A. Title Page

Professional Development Grant Report
Arkansas Tech University

Presentations and Book Chapter Solicitation at a Professional Conference

by

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B. Restatement of Problem Researched

This Professional Development Grant allowed Dr. Warnick to attend the National Association of School Psychologists 2009 Annual Convention in Boston, MA. At this conference, Dr. Warnick presented two posters he co-authored. One poster was co-authored with two ATU students. Additionally, he used the opportunity to solicit book chapters for a two volume book series that he is editing for Nova Science Publishers (NY, USA) on the topic of the scientific basis of educational policy and practice.

- Abstract for Presentation Entitled “Addressing Tourette’s Syndrome with efficacy in a rural setting”:
  Tourette’s syndrome is a low-incident disorder that can be very disruptive and stressful in children in a school setting. Particularly in a rural setting, resources and education about this disorder can be difficult to access. The current study illuminates various approaches and resources that are efficacious and available even in rural settings. Additional discussion is provided regarding issues such as manifestation determination, least restrictive environment, and confidentiality in cases of very public and vocal disorders.

- Abstract for Presentation Entitled “Current educational practice: The good, the bad and the pseudoscience”:
  The primary education system has made great strides to incorporate empirically-supported interventions and pedagogy into its standard practice. This presentation will examine the extent that three inadequate methods are employed in the United States education system. The educational practices investigated were corporal punishment, grade retention, and adaptations for differing learning styles. To examine the the extent of adoption of corporal punishment and grade retention, we examined 60 school student handbooks from across the United States. The investigation revealed nearly all of the sampled schools employed corporal punishment and grade retention as a standard policy. Further investigations also revealed the extent to which learning styles have become an accepted educational practice. Empirically-supported alternatives to each of these practices will be discussed.

C. and D. Brief Review of the Research Procedures and Summary:

While Dr. Warnick’s primary fields of research have been in behavioral neuroscience (animal modeling; e.g., Warnick & Kalueff, in press; Sufka et al., 2009; Warnick et al., 2009; Sufka et al., 2006; Warnick et al., 2006) and sports psychology (boxing; e.g., Warnick & Martin, in press; Warnick & Warnick, 2009; Warnick & Warnick, 2007), he has attempted to broaden his focus to clinical related areas to provide research opportunities for ATU students. In order to accomplish this task, Dr. Warnick has collaborated with his wife, Kyla Warnick, Ed.S., a licensed school psychology specialist, to study topics in school psychology. This has been a very beneficial partnership as they have presented four posters with four ATU undergraduate and graduate students at the National Association of School Psychologists 2008 Annual Convention in New Orleans, LA and the National Association of School Psychologists 2009 Annual Convention in Boston, MA (copies of the posters attached). Also, at the National Association of School Psychologists 2009 Annual Convention Dr. Warnick attempted to solicit conference
attendees to contribute book chapters to a book series he is editing for Nova Science Publishers (NY, USA). It is hoped that the professional relationships Dr. Warnick made with these school psychologists will help provide better prospects for ATU students to gain professional training after they graduate.

E. Conclusions and Recommendations
Attaining this Professional Development Grant allowed Dr. Warnick to travel to the National Association of School Psychologists 2009 Annual Convention in Boston, MA to present two research posters. One of the posters had two ATU students (an undergraduate and a graduate student) as co-authors. He also used the conference as an opportunity to solicit other researchers to contribute book chapters to a two volume book series he is editing for Nova Science Publishers on the topic of the scientific basis of education policy. Attending this conference allowed Dr. Warnick to establish more contacts with researchers in school psychology. It is hoped that these connections will eventually provide ATU students access to further training opportunities.
An Efficacious Program Addressing Tourette’s Syndrome in a Rural Setting

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1Russellville School District, Russellville, AR USA
2Arkansas Tech University, Russellville, AR USA

Introduction

Tourette's syndrome is a disorder that affects up to 30 per 10,000 children (DSM-IV). Tourette’s syndrome can present with features such as motor tics and at least one vocal tic. Such tics can be simple or complex involving hand movements and long phrases including socially inappropriate and disruptive gestures and terms. This disorder, by nature, presents many difficult obstacles in the school setting. Further complicating this disorder is the many misconceptions regarding the behavioral manifestations. Additional barriers are added when trying to access resources in a rural area. The current single subject case design details a method for implementing an efficacious program with a student with Tourette’s syndrome in a rural setting.

Methods

The current study reviews behavioral manifestations of Tourette’s syndrome before, during, and after various interventions to address tics in a public school setting. Interventions often focused on providing avenues for alleviation of the anxiety that the student experienced in the school setting, education of the faculty and students involving Tourette's syndrome, and pooling community resources to provide appropriate, research based interventions. As this disorder is often misunderstood, a key component of this intervention was education.

Results

The use of the techniques resulted in the increase of time spent in a school setting. Additional, progress was made toward earning credits for graduation. A decrease in the number and severity of tics was noted.

Key Intervention Components

<table>
<thead>
<tr>
<th>Education</th>
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<tbody>
<tr>
<td>Faculty/Staff</td>
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<tr>
<td>• Provide in-service credit for reviewing informational videos</td>
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<tr>
<td>• Provide professional development through educated local speakers on Tourette’s syndrome</td>
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<tr>
<td>Student/Peer</td>
</tr>
<tr>
<td>• With parental consent, explain features of the syndrome</td>
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<tr>
<td>• Teach and support student understanding of differences</td>
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Anxiety Alleviation Techniques

<table>
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<tr>
<th>Techniques</th>
<th>Results</th>
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<tbody>
<tr>
<td>Frequent Breaks</td>
<td>Lessens or reduces tics</td>
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<tr>
<td>Provide private location</td>
<td>Allows student to reduce</td>
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<tr>
<td>for student to Tic</td>
<td>stress of suppressing tics</td>
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<tr>
<td>Identify stress triggers</td>
<td>If stress is caused during</td>
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<tr>
<td>and provide separate</td>
<td>class transition times,</td>
</tr>
<tr>
<td>environmental</td>
<td>allowing a student to leave</td>
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<tr>
<td>modifications to reduce</td>
<td>early or arrive late may</td>
</tr>
<tr>
<td>stress</td>
<td>reduce tics</td>
</tr>
<tr>
<td>Habit Reversal Training</td>
<td>Student learns to suppress</td>
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Intervention Resources

| Website: www.tsa-usa.org |
| Video: A Teacher Looks at Tourette Syndrome. 2007, Tourette Syndrome Association, Inc. |

Manifestation Determination Review

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<tr>
<th>Faculty/Staff</th>
<th>Education is key to understanding that tics may be a complicated mix of vocal and motor gestures. It is important to stress that even when it sounds like a student is making an inappropriate comment, it can be due to a tic.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Student/Peer</td>
<td>Educate peers to the extent of complex tics so it is apparent that a student is not breaking rules</td>
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Key Tic Features

Motor Tics
- Simple: sudden, brief meaningless movements (eye blinks, eye movements, grimaces, head jerks, shoulder shrugs)
- Complex: slower, longer, more purposeful
Multiple simple tics occurring in an orchestrated pattern, facial gestures, touching objects/self, hand gestures, gyrating/bending, dystonic postures, obscene gestures

Phonic Tics
Simple: sudden meaningless sounds or noises (throat clearing, coughing, sniffing, spitting, grunting, animal noises, hissing, sucking, other simple sounds)
Complex: sudden more meaningful utterances (syllables, words, phrases, obscene, aggressive words, echo self, echo others)

Conclusions

Tourette's Syndrome is a difficult disorder to address in the public school setting. By providing educational support to faculty members and students, understanding can lead to a positive school setting in which an individual with TS can actively engage in his/her educational environment. While working in a rural setting can be an additional challenge to the school psychologist, there are many online and video resources that can be valuable educational tools for supporting students struggling with this difficult disorder.

Acknowledgements

Thank you to the Russellville School District for providing the setting for these interventions.
Current Educational Practice: The Good, the Bad and the Pseudoscience
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Introduction
While primary education has made great strides to incorporate empirically-supported interventions and pedagogy into its standard practice, many examples of pseudoscientific and discredited methods are still common throughout the education system. This study examined the extent that three of these methods are employed in the United States education system. References for scientific-based alternatives are provided.

Methods
This study attempted to investigate how ingrained certain poor educational practices were in the United States educational system. The educational practices investigated were corporal punishment, grade retention, and adaptations for differing learning styles. To study the extent of the adoption of corporal punishment and grade retention, we examined 60 school student handbooks from across the United States. To study the extent of the acceptance of the learning styles concept, we examined the number of results provided by publicly-accessible internet search engines.

Corporal Punishment
For this study, the United States was divided into four regions, labeled as Northeast, South, Midwest, and West, based on the United States Census Bureau's maps. Sixty high school handbooks, 15 from each region, were chosen from cities that contain a population of at least 50,000 people. Within each handbook, policies addressing corporal punishment were examined.

All schools included corporal punishment in their handbook as a disciplinary procedure. This is an interesting finding considering the known ineffectiveness of this method on long-term behavioral outcomes, the negative effects spanking can have on self-esteem and psychological well-being, the association between corporal punishment and mental illness, and the association between corporal punishment and educational achievement.

References that Provide Alternatives to Corporal Punishment

Grade Retention
For this study, handbooks were acquired in the same method as the corporal punishment investigation. Within each handbook, policies addressing grade retention were examined.

As with the previous study, all schools included grade retention as a method of educational remediation. This is an especially troubling finding given the known relationships between grade retention and educational achievement, emotional and psychological well-being, mental health, criminal behavioral, and substance abuse.

References that Provide Alternatives to Grade Retention

Learning Styles
For this study, internet searches using the terms "learning styles" and "school district" were conducted on Google and Yahoo! search engines.

Over 165,000 results were found on the Google search and 775,000 results were found on the Yahoo! Search. This preliminary investigation indicates an apparent wide-spread acceptance of the learning styles concept. Belief in a concept with no scientific merit could lead school districts and personnel to waste valuable resources. Future studies will need to be conducted to determine the true extent of the acceptance of this pseudoscientific concept.

References that Provide that Debunk the Learning Styles Myth