

IMPACT OF TRAUMA ON A CHILD ARTISTIC DEVELOPMENT THROUGH THE LENS OF BEHAVIOURISM

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ABSTRACT

This case study examines the long-term effects of trauma on a 10-year-old male subject whose father passed away. The intend to evaluate the transformations in his artistic and creative expressions by examining the observable data, such as drawings and writings by the subject following the traumatic event. For a comprehensive understanding of observed actions, the study focuses on the theories of behaviorism in adolescents provided by Ivan Pavlov, John B. Watson, and B. F. Skinner. This case study investigates the long-term psychological and behavioral effects of trauma on a 10-year-old male subject following the death of his father. By systematically analyzing the subject's artistic and creative outputs—including drawings, writings, and other expressive works—documented over a sustained period after the traumatic event, this research aims to identify and characterize shifts in emotional expression, cognitive processing, and behavioral responses. The study situates these observations within the framework of behaviorism theories in adolescents, drawing specifically on the foundational work of Ivan Pavlov, John B. Watson, and B. F. Skinner to interpret conditioned responses, learned behaviors, and reinforcement mechanisms influencing the subject's development. Through this multidisciplinary approach, the research delineates how trauma manifests in creative expression, highlighting patterns of avoidance, anxiety, or resilience reflected in the child's work. The findings enhance the understanding of trauma's pervasive psychological impact on children's emotional well-being and cognitive development. The intend to evaluate the transformations in his artistic and creative expressions by examining the observable data, such as drawings and writings by the subject following the traumatic event. For a comprehensive understanding of observed actions, the study focuses on the theories of behaviorism in adolescents provided by Ivan Pavlov, John B. Watson, and B. F. Skinner. The findings of this research contribute to understanding of the psychological impact of trauma on children, provide insights into the subject's emotional and cognitive reactions, and offer prospective routes for therapeutic intervention. Furthermore, it provide valuable insights into potential pathways for targeted therapeutic interventions designed to support recovery and promote adaptive coping strategies in young trauma survivors. This study ultimately contributes to clinical knowledge by integrating behavioral theory with artistic expression analysis, offering a robust basis for future psychological and counseling practices focused on childhood trauma recovery. The findings of this research contribute to understanding of the psychological impact of trauma on children, provide insights into the subject's emotional and cognitive reactions, and offer prospective routes for therapeutic intervention.

INTRODUCTION

Background of the Subject:

Traumatic events can greatly influence people, especially children who may lack essential coping abilities. The death of a parent is an extremely stressful occurrence that has long-term effects on a child's psychological well-being. This study focuses on a 10-year-old male subject who witnessed his father's death two years before this study. Examination of the changes in his drawings and creative writing within the two-year time span, which serve as an outlet for his emotional state indicating the possibility of psychological effects of the trauma. An analysis of the subject's before and after drawings has been conducted to further comprehend his creative metamorphosis following the traumatic event.

Objectives:

This case study intends to investigate the influence of trauma on the subject's drawings and creative writing by analyzing observable data. The aim is to acquire a greater understanding of the observed behaviors and derive relevant conclusions by applying the theories of behaviorism in adolescents formulated by Ivan Pavlov, John B. Watson, and B. F. Skinner.

The objectives of this case study are to:

Examine how trauma affects the frequency, themes, and styles in the subject's drawings and creative writing through systematic observation and documentation. Identify specific behavioral patterns, such as repetitive actions or emotional expressions, within the subject's creative outputs that can be linked to traumatic experiences.

Analyze the subject's observable responses and behaviors using behaviorist principles, including classical conditioning (Pavlov), stimulus-response relationships (Watson), and operant conditioning (Skinner), to explain changes in creative expression.

Determine how environmental stimuli and reinforcement mechanisms influence the subject's drawing and writing habits post-trauma. Explore the role of behavior modification techniques in potentially shaping or altering the

subject's creative behaviors as a coping or adaptive mechanism. Synthesize findings to develop a comprehensive understanding of trauma's impact on adolescent creativity from a behaviorist theoretical perspective.

Formulate recommendations for therapeutic or educational interventions that utilize behaviorist approaches to support trauma-affected adolescents in their creative development.

THEORETICAL FRAMEWORK

Behaviorism in Adolescents:

Behaviorist theory is a psychological approach that focuses on observable behaviors and emphasizes the impact of external factors on human actions. It states that the environment affects behavior through conditioning (Brown 1928). Behaviorism provides insights into how experiences

and external factors impact teenagers' responses and behaviors (Schneider & Morris, 1987). External stimuli and reinforcements induce observable actions, and individuals learn through association, repetition, and reward/punishment systems (Brown 1928). This would acquire insights into the subject's responses to trauma as an external factor and discover potential transformation in his creative output by using behaviorism concepts in case study mentioned below

Ivan Pavlov's Classical Conditioning:

According to Ivan Pavlov's classical conditioning theory, actions may be taught through the association of stimuli (Brown 1928). Pavlov's experiments with dogs demonstrated that previously neutral stimuli could elicit conditioned responses through repeated pairings with a naturally occurring stimulus. In his experiments, the ringing of the bell made the dogs salivate, serving as a stimulus for the following meal routine. By applying this model to this case, the traumatic experience serves as an external stimulus that contributes to changes in his psychological behavior which profoundly transformed the subject in his artistic journey.

John B. Watson's Behaviorist Manifesto:

An important figure in behaviorism, John B. Watson, prioritized the study of observable behaviors above subjective mental processes. His behaviorist manifesto advocated the notion that human behavior is influenced by external circumstances and molded through conditioning (Schneider & Morris, 1987). This theory will also be situated upon the study at hand.

B. F. Skinner's Operant Conditioning:

B. F. Skinner developed behaviorism with his Operant Conditioning theory. Skinner proposed that behaviors are influenced by the consequences of certain actions, with positive consequences reinforcing behaviors and negative consequences reducing their occurrence. Furthermore, Skinner did not believe in mental events such as "being sad," "being angry," and so on. He desired an objective and quantifiable method of studying behavior (Skinner 1954). He stated that nothing internal influences how a behavior matures and changes; a person's mental concepts are transformed into behavioral phrases.

METHODOLOGY

This case study focuses on a 10-year-old male participant who had recently lost his father. The subject's guardians provided informed consent as well as the data needed for the purpose of this study. Ethical concerns were addressed throughout the study. Pre- and post-trauma drawings and creative writing activities by the subject were used to collect data. The subject was instructed to draw and write in school and domestic activities. Themes, substance, emotional expression, and artistic style modifications were examined in pre- and post-trauma drawings and creative writing samples to analyze the artistic development through the models provided within the theoretical framework. The traumatic event was used as an external stimulus for the subject's transformation.

The methodology of this case study involved a

detailed, ethically grounded process focusing on a

10-year-old male participant who recently experienced the trauma of losing his father.

The following steps were undertaken:

Ethical Considerations and Consent: Prior to data collection, informed consent was obtained from the subject's guardians. Throughout the study, confidentiality and the subject's psychological safety were prioritized, with procedures adapted to minimize distress.

Participant Selection: The subject was selected based on the recency of the traumatic event and the availability of pre-trauma creative work, ensuring a clear comparative framework.

Data Collection Instruments: Data comprised two primary sources: drawings and creative writing samples. These included works produced by the subject both before and after the traumatic event to provide a longitudinal perspective.

Task Design and Setting: The subject was given standardized instructions to engage in drawing and written expression centered on familiar contexts—specifically, school and domestic activities. These tasks were performed in controlled yet naturalistic environments such as the subject's home and school settings to capture authentic creative responses.

Data Recording Timeline: Pre-trauma samples were gathered retrospectively from archived school and home work, while post-trauma samples were collected over a designated period following the father's death, facilitating temporal comparison.

Analytical Framework: The collected drawings and writings were systematically analyzed for modifications in thematic content, substance, emotional expressiveness (e.g., use of colors, tone, imagery), and artistic style (e.g., line quality, composition). This analysis was conducted to observe developmental changes correlated with trauma.

Theoretical Application: The traumatic event was conceptualized as an external stimulus triggering behavioral and creative transformations. These transformations were analyzed using behaviorist theories, with particular focus on stimulus-

response patterns and conditioning mechanisms

as outlined by Pavlov, Watson, and Skinner. Data Interpretation Procedures: Qualitative content analysis techniques were used to code and categorize observed changes. Triangulation was applied by comparing drawing and writing outputs across time and context, enhancing the validity of observed patterns.

This methodology ensured a rigorous exploration of trauma-induced changes in the subject's creative behaviors, grounded in ethical research practice and behaviorist theoretical models.

DATA ANALYSIS

Pre-Trauma Drawings:

Prior to the tragic experience, the subject's drawings displayed a wide range of subjects and emotions. His drawings displayed vibrant colors, a wide range of subject matter appropriate to his age, and a balance between positive and negative emotions. The content was mainly cheerful, featuring images of family, friends, animals, landscapes, and favorite pastimes. The drawings displayed a consistent creative style at an age-appropriate ability level.



Fig 1. Subject's drawing was from approximately a year ago before the traumatic event. He has used colorful highlighters for this particular piece to depict a human child figure with a bird in a landscape. The overall effect of the drawing suggests joy and comfort.



Fig 2. A pre-trauma colorful drawing showcasing typical content for a child's artwork. The subject has reimagined a day at the beach which features sea animals and foliage.

Post-Trauma Drawings:

The use of vibrant color is quite obvious in these drawings but the theme has become more somber than ever. The subject focuses on singular figures who seem to be in agony. The black marker is used to depict blood instead of a red pencil. The weapons have been introduced to suggest a utility for the cause of pain and violence.

Following the traumatic event, the subject's drawings underwent significant changes. The previously vibrant colors became muted, and predominant darker themes of violence, fear, and blood emerged. The artistic style became more abstract, with distorted figures and somber colors dominating the drawings.

The following drawings are in chronological order from the time of his father's death to the recent period. The purpose of maintaining this order was to show his gradual development as an artist after the traumatic event.



Fig 3. Subject's drawing after a few months after his father's death. There is a visible drastic shift in the themes as well in the medium. Previously adorned vibrant and colorful technique is now renounced and has been replaced by dark lead pencil. The shading and marking have also become forceful.

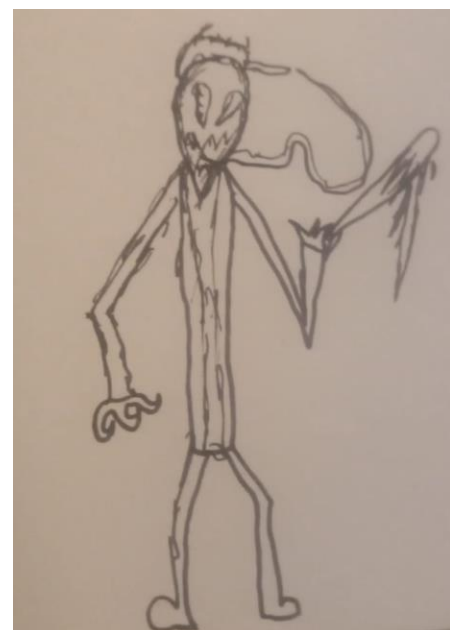
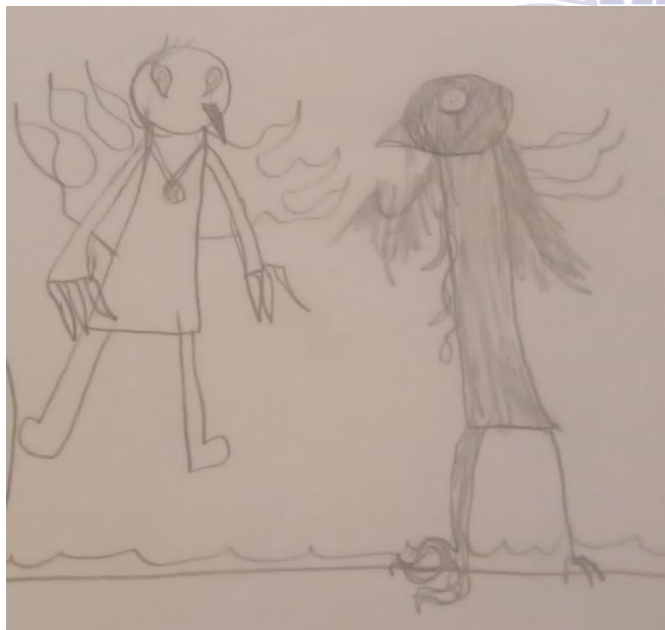


Fig 4 (left) and Fig 5 (right). The subject's main focus has now shifted to abstract figures rather than landscapes. The figures seem to be a hybrid form of human and animal.

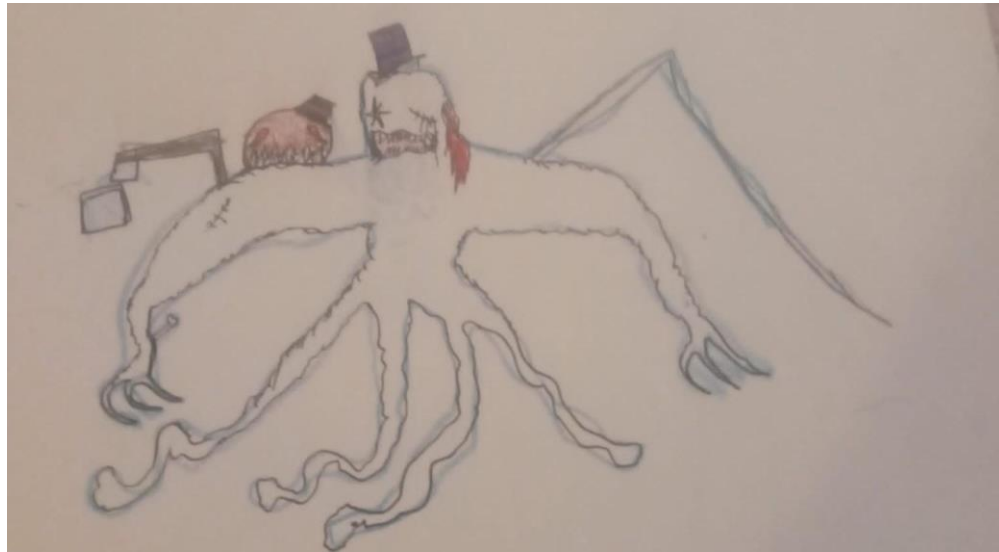


Fig 6. The subject has minimally used colored pencils, mainly to depict blood and the shadow of the



Fig 7. The subject has used red color to depict themes of anger, violence, and punishment in this drawing. The subject matter is becoming darker than the previous drawings. figure.



Fig 8. The foliage and color have made a comeback in the subject's drawings but the content still revolves around blood and horror. The child has seem to depict a kind of cannibal plant in this particular piece.



Fig 9 and 10. This is the subject's most recent drawing.

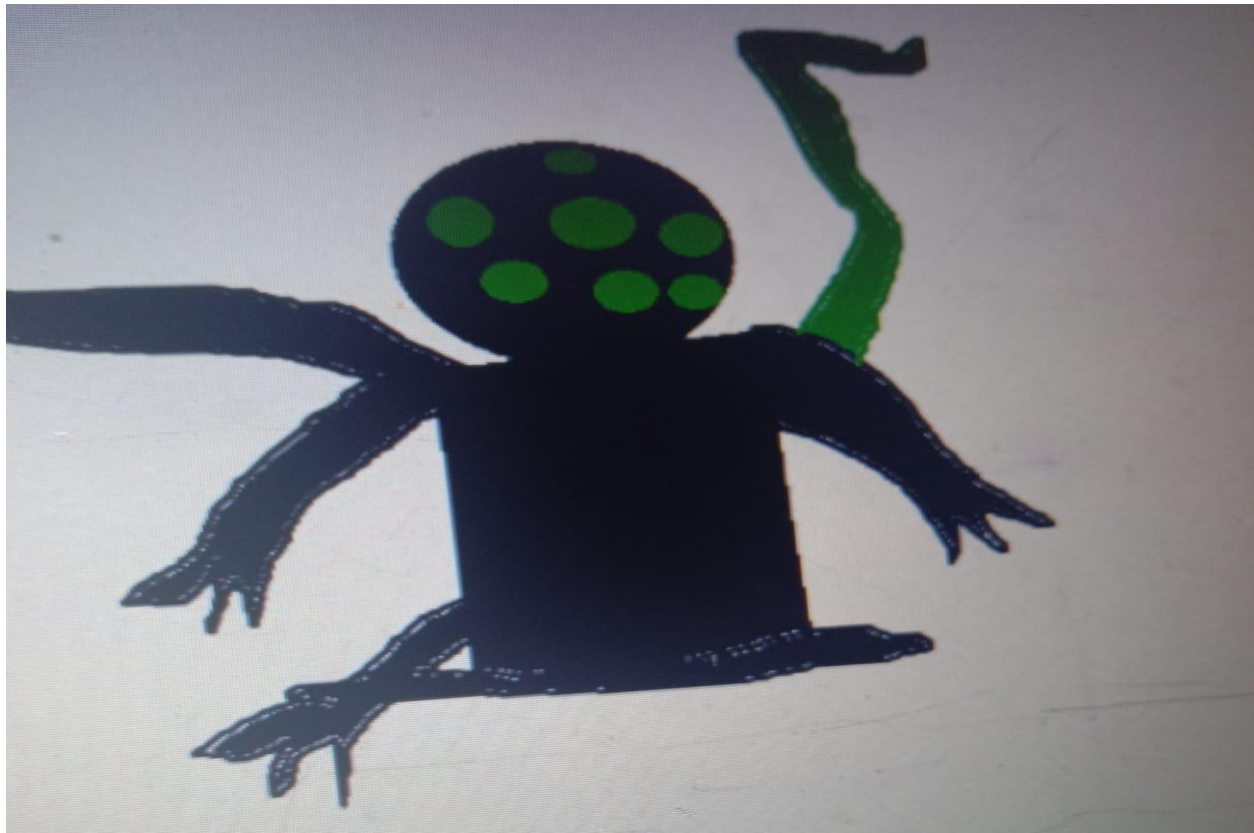


Fig 11. The color black is completely dominant in this drawing. Themes of fear regarding Trypophobia are also evident here.

Post-Trauma Creative Writing:

The subject's artistic development was accompanied by a creative writing practice that showed similar contents of his drawings, and reflective narratives that explored themes of brutality and horror. The writings seem to be door never had been locked up in a endless torture

verbal descriptions of his drawings. Two excerpts from the subject's writings are cited as follows: "back in a room with endless torture never had escape a place that is covered and a room with a person's hand a zombie which wires I shut the

lights are off am I gone is this gonna be the end and I will break to get out w endless torture of death.”

“I woke up and I saw a jack on the floor covered with black ink the man ran in shock but alzi ate his head off and a a giant invader started chasing me I ran to the power room and I saw a giant whith one big eye his name was eyelin he was furious his eye shot blood from it I broke into the power room for 23 - 30 years old kids I shut the power off and it was dark I turned on my flashlight and then I saw a different kind of jack he was gonna bite me the door closed but the clock rang 6am and jeck and his army stopped and the door opened so I ran but jack was still bleeding ink but his eye moved so I ran upstairs to raid care and a spider took me in the game the spider took

me out when I beat his game and game a key I unlocked the door avoiding jack and knocked out duocara and left”

The modifications seen in the subject's drawings and creative writing strongly show that the traumatic incident had a substantial influence on his emotional state and creative expression. The move toward darker topics and the usage of abstract symbolism might be seen as an expression of personal turmoil.

DISCUSSION AND CONCLUSION

The subject's response to trauma may be examined via the lens of classical and operant conditioning, according to behaviorists. The subject's creative transformations in drawings and creative writing may be conditioned responses to the stress and accompanying stimuli. His father's death acted as an unconditioned stimulus (US), eliciting a naturally unpleasant emotional reaction (unconditioned response - UR). The subject's drawings and creative writing were connected with the trauma over time, resulting in conditioned reactions (CR) marked by sadness, isolation, and loss.

Moreover, theoretical models of operant conditioning can assist explain changes in the subject's creative expressions. Following the

horrific experience, the subject's drawings and creative writing may have served as a negative reinforcement outlet for his feelings. Expressing grief and despair through this medium brought brief comfort from the trauma's overpowering feelings.

Anyhow, Watson's behavior modification concepts give insight into prospective intervention options. The subject's artistic expression can be guided towards healthy topics and emotions by progressively reinforcing positive emotions, stimulating creative inquiry, and offering support. Positive reinforcement and rewards can assist mold his artistic expressions in a more adaptable way.

The findings emphasize the significance of identifying the psychological impacts of trauma on creative development. Further research should explore the long-term effects of trauma on children's artistic and creative expressions. Interventions can be customized to reinforce desirable behaviors and improve emotional well-being using behaviorist concepts.

The conclusions drawn from the analysis of the subject's drawings indicate significant changes in emotional expression and cognitive processing resulting from the trauma of losing his father. The drawings reveal phases of heightened anxiety, fear, and sadness, characterized by darker colors, fragmented imagery, and symbolic representations of loss and absence. Over time, some drawings also show emerging signs of coping and resilience, such as increased use of lighter tones and more structured, coherent compositions. These patterns align with behaviorist theories, suggesting that the subject's creative expressions reflect conditioned emotional responses and learned behaviors shaped by his environment and experiences. The findings support the idea that artistic output can serve as a valuable diagnostic tool to observe internal states and behavioral adaptations in traumatized children. Ultimately, the study's conclusions emphasize the importance of incorporating creative therapeutic interventions to address emotional distress and foster adaptive behavioral learning in young trauma survivors.

REFERENCES:

- Brown, W. E., Jr. (1928). Conditioned Reflexes. By I. P. Pavlov. Translated and edited by G. V. Anrep M.D., D.Sc., (Oxford University Press: Humphrey Milford). *Philosophy*, 3(11), 380-383. <https://doi.org/10.1017/s0031819100028242>
- Schneider, S. C., & Morris, E. (1987). A History of the Term Radical Behaviorism: From Watson to Skinner. *Behavior Analyst*, 10(1), 27-39. <https://doi.org/10.1007/bf03392404>
- Skinner, B. F. Science and human behavior. New York: The Macmillan Company, 1953. 461 P. (1954). *Science Education*, 38(5), 436. <https://doi.org/10.1002/sce.37303805120>
- Boone, T., Reilly, A. M., & Sashkin, M. (1977). SOCIAL LEARNING THEORY Albert Bandura Englewood Cliffs, N.J.: Prentice-Hall, 1977. 247 pp., paperbound. *Group & Organization Studies*, 2(3), 384-385. <https://doi.org/10.1177/105960117700200317>

