

RESEARCH CONFERENCE 2020

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**A Content Analysis of Bessel van der Kolk's
Developmental Trauma Disorder (DTD)
Proposals**

**POSTER
PRESENTATION**

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Abstract

Bessel van der Kolk, M.D. is considered one of the foremost experts on **trauma in children**, especially traumatic life events that occur during critical and sensitive developmental periods during the lifespan.

Since the latest version of the American Psychiatric Association's *Diagnostic and Statistical Manual of Mental Disorders (DSM-5)* was published in 2013, **van der Kolk** has published a book and given hundreds of national and international presentations about this topic.

Many of his claims are **incorrect and misleading** to policymakers, researchers, and practitioners.

This poster presentation displays results from multiple *Pearson correlation coefficients* and *Cohen's d* for an **objective** representation of the data.

Problem

The construct validity and definition integrity of Dr. van der Kolk's developmental trauma disorder (DTD) have been challenged as not being grounded in a clear definition of the disorder.

Research, therefore, is needed to test and refine the operational definition of DTD features both as **embedded in and distinct from** other PTSD symptoms with , children, adolescents, and adults who have experienced severe childhood traumatization.

Research is needed to develop and validate unified definitions and assessments of childhood "*polyvictimization*" (ongoing trauma exposure) and cumulative traumatic exposure.

Purpose

To **expand** van der Kolk's DTD definitions beyond "literature reviews" by conducting a conceptual analysis and relational analysis to:

- Determine the word similarities and the differences between van der Kolk's **proposed 2005 DTD** and **his proposed 2009 DTD**.
- Determine the word similarities and the differences between van der Kolk's proposed **2009 DTD** and **DSM-5's PTSD**.

Significance

According to the *American Psychiatric Association* (APA), part of the problem is that “**reliable diagnoses** are essential for guiding treatment recommendations, identifying prevalence rates for mental health service planning, identifying patient groups for clinical and basic research, and documenting important public health information such as morbidity and mortality rates” (p. 5).

- The reliability of DTD has yet to be scientifically determined compared to PTSD.

This **summative content analysis** is the first and only study that systematically analyzed each word contained in van der Kolk’s (2005) and (2009) DTD proposals compared to the *DSM-5* (2013) to obtain their respective Pearson correlation coefficient and coefficient of determination.

Study outcomes can **inform** public health policymaking, human services application, and health care application for social workers, nurses, counselors, and educators.

Theory or Framework

Because **psychological distress** following exposure to a traumatic event is quite variable and the functional consequences of trauma are exhibited across social, interpersonal, developmental, educational, physical health, and occupational domains, use of a **conceptual framework** was necessary.

This study used Siegel's (2019) **Interpersonal Neurobiology (IPNB)** as the framework. Key tenants include the following:

- *The Brain-Mind-Relationship or Triangle of Well-being*
- *Attachment and Development*
 - Pretraumatic factors
 - Peritraumatic factors
 - Posttraumatic factors

IPNB consilience across wide range of disciplines leads to an **integrated framework defining the mind, mental health, and the strategies of intervention** to cultivate well-being.

Relevant Scholarship

Previous studies on the topic of DVD become a recognized psychiatric disorder are scant and methodologically limited/deficient.

- **Only one international study** has attempted to apply the proposed DTD criteria.
- The first field test to apply the proposed DTD criteria to **archival data** of a sample of children in the United States.



Conceptual overlaps exist and vital assessment protocols are absent for proposed DTD.

- Many symptoms of borderline personality disorder or attachment disorder [with disinhibition] are included in the list of DTD symptoms, thus **impeding the distinction** between these disorders.
- Because the proposed DTD criteria represent a new diagnostic entity, **screening mechanisms and standardized measures** are absent.



Research Question

What are **the similarities and the differences** between Bessel van der Kolk's proposed Developmental Trauma Disorder (DTD) and the American Psychiatric Association's Posttraumatic Stress Disorder (PTSD)?

Data Sources

Definitions contained in **van der Kolk's (2005) and (2009) DTD proposals**.

Definitions for PTSD (for adolescents and adults) and the definition of PTSD (pediatric type) contained in **American Psychiatric Association's (2013) 5th edition of the *Diagnostic and Statistical Manual of Mental Disorders***.

Procedures

3 published written documents containing text restricted to diagnostic criteria for DTD (2005 & 2009) and PTSD (2013) were imported into *NVivo*.

The data were then prepared to conduct a Word Frequency Query by setting the variables:

- Word similarity search minimum length to "1"
- Results to "word", "length", "count" and "weighted percentage (%)"

Analysis

Used *NVivo* to

- conduct **word frequency** queries.
- conduct **Pearson correlation coefficients** (r).
- produce **tree diagram** to visual the "similarity space" each document.

Used *Microsoft Excel* used to calculate **coefficient of determinations** (r^2 or Cohen's D).

Findings

Data analysis indicted the following:

- PTSD definition (for the distinctive use with *pediatric* populations compared to the use with *adolescent and adult* populations) in the DSM-5 has a **consistently strong word similarity**.
- van der Kolk’s (2009) DTD definition **evolved significantly** from his 2005 DTD proposal that both documents have **zero-word similarity**. Essentially, they have nothing in common – at an objective statistical level.

Table 1

Correlation Coefficient and Coefficient of Determination Between DTD and PTSD

Trauma-Related Diagnosis Type		r	r ²	Strength
PTSD (DSM-5, 2013)	PTSD - Pediatric Subtype (DSM-5, 2013)	.93253	86.96%	Very strong (+)
PTSD - Pediatric Subtype (DSM-5, 2013)	DTD (van der Kolk, 2009)	.02802	0.08%	Very weak (+)
PTSD (DSM-5, 2013)	DTD (van der Kolk, 2009)	.01420	0.02%	Very weak (+)
DTD (van der Kolk, 2005)	DTD (van der Kolk, 2009)	-.00311	0.00%	None (0)
PTSD (DSM-5, 2013)	DTD (van der Kolk, 2005)	-.07690	0.59%	Very weak (-)
PTSD - Pediatric Subtype (DSM-5, 2013)	DTD (van der Kolk, 2005)	-.08925	0.80%	Very weak (-)

Note. Results are listed in descending order from the closest linear correlation to the most distant linear correlation. r = Pearson correlation coefficient. r² = coefficient of determination. Pearson correlation coefficient strengths are based on Evans (1996).

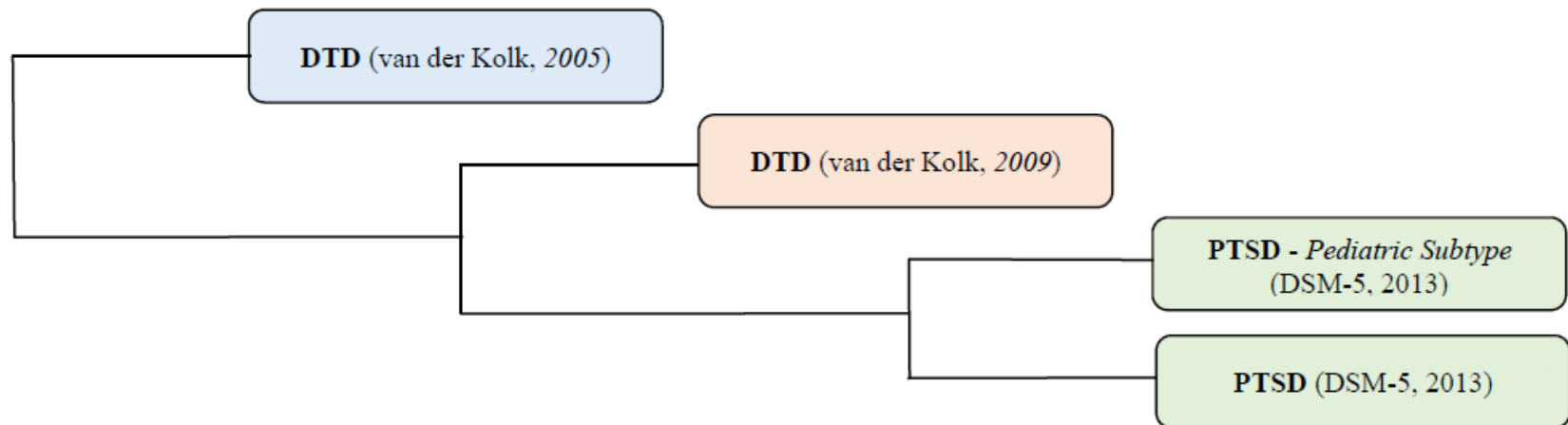
Findings

This tree diagram conveys the “space between” word similarity for all four documents analyzed. To use a “family genogram” analogy:

- The two PTSD types defined the DSM-5 are fraternal twins.”
- van der Kolk’s (2009) DTD definition is a “second cousin” to DSM-5’s definitions of PTSD.
- van Der Kolk’s (2005) DTD definition is an “adopted sibling” to his (2009) DTD definition.

Figure 1

Tree Diagram of Correlation Between DTD and PTSD



Note. Negative correlations (distinctiveness) begin on the left and progress to the right with corresponding positive correlations (similarities).

Interpretation

Results from this study indicated a Pearson correlation coefficient between van der Kolk's 2005 and 2009 DTD proposals to be **-0.00311**, with a coefficient of determination to be **0.00%**. These findings underscore a **significant internal validity deficient** and the **absence of a clear and concise** description of this proposed new mental disorder organized by explicit diagnostic criteria.

Findings of this study **validate** the APA's decision seven years prior to **reject** disorders with **low clinical utility and weak** diagnostic **reliability** or **validity**.

The "very weak" similarity between van der Kolk's (2009) DTD to *DSM-5's* PTSD indicates **conceptual uncertainty** from scientifically validated trauma-related disorders.

This study's results **align** with Schmid et al. (2013), Bishop (2014), and Ford (2015).

Limitations

van der Kolk's (2009) proposed DTD required **disruptions of protective caregiving during childhood** as causal events. This study did not contrast this diagnostic criteria to other *DSM-5* trauma-related disorders that also require the **absence of adequate caregiving during childhood**, such as reactive attachment disorder and disinhibited social engagement disorder.

Potential **threats to trustworthiness** include the following:

- This study did not use **conventional** content analysis to derive coding categories directly from the text data.
- This study did not use **directed** content analysis by starting with a theory or relevant research findings as guidance for initial codes.

Recommendations

Findings from this study could be expanded to investigate the **convergent and discriminant** validity and **incremental** validity of DTD compared to PTSD.

More research is needed to further refine and validate the **DTD construct**, along with associated reliable and valid **assessment measures**.

Future studies could investigate the **age of onset** of DTD compared to PTSD to better inform the nature and timing of interventions.

Use **attachment theory** to explore the relationship between developmental trauma, episodic trauma, and borderline personality disorder.

Conduct a **longitudinal study** to examine the distinctiveness of DTD to PTSD - **Pediatric Subtype** (children 6 years and younger).

Social Change Implications

Interested parties can advocate at individual, group, institutional, and societal levels to address scientifically unsound misdiagnoses practices that cause harm to the client or others.

- To do so effectively, the various disciplines of mental health must **strengthen their partnerships** with the disciplines of public health, community and behavioral health science, and health economics.
- To prepare for the next 50 years, results from this study can **inspire** strategically guided research about childhood traumatic events and future scholars of social change can develop **public health policy** to ensure the proper identification and treatment of children traumatized by the **social inequities** of physical abuse, caregiver neglect, sexual violence (trafficking/commercialized exploitation), kidnapping, and emotional abuse.

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