoral internship.

The Research Issue

The Need for School-based Violence Prevention

Jennifer Cooper
Ohio State University

Introduction

School violence is a problem of national significance and one with which all communities, educators, parents, and students should be concerned. Many children experience violence on a daily basis in their communities and schools, while many also endure abuse, neglect, and violence in their homes (Prothrow-Smith & Quaday, 1995). Previous research has shown that school violence can have a negative impact on academic achievement and lead to an increased likelihood of anxiety, depression, post-traumatic stress disorder, substance use, suicide, delinquency and other problems that persist into adulthood (Buka, Stichick, Birdthistle, & Earls, 2001; Gorman-Smith & Tolan, 1998; Markowitz, 2001). The strong correlation between aggressive behavior problems and children from low-income families puts urban youth at increased risk for academic underachievement, violence in school, and suicide (Chen & Weikert, 2008; Nickerson & Slater, 2009; Qi & Kaiser, 2003).

Schools should be safe environments for teaching and learning, where students can actively participate without fear of violence and/or crime. However, schools face significant challenges in providing safe and supportive learning environments for children, especially for students in urban neighborhoods. Preliminary data from the Indicators of School Crime and Safety (2010) report show that there were 38 school-associated violent deaths from July 1, 2008, through June 20, 2009 among youth 5-18 years of age. Among students ages 12-18, there were approximately 1.2 million victims of nonfatal crimes at school, including 743, 100 violent crimes (simple assault and serious violent crime). In 2009, eight percent of students reported being threatened or injured with a weapon, such as a gun, knife, or club, on school property. Further, the Center for Disease Control and Prevention's Youth Risk Behavior Surveillance (2010) survey reports that 17.5% of students nationwide had carried a weapon on at least one occasion in the 30 days prior to the survey. Nationwide, 31.5% of students had been in a physical fight (11.1% on school grounds) one or more times during the 12 months before the survey.

These data suggest the strong need for school-based violence prevention programs to reduce the risk of children being victims and/or perpetrators of school violence and to maintain schools as safe environments in which students can maximize learning and develop to their fullest potential. The important role of school psychologists in schools' efforts to minimize the effects of school violence is receiving attention in the literature and directly aligns with several of the National Association of School Psychologists' (NASP) domains of practice as outlined in the Model for Comprehensive and Integrated School Psychological Services (National Association of School Psychologists, 2010).

Violence and Academic Achievement

A safe learning environment is a necessary prerequisite for students to concentrate and participate in the learning-related activities at school. A 2008 study examined the characteristics of students from 212 middle schools in New York City that exhibited violent or aggressive behaviors in schools to develop a model to explain school disorder and academic achievement (Chen & Weikert, 2008). Findings from this study supported the variables of poverty and minority status of student populations as predictors of school disorder. Lower student socioeconomic

status (SES) was found to contribute to lower levels of academic achievement and poor school attendance. Lower SES was also found to contribute to higher levels of school disorder. Chen and Weikert (2008) found that school disorder has a significant effect on student achievement; however, its impact was through the indirect mediating variable of student attendance rates.

Fear of violence or victimization in schools can also lead to school refusal or avoidance in school-related activities that can negatively impact academic achievement and healthy social development. A recent study based on a secondary analysis of the Program for International Student Assessment (PISA) data collected from a nationally representative sample of 2,787 15-year-olds in over 100 schools in the United States found that low-achieving students reported a higher level of fear of school violence than high achievers (Akiba, 2010). Further, this study found that classroom disorder and lower levels of average parent educational attainment were associated with high levels of fear. The two strongest predictors of student fear were low academic achievement and a weak sense of student connectedness at schools. Conversely, high levels of students' sense of belonging and student-teacher bonds were linked to lower levels of fear.

In thinking about these two studies, the vicious cycle of poverty, school attendance, academic underperformance, and school violence is disturbing; higher levels of poverty in urban schools often lead to lower attendance rates and academic underachievement, that may, in turn, contribute to higher levels of school violence and fears of attending school (Akiba, 2010; Chen & Weikert, 2008). Furthermore, students who engage in school violence or demonstrate school refusal behavior due to fear of violence will exhibit higher levels of absenteeism contributing further to academic deficits in urban schools.

School Violence and Suicidality

Previous research has linked youth violence to many problems such as increased substance use, delinquency, and mental health problems (Buka et al., 2001; Gorman-Smith & Tolan, 1998; Markowitz, 2001) that are beyond the scope of this paper. However, schools and school psychologists need to be acutely aware of the co-morbidity of violence and suicide in adolescents given the seriousness of these behaviors. A nationally representative sample of 11,113

adolescents that completed the 2005 Youth Risk Behavior Survey (YRBS) found that boys were more likely to carry a weapon and get into physical fights at school, wherein girls were more likely to report feeling unsafe at school and having suicidal thoughts (Nickerson & Slater, 2009). This study found that carrying a weapon, getting into physical fights, being threatened or injured at school, and having property damaged or stolen at school were predictors of suicidal behaviors in both boys and girls.

Nickerson and Slater (2009) also noted important racial differences that practitioners should be cognizant of. For example, African American students were less likely than their White peers to report suicidal ideations. However, Native American, Alaskan, and Hispanic females were more likely to report suicidal ideations than their White peers.

Models of Violence Prevention Programs

Two prominent models of school-based prevention programs exist in the research literature: the authoritarian approach and the educational/therapeutic approach (Nickerson & Spears, 2007). The first approach focuses on using punitive measures (e.g., suspension and expulsion) and a strong policing presence to restrict student autonomy. In contrast, the educational/therapeutic approach engages students, parents and school staff, and focuses on promoting a positive school climate and encouraging behavior management and conflict resolution in schools. Examples of authoritarian practices would include zero tolerance policies and security measures and while educational/therapeutic approaches would include parent training, violence prevention programs, and psychoeducational groups.

A study conducted by Nickerson and Spears (2007) examined the extent to which schools are using these two models and how variables such as school size, neighborhood variables such as SES and crime, and number of school-based mental health professionals predicted the use of one practice over the other.

The sample was comprised of 2,270 school principals that completed the School Survey of Crime and Safety (SSOCS). Results from this study indicated that large, urban schools were more likely than rural schools to use both authoritarian and therapeutic

approaches. Nickerson and Spears (2007) found that a greater number of mental health professionals predicted the increased likelihood of violence prevention programs, student conflict resolution, and parent training in the schools. Interestingly, Nickerson and Spears also found that schools serving a higher number of low-income students were more likely to use authoritarian practices such as corporal punishment, suspension without services, and random metal detector checks regardless of crime levels in surrounding neighborhoods. This finding was particularly disconcerting given the important role that positive student-school relationships and student connectedness can play in promoting student success in urban schools (Abika, 2010; Decker, Dona, & Christenson, 2007).

Evaluation of School-based Violence Prevention Programs

School-based violence prevention programs have drawn national attention in the United States; however, reports regarding the effectiveness of such programs are conflicting (Park-Higgerson, Perumean-Chaney, Bartolucci, Grimley, & Singh, 2008). In an attempt to identify and analyze the variables that may affect program effectiveness and fidelity, a recent meta-analysis examined 26 randomized controlled trial, school-based studies aimed at reducing aggression and violence in school-age children. The authors cited two earlier meta-analyses that examined school-based violence prevention programs that found school-based interventions to be effective in preventing and reducing violence and aggressive behaviors (Derzon & Wilson, 1999; Mytton, DiGuiseppi, Gough, Taylor, & Logan, 2002). However, the authors noted a limitation of these studies was that they did not clarify what program characteristics made the programs successful.

Park-Higgerson et al. (2008) examined five program characteristics: theory-based interventions, characteristics of target population, type of program, single or multiple approach programs, and type of instructor. Findings from this study indicated that only one factor, single approach programs, was found to have a mildly positive effect on reducing youth violence. This finding was contrary to the popular notion that multiple approach programs (those that involve family, peers, and the community) are superior in reducing violence in children and adolescents. Unlike findings from many previous individual studies, the meta-analysis did not find positive effects for the remaining four program characteristics. Park-Higgerson et al. reported that interventions which employed intervention specialists, were non-theory-based, and focused on at-risk and older children were slightly more effective in reducing violence and aggressive behaviors. However, limitations of this study included small size samples, missing pretests, small effect sizes, and heterogeneity among the studies selected for inclusion. Park-Higgerson et al. (2008) cautioned that the results should not be generalized to all studies analyzing school-based violence prevention programs because many individual studies were excluded from the meta-analysis. Additionally, other program characteristics, such as intensity and/or duration of interventions, were not examined in this study..

Role for School Psychologists

School psychologists are uniquely poised to meet the challenges of preventing and reducing youth violence and promoting prosocial behavior in schools. The need for school psychologists to become involved in violence prevention and school safety efforts is also consistent with the comprehensive mental health service delivery model advocated for by NASP. In speaking about the issue of school violence, Furlong, Morrison, and Pavelski (2000) state, "With the exception of PL 94-142, at no time in the past 30 years has an issue galvanized policy maker's interest in expanding the availability of mental-health services in the schools (p. 82)." Furlong et al. (2000) argue that school psychologists are uniquely trained to address school violence and its associated drug use, and taking on this expanded role would allow the profession the opportunity for further role redefinition. However, the authors caution that if school psychologists do not rise up to the challenge, that other professions will. This would signify a crucial missed opportunity to help youth

with behavioral and academic problems and may cause school psychologists to be relegated to their more traditional roles within the schools.

Summary and Suggestions for Future Research

School violence is a problem that all policy makers, schools, parents, communities, and students should be aware of and take proactive measures to prevent. Problems associated with school and community violence include, but are not limited to, lower levels of academic achievement, poor school attendance, and increased likelihood for risk-taking behaviors such as substance use and suicide (Akiba, 2010; Buka et al., 2001; Chen & Weikert, 2008; Gorman-Smith & Tolan, 1998; Markowitz, 2001; Nickerson & Slater, 2009; Qi & Kaiser, 2003). Urban schools are at increased risk for violence due to high concentrations of minority students and students from impoverished families (Chen & Weikert, 2008; Qi & Kaiser, 2003). Schools are ideal settings to implement violence prevention programs and work to reduce students' problem behaviors before they spiral out of control. Models of effective school-based prevention programs such as the authoritarian and educational/therapeutic approaches exist in the research literature. However, future research should work to identify program characteristics that can be replicated, so evidence-based best practices can be implemented on a broader level within public schools across the United States. In exploring the effectiveness of various interventions and individual program characteristics, future researchers should explore differences between age-groups, school settings (urban v. suburban), and diversity of the student body. Future research should also examine the unique needs of urban learners and how best to meet their mental health needs by utilizing therapeutic violence prevention approaches.

The role of school psychologists in implementing school-based violence prevention programs is receiving attention in the literature, and arguments for school-based mental health professionals to address this unmet need in schools (urban schools especially) is supported by NASP's (2010) position on comprehensive services in the schools. As large numbers of students experience school violence and/or avoidance of school due to fear of victimization, the impact on their educational outcomes will follow, and the number of students failed by the public education system will continue to grow. The time to address youth violence in schools is now. It is the shared responsibility of schools and society, in general, to ensure that tomorrow's youth are educated to the best of our abilities. Effective school-based violence prevention strategies offer the best solution to creating safe and nurturing learning environments that inspire academic and social growth for all students.

References

Akiba, M. (2010). What predicts fear of school violence among U.S. adolescents? *Teachers College Record, 112(1),* 65-102.

Buka, S. L., Stichick, T. L., Birdthistle, I., & Earls, F. J. (2001). Youth exposure to violence: Prevalence, risks, and consequences. American Journal of Orthopsychiatry, 71, 298–310.

Centers for Disease Control and Prevention. [Youth Risk Behavior Surveillance – United States, 2009]. Surveillance Summaries, [June 2010]. MMWR 2010;59(No. SS-5).

Chen, G., & Weikart, L. A. (2008). Student background, school climate, school disorder, and student achievement: An empirical study of New York City's middle schools. *Journal of School Violence, 7(4),* 3-20.

Decker, D. M., Dona, D. P., & Christenson, S. L. (2007). Behaviorally at-risk African American students: The importance of student-teacher relationships for student outcomes. *Journal of School Psychology, 45,* 83-109.

Derzon, J., & Wilson, S.J. (1999). An empirical review of school-based programs to reduce violence. Paper presented at: Annual Meeting of the American Society of Criminology; 1999; Toronto, Ontario.

Furlong, M., Morrison, G., & Pavelski, R. (2000). Trends in school psychology for the 21st century: Influences of school violence on professional change. *Psychology in the Schools, 37(1),* 81-90.

Gorman-Smith, D., & Tolan, P. (1998). The role of exposure to community violence and developmental problems among inner-city youth. Development and Psychopathology, 10, 101–116.

Markowitz, S. (2001). The role of alcohol and drug consumption in determining physical fights and weapon carrying by teenagers. *Eastern Economic Journal.* 27: 409-432.

Mytton, J.A., DiGuiseppi, C., Gough, D.A., Taylor, R.S., & Logan S. (2002). School based violence preven-

tion programs: systematic review of secondary prevention trials. Archives of Pediatrics & Adolescent Medicine;156: 752-762.

National Association of School Psychologists (NASP). (2010). National Association of School Psychologists Model for Comprehensive and Integrated School Psychological Services. *School Psychology Review, 39(2),* 320-333.

Nickerson, A. B. & Slater, E. D. (2009). School and community violence and victimization as predictors of adolescent suicidal behavior. *School Psychology Review, 38(2),* 218-232.

Nickerson, A. B., & Spears, W. H. (2007). Influences on authoritarian and educational/therapeutic approaches to school violence prevention. *Journal of School Violence, 6(4),* 3-31.

Park-Higgerson, H., Perumean-Chaney, S. E., Bartolucci, A. A., Grimley, D. M., & Singh, K. P. (2008). The evaluation of school-based violence prevention programs: A meta-analysis. *Journal of School Health, 78(9),* 465-479.

Prothrow-Stith, D. (2007). A major step forward in violence prevention. American Journal of Preventive Medicine, 33(2S), 109–111.

Qi, C. H., & Kaiser, A. P. (2003). Behavior problems of preschool children from low-income families: Review of the literature. *Topics in Early Childhood Special Education*, *23*(4), 188–216.

Robers, S., Zhang, J., and Truman, J. (2010). *Indicators of School Crime and Safety: 2010* (NCES 2011-002/NCJ 230812). National Center for Education Statistics, U.S. Department of Education, and Bureau of Justice Statistics, Office of Justice Programs, U.S. Department of Justice. Washington, DC.

About the Author

Jennifer M. Cooper, M.A., is a third-year doctoral student at The Ohio State University. Her research interests include system-level change, school-based mental health access, social justice and home-school collaboration.

F a m i l i e s a n d S c h o o l s T o g e t h e r : A F a m i l y E n g a g e m e n t P r i m a r y P r e v e n t i o n P r o g r a m E v a l u a t i o n

B y C a r o l y n H a y t e r
M i c h i g a n S t a t e U n i v e r s i t y

Abstract

Families and Schools Together (FAST) is a family engagement prevention program that targets at-risk populations. The evidence-based program emphasizes the importance of building relationships to navigate difficult periods in child development and promote resilience in children. Quantitative and qualitative data suggests this program is effective and randomized controlled trials provide particularly strong support for implementation. This paper will discuss the FAST program, its theoretical basis, program components, program outcomes, evidence from empirically based research, and finally practical implications and recommendations for communities who may be interested in using the FAST model.

Introduction

When parents are involved in their children's education, children benefit on many levels (i.e. academic, behavioral, and social-emotional). Results may include better grades, better test scores, higher rates of grade promotion, more stable attendance, higher levels of social skills and adjustment, and better attitudes toward school. Simply put, "When parents are involved, children do better in school" (Miller & Kraft, 2008, p. 937).

Families and Schools Together (FAST) embraces the idea of family-school partnership to promote positive student outcomes. Family engagement looks different across schools and parent involvement can take on a variety of roles (including partner, collaborator, supporter, advisor, and audience). These roles change over time and some parents are left with little guidance or information about how to positively support their child's academic experience. FAST is an after-school early intervention, prevention, and life-long learning program designed to clarify these role expectations across the course of development. The program is intended to supplement academic experiences in the classroom through experiential learning in after school sessions. The FAST approach embraces a community-based forum "Where content is replaced with process, and instructor-led verbal interaction is

replaced with group interactivity and shared leadership" ("Families and Schools Together," n.d.).

Theoretical Base

The creators of FAST refer to a number of theoretical models when explaining the foundation for this prevention program. These models include: evidence-based practice, social ecological theory, family stress theory, family systems theory, parent empowerment, community development, brain development research, social capital, and risk and resiliency. FAST is a multi-component program and therefore each of these theories can be seen in different ways. However, the two most predominant theories are evidence-based practice and social ecological theory.

FAST has been developed through research at the University of Wisconsin-Madison and the Wisconsin Center for Educational Research. The program has been nationally recognized as a research-based model program and many empirical studies support this recognition. The developers acknowledge the importance of data-driven decision-making and therefore quantitative evaluation has been a large part of FAST implementation from the program's origination. In particular, a specific evaluation tool called FAST Evaluation has been used since 1990 to measure outcomes for families. The evaluation process consists of pre- and post-surveys completed by families and reviewed by FAST developers who then provide a summary report.

The other most prominent theory, social ecological theory, is displayed in the everyday programming activities. The developers recognize the importance of relationships and the influences that relationships can have on children's social, emotional, behavioral, and academic development:

> The theory states that children bond first and most importantly with the parents, especially a primary caregiver, then with the family unit. This ecology is extended into the school and local social environments, and out into work and wider social settings as children reach adulthood. The key to the

theory is the use of relationships to create accountability structures. This is imparted by a type of "quality time" that is embedded in our programs ("Families and Schools Together," n.d.).

From looking at the program components, it is easy to see that this theory is a central feature of FAST programming. The remaining theories mentioned above then fit into particular activities throughout the curriculum.

Components

FAST is a unique program that takes a developmental approach to learning and offers age-specific programs from infancy through the teenage years (Baby FAST, Pre-K FAST, Kids FAST, Middle School FAST, and Teen FAST). In addition, various implementation methods can be used depending on the needs of the community (e.g. standard implementation, multi-hub implementation, language adaptations, and cultural adaptations).

FAST is not an education-based curriculum. "It is an experiential, interactive process that builds empowerment, relationships, and skills." FAST team leaders are trained by the program providers and are supplied with all manuals, forms, and activity components necessary for program implementation. FAST team leaders can include a variety of individuals including parent members, school representatives, mental health specialists, teen advocates, or other community representatives for example. Then through an ongoing contract, FAST teams have the rights to use FAST materials and conduct their own groups within their community. Groups run for about 2 1/2 hours after school once a week for approximately 8-10 weeks.

FAST sessions vary depending on the developmental level of the child. Baby FAST will differ greatly from Teen FAST, for example, but all of the activities are designed to promote positive relationships and build skills. Some common activities that seem to transcend developmental barriers include nonverbal communication games, family-unity and strengthening games, music,

singing, and stress-reduction, for example. FAST team leaders are trained to facilitate these sessions and all activity components are provided with training. Activity components are not available through the developers website and interested participants must purchase the training package in order to gain access to these materials.

Audience

As a family engagement program, the targeted audience includes children and parents as well as other interested community members. FAST is specifically recommended for at risk populations: those at risk for substance abuse, school dropout, or behavior problems, for example. As mentioned above, one of the advantages of the FAST program is that it is available for all age groups. The developers offer Baby FAST, Pre-K FAST, Kids FAST, Middle School FAST, and Teen FAST. The activities in each program change, but the philosophy remains the same allowing for continuity as a family grows and develops together.

Timeline

FAST has a fairly lengthy implementation process when programs are just beginning, but over time the process becomes easier. To begin, a FAST team possibly consisting of a parent member (preferably FAST graduate), a school representative (e.g., guidance counselor or teacher), a mental health specialist, a law enforcement officer, a teen advocate, and another community or faith based agency representative must embark on the training process. It is unclear (based on the developer's website) how long this initial training lasts, but based the emphasis on proper implementation and program integrity as well as the high cost for training one can imagine it would last a significant amount of time.

After the training process, the FAST team can begin recruiting participants for the program. This alone could be an extensive process since the program is intended to benefit at-risk populations and often those are the families that are most difficult to reach. Once a group is established, the

FAST team may begin conducting group sessions that run for 8-12 weeks at approximately 2.5 hours per week. After 8-12 weeks, there is a graduation ceremony and families have the opportunity to sign up for a multi-family community follow-up program called FASTWORKS that lasts for 2 years.

Critique of Empirical Research

As mentioned above, FAST has been developed over years of research at the University of Wisconsin-Madison. Four randomized controlled trials (the gold standard for research) have been funded by government agencies including the Department of Health and Human Services and the Department of Education. These studies have shown that FAST has positive effects in a variety of areas including increased social skills, reduced aggression, reduced anxiety, reduced delinquent behaviors, and increased academic competence. Furthermore, parents showed increases in volunteer work and took on more leadership roles in the community. These results were discovered in various settings and included low-income, minority, urban, rural, and disabled populations. Two of these particular studies are detailed below.

Kratochwill, McDonald, Levin, Bear-Tibbetts, and Demaray (2004) conducted one of the aforementioned randomized controlled trials in their study of FAST's impact on behavioral and academic development of American Indian children. Over three years the researchers implemented and adapted version of FAST with American Indian values in mind. The authors sampled 50 families, 40 of whom graduated from the FAST program, and they collected pre-test, post-test, and 9-12 month follow-up data. Immediate post-test results showed statistically significant improved scores on the Aggressive Behavior index of the Child Behavior Checklist (CBCL; $d=1.20$) and improvements on the Withdrawn Scale of the CBCL ($d=.87$) for FAST participants as compared to controls. At the 1-year follow-up, the researchers discovered statistically significant teacher reported differences in academic competence of FAST students compared to controls as reported on the SSRS ($d=.77$).

A more recent study by Kratochwill,

McDonald, Levin, Scalia, and Coover (2009) provides more positive support for FAST when targeting at-risk special needs populations. This study was also a randomized controlled trial and targeted elementary students with behavioral problems who were determined by teachers to be at-risk for special education placements. The authors sampled 67 pairs and collected pre, post, and 1-year follow-up data. Results showed decreased externalizing behaviors for FAST children compared to controls and decreased special education placements for FAST children compared to controls. In addition, immediate post-test data showed a statistically significant difference in Family Adaptability for FAST participants compared to controls ($d = 1.35$). At the 1-year follow up, Family Adaptability had decreased for both groups, but it decreased less for the FAST group ($d = .79$). The decreased externalizing behaviors found at the immediate post-test were maintained at 1-year follow-up, as well ($d = .68$).

Qualitative approaches have often shown positive effects of the FAST program as well. McDonald et al. (1997) report results from parent interviews and surveys that show the benefits of FAST in ways different than the empirical studies mentioned above. For example, one parent states, "It's been about five years since we went through the FAST program and I still have friendships with some of the people I went through with. It was kind of a turning point for me. I was like, gee, these people believe that I have certain qualities, that I'm an O.K. person" (McDonald et al., 1997). Another parent said,

> "But I don't have the husband no more and I'm barely making ends meet-and I'm trying so hard, but I'm trying too hard that I'm missing the whole point. A lot of parents are doing the same thing. They don't realize how they are hurting the kids, and FAST helped me realize that. That if I'm giving of myself to this child, if I'm not having a meeting of the minds and hearts with this child on a continuous basis, I'm missing the whole point. I promised to love when I brought him here-to give him the most common thing, to give quality of your-

self... When I started going to FAST and when we sat down every week to have dinner, I started having flashbacks of when I was growing up with my family. I wondered how did I let this get away. That's mainly what they opened my eyes to and gave me a deeper insight into" (McDonald et al., 1997).

As shown, quantitative research studies as well as qualitative research studies have shown positive results from the FAST program, but it is important to note that many studies have been confounded by the researchers' personal investments in the program. In particular, Lynn McDonald is the founder of the program and many of the co-authors are employees of the University of Wisconsin and/or the Wisconsin Center for Educational Research. It is difficult to find research on FAST that is not tied in someway to McDonald or her colleagues. Despite this, the results are convincing due to the strong methodological design of the randomized controlled trials.

Discussion

Empirical research has shown the positive effects of FAST, but a number of factors need to be considered when a community or group is debating whether or not to use this program.

Program Strengths

One great aspect of FAST is the transportability of the intervention. As mentioned above, there are a variety of implementation options including standard implementation, multi-hub implementation, language/cultural adaptations. Standard implementation is used for implementing the standard version of FAST at one particular site. Multi-hub implementation is used for implementing multiple, simultaneous cycles at the same location. Language adaptations are available for a variety of languages including Spanish, German, and Russian for example. Local Native American adaptations are available as well (as demonstrated by Kratochwill et al.'s (2004) above-mentioned study.

In addition, there are three editions of FAST that are available as well: Parent Involvement FAST, Healthy FAST, and Achieve FAST. Parent Involvement FAST "focuses on building protective factors around children to keep them away from drugs and alcohol at the same time as it shifts child behaviors toward improved scholastic performance," Health FAST "includes AODA and School Performance, but adds components for helping parents improve the mental and physical health of children," and Achieve FAST "offers a number of unique FAST modifications that can be used to meet the needs of groups of families sharing special needs, such as ADHD, high functioning children, or crisis-traumatized families" ("Families and Schools Together," n.d.).

All of these variations allow communities to tailor the program to their needs and this is a clear strength of the FAST program. In addition to the adaptability to community needs, the other potential benefits from this program are clear as well: no interference with the regular school schedule, ability to monitor progress through annual evaluation reports, and scientifically-proven positive student outcomes.

Program Weaknesses

Schools pay for FAST training ($3900/team) and then yearly evaluation reports are available for an annual fee (approximately $1100). As long as schools are under contract, they have the rights to use all parts of the program/curriculum. The challenges of implementing FAST are clear, however: high monetary cost and a large time commitment from students, parents, and community volunteers. Unfortunately, students and families who are at-risk are often those who are the most difficult to reach. Many families who would benefit from this prevention program may not have the resources to participate.

Practical Implications/Recommendations

Although FAST is a non-profit program, the cost is still high and it is reasonable to

conclude that low-SES communities are unlikely to have the funds to pay for training. Therefore a large demographic is missing out on potentially positive intervention and FAST is neglecting a great number of people who need help. Perhaps one possible way to decrease the training costs would be to create online/video training methods. A large part of the training costs are most likely to support the trainers (especially since the program is non-profit) and perhaps if a more cost-effective training method is developed, the costs for schools could decrease.

For communities who have at-risk populations and have the funds to effectively run a FAST program, this prevention program seems like a great resource for building stronger families and communities. For those who don't have the financial resources to implement FAST, the greatest lesson to be learned is that building strong communities makes a difference in the lives of children. There are many other ways to build relationships and other methods and resources should certainly be explored.

References

Families and Schools Together. (n.d.) *Protecting Hearts and Minds - Families and Schools Together*. Retrieved April 3 2009, from http://familiesandschools.org/

Kratochwill, T.R., McDonald, L., Levin, J.R.,

Scalia, P.A., & Coover, G. (2009). Families and schools together: An experimental study of multi-family support groups for children at risk. *Journal of School Psychology*, *47*, 245-265.

Kratochwill, T.R., McDonald, L., Levin, J.R., Bear-Tibbetts, H.Y., & Demaray, M.K. (2004). Families and Schools Together: an experimental analysis of a parent-mediated multi-family group program for American Indian children. *Journal of School Psychology, 42,* 359-383.

McDonald, L., Billingham, S., Conrad, T., & Morgan, A. (1997). Families and schools together (FAST): Integrating community development with clinical strategies. *Families in Society, 78*(2), 140-155.

Miller, D. D. & Kraft, N.P. (2008). Best practices in communicating with and involving parents. In A. Thomas and J. Grimes (Eds.), Best Practices in School Psychology V (pp. 937-952). Bethesda, MD: National Association of School Psychologists.

About the Author

Carolyn A. Hayter is a doctoral candidate in school psychology at Michigan State University.

Gangs in Urban Schools
Rachel L. Lee
Ohio State University

Abstract

Street gangs are commonplace in many urban cities across the county and can be attractive to youth for a variety of reasons. Yet, gang-related activity within a school setting can have a negative impact on the educational process. This paper is intended to review relevant literature on gangs, types of gang-related activities and potential strategies for intervening with gang behaviors in urban schools.

The education system and the quality of learning that takes place in any school are affected by numerous factors. However, one major influence on urban students' education, particularly those in junior high and high school, is gang-related activity. Often overlooked, gang-related activity can have a significant impact on not only the students, but the entire school community as well.

Despite the huge effect gang activities can have on education, more research has been

conducted on street gangs out in the community rather than in the school setting. Very little data exists as to the number or types of gangs currently in urban school systems or what types of schools are more likely to have higher numbers of students as gang members (Monti, 1993). This is surprising given the enormous effect gangs can have on urban youth. As with bullying, there is evidence that some educators view gang membership and activity as a natural progression or stage in growing up (Parks, 1995). Gang activity in schools should be a significant area of concern for all types of educators with the best interests of their students at heart and should therefore be analyzed.

Although there may not be a standardized definition of a gang (Parks, 1995), Hagedorn (2005) defines a gang as a group of unsupervised youth who develop into a type of organization through conflicts with other groups and the authorities (Hagedorn, 2005). Typically, gangs begin out in the community, but for many youth, school provides the perfect avenue for allegiances as well as conflicts to be fortified (Monti, 1993). Most gangs are comprised of ethnically homogeneous, urban, lower socioeconomic status males, predominantly African-American or Hispanic (Parks, 1995).

Gangs are attractive to these student demographics because they provide the opportunity to make numerous friends, frequent socialization, activities and remedies for boredom (Ramsey, Rust, & Sobel, 2003). Further, gangs provide a structure that many urban students do not experience in the home environment and this can hold great appeal for many urban youth (Huff & Trump, 1996). Some evidence even suggests that ineffective teachers may increase the likelihood that some students may become gang members through name calling, labeling, public insults and humiliation, belittling, not providing opportunities to respond and holding lower expectations of them (Parks, 1995). Research has shown that a few characteristics are common among all gang members. These include being involved in few prosocial behaviors, low self-esteem, no commitment to suc-

cess at school, and having many delinquent friends (Ramsey et al., 2003).

Gang-related activities can take many different forms. School-related gang activities can include wearing gang-specific colors, refusing to acknowledge a teacher's authority, recruiting from the student body, school vandalism, and more serious offenses (Ramsey et al., 2003). For example, fighting, intimidation, drug-selling, drinking, and the displaying of goods or girls/conquests are just some of the more common gang undertakings (Monti, 1993). Once gangs take root in a school, they may become increasing violent with the school and its grounds no longer being a neutral zone between rival gangs. These so called, "turf wars" can result in gangs focusing on the concepts of "protection" and "ownership" and attempting to ward off possible threats to its members or making other students ask permission to access certain areas. This could lead to more members of the student body feeling as though membership in a gang is necessary, especially if gang-related violence escalates. As violence increases, students as well as teachers and staff may be physically assaulted or robbed, oftentimes by non-student intruders to the school or grounds (Parks, 1995).

As can be imagined, these types of activities can have serious consequences on students, learning and the education system of a school. The actions of gangs can lead to lower school attendance rates as safety becomes a priority over education, higher drop-out rates, class disruptions, vandalism and graffiti. It can also lead to undermined school authority, attacks on students and staff, and increases in substance abuse and weapon possession in the school setting (Parks, 1995). This makes it difficult for schools to provide a safe haven for students, or to help them achieve and be successful enough to acquire the skills and knowledge needed to become productive members of society (Ramsey et al., 2003).

Because these types of gang behaviors cause many students not to feel safe in the school, they oftentimes prompt the school to dramatically

increase and expand its security systems, usually in the form of police involvement, security guards, civilian security personnel, emergency response teams and metal detectors (Parks, 1995). Unfortunately, the heightened security systems frequently increases the level of fear among the students and teachers which then increases the power of some gangs and the perceived need for students to join gangs for safety. Further, if a teacher or administrator is afraid to confront or get involved in any issues with a gang member, that staff member immediately loses credibility as well as the ability to be both an effective educator and disciplinarian (Thompkins, 2000). The above cyclical pattern of fear, and increases in security and gang membership obviously are not the goal of any school system.

Fortunately, there are many more positive and proactive approaches that a school can take in order to help combat and prevent gang difficulties. A balance of programming must be achieved instead of the school simply focusing on one specific intervention (Huff & Trump, 1996). Three of the most basic strategies a school can employ are clear expectations and rules given in a handbook for all staff and students, consistency enforcing these rules and a dress code to deter outright gang colors in the school setting (Wood & Huffman, 1999). Other strategies and interventions could include mentoring, recreation programs, sports programs, youth employment, and parent education programs. Further, staff professional development should focus on how to reach inner city urban students, knowledge of their culture, and cross-cultural communication. Also, an effort should be made to hire school personnel of color who can serve as role models, specifically males. Perhaps most critically, gang intervention programs in the schools should focus on the concepts of honor, respect, power and bravery, as these tend to be traits that gangs value and emphasize (Parks, 1995).

Moreover, school psychologists can be very effective in dealing with gangs in the school setting. They can become active in violence prevention and gang intervention within the school by collaborating to develop more preventative measures appropriate for their specific school instead of the reactive crisis management structures that many schools primarily use (Edwards, 2001). School psychologists may be ideally suited to this role given their knowledge, training and the fact that they typically having experience dealing with students who are behavioral concerns (Larson & Busse, 1998).

In conclusion, gang membership and gang activities in the schools can have an extremely negative effect on students and the educational system in general. Although there are various reasons gang membership may appeal to students, many of whom share characteristics such as low-self esteem, gangs are only able to overrun a school when the people who should be in the positions of power are afraid to stand up to gangs and resist their presence and influence (Thompkins, 2000). Schools should not look only to increases in security measures to solve the issue of gang-related behaviors in the school, but should seek to implement more positive and proactive approaches such as after school programs, mentoring and parent education programs. A school psychologist would be in an excellent position to help develop these programs given their skill-sets. By acknowledging the existence of gangs within the school, developing and consistently implementing proactive interventions, and enforcing the code of conduct, a school can return to focusing on educating students to be productive members of society rather than constantly reacting to gang-related behaviors.

References

Edwards, C.H. (2001). Student Violence and the Moral Dimensions of Education. *Psychology in the Schools, 38, (3),* 249-257.

Hagedorn, J.M. (2005). The Global Impact of Gangs. *Journal of Contemporary Criminal Justice, 21, (2),* 153-169.

Huff, C.R., & Trump, K.S. (1996). Youth Violence and Gangs: School Safety Initiatives in Urban and Suburban School Districts.

Education and Urban Safety, 28, (4), 492-503.

Larson, J., & Busse, R.T. (1998). Specialist-level Preparation in School Violence and Youth Gang Intervention. *Psychology in the Schools, 35, (4),* 373-379.

Monti, D. J. (1993). The Culture of Gangs in the Culture of the School. *Qualitative Sociology, 16, (4),* 383-404.

Parks, C.P. (1995). Gang Behavior in the Schools: Reality or Myth? *Educational Psychology Review, 7, (1),* 41-68.

Ramsey, A.L., Rust, J.O., & Sobel, S.M. (2003). Evaluation of the Gang Resistance and Training (GREAT) Program: A School-Based Prevention Program. *Education,* *124, (2),* 297-309.

Thompkins, E.E. (2000). School Violence: Gangs and a Culture of Fear. *The American Academy of Political and Social Science; The Annals of The American Academy of Political and Social Science, 567, (54),* 54-71.

Wood, S.F., & Huffman, J.B. (1999). Preventing Gang Activity and Violence in Schools. *Contemporary Education, 71, (1),* 19-23.

About the Author

Rachel Lee, M.A., is a second-year doctoral student in school psychology at The Ohio State University. Her research interests include Applied Behavior Analysis, School Safety, and Crisis Intervention.

The Flynn Effect: Research and Implications for School Psychology

Jeffrey D. Shahidullah

Michigan State University

Abstract

A debated topic in the realm of psychological assessment literature is the Flynn effect; a phenomenon whereby average IQ test scores have increased in most parts of the world (Flynn, 1994). Despite growing acceptance of the phenomenon, researchers continue to debate the underlying causes, how it should be handled in psychological testing, and societal implications in regards to education. School psychologists who conduct intellectual and academic assessment should be aware of the debate and its implications for practice. The present paper aims to provide an overview of the Flynn effect literature and how it relates to the field of school psychology; particularly, school psychologists' conducting intellectual assessment for special education evaluation.

Keywords: Flynn effect, school psychology, IQ testing, intellectual disability

A debated topic in the realm of psychological assessment literature is the Flynn effect; a phenomenon whereby average IQ test scores have increased in most parts of the world, although pace of change varies by country, time, and test used (Flynn, 1994). From conducting population studies in various countries using the same test on populations at different times, usually separated by many years, results show that later generations perform better on tests than previous generations (Flynn, 1987). The average rate of rise is around three IQ points per decade (Flynn, 1999). The largest Flynn effects appear on culture-reduced highly g-loaded tests such as Raven's Progressive Matrices (Raven, Raven, & Court, 1998). Despite growing acceptance of the phenomenon, researchers continue to debate the underlying causes, how it should be handled in psychological testing, and societal implications in regards to education. School psychologists who conduct intellectual and

Ever since the New Zealander, James R. Flynn, discovered the phenomenon in the later 1970's to early 1980's, it has been debated but a definitive reason behind the effect has not yet been established. Many possible reasons have been offered for the Flynn effect, such as nutrition, education, practice effects, family size, heterosis and the Dickens-Flynn model. Sundet, Barlaug, & Torjussen (2004) found correlations between nutrition and intelligence measures. This may be supported by the fact that the original generation tested in Flynn's review of tests grew up just before World War II, and these populations experienced lesser nutritional intakes as compared with studies examined at later times, which involved people who had matured after World War II and whose nutritional intakes were much closer to optimal (Russell, 2007). Another study presented data supporting the nutrition factor, which predicts that gains in IQ will predominantly occur at the low end of the distribution where nutritional deprivation is most severe (Colom, Lluis-font, & Andres-Pueyo, 2005).

As greater proportions of the population obtain increased levels of education, higher IQ scores may be the direct result. The percentage of adults with a college education for the WAIS-R (1981) was 14.4, while the percentage for the WAIS-III (1997) was 25.0 (Kaufman, 2001). Also, the possibility exists that parents are now more concerned with their child's cognitive development and may be doing more to foster it than in past years. Currently, children generally start school earlier and attend longer than previous generations.

"Practice effects" are another possible reason for the generational rise in IQ test scores. As children today take more IQ-type tests than children of earlier generations, these "practice effects" could improve scores in two ways. First, children who take test frequently might develop better test-taking methods. Also, children might know answers to certain questions because they may have already seen the same or similar questions previously.

The trend towards smaller families has risen and would allow parents who have fewer children to focus more of their limited resources on each child. Therefore, a trend toward smaller families could raise mean IQ as the average child in the population would have more resources, both material and cognitive, devoted to them (Zajonc & Mullally, 1997).

An alternative resolution to the proposed cause of the Flynn effect is the genetic phenomenon "heterosis," often referred to as "hybrid vigor" (Mingroni, 2007). This is a genetic effect that results from matings between members of genetically distinct subpopulations such as has been occurring in human populations through the breakup of small, relatively isolated communities owing to urbanization and greater population mobility (Mingroni, 2007).

The "Dickens-Flynn Model" is an abstract model with two major features which offer reason behind the Flynn effect (Dickens & Flynn, 2001). First, the model states that a large number of environmental factors are correlated with genes. Changes in these environmental factors are, in part, responsible for the increasing IQ trend. Secondly, the model shows a "social-multiplier effect," whereby the IQ of others in the population affects the IQ of the individual.

While various researchers have agreed that mean IQ test scores have been rising, we still do not have a widely agreed upon reason behind the phenomenon. This is mostly to do with the multi-faceted findings of the phenomenon which have puzzled researchers alike. First, general intelligence (*g*) has not increased in synchrony with increased mean IQ (Rushton, 1999). Also mental chronometry, a key measurement of an individual's level of *g*, has not increased either (Nettelbeck & Wilson, 2004). It is difficult to account for the Flynn effect when *g* or reaction times stay stagnant. However, some recent studies have

found that *g* has improved considerably (Te Nijenhuis et al., 2004; Colom & Garcia-Lopez, 2003).

Some researchers offer explanations for why the Flynn effect does not exist (Beaujean, 2005; Teasdale & Owen, 2008). Classical Test Theory (CTT) is the predominantly used method in Flynn effect measurement, but it cannot measure all information available in a given test performance (Beaujean, 2005). Beaujean posits that a more modern measurement method, such as Item Response Theory (IRT), allows for measurement of latent abilities that cannot be measured in CTT. Unless measures, such as increases in cognitive ability or systematic declines in item-level difficulty, are invariant between groups, CTT models are not sensitive to such sources of variance (unlike IRT) and may show a difference in true scores even when there is no change in the underlying latent variable (Beaujean, 2005). The results of Beaujeans' study show when using IRT, the strength of the Flynn effect decreases. Therefore, the Flynn effect appears to be largely the result of changing item properties rather than changes in cognitive ability (Beaujean, 2005).

In studies of the Scandinavian country, Denmark, a plateau effect in intelligence has been found (Teasdale & Own, 2005). Using data acquired from the Danish draft board, researchers initially found substantial gains in test scores, particularly in the low end of the distribution, through the 1960's and 1970's that later platueaued in the 1990's and started to decline in the 2000's. This reversal of the Flynn effect is not easy to account for, especially since a broad underlying cause of the Flynn effect has never been universally agreed upon.

For all the arguments or counterarguments concerning the Flynn effect, the phenomenon's impact on society is profound. It has implications for considering which children are deemed intellectually or learning disabled and consequently qualify for special education services. Theoretically, over time the Flynn effect results in slightly inflated IQ scores which reduce the number of children classified as intellectually disabled. This is because fewer children will score below the IQ (70) threshold for an intellectual disability

(Flynn, 1984). The substantial longitudinal fall and rise in intellectual disability rates, plus the disparities among states in terms of percentage of enrolled students receiving intellectual disability services raises a number of questions regarding whether intellectual disability is adequately conceptualized (Flynn, 2000). Currently, when an IQ is calculated, it is compared to the normative performance of a standardization sample that, in theory, provides a representation of the population as a whole. Over time, normative performance in the population may change. When a new standardization sample is drawn years later at the time a test is renormed, the new standardization sample may outperform the old sample (Scullin, 2006). This fluctuation in test scores allows some students who would ordinarily qualify for special education services to potentially not qualify depending on the year in which the IQ test was taken. Also, there are long-term consequences considering the potential underclassification of intellectual disability. One of the three defining criteria for intellectual disability is that the individual must have been diagnosed during their developmental period of prior to age 18 (Scullin, 2006). If they, however, failed to meet the criteria when tested in school, they will have a difficult time collecting government benefits that accompany an intellectual disability when they are adults (Parish, 2003).

In the majority of schools, IQ testing is a key component in the diagnosis of not only intellectual disability but also learning disabilities (LD), which may qualify students for special education services under IDEA legislation. Concerning the misclassifications of students with an intellectual disability, students may not qualify as learning disabled depending on when tests are renormed. Recent research has shown clear evidence that the Flynn effect affects at least some IQ scores from students in learning disabled populations (Sanborn, Truscott, Phelps, & McDougal, 2003). School psychologists, in particular, must be concerned with this debacle and understand how the Flynn effect may affect scores of children undergoing special education evaluation.

must be standardized frequently or else the dated norms will spur inflated IQ scores. Even after new norms are documented and published, the Flynn effect may continue to impact scores. Consequently, potential Flynn effect problems do not end with the acceptance of a new test and current norms. The norms will gradually grow old and fail to reflect the recent rise in ability (Hiscock, 2007). Also, many school districts will be slow to get the newest version of a test (especially considering the current financial crises in many school districts), allowing the possible situation of a student qualifying for services in one school district while being denied in another (Kanaya, Scullin, & Ceci, 2003). There is reason to believe that many students are diagnosed as intellectually disabled solely based on the district and year in which they are tested and test norms used rather than on their cognitive ability (Kanaya et al., 2003). This situation creates distress for school psychologists as they try to come up with a solution that will please everyone, which more than likely, will not happen. Ethical and moral dilemmas arise as parents can attempt to get their child retested in another location, time and with an alternative test in order to receive the tests results desired.

The dilemma arises for school psychologists of do we adjust obtained IQ scores to accommodate for the Flynn effect? Greenspan (2006) asserts that subtracting IQ points from an individual's obtained score is not only appropriate, but essential. Kanaya et al. (2003) argue for score adjustments on the basis of a large empirical study.

Others in the field caution against adjusting scores for the Flynn effect. Lacritz and Cullum (2003) advise that "caution should be used in applying Flynn's philosophy to actual patients, as there are many sources of variance unaccounted for by his formulas that could impact an individual's score." A recent study surveyed directors of doctoral training programs approved by the American Psychological Association (APA) and board-certified school psychologists and completed a

systematic review of IQ test manuals, contemporary textbooks on IQ testing, federally regulated IQ testing protocols, and various sources of legal and ethical guidelines and confirmed in each instance that IQ score adjustments do not align with prevailing standards of psychological practice (Hagan, Drogin, & Guilmette, 2008). Of school psychologists surveyed, the majority (68%) were moderately or very familiar with the Flynn effect. A large majority (94%) of the participants reported that they had never adjusted obtained IQ scores on the basis of the Flynn effect. These findings are consistent with testimony in *Green v. Johnson* (2008) where only 6 out of 5,000 school-based IQ test reports from 1999 to 2001 even mentioned the Flynn effect.

The American Educational Research Association, American Psychological Association, & National Council on Measurement in Education (1999) offer criteria for testing practices and the effects of test use. Standards 5.1 and 5.2 require the test administrator to follow the standardized procedures and score the measure according to the test manual of the publisher. These standards make no reference to the Flynn effect, adjusting individual scores, or recalculating norm means separate and apart from the test manual (Hagan, Drogin, & Guilmette, 2008).

School psychologists must be aware that there is no universally agreed upon method for how diagnostic conclusions should be influenced by the Flynn effect (Young et al., 2007). While the Flynn effect has become more accepted as an occurring phenomenon, further studies must be done to conclude how to accurately represent its impact.Currently, most research concerning the Flynn effect does not address specific problems in school psychology, as it mostly investigates effects within the forensic and criminal case realm. Unfortunately, the field of school psychology in particular has done little to address this dilemma. School psychologists should advocate for further research into the Flynn effect phenomenon as they play key roles in intelligence testing.Because of conse-

quences of decisions that can be made by results of a single IQ test, school psychologists have the responsibility to be competent in their knowledge of the various tests they use. They should stay current with recent rules, laws, and ethical guidelines that regulate the field. Most importantly, while it is apparent that a clear and resounding cause of the Flynn effect phenomenon has yet to be agreed upon, it would be safe to assume that an array of possible influences contribute to the effect, rather than just one.

References

American Educational Research Association, American Psychological Association, & National Council on Measurement in Education. (1999). Standards for educational and psychological testing. Washington, DC: American Educational Research Association

Beaujean, A. A. (2005). Using Item Response Theory to assess the Lynn-Flynn Effect. Unpublished doctoral dissertation, University of Missouri-Columbia.

Colom, R., & Garcia-Lopez, O. (2003). Secular gains in fluid intelligence: Evidence from the culture-fair intelligence test, *Journal of Biosocial Science, 35*, 33-39.

Colom, F., Lluis-Font, J. M., & Andres-Pueyo, A. (2005). The generational intelligence gains are caused by decreasing variance in the lower half of the distribution: Supporting evidence for the nutrition hypothesis. *Intelligence, 33*, 83-91.

Dickens, W. T., & Flynn, J. R. (2001). Heritability estimates versus large environmental effects: the IQ paradox resolved. *Psychological Review, 108*, 346-369.

Flynn, J. R. (1984). The mean IQ of Americans: Massive gains from 1932 to 1978. *Psychological Bulletin, 101*, 171-191.

Flynn, J. R. (1987). Massive IQ gains in 14 nations: What IQ tests really measure. *Psychological Bulletin, 101*, 171-191.

Flynn, J. R. (1994). IQ gains over time. In R. J. Sternberg (Ed.)., Encyclopedia of Human Intelligence (pp. 617-623). New York: Macmillan.

Flynn, J. R. (1999). Searching for justice: The discovery of IQ gains over time. *American Psychologist, 54*, 5-20.

Flynn, J. R. (2000). The hidden history of IQ and special education: Can the problems be solved? *Psychology, Public Policy, and Law, 6,* 191-198.

Greenspan, S. (2006, spring). Issues in the use of the "Flynn effect" to adjust IQ scores when diagnosing MR. *Psychology in Mental Retardation and Developmental Disabilities Newsletter, 31*, 3-7.

Green v. Johnson, WL 352028 (4th Cir. 2008).

Hagan, L. D., Drogin, E. Y., & Guilmette, T. J. (2008). Adjusting IQ scores for the Flynn effect: Consistent with the standard of practice? *Professional Psychology: Research and Practice, 39*(6), 619-625.

Hiscock, M. (2007). The Flynn effect and its relevance to neuropsychology. *Journal of Clinical and Experimental Neuropsychology, 29*, 514-529.

Kanaya, T., Scullin, M. H., & Ceci, S. J. (2003). The Flynn effect and U.S. policies: The impact of rising IQ scores on American society via mental retardation diagnoses. *American Psychologist, 58,* 778-790.

Kaufman, A. S. (2000). Seven questions about the WAIS-III regarding differences abilities across 16 to 89 year life span. *School Psychology Quarterly, 15*(1), 3-29.

Lacritz, L. H., & Cullum, C. M. (2003). The WAIS-III and WMS-III: Practical issues and frequently asked questions. Clinical interpretation of the WAIS-III and WMS. Boston: Elsevier.

Mingroni, M. A. (2007). Resolving the IQ paradox: Heterosis as a cause of the Flynn effect and other trends. *Psychological Review, 114*(3), 806-829.

Nettelbeck, T., & Wilson, C. (2004). The Flynn effect: Smarter not faster. *Intelligence, 32*, 85-93.

Parish, S. L. (2003). Federal income payments and mental retardation: The political and economic context. *Mental Retardation, 41*, 446-459.

Raven, J., Raven, J. C., & Court, J. H. (1998). *Manual for Raven's Progressive Matrices and Vocabulary Scales: Section I. General Overview.* Oxford, England: Oxford Psychologists Press, and San Antonio, TX: Psychological Corporation.

Rushton, J. P. (1999). Secular gains in IQ not related to the *g* factor and inbreeding depression-unlike black-white differences: A reply to Flynn. *Personality and Individual Differences, 26*, 381-389.

Russell, E. W. (2007). Commentary: The Flynn effect revisited. *Applied Neuropsychology, 14*(4), 262-266.

Sanborn, K. J., Truscott, S. D., Phelps, L., & McDougal, J. L. (2003). Does the Flynn effect differ by IQ level in samples of students classified as learning disabled? *Journal of Psychoeducational Assessment, 21,* 145-159.

Scullin, M. H. (2006). Large state-level fluctuations in mental retardation classifications related to introduction of renormed intelligence test. *American Journal on Mental Retardation, 111*(5), 322-335.

Sundet, J. M., Barlaug, D. G., & Torjussen, T. M. (2004). The end of the Flynn effect? A study of secular trends in mean intelligence test scores of Norwegian conscripts during half a century. *Intelligence, 32*(4), 349-362.

Te Nijenhuis, J., De Jong, M. J. Evers, A., & Van Der Flier, H. (2004). Are cognitive differences between immigrant and majority groups diminishing? *European Journal of Personality, 18*(5), 405-434.

About the Author

Jeffrey D. Shahidullah, EdS., NCSP, is a doctoral student in school psychology at Michigan State University, East Lansing, MI. His research interests are in child psychopathology and school psychopharmacology.

Forum

Unpacking Diversity Recruitment: Thinking Beyond Phenotypic Parity

Joel Bocanegra, Aaron Gubi, and Melissa Hernandez
University of Wisconsin-Milwaukee

Unpacking Diversity Recruitment: Thinking Beyond Phenotypic Parity

In 2009, the National Association of School Psychologists (NASP) reaffirmed its commitment to fostering a diverse workforce, releasing a position statement which declared that, "NASP is firmly committed to increasing the number of culturally and linguistically diverse school psychology students, practitioners, and trainers in school psychology programs" (p.1). Although NASP's 2009 position statement is one of the field's most recent attempts at advocating for increased minority recruitment, conversations surrounding minority recruitment are not new within school psychology. In fact, according to Esquivel, Warren, and Littman (2007) conversations surrounding the importance of minority recruitment within the field of school psychology were had soon after the creation of NASP, over 30 years ago. Unfortunately, although school psychology has long been aware of the need for increased diversity of its practitioners, scholars, and graduate students, it has yet to make significant gains (Curtis et al., 2008; Rogers, 2005).

The inability of school psychology's training programs to increase the diversity of its graduate student population has been repeatedly identified as an area of concern within the literature (Curtis et al., 2008; Rogers, 2005; Esquivel, Warren, & Littman, 2007). However, much of the conversation surrounding diversity recruitment seems to be predominately focused on, and measured through, the diversification of phenotypic characteristics that are often associated with a diverse environment (e.g., skin color). This fixation on phenotypic parity ignores that individuals from diverse backgrounds do not solely allow for the diversification of the academic color palette; more importantly, diverse individuals can impact the field through deeper forms of diversity such as, diverging personal and cultural histories, experiences, perspectives, and knowledge (Banks, 1998; Rogers, 2006). An increase in diverse knowledge and experiences can

facilitate a re-examination of current practices, and can lead to fresh approaches toward training, research, and professional practices (Homan, van Knippenberg, Van Kleef, & De Dreu, 2007; Jehn, Neale, & Northcraft, 1999; Roberge, & van Dick, 2010).

As the field attempts to increase the recruitment of culturally diverse students, it is important to have an open conversation regarding how, and in what ways, minority graduate students can enhance the field of school psychology. Although research is limited, scholars have suggested that diverse individuals can impact training, research, practice, and improve organizational performance through the diverse perspectives and experiences they may espouse (Roberge, & van Dick, 2010; Rogers, 2006). Therefore, due to the current lack of knowledge and the importance of moving the conversation beyond the topic of phenotypic parity, the current article will present several self-reflections created by ethnic minority and culturally diverse school psychology graduate students that attempt to explore the important life events and perspectives espoused by each student.

It is the authors' hope that a cursory survey of diverse graduate students' life experiences and perspectives will give credence to the unique experiences that they espouse, how those experiences shaped their perspective, and how it may benefit the field. However, it is important to note that the end goal of this article is not to conclude that all students from diverse cultural groups or backgrounds espouse unique perspectives and/or life experiences, or that culturally diverse students are the sole benefactors of experiential/perspective diversity. Rather, the goal of this article is simply to move the conversation surrounding minority recruitment within school psychology beyond phonotypical disparities to more substantive conversations such as the benefits of diversity of experiences, culture, and perspectives on the field of school psychology and its relation to minority recruitment.

Personal Reflections on Diversity of Life Experiences

Personal Essay One

    Thinking back to the experiences that most affected my current approaches towards research and practice, I would have to classify these experiences as war; whether it entails the drug wars of my youth, my war against racism, my war with establishing an ethnic identity that opposed societal stereotypes, the war of learning within an unstable academic environment, or the war I was a part of as a soldier in Iraq. War has inevitably been part of my life. When I was a young child, we lived in Puerto Rico on a cul de sac that was surrounded by the local project. My earliest memories as a child revolve around life with my family, sitting in the living room, and being hurried away from the windows due to automatic gun fire heard from across the street. Since my earliest memories, there were drug wars raging in these projects, and like most wars, the innocent were not spared from the carnage. At the age of five, my parents divorced, and we moved from Puerto Rico to a better place, an area of potential opportunity and safety, rural Florida.

    Florida was a culture shock. I did not speak the language, I had no friends, and I lived in an area that was hostile to outsiders. This general antipathy towards foreigners was evidenced by street signs adorned with Klu Klux Klan graffiti, which accompanied me on my daily walk home from school. This symbol of hatred, my struggles with mastering a non-native language, my attempts in establishing a positive ethnic identity, and the numerous physical altercations that were part of being an outsider were a critical part of my early life and inarguably impacted my later theoretical perspectives and professional interests.

    However, things changed when I was 12 years old. My mother married a military man, and as a result, I would spend the next seven years bouncing from state-to-state. By the time I graduated high school, I had attended approximately 11 different schools in four different states. This lack of academic stability instilled in me a generally apathetic view towards school and education, which I would not surmount until much later in life. Upon completion of high school, I enlisted in the Army National Guard in order to pay for college, and consequently, I spent a year deployed overseas fighting in Iraq. While in Iraq, I witnessed both the inhumanities of war, and the innocence, purity, and optimism of Iraqi youth.

    My life experiences, which include immigration, language acquisition, racism, academic instability, poverty, violence, and war, have impacted my current worldview and theoretical perspectives by allowing me to relate, understand, and empathize with many of the challenges experienced by children and adolescents. These experiences also instilled in me an appreciation for the importance of systemic change, which in turn drove my personal interest into understanding how to impact the social environment in order to best provide psychoeducational services to underserved youth.

Personal Essay Two

    Having grown up as the oldest child of two immigrant parents, I learned early on that a dedication to family and traditions was critical for survival. Speaking only Spanish, my parents embarked on a journey to build a comfortable life for my large extended family. They settled into jobs as manual laborers in an industrial setting and provided support for us all. Our home life surrounded the events and experiences of our large extended family that were readily available to provide encouragement when needed. Though our home seemed crowded at times, it was not until much later that I fully appreciated the support that this cohesive family presence provided to me throughout my formative years.

    Once I began school, I was placed in "English as a second language" (ELL) classes. Though I phased out to English-only classes by the second grade, my parents continued to encourage me to speak English so as to master the language quickly. At the time, they felt that being a Spanish-speaker was a hindrance to advancement in this country. However, I am endlessly grateful that I was given the opportunity to learn to read, write, and speak in Spanish. Though I excelled during my high school years, I often felt I did not fit in with my classmates who were primarily European-Americans. When it came time to apply for college, I felt the effects of racism and discrimination as my friends became angered at my acceptance into many

schools. Claims that affirmative action was unfair to them as European-American students rang loudly. Though I tried not to let it bother me, reconciling perceptions about my cultural background and my academic accomplishments was difficult. Ultimately, I attended a university on a full academic scholarship, rather than a minority based award.

Having progressed through such critical components to the development of my identity, I now feel comfortable in my own skin and am proud of the features that make me "diverse." Through a series of valuable, practical and research experiences throughout these last few years, I am learning to express these differences to classmates and colleagues who have had different life experiences. Key experiences as an ELL propelled me to commit myself to working towards the provision of culturally-appropriate services to diverse families from many different backgrounds. Through difficult experiences with discrimination in personal and academic settings, I learned the importance of providing academic, social, and emotional support for minority students across various stages of their academic and professional careers. It is my hope that in sharing my own experiences, I can illuminate on the lives that Latino families face in light of differences due to language, cultural, familial, financial, and educational experiences. I hope to start by taking such factors into account when working in a direct service position with diverse youth and families in the near future.

Personal Essay Three

My parents immigrated to the United States and embarked on a journey to build a more comfortable life for their families and, soon thereafter, for their children. Growing up in a diverse family of Arab and European Jewish background, I frequently grappled with cultural identity growing up. Stability often proved difficult in my earlier life, as my parents struggled to subsist economically in a variety of blue-collar jobs and, as a result, we moved frequently and, as I learned later, rarely had enough money available to meet the most basic of expenses. Things began to improve financially for our family in my early adolescence, as my father received a stable job with the postal service. This new stability was quickly challenged by the unexpected death of my mother, also in early adolescence. Such instability made life challenging at times when younger, as I struggled to better understand myself, my life, and our world.

In retrospect, these challenges aided me in developing as a person and, I believe, will benefit me as a professional. My cultural background has contributed towards a lifelong interest in better understanding individuals from diverse backgrounds. In academic terms, my cultural background has contributed towards my interests in multicultural competency practices in research, training, and practice. Family instability and traumatic experiences contributed towards a sense of empathy for the "underprivileged" and those who face a variety of structural hurdles due to family instability, discrimination and social/economic injustice. My successes in college and a variety of professional endeavors provided me a vantage point to reflect upon my challenging developmental experiences. I came to appreciate the array of difficulties that can impede optimal development. I realized that, though I have demonstrated resiliency in overcoming an array of obstacles, that I nonetheless could just as easily have followed a different and far less ideal trajectory. This insight contributed towards a strong and lasting desire to further social justice, both in my personal and professional life. Professionally, for example, I feel committed to addressing disproportionality in special education classification. Lastly, I believe an individual cannot be separated from their experiences, and therefore, I believe our field commits an injustice when it does not actively seek to adequately represent the populations it purports to serve.

Discussion

The previous reflections, which were written by ethnic minority and culturally diverse graduate students, provides a brief glimpse into some of the more substantive forms of diversity (e.g. experiential diversity and diversity of perspectives) that may be espoused within diverse individuals. The range of experiences and perspectives that was evidenced within the reflections, and the possible impact that the amalgamation of such experiences could have on the field of school psychology, calls into question whether conversations regarding diversity recruitment that are fixated solely on increasing the diversity of the phenotypic characteristics, although well intentioned, are exemplifying a dilettante understanding of the complexity and benefits of diversity. Furthermore, these reflections suggest that individuals who represent culturally diverse groups are not a sum of their pheno-

typic characteristics, but rather, a product of their culturally mediated experiences and it is the exchange of these deeper forms of diversity that makes their recruitment indispensable to the development of the field of school psychology.

Therefore, if school psychology desires to better service the needs of its diverse student population, it is critical that it heeds the call for increased recruitment of minority and culturally diverse students. However, the end goal of this recruitment should not solely be borne out of a desire to better represent the physical characteristics of a growing population; but rather, diversity recruitment should seek to better represent the experiences and cultures that are espoused within diverse populations. A diversity recruitment effort that overtly seeks to diversify the perspectives and experiences, in addition to the diversification of phenotypic characteristics, can help assure the conceptual vitality of school psychology through a confluence of underrepresented experiences and perspectives.

It is the present authors' hope, that the recognition that diversity recruitment is not equitable recruitment, but rather, a key component to the conceptual development of the field, will redouble graduate programs' efforts at significantly diversifying the field. However, it is understood that recruiting diverse students is a challenging endeavor, replete with numerous systemic obstacles. Nevertheless, most worthy goals are not easy, and if they are to be reached, there must first be an explicit, foundational understanding of its constructs and its affects on the profession of school psychology. Therefore, if school psychology is to reach its goal of significantly increasing the number of diverse school psychologists, it is paramount that the conversation regarding diversity recruitment be expanded beyond the realm of phenotypic parity. Thus, diversity recruitment must be unpacked, and a general understanding of its importance, its complexity, and its impact on the field be understood by all.

References

Banks, J. (1998). The lives and values of researchers: Implications for educating citizens in a multicultural society. *American Educational Research Association, 27*, 4-17.

Curtis, M. J., Lopez, A. D., Castillo, J. M., Batsche, G. M., Minch, D., & Smith, J. C. (2008). The status of school psychology: Demographic characteristics, employment conditions, professional practices, and continuing professional development. *Communiqué, 36*, 27-29.

Esquivel, G. B., Warren, T. M., & Littman Olitzky, S. (2007). A historical review of the development of multicultural school psychology. In G. Esquivel, E. Lopez, & S. Nahari (Eds.), *Handbook of Multicultural School Psychology* (pp.3-29). Mahwaw, NJ: Lawrence Erlbaum Associates.

Homan, A. C., van Knippenberg, D., Van Kleef, G. A., & De Dreu, Carsten K. W. (2007). Interacting dimensions of diversity: Cross-categorization and the functioning of diverse work groups. *Group Dynamics: Theory, Research, and Practice, 11*(2), 79-94.

Jehn, K., Neale, M., & Northcraft, G. (1999). Why differences make a difference: A field study of diversity, conflict, and performance in workgroups. *Administrative Science Quarterly, 44*, 741-763.

National Association of School Psychologists. (2009). *Recruitment of Culturally and Linguistically Diverse School Psychologists* (Position Statement). Bethesda, MD: Author.

Roberge, M., & van Dick, R. (2010). Recognizing the benefits of diversity: When and how does diversity increase group performance? *Human Resource Management Review, 20*(4), 295-308.

Rogers, M. R. (2005). Multicultural training in School Psychology. In C. L. Frisby & C. R. Reynolds (Eds.), *Comprehensive handbook of multicultural School Psychology* (pp. 993-1022). Hoboken, NJ: John Wiley and Sons Inc.

Rogers, M. R. (2006). Exemplary multicultural training in school psychology programs. *Cultural Diversity and Ethnic Minority Psychology, 12*, 115-133.

About the Authors

Joel Bocanegra is a doctoral student within the school psychology program at the University of Wisconsin-Milwaukee. His research interests are multicultural issues, diversity recruitment, and violence prevention.

Aaron Gubi is a doctoral candidate within the school psychology program at the University of Wisconsin-Milwaukee. His research and professional interests revolve around positive psychology, urban/ multicultural school psychology practices, and adolescent mental health issues.

Melissa Hernandez, B.A., is a doctoral student in school psychology at University of Wisconsin-Milwaukee. Her current research interests are bilingual service provision, multicultural considerations in research, and intervention with pregnant teenagers. She has had experience in the school-setting, a community outpatient mental health center, and inpatient/ outpatient treatment in a hospital setting with children and adolescents.

TEACHING SOCIAL EMOTIONAL BEHAVIOR WITHIN A SCHOOL-WIDE POSITIVE BEHAVIOR SUPPORT FRAMEWORK: AN APPLICATION OF A SINGLE CASE DESIGN

RHONDA N. T. NESE & KARALYN M. TOM
UNIVERSITY OF OREGON

It is estimated that one in four individuals worldwide will develop a mental or behavioral disorder throughout their lifetime, and that five of the ten leading causes of premature death worldwide is primarily because of psychiatric disorders (World Health Organization [WHO], 2004). The problem with the current mental health system is that it is primarily reactive, waiting until the individual has suffered a magnitude of problems – school dropout, incarceration, job loss, relationship difficulties, etc – before they receive any type of support. Therefore, the key to addressing mental health disorders must be through preventative efforts that tend to individuals before severe symptoms are present (Greenberg, Domitrovich, & Bumbarger , 2001; WHO, 2004). It is estimated that roughly 7.5 million children suffer from a mental health disorder and 75% - 85% of these children do not receive appropriate interventions targeting their needs (Greenberg et al., 2001; Greenberg et al., 2003). Therefore, prevention should focus on early identification and early intervention. One place that has already become a de facto mental health service provider is the school.

Social-Emotional Learning Curriculums

The school system has many advantages for prevention efforts - they are capable of targeting children before major mental health symptoms develop, and have the ability to reach a large number of children. It is fairly common for schools across the United States to have some type of mental health service available for children, such as a social skill group or a school counselor (Hoagwood, Olin, Kerker, Kratochwill, Crowe, and Saka, 2007). In addition to these services, many schools are starting to adopt social-emotional learning (SEL) curriculums as a way to target school-wide mental health prevention efforts. SEL curriculums target several key variables that have been related to building resilience in children and bolster a child's ability to be successful in the world despite exposure to multiple risk factors. SEL curriculums typically teach children concepts such as identification of emotions, self-awareness, self-management, relationship management, social awareness, and responsible decision making (Hoagwood et al., 2007; Axelrod, Devaney, Ogren, Tanyu, & O'Brian, 2007). Self-awareness is defined as having knowledge of one's own emotions, thoughts, and strengths; self-management includes the ability to handle one's emotions appropriately and employ effective coping strategies; social awareness involves empathy, an understanding of how other people may be feeling and why they behave as they do; relationship management includes the ability to initiate and sustain friendships, including adequately handling conflict; and responsible decision-making entails the capability to integrate all the above-stated competencies in order to make socially-appropriate decisions within a larger social context (Collaborative for Academic and Social and Emotional Learning, 2005; Denham & Weissberg, 2004; Greenberg et al., 2003).

Critical to effective SEL programs is both direct instruction of skills as well as purposeful integration of skill practice throughout school days and across settings. SEL programs are not meant to be fragmented, short-term initiatives, rather they are multi-year innovations that are threaded throughout classroom/school/district practices, coordinated from preschool through high school as children face increasingly challenging experiences, and systematically monitored (Denham & Weissberg, 2004; Greenberg et al., 2003; Hemmeter, Ostrosky, & Fox, 2006). In this way, SEL programs can be adopted and implemented within a larger system and require coordination efforts within the system (e.g. school, district, etc.).

that have been developed and researched. Though few universal SEL curricula have been researched with extensive replication efforts, those that have been studied have resulted in increased social competence, academic engagement, and school adjustment as well as decreased aggressive behavior among students. Results have also suggested improved classroom instruction and management among teachers (Greenberg et al., 2003; Joseph & Strain, 2003; Lopes & Salovey, 2004; Payton, Weissberg, Durlak, Dymnicki, Taylor, Schellinger, Pachan, 2008).

A technical report recently published by Payton et al. (2008), included a meta-analysis of 180 published studies involving universal SEL interventions for children ages 5-13. Consistently, study outcomes suggested statistically significant increases in social-emotional skills, socially appropriate behavior, positive attitudes, and academic performance. Additionally, statistically significant decreases were found in conduct problems, emotional distress, and drug use. Across studies, it was found that teachers were able to implement programs and those that implemented with fidelity achieved more positive outcomes than those who struggled with implementation fidelity. It should be noted that several studies made no mention of measuring implementation in any way.

Challenges of Implementing Mental Health Programs in Schools

Unfortunately several problems exist with successful implementation of mental health services in school systems. First, schools also tend to be reactive because they frequently do not provide services until the children have been identified for special education services or been through juvenile court (Greenberg et al., 2001). Secondly, schools are limited in their resources to meet the demand of all the students that may need mental health services (Greenberg et al, 2003). Another problem with the current mental health services provided in the schools is that they are not well coordinated, often exist in isolation from each other, and are episodic in their delivery (Farmer & Farmer, 1999; Greenberg et al., 2003). Fourth, there is very little information on types of treatment administered in schools and they often vary from general education consultation to interventions carried out by counselors, school psychologists, and social workers. Fifth, these types of interventions are usually not linked to other

outcomes that are meaningful to the school (i.e. academics) resulting in a lack of accountability. Therefore, although we see increasing number of schools adopting SEL programs in some fashion, there is little evidence that these programs are implemented with fidelity or sustained over time (Walker, Ramsey, & Gresham, 2004).

School-Wide Positive Behavior Supports as a Solution

One of the ways that schools can address these problems is through using more coordinated efforts of mental health service delivery by implementing school-wide positive behavior supports (SWPBS). School-wide positive behavior support (SWPBS) is a framework to guide sustained and effective implementation of evidence-based practices to decrease problem behavior and enhance the positive social culture of the school (Sugai & Horner, 2005). SWPBS has already been shown to support a variety of evidence-based behavioral interventions within schools such as Check In/Check out and First Step to Success (Anderson & Scott, 2009). The key features of SWPBS allow for sustainability as well as accountability of mental health services because it involves a systems perspective, data to measure outcomes (e.g., office discipline referrals, observations, surveys), practices that support these efforts (teaching the rules and expectations of behavior to the teachers and the students and reinforcing these rules through positive reinforcement), and a continuum of systemic and individualized strategies that are coordinated in a three-tiered model of support (Anderson & Scott, 2009). Through this systemic approach to delivering interventions, schools will be able to move forward in addressing prevention and intervention efforts as well as social-emotional learning on a larger scale, rather than the current practices of individualized interventions for only the most severe populations.

The prevention aspect of SWPBS is coordinated through the use of a three-tiered model of continual supports, in which implementation of social–behavioral interventions are provided to students based on level of need (Anderson & Kincaid, 2005). Across all tiers, data are collected and used to determine which students might benefit from additional interventions, whether any individual student is making adequate progress, and evaluating the effectiveness of current intervention practices.

Primary tier. The primary tier provides universal supports for all students and is implemented across the entire school. Provisions within the primary tier of support include explicit instruction of rules and expectations, frequent acknowledgement (positive reinforcement) for meeting school-wide expectations, and a continuum of logical consequences for problem behavior (Horner, et al., in press). Data is collected on problem behavior and used for regular decision-making by teams. Systems features at this level of support include SWPBS trainings and orientations for all staff members, team organization, and shared data used to guide implementation (Horner, el al., in press). Therefore, at the universal level, all children within a school system could receive a general mental health intervention such as SEL curriculum, with the goal being to prevent the development of problems and exacerbation of existing problems (Greenberg et al, 2001; Sugai & Horner, 2005). The goals and strategies of the SEL curriculum could be infused with the school's rules and expectations with specific SEL terminology and behaviors positively reinforced when used by students.

Secondary tier. For those students that do not respond to primary tier interventions, secondary tier interventions offer additional support to targeted populations at-risk for academic and behavior concerns. Therefore, children who may be at higher risk for mental health disorders and do not respond to the universal support receive additional interventions in smaller groups. Secondary interventions consist of small-group strategies that are based on data and readily available. It is important to note that students receiving secondary supports continue to participate in primary interventions, they are simply receiving additional supports to help them succeed in school. Secondary prevention practices are conceptualized as intervention strategies made up of efficient behavioral change strategies (Horner, et al. in press). When choosing secondary interventions, schools consider the needs of their students, the resources available, and the existing skills of their

staff. Systems-features include the use of data to select students who may benefit from a particular secondary intervention and to monitor progress of all students receiving secondary interventions (Luiselli, Putnam, Handler, & Feinberg, 2005). Data collection is more frequent so that interventions can be adjusted quickly if a student is not meeting pre-determined behavioral goals. School teams are responsible for selecting secondary interventions appropriate and monitoring the fidelity of implementation across all students as well as for specific students (Horner, et al., in press).

Tertiary tier. Finally, the tertiary level of the three-tier model offers intensive support and instruction to those students experiencing more severe academic and behavior difficulties, and are identified as displaying early signs of mental health disorders. More time, resources, and expertise are required for the proper implementation of tier three interventions. Tertiary supports build off of a functional behavior assessment and require individualized intervention planning (Bradshaw, Mitchell, & Leaf, 2009). Results of the functional behavior assessment are then used to develop a comprehensive behavior support plan, which include multi-component interventions and strategies, new skill building techniques, and appropriate behavior reinforcement (Horner, et al., in press). Even at this level of intensity, students continue to access the primary prevention intervention (Luiselli, et al., 2005). Tertiary supports require frequent progress monitoring to ensure that students are making adequate progress and that the intervention is being implemented as designed (Horner, in press). In addition, schools need access to individuals with expertise in the conduct of functional behavior assessments and development of support plans (Bradshaw, et al., 2009).

At all levels data is taken on progress toward specified behavioral goals to determine if modifications are needed as well as on fidelity of implementation. Therefore the use of SWPBS as a framework to support mental health interventions may allow for better implementation because the efforts are embedded into the mission of the school, are held ac-

countable through data-based decision making, and are school-wide initiatives rather than isolated interventions. Another important benefit of utilizing SWPBS as a means of wide-spread implementation of social-emotional learning interventions, is that many studies have been conducted measuring the effects of the implementation of SWPBS, noting decreases in problem behaviors (e.g., Colvin et al., 1993; Horner et al., 2009), and improved academic outcomes (e.g., Luiselli, et al., 2005; Metzler, Biglan, Rusby & Sprague, 2001). Future research on combining SWPBS with social-emotional interventions, may explore whether outcomes observed in the SWPBS literature are enhanced by the addition of mental health interventions like SEL curriculums in a school's primary prevention efforts.

The addition of SEL to primary prevention efforts within a SWPBS model may enhance behavioral and academic outcomes for several reasons. As mentioned previously, SEL curriculums typically focus on teaching students concepts such as identification of emotions, self-awareness, self-management, relationship management, social awareness, and responsible decision making (Axelrod, Devaney, Ogren, Tanyu, & O'Brian, 2007; Hoagwood et al., 2007). When taught well and reinforced consistently these concepts enable students to regulate and manage their emotions, employ effective coping strategies, interact effectively with peers, and teach students effective ways to problem-solve difficult situations. Although these skills are more covert in nature and primarily target internal thought processes, one would expect that students would display more socially appropriate behaviors by employing these skills. Therefore whereas previous SWPBS interventions focus on teaching specific appropriate behaviors for different environments, SEL curriculums emphasize making responsible choices by teaching students how to manage their internal thought processes. This combination of teaching both covert and overt behaviors may result in greater decreases in problem behavior and larger increases in improved academic outcomes from what has typically been found by schools implementing SWPBS. In addition, because SEL curriculums teach ways to handle one's emotions appropriately and employ effective coping strategies as well as increase their understanding of how other people may be feeling and why they behave as they do, students who may be at risk for internaliz-

ing problems may be better serviced through SWPBS practices that incorporate social-emotional interventions.

Single-Case Design to Measure Outcomes

Studies utilizing single-case design to measure reductions in problem behaviors as the result of the implementation of SWPBS practices have been well documented (e.g., Colvin et al., 1993; Frazen, & Kamps, 2008; McCurdy, Lannie, & Barnabas, 2009). Many of these studies revealed marked reductions in behaviors such as aggressive behaviors, out of seat, disruptive behaviors, inappropriate verbal behaviors, and inappropriate physical contact. These results have been shown at both the individual and group levels. It would be hypothesized that the addition of and SEL as part of primary prevention, would replicate similar findings and may have longer maintenance of appropriate behaviors over time because students would be able to learn additional skills that allow them to build better peer relationships and teach problem solving skills that they could implement when dealing with conflicts in the future. Therefore, functional relationships between SWPBS practices on behaviors that would be classified as externalizing in nature have been extensively studied in the SWPBS literature. Future studies that want to examine the functional relationship between SWPBS with the addition of a primary prevention SEL program could use similar behavioral outcomes (e.g., physical aggression, inappropriate verbal behaviors, on-task behaviors, etc.), as well as determine whether these changes are different (i.e., longer maintenance, lower frequency in behaviors, lower variability, etc.) in schools that have an SEL program as those that do not on both a group and individual level.

One area that SWPBS has limited research in is the impact SWPBS practices have on students who display predominately internalizing symptoms. Internalizing symptoms are generally related to class disorders such as depression, anxiety, social withdrawal, and somatic complaints (Merrell, 2008). Children with internalizing symptoms typically struggle with their ability to initiate conversations with other children, participating in social situations, responding to social initiations by others, and are often shy or timid. In a study by Lane, Wehby, Roberson, and Rogers (2007), researchers found that for high school students who displayed externalizing, internalizing, and typical behaviors all benefited from SWPBS as measured by increases in GPA, decreases in unexcused tardies, and decreases in suspension; however, students with internalizing behaviors were the most responsive based upon the effect sizes of these changes. Although these outcome measures do reflect a positive effect for stu-

dents with internalizing problems, it is limiting in its ability to target specific behaviors that show an improvement in internalizing symptoms. Children who display internalizing symptoms are over-looked and as a result often underserved because of the nature of the symptoms which tend to be more inner-directed and conceptualized as more emotional rather than behavioral (Merrell, 2008). Although students with internalizing problems may be perceived as hav-ing more skills and success in the school context, it is important that schools recognize the need to provide support for students who may be at-risk because inter-nalizing disorders also have the potential to have nega-tive lifelong consequences.

As suggested by the research, the added benefit of having an SEL curriculum as a means of primary prevention and promotion of social-emotional resiliency is that students who have in-ternalizing symptoms will also be serviced through a universal intervention. That said, it will be im-portant for measurement of these behaviors to be included as outcome measures. Typically, internal-izing problems are assessed through various forms of self-report measures as the main method of as-sessment because these disorders are internal and subjective states (Merrell, 2008). For single-case design, it will be essential that direct observation assessments are created that can reliably measure outcomes for students who exhibit internalizing symptoms. In a study by Cooke and Apolloni (1976), researchers measured the functional rela-tion between social emotional behavior training and the generalizability of positive social-emotional change. Some of the dependent vari-ables that these researchers measured were the fre-quency of smiling, sharing, positive physical con-tacting, and verbal complimenting. Similarly Kaz-din (as cited in Merrell, 2008) supported the use of three types of behavioral codes that can target de-pressive symptoms such as social activity (talking, playing with others), solitary behavior (how often the child engages in activities alone), and affect-related expression (smiling, frowning, complain-ing, etc.). One would expect that students who suf-fer from depressive symptoms display less social activity, more solitary behavior, and less affect-related expression. These direct observation meth-ods combined with traditional direct observation

focused on externalizing problems, may be a more comprehensive indicator of how SEL combined with SWPBS practices can enhance outcomes for all students.

Conclusions

The use of SWPBS as a framework to sup-port mental health interventions such as a univer-sal SEL program may allow for better implementa-tion because the program can be linked to the broader goals of schools, the program is held ac-countable through data-based decision making, and are school-wide initiatives rather than isolated interventions. Additionally, it is argued that by combining SWPBS with social-emotional inter-ventions outcomes observed in the SWPBS litera-ture (i.e., decreases in problem behaviors and in-creases in positive academic behaviors) are en-hanced by the addition of universal mental health interventions like SEL curriculums because SEL curriculums teach children skills such as perspec-tive taking, how to build positive relationships, problem solve, and regulate their emotions. There-fore, SEL programs may promote more pro-social behaviors because they target internal thought processes that have been shown to increase posi-tive behavioral outcomes.

Another unique aspect of infusing a social-emotional intervention into a SWPBS framework is that children who suffer from internalizing symptoms will also benefit from this type of uni-versal program. Assessment of internalizing symp-toms calls for a new set of behavioral definitions that are not typically used in direct observations within the SWPBS literature and single-case de-sign. Examples of behaviors that can be measured through direct observations are social activity, solitary behavior, and affect-related expressions.

Single case-design has been used fre-quently in displaying the benefits of SWPBS inter-ventions (e.g., Frazen, Kamps, 2008; McCurdy, Lannie, Barnabas, 2009) through using dependent measures such as physical aggression, inappropri-ate touching, and on-task behaviors. These same dependent measures can also be used to reveal the benefits of incorporating a social-emotional inter-vention at the universal level. It is hypothesized by the authors that the added benefit of a social-

emotional intervention would be lower frequencies of problem behaviors, lower variability, and longer maintenance of effects. Another important benefit of implementing SWPBS with a universal SEL program is the potential decrease in internalizing symptoms by students who have internalizing problems as this is typically an underserved population. Future studies in this area should explore the use of single-case design in accurately measuring social-emotional intervention outcomes using the recommended definitions in this paper. Additionally, studies should explore whether there are differences with the addition of SEL as a primary prevention intervention within a SWPBS framework. As more schools across the nation begin implementing SWPBS, schools should consider the addition of social-emotional interventions as a means to promote both positive behaviors and social-emotional resiliency.

References

Anderson, C. M., and Kincaid, D. (2005). Applying Behavior Analysis to School Violence and Discipline Problems: Schoolwide Positive Behavior Support. *The Behavior Analyst, 28*(1), 49-63.

Anderson, C.M. & Scott, T. (2009). Implementing function-based support with schoolwide positive behavior support. In Sailor, W., Dunlap, G., Sugai, G., & Horner, R. (Eds.), *Issues in Clinical Child Psychology.* Springer US.

Axelrod, J., Devaney, E., Ogren, K., Tanyu, M., & O'Brian, M.U. (2007). From programs to integrated programming – A framework for implement and sustaining school-wide social and emotional learning. In Evans, S.W., Weist, M.D., & Serpell, Z.N (Eds.), *Advances in school-based mental health interventions* (pp.1-20). Kingston, New Jersey: Civic Research Institute, Inc.

Bradshaw, C., Mitchell, M., & Leaf, P. (in press). Examining the effects of school-wide

positive behavioral interventions and supports on student outcomes: Results from a randomized controlled effectiveness trial in elementary schools. Journal of Positive Behavior Interventions.

Carnine, D. (1997). Bridging the research-to-practice gap. *Exceptional Children, 63*(4), 513-521.

Collaborative for Academic, Social, and Emotional Learning (2005). What is social and emotional learning? Retrieved November 19, 2009, from http://casel.org/basics/definition.php

Colvin, G., Kameenui, E. J., & Sugai, G. (1993). Reconceptualizing Behavior

Management and School-Wide Discipline in General Education. *Education and Treatment of Children, 16*(4), 361-381.

Denham, S. A., & Weissberg, R. P. (2004). Social-emotional learning in early childhood: What we know and where to go from here. In E. Chesebrough, P. King, T. P. Gullotta, & M. Bloom (Eds.), *A blueprint for the promotion of prosocial behavior in early childhood* (pp. 13-50). New York : Kluwer Academic/ Plenum Publishers.

Farmer, E.M.Z. & Farmer, T.W. (1999). The role of schools in outcomes for youth: Implications for children's mental health services research. *Journal of Child and Family Students,* 8(4), 377-396.

Frazen, K., & Kamps, D. (2008). The utilization and effects of positive behavior support strategies on an urban school playground. *Journal of Positive Behavior Interventions, 10*(3), 150-161.

Fixsen, D. L., Naoom, S. F., Blasé, K. A., Friedman, R. M., & Wallace, F. (2005). Implementation Research: A Synthesis of the Literature. Tampa, FL: University of South Florida, Louis de la Parte Florida Mental Health Institute, The National Implementation Research Network (FMHI Publication #231).

Flay, B. R., Biglan, A., Boruch, R. F., Castro, F. G., Gottfredson, D., Kellam, S., Mościcki, E. K., Schinke, S., Valentine, J. C., & Ji, P. (2005). Standards of Evidence: Criteria for Efficacy, Effectiveness and Dissemination. *Prevention Science, 6*(3), 151-175.

Greenberg, M. T., Domitrovich, C., & Bumbarger, B. (2001). The prevention of mental disorders in school-aged children: Current state of the field. *Prevention and T reatment.* 4(1), 200-215.

Greenberg, M. T., Weissberg, O'Brian, Zins, Fredericks, Res nik, & Elias (2003). Enhancing school-based preven tion and youth development through coordinated so cial, emotional, and academic learning. *American Psychologist*, 58(6/7), 466-474.

Hemmeter, M.L., Ostrosky, M.M., & Fox, L. (2006). Social emotional foundations for early learning: A conceptual model for intervention. School Psychology Review 35, 583-601.

Hoagwood, K.E., Olin, S.S., Kerker, B.D., Kratochwill, T.R., Maura, C., & Saka, N. (2007). Empirically based school interventions targeted at academic and mental health functioning. *Journal of Emotional and Behavioral Disorders,* 15(2), 66-92.

Horner, R. H., Sugai, G., & Anderson, C. M. (in press). Examining the evidence base for school-wide positive behavior support.

Horner, R. H., Sugai, G., Smolkowski, K., Eber, L., Nakasato, J., Todd, A. W., & Esperanza, J. (2009). A Randomized, Wait-List Controlled Effectiveness Trial Assessing School-Wide Positive Behavior Support in Elementary Schools. *Journal of Positive Behavior Interventions, 11* (3), 133-144.

Ji, P., Axelrod, J., Foster, C., Keister, S., O'Brien, M. U., Ogren, K., & Weissberg, R. P. (2008). A model for implementing and sustaining schoolwide social and emotional learning. *Th Community Psychologist, 41*(2), 40-43.

Joseph, G. & Strain, P. S. (2003). Enhancing emotional vocabulary in young children. *Young Exceptional Children, 6* (4), 18-27.

Kaminiski, R.A., Good, R.H., Knutson, N. (2007). *Essential Workshop: DIBESL training institute*. Dyanamic Measurement Group.

Lane, K.L, Wehby, J.H., Roberson, E.J., Rogers, L.A. (2007). How do different types of high school students respond to schoolwide positive behavior support programs?: Characteristics and responsiveness of teacher-identified students. *Journal of Emotional and Behavioral Disorders*, 15(1), 3-20.

Luiselli, J. K., Putnam, R. F., Handler, M. W., & Feinberg, A. B. (2005). Whole-School Positive Behaviour Support: Effects on student discipline problems and academic performance. *Educational Psychology, 25*(2-3), 183-198.

Lopes, P.N., & Salovey, P. (2004). Towar d a broader education: Social, emotional and practical skills. In Zins, J.E. et al. (Eds). *Building academic success on soci al a n d emotional learning: What does the research say?* (pp. 76-92).

McCurdy, B.L., Lannie, A.L., & Barnabas, E. (2009). Reducing disruptive behavior in an urban school: An extension of the good behavior game. *Journal of School Psychology. 47*, 39 – 54.

Merrell, K.W. (2008). *Behavioral, social, and emotional assessment of children and adolescents.* New York, NY: Talyor & Francis Group, LCC.

Metzler, C. W., Biglan, A., Rusby, J. C., & Sprague, J. R. (2001). Evaluation of a Comprehensive Behavior Management Program to Improve School-Wide Positive Behavior Support. *Education and Treatment of Children, 24*(4), 448-479.

Payton, J., Weissberg, R. P., Durlak, J. A., Dymnicki, A. B., Taylor, R. D., Schellinger, K. B., & Pachan, M. (2008). *The positive impact of social and emotional learning for kindergarten to eighth-grade students: Findings from three scientific reviews.* Chicago, IL: Collaborative for Academic, Social, and Emotional Learning.

Sugai, G. & Horner, R. (2005). Schoolwide positive behavior supports: Achieving and sustaining effective learning environments for all students. In W.L. Heward, T.E. Heron, N.A. Neef, S.M. Peterson, D.M. Sainato, G. C, R. Gardner, L.D. Peterson, S.B. Hersh & J.C. Dardig (Eds.), *Focus on behavior analysis in education: Achievements, challenges, and opportunities.* Upper Saddle River, NJ: Pearson Press.

Taub, J.(2001). Evaluation of the second step violence prevention program at a rural elementary school. *School Psychology Review,* 31(2), 186-200.

Walker, H.M., Ramsey, E., & Gresham, F.M. (2004). *Antisocial behavior in school: Evidence based practices* (2nd ed.). Belmont, CA: Wadsworth.

World Health Organization (2004). Prevention of mental disorders: Effective interventions and policy options: A summary report. *Geneva, Switzerland: World Health Organization Department of Mental Health and Substance Abuse.*

About the Authors

Rhonda N. T. Nese and Karalyn M. Tom are both doctoral candidates in the School Psychology program at the University of Oregon.

Applications

Student Affiliates School Psychology

Membership Information

To become a member of SASP please complete this form and email it to Jacqueline Brown jbrown@education.ucsb.edu or mail it to the address listed below. Members are also eligible for travel expenses to APA, scholarship awards, and other financial rewards by taking part in activities designed to promote SASP. SASP membership is FREE to all school psychology students. In addition, please consider joining the SASP listserv. This listserv will provide you with access to our newsletter, information on how to apply for various awards and travel grants, and other resources important to students in our field. SASP encourages members to also join APA's Division 16 (School Psychology). Information regarding this will be included in your welcome packet.

SASP Membership Committee
Attn: Jacqueline Brown
6510 El Colegio Rd. #1309
Santa Barbara, CA 93106

Renewal: Please circle   yes   or   no

NAME: _____

MAILING ADDRESS: _____

                             _____

                             _____

EMAIL ADDRESS: _____

UNIVERSITY AFFILIATION: _____

STUDENT STATUS: _____
                             (i.e., 1st year, part-time, 3rd year, full-time)

FACULTY SPONSOR   _____

Would you like to be added to the SASP Listserv ?   yes   or   no

Are you a member of APA? yes or no   Are you a member of Division 16? yes or no

Please indicate committees in which you may have interest:
___Communications   ___ Nominations/Elections   Other Interests (describe)
___Membership   ___ Diversity Affairs   _____

APA Division 16
MEMBERSHIP APPLICATION
Please print or type:

Last Name   First Name   MI

Address: _____

City: _____ State: _____ Zip: _____

Phone: (___) _____ e-mail: _____

APA Membership Number (*if applicable*): _____

Please check status:

____ Member $45.00

____ Fellow $45.00

____ Associate $45.00

____ Professional Affiliate $55.00

____ International Affiliate* $5.00

____ Life Status, no fee (*Division 16 members, 65 years of age or older and have been a member of APA for at least 25 years*)

____ Life Status $30.00 (*with School Psychology Quarterly*)

____ Student Affiliate $30.00 (*complete below*)

_____

Faculty Endorsement   Institution   Expected Yr. of Graduation

Please complete and mail this application with your check payable to APA Division 16 to:
Attn: Division 16 Membership
APA Division Services Office
750 First Street, NE
Washington, DC 20002-4242

* International Affiliate status shall be extended to individuals who are credentialed school psychologists, other psychologists, or individuals pursuing preparation in school psychology who live outside the United States and Canada. APA members must join Divisions in the same category of membership. Therefore, if you are an International Affiliate of APA, you would join the Division as an International Affiliate. If you are a Member of APA, you would join the Division as a Member, not as an International Affiliate, even if you live outside the US and Canada.

APA members can submit their membership application online at:
http://www.apa.org/about/division/join.aspx

Division 16 is an exciting division with many activities and services to benefit you. Members:

- ❖ Engage in the national and international conversation on school psychology. Division 16 is active in advocating for the interests of school psychologists on issues both within the broader field of psychology as well as with constituent school psychology organizations.
- ❖ Receive cutting edge publications such as *School Psychology Quarterly*, the Division's APA journal and the high quality peer-reviewed newsletter *The School Psychologist*.
- ❖ Network with colleagues and leaders in the field who share your interest in School Psychology.
- ❖ Contribute to the Science for Policy and Practice in School Psychology during Division 16 programming at the APA annual convention via round table discussions, symposia, poster sessions, workshops and the superlative Division 16 Hospitality Suite and Social Hour.
- ❖ Join the Division 16 listserv to keep up to date with current trends, professional opportunities, and the on-going dialogue on School Psychology matters.
- ❖ Recognize outstanding achievements. Division 16 honors Students (e.g., APF-Paul Henkin travel awards, minority scholarships, AGS outstanding scholarship awards), Early Career Scholars (e.g., Lightner Witmer Award), and substantial contributors to the field (e.g., Fellow, Senior Scientist, Jack Bardon Distinguished Service Award, Lifetime Achievement Award).
- ❖ Become involved in Division 16 governance. There are many opportunities to join committees and run for executive office in the Division.
- ❖ Visit our website for more information:
  http://www.indiana.edu/~div16/index.html