Viewing the Behavioral Responses of ED Children from a Trauma-Informed Perspective

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The purpose of this study was to investigate via a trauma-lens the types of behavioral responses recorded in the IEPs of ED children. The theoretical orientation for the study was based heavily on the framework for school-based psychological evaluations identified by Tishelman, Haney, O'Brien and Blaustein (2010). Using the retrospective record review methodology, this exploratory study confirmed existing research on the behavioral responses of ED children and added to the literature by detailing preliminary evidence of behavioral responses that aligned with three of the four functional core domains in which children may display trauma-related difficulties in school.

The bulk of educational research regarding trauma focuses on supporting traumatized children in school (Cole, Eisner, Gregory, & Ristuccia, 2013; Cole, O'Brien, Gadd, Ristuccia, & Wallace, 2005; Tishelman, Haney, O'Brien, & Blaustein, 2010). Studies identify trauma signs, trauma-sensitive interventions, and trauma-sensitive school-wide practices. However, scant research examines the behavioral responses among emotionally disturbed (ED) children using a trauma lens.

Many studies investigating characteristics of special education children identified with emotional disturbance use a behavioral perspective and focus on the five federal eligibility characteristics, types of behavior displayed in various educational settings, and the importance of using evidence-based classroom practices (Bower, 1982; Cook, Tankersley, Cook, & Landrum, 2008; Cullinan & Sabornie, 2004; Epstein Cullinan, Ryser, & Pearson, 2002; Gage, 2013; Wery & Cullinan, 2011). Since trauma has a significant impact on a child's ability to function successfully in school settings, it is important to view the behavioral responses among ED children from a trauma-informed perspective (Tishelman et al., 2010). This information is vital for educators designing Individual Education Programs (IEPs) because school personnel must accurately represent the behavioral nuances of each child. Goals, objectives, services, and interventions are accurately determined only when the IEP team fully understands the unique traits and tendencies of each child (Diliberto & Brewer, 2012).

Research regarding childhood trauma has already been addressed in the literature (Cole et al., 2013; Cole et al., 2005; Tishelman et al., 2010). Within the field of psychology studies showed that childhood trauma from exposure to family violence can diminish concentration, memory, and the language abilities children need to function well in school (Streeck-Fischer & van der Kolk, 2000). Children may have learning difficulties, poor modulation of impulses, selfdestructive behavior, and interpersonal difficulties (Cook et al., 2005); they may present with persistent physical or emotional conflict, engage in violent or unsafe acts, and/or seek out deviant affiliations with others (Stolbach et al., 2013).

In school, traumatized children experience significant academic problems. Studies indicated that cognitive delays and neurobiological deficits are a direct result of maltreatment (Delima & Vimpani, 2011). Kauffman (2007) argued that a "medical outlook, not the legal outlook, provides the most hopeful prospects" for the field of special education, because a medical viewpoint is guided by scientific evidence and "seeks to foster healthy, productive citizens" (pp. 253-254). It is this premise on which the rationale for this study was based. It is well documented that students with emotional and behavioral difficulties experience less school success than any other group of students (Landrum, Tankersley, & Kauffman, 2003; Shook, 2012). These difficulties include but are not limited to problems in mathematics and reading; poor peer relationships; aggression; defiance; and depression (Cullinan & Sabornie, 2004). Most often children who display these and other inappropriate behaviors are not adequately progressing through the curriculum (Tishelman et al., 2010).

One could infer that some children with ED might have a trauma history due to their inability to initiate or maintain satisfactory interpersonal relationships with peers and teachers, episodes of physical or verbal aggression, and anti-social nature. In fact, when the areas of functional difficulty among children exposed to trauma are compared to ways in which ED children manifest behavioral responses in school, similarities emerge as shown in Table 1.

Given the similarities between the qualifying characteristics used to determine eligibility for special education due to an emotional disturbance and the four functional domains in which children manifest trauma, research that viewed ED children from a trauma-informed perspective has not yet been documented in the literature. Streeck-Fischer and van der Kolk (2000) noted "Isolated traumatic incidents tend to produce discrete conditional behavioral and biological responses to reminders of the trauma" (p. 903). Given this insight, it was thought that the written narrative of a child's IEP could potentially capture these behavioral responses. The purpose of this study was to explore what types of behavioral responses were recorded in the IEPs of ED children.

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Table 1. Commonalities between Functional Core Trauma-Related Domains (Tishelman et al., 2010) and Qualifying Characteristics for Emotional Disturbance (IDEA, 2006)

Functional Core Domain	ED Characteristic per IDEA	Similarity between Functional Core Domain and ED Characteristic
Academics	Inability to learn	Difficulty learning
Relationships	Inability to build or maintain relationships	Impaired relationships
Self-Regulation	Inappropriate types of behavior or feelings Pervasive mood of unhappiness or depression	Behavior or feelings differ significantly from expectations given the child's development
Physical Functioning	Physical symptoms or fears	Impaired internal and external physical functioning

Method

By employing an exploratory, retrospective record review (RRR) this study sought to uncover specific behavioral responses recorded in the IEPs of ED children. Retrospective research is the process by which data that were originally collected for reasons other than research is analyzed (Hess, 2004). Often referred to as a "chart review" or "medical record review" (MRR) in the health care field—inspection of records can guide various types of clinical research using physician and nursing notes; diagnostic tests; and admission and discharge documentation (Gearing et al., 2006; Hess, 2004; Worster & Haines, 2004). Medical records are protected by the federal privacy law *The Health Insurance Portability and Accountability Act of 1996* also known as HIPPA (U.S. Department of Health and Human Services, 2015).

Similarly, schools collect educational records on children ranging from, but not limited to, grades, courses, awards, special education programs, and student discipline. As with medical records, educational records are protected by *The Family Education and Rights Privacy Act* (FERPA). Notwithstanding, there are conditions by which schools may release information from students' education records to researchers making the educational records of children a largely untapped resource for the examination of phenomena (U.S. Department of Education, 2015).

Privacy concerns are eliminated and sound results are obtained when MRR studies employ precise methodological guidelines (Allison et al., 2000; Gearing et al., 2006; Vassar & Holzmann, 2013). Therefore, the study utilized the retrospective chart review research methodology advocated by Gearing et al. (2006) and shown in Figure 1. Because the "investigator is looking 'back' in time at events which have

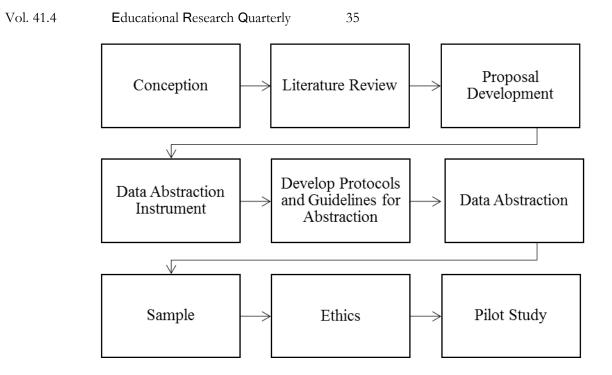


Figure 1. Nine guidelines for the design of a Retrospective Chart Review as recommended by Gearing et al., (2006).

already occurred, to collect information" the study assumes a retrospective nature (Schwartz & Panacek, 1996, p. 119). There is an abundance of literature that speaks to the practicality and usefulness of retrospective studies (Gearing et al., 2006; Hellings, 2004; Hess, 2004; Nagurney et al., 2005; Schwartz & Panacek, 1996). Retrospective research is "often undervalued and, hence, underutilized" but when used properly can add to the body of knowledge in the area of research (Gearing et al., 2006, p. 126). In that this is an exploratory study, the data gathered will inform future, prospective studies (Vassar & Holzmann, 2013).

The study used a sample of convenience consisting of the author's personal network of professional contacts. Former colleagues, associates, and acquaintances were contacted via email. A brief study description was offered along with the requirements for participation. Each was asked to respond if they had interest. Contacts representing six Connecticut public school districts replied with interest and three subsequently acknowledged their participation in writing by providing a signed letter of informed consent.

Connecticut school districts located within District Reference Groups D, H, and I elected to participate. District Reference Groups (DRGs) are used by the Connecticut State Department of Education to compare school districts with similar characteristics. Connecticut has 164 local school districts, divided into nine groups based on socioeconomic status and various indicators of need (State of Connecticut, 2016; Prowda, 2006). Each DRG is represented by a single letter in the alphabet ranging from "A" to "I." DRGs designated by letters closer to the beginning of the alphabet have a higher socioeconomic level and lower level of need. For example; the 2015 median family income (MFI) in the DRG D school district was approximately \$87,000 while the MFI for the DRG I district was \$36,000 (U.S. Census, 2015).

Participating districts were given directions explaining the random IEP selection process, the protocol for obtaining parent permission, and explicit instructions regarding the deidentification of any personally identifiable information contained within the IEP. Fifteen IEPs of ED children between the ages of 12 and 18 (grade levels 7-12) were received. A total of 12 IEPs were included in the study, three IEPs were used to assess the study design and therefore not included in the final study sample. All of the IEPs were written for the 2014–2015 school year. The mean age of the child was 15.2 years; 50% of the IEPs were for children grades 8–9; 75% were male, and 92% of the children received classroom instruction in English. It should be noted that the percentage of female versus male students included in this study is in line with national statistics that show approximately 23% of ED students are female and 77% are male (NCES, 2015).

For this study, a measure of Behavioral Responses for ED Children was constructed based heavily on the research of Tishelman et al. (2010) who crafted a framework for school-based psychological evaluations utilizing a trauma lens. Using a 3-point Likert scale (0 = no/not at all stated; 1 = somewhat stated; 2 = yes/clearly stated) the IEPs were examined by the author on three separate occasions for evidence of behavioral responses that aligned with the four functional core domains in which children may show possible trauma-related difficulties in school: (a) academics, (b) relationships, (c) self-regulation, and (d) physical functioning.

Intraobserver reliability (i.e., consistency) between the three scoring sessions was measured using the kappa statistic (κ), with the level of agreement being defined as follows: <0 = *less than chance agreement*, 0.01–0.20 = *slight agreement*, 0.21–0.40 = *fair agreement*, 0.41–0.60 = *moderate agreement*, 0.61–0.80 = *substantial agreement*, and 0.81–0.99 = *almost perfect agreement* (Hintz, 2005; Viera & Garrett, 2005). The magnitude of

agreement among all three data abstraction sessions was described as moderate to substantial (Table 2). Thus, good intraobserver reliability was established for the study.

Table 2. Kappa Statistic Showing IntraobserverReliability

	Session #1	Session #2	Session #3
Session #1		K = 0.55	K = 0.56
Session #2	K = 0.55		K = 0.61
Session #3	K = 0.56	K = 0.61	

Results

The results of this single document retrospective record review are shown in Figure 2. Eighty-three percent (n = 10)of the IEPs contained behavioral responses that aligned with three out of the four functional core domains (academics, relationships, & self-regulation). The remaining 17% (n = 2)of IEPs contained behavioral responses that aligned with two of the four functional core domains (academics & selfregulation). None (n = 0) of the IEPs contained behavioral responses that aligned with the physical functioning domain. It should be noted that within this study an examination of the behavioral response profiles yielded no significant differences between males and females.

Within the academic domain, 100% (n = 12) of the IEPs contained two or more indices of significant academic problems. Seventy-five percent (n = 9) of the IEPs recorded difficulty with written expression, writing essays, or figuring out math problems. Fifty-eight percent (n = 7) showed poor reading skills, including comprehension difficulty. Fifty percent (n = 6) documented poor production (e.g., written, oral, homework, tests), and difficulty sustaining attention and/or concentration. Other academic problems noted in the IEPs of ED children were: a lack of motivation or follow through (42%, n = 5); difficulty starting or finishing work,



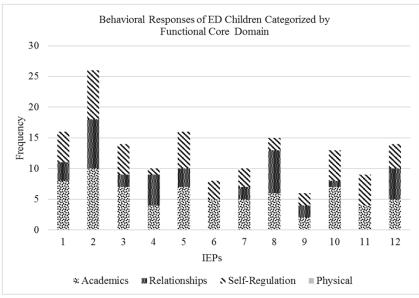


Figure 2. The number of behavioral responses documented within each ED child's IEP, categorized by the functional core domain in which children may show possible trauma-related difficulties in school.

remembering homework, and completing long-term projects (33%, n = 4); and a sense of self as ineffective and/or worthless (8%, n = 1).

Analysis of the behavioral responses associated with the relationships domain indicated 75% (n = 9) of the IEPs contained two or more indices of troubled relationships. Specific behaviors recorded in the IEPs of ED children included: lack of prosocial skills (50%, n = 6); social withdrawal, and social isolation from others (33%, n = 4); limited ability to bond with adults or peers at school (25%, n = 3); behavior in contexts involving larger group peer interaction and/or unstructured component, and limited ability to feel and/or express empathy and sympathetic responses (8%, n = 1).

Within the self-regulation domain, 92% (n = 11) of the IEPs contained two or more indices of an impaired ability to self-regulate at a developmentally expected level. Thirtythree percent (n = 4) documented frequent interpersonal conflict with peers and/or adults, sometimes characterized by seemingly inexplicable defensive hostility or withdrawal; exaggerated, disruptive, or destructive behavior; withdrawal from social relationships, and exaggerated changes in mood. Twenty-five percent (n = 3) recorded disengagement from social structure. Other indicators of an impaired ability to self-regulate noted in the IEPs were: behavioral expression of internal arousal level, ranging from lethargic/disconnected to hyperarousal/lethargic (16%, n = 2); angry outbursts directed toward objects or people, and denying known or observed behaviors—appearing to lie (8%, n = 1).

Discussion

The study revealed variation between the behavioral responses associated with the physical domain recorded in the IEPs of ED children and that which is documented in the literature. Existing research supports concerns regarding

physical functioning among ED children. Frequent visits to the nurse's office, absenteeism due to illness, coping through somatic expression (e.g., headaches, nausea, more susceptible to illness), and self-harming behaviors like cutting have all been documented as a type of behavioral response among ED children (Bower, 1982; Epstein et al., 2002). This outcome warranted a reexamination of the study sample and criteria used to establish parameters for inclusion of records into the study.

It was determined that the lack of IEPs noting evidence of a behavioral response within the Physical Domain may have been be due to:

- 1. The sample size (n = 12) was too small to capture the behavioral responses associated with concerns regarding physical functioning (Roberts, 2010).
- 2. The sample of convenience readily accessible to the researcher did not contain an accurate subgroup of the overall population being studied.

Upon further analysis of the educational placement of the child for whom the IEP was written, it was found that none of the IEPs (n = 0) were written for a child in a private residential facility, hospital, or temporary housing situation. Future retrospective record review studies investigating the behavioral responses of ED children should use samples which are much larger in size and account for children in multiple educational placements (e.g., private residential facilities, hospitals, and temporary housing situations).

The results of this RRR study must be treated with caution due to the small sample size. It is unclear why many public school districts failed to take part. A potential hypothesis may lie within the strict ethical human subject requirements for the study. Each school district was required to obtain parent permission, and subsequently redact all personal information from the IEP before entering it into the study. The required investment of time and resources may possibly have been too much. Those districts that did participate helped to advance the body of knowledge and offer new insight into the behavioral responses of ED children.

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As stated earlier, this study used a sample comprised of school districts from different DRGs and were therefore not matched on SES or ethnicity; therefore, this a study limitation. As Stuart and Rubin (2007) stated "preexisting differences between the groups must be controlled to obtain approximately unbiased estimates of the effects of interest" (p. 155). Therefore, future investigations using a much larger sample size should control for SES and ethnicity.

There are five characteristics examined when considering a child for special education services under the primary disability of emotional disturbance:

- 1. Inability to learn which cannot be explained by intellectual, sensory or other health factors;
- 2. Inability to build or maintain satisfactory interpersonal relationships with peers and teachers;
- 3. Inappropriate types of behavior or feelings under normal circumstances;
- 4. A general pervasive mood of unhappiness or depression, and;
- A tendency to develop physical symptoms or fears associated with personal or school problems (Individuals with Disabilities Education Act, 2006).

IDEA (2006) stated a child need show one or more characteristics to qualify as a student with emotional disturbance, but the characteristic must be chronic, severe,

and negatively affect the child's educational performance. Furthermore, the characteristic cannot be "a culturally sanctioned response system" (State of Connecticut, 2012, p. 25). All the IEPs (100%; n = 12) in this study contain behavioral responses that resemble more than one qualifying characteristic. Each behavioral response, while not explicitly stated as being chronic or directly known and subsequently ruled out as an ethic norm, was noted in the IEP as an area of weakness.

To strengthen the psychometric rigor of the study further research is needed on a larger scale using two or more data abstractors. While the author has over 30 years of experience in the field of special education working specifically with ED children—interobserver agreement would strengthen the validity of the observational system used (Hintz, 2005). To date, studies have focused on research that views ED children from a behavioral perspective (Epstein et al., 2002; Kauffman & Badar, 2013; Kauffman & Landrum, 2013; Wagner, Kutash, Duchnowski, Epstein, & Sumi, 2005). This study adds to the literature by recording the behavioral responses of ED children from a trauma-informed perspective.

Conclusion

While not generalizable to all ED children, the retrospective record review design used in this exploratory study proved to yield new insight. This represents advancement in the methodological approaches used to study the behavior of special education children. RRR research not only affords educational leaders from K–12 institutions the option of using a study design other than the typical survey/interview methodology, but it allows leaders from post-secondary schools, health-related professions, government, and human service organizations another method with which to study children. RRR research provides new insight and

understanding of phenomena, informing practice and making a reliable and valuable contribution of knowledge.

Important preliminary findings in this study reveal the types of behavioral responses evident in the IEPs of ED children are indicative of (a) difficulty learning; (b) impaired relationships; (c) behavior or feelings that differ significantly from expectations given the child's development, and (d) align with three out of four functional core domains in which children may show possible trauma-related difficulties in school. None of IEPs of ED children in this study contain evidence of impaired internal and/or external physical functioning.

In that the IEP (a) outlines key curricular requirements for special education services critical to the student's educational success; (b) guides the integration of general and special education curriculum; (c) links the classroom environment to IEP goals and strategies, and (d) aids teachers in the creation of lesson plans and behavioral protocols that meet each ED child's unique needs—the incorporation of a trauma-informed perspective into the development of the IEP document should be considered (Diliberto & Brewer, 2012). In sum, to better strengthen a ED child's ability to learn; build and maintain satisfactory relationships; and self-regulate at a developmentally expected level—special education practitioners are strongly encouraged to seek out opportunities to work collaboratively with those in the field of childhood trauma.

References

Allison, J., Wall, T. C., Spettell, C. M., Calhoun, J., Fargason, C. A., Kobylinski, R. W., ... Kiefe, C. (2000). The art and science of chart review. *Journal on Quality Improvement*, 26(3), 115–136. doi.org/10.1016/S1070-3241(00)26009-4

- Bower, E. M. (1982). Defining emotional disturbance: Public policy and research. *Psychology in the Schools, 19*, 55–60. doi.org/10.1002/1520-6807(19820108)19:1<55::AID-PITS2310190112>3.0.CO;2-2
- Cole, S. F., Eisner, A., Gregory, M., & Ristuccia, J. (2013). Helping traumatized children learn: Creating and advocating for trauma-sensitive schools. Boston, MA: Massachusetts Advocates for Children.
- Cole, S. F., O'Brien, J. G., Gadd, M. G., Ristuccia, J., Wallace, D. L., & Gregory, M. (2005). Helping traumatized children learn: Supportive school environments for children traumatized by family violence. Boston, MA: Massachusetts Advocates for Children.
- Cook, B. G., Tankersley, M., Cook, L., & Landrum, T. J. (2008). Evidence-based practices in special education: Some practical considerations. *Intervention in School and Clinic*, 44(2), 69–75. doi: 10.1177/1053451208321452
- Cook, A., Spinazzola, J., Ford, J., Lanktree, C., Blaustein, M., Cloitre, M., ... van der Kolk, B. (2005). Complex trauma in children and adolescents. *Psychiatric Annals*, *35*(5), 390–398.
- Cullinan, D., & Sabornie, E. J. (2004). Characteristics of emotional disturbance in middle and high school students. *Journal of Emotional and Behavioral Disorders*, 12(3), 157–167. doi: 10.1177/10634266040120030301
- Delima, J., & Vimpani, G. (2011). The neurobiological effects of childhood maltreatment: An often overlooked narrative related to the long-term effects of early childhood trauma. *Family Matters*, *89*, 42–52.
- Diliberto, J. A., & Brewer, D. (2014). Six steps for successful IEP meetings. *Teaching Exceptional Children*, 47(2), 128– 135. doi.org/10.1177/0040059914553205
- Epstein, M. H., Cullinan, D., Ryser, G., & Pearson N. (2002). Development of a scale to assess emotional disturbance. *Behavioral Disorders*, 28(1), 5–22.

- Gage, N. A. (2013). Characteristics of students with emotional disturbance manifesting internalizing behaviors: A latent class analysis. *Education and Treatment of Children*, 36(4), 127–145. doi.org/10.1353/etc.2013.0038
- Gearing, R. E., Mian, I. A., Barber, J., & Ickowicz, A. (2006). A methodology for conducting retrospective chart review research in child and adolescent psychiatry. *Journal of Canadian Academic Child Adolescent Psychiatry*, 15(3), 126–134.
- Hellings, P. (2004). A rich source of clinical research data: Medical records and telephone logs. *Journal of Pediatric Health Care, 18*, 154–155. doi: 10.1016/ j.pedhc. 2004.03.001
- Hess, D. R. (2004). Retrospective studies and chart reviews. Respiratory Care, 49(10), 1171–1174.
- Hintz, J. M. (2005). Psychometrics of direct observation. School Psychology Review, 34(4), 507–519.
- IDEA Regulations, 34 C.F.R. § 300 (2006).
- Kauffman, J. M. (2007). Conceptual models and the future of special education. *Education and Treatment of Children*, 30(4), 241–258. doi.org/10.1353/etc.2007.0024
- Kauffman, J. M., & Badar, J. (2013). How we might make special education for students with emotional or behavioral disorders less stigmatizing. *Behavioral Disorders*, 39(1), 16–27.
- Kauffman, J. M., & Landrum, T. J. (2013). *Characteristics of emotional and behavioral disorders of children and youth*. Boston, MA: Pearson.
- Landrum, T. J., Tankersley, M., & Kauffman, J. M. (2003). What is special about special education for students with emotional or behavioral disorders? *The Journal of Special Education*, 37(3), 148–156. doi: 10.1177/ 00224669030370030401

- Nagurney, J. T., Brown, D. F., Sane, S., Weiner, J. B., Wang, A. C., & Chang, Y. (2005). The accuracy and completeness of data collected by prospective and retrospective methods. *Academic Emergency Medicine*, 12(9), 884–895. doi: 10.1197/j.aem.2005.04.021
- Prowda, P. (2006). Research bulletin: District reference groups, 2006. Report prepared for Connecticut State Department of Education Division of Teaching, Learning and Assessment. Retrieved from http://sdeportal.ct.gov/ Cedar/Files/Pdf/Reports/db_drg_06_2006.pdf
- Roberts, C. (2010). The dissertation journey. Thousand Oaks, CA: Corwin.
- Schwartz, R. J., & Panacek, E. A. (1996). Basics of research (part 7): Archival data research. *Air Medical Journal*, 15(3), 119–124. doi: 10.1016/S1067-991X(96)90037-1
- Shook, A. C. (2012). A study of preservice educators' dispositions to change behavior management strategies. *Preventing School Failure*, 56(2), 129–136. doi: 10.1080/1045988x.2011.606440
- State of Connecticut, Department of Education. (2016). District world wide web address report. Retrieved from http://www.csde.state.ct.us/public/csde/reports/ww wDistrict.asp
- Streeck-Fischer, A., & van der Kolk, B. A. (2000). Down will come baby, cradle and all: Diagnostic and therapeutic implications of chronic trauma on child development. *Australian and New Zealand Journal of Psychiatry*, 34(6), 903–918. doi.org/10.1080/000486700265
- Stolbach, B., Minshew, R., Rompala, V., Dominguez, R. Z., Gazibara, T., & Finke, R. (2013). Complex trauma exposure and symptoms in urban traumatized children: A preliminary test of proposed criteria for developmental trauma disorder. *Journal of Traumatic Stress*, 26(4), 1–9. doi: 10.1002/jts.21826

- Stuart E. A., & Rubin D. B. (2007). Best practices in quasiexperimental designs: Matching methods for casual inference. In J. W. Osborne, *Best Practices in Quantitative Methods* (pp. 155–176). New York, NY: Sage Publications.
- Tishelman, A. C., Haney, P., O'Brien, J. G., & Blaustein, M.
 E. (2010). A framework for school-based psychological evaluations: Utilizing a trauma lens. *Journal of Child and Adolescent Trauma*, 3(4), 279–302. doi: 10.1080/19361521.2010.523062
- U.S. Department of Education. (2015). Family Educational Rights and Privacy Act (FERPA). Retrieved from http://www2.ed.gov/policy/gen/guid/fpco/ferpa/in dex.html
- U.S. Department of Education. Institute of Education Sciences, National Center for Education Statistics (2015). *Digest of education statistics*. Retrieved from https://nces.ed.gov/programs/digest/d15/tables/dt 15_204.50.asp
- U.S. Department of Health and Human Services. (2015). Summary of the HIPPA privacy rule. Retrieved from https://www.hhs.gov/sites/default/files/privacysum mary.pdf?language=en
- U.S. Census Bureau. (2015). Median household income (in 2015 dollars), 2011-2015. Retrieved from http://www.census.gov/
- Vassar, M., & Holzmann, M. (2013). The retrospective chart review: Important methodological considerations. *Journal of Educational Evaluation for Health Professions*, 10, doi: 10.3352/jeehp.2013.10.12
- Viera, A. J., Garrett, J. M. (2005). Understanding interobserver agreement: The Kappa statistic. *Family Medicine*, 37(5), 360–363.
- Wagner, M., Kutash, K., Duchnowski, A. J., Epstein, M. H., & Sumi, W. C. (2005). The children we serve: A

national picture of the characteristics of students with emotional disturbances receiving special education. Journal of Emotional and Behavioral Disorders, 13(2), 79– 96. doi.org/10.1177/10634266050130020201

- Wery, J. J., & Cullinan, D. (2011). State definitions of emotional disturbance. Journal of Emotional and Behavioral Disorders, 21(1), 45-52. doi 10.1177/106 3426611418234
- Worster, A., & Haines, T. (2004). Advanced statistics: Understanding medical record reviews (MMR) studies. Academic Emergency Medicine, 11(2), 187-192. doi: 10.1111/j.1553-2712.2004.tb01433.x