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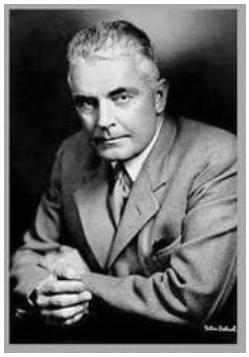
The Sad Tale of Little Albert

New Evidence Suggests Little Albert Was Neurologically Impaired

By Kendra Cherry

Anyone who has ever taken an introductory course in psychology is probably familiar with the Little Albert experiment[1]. In the famous experiment conducted in the 1920s by behaviorist John B. Watson[2] and Rosalie Rayner, an infant was exposed to a white rat to which he initially exhibited no fear. The researchers then presented the rat accompanied by a loud clanging noise. After repeated pairings, the child began to cry when the rat alone was presented. This fear was even generalized to objects that resembled the rat such as fluffy white toys.



John B. Watson. New evidence suggests he knowingly misrepresented his famous Little Albert experiment.

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As the story goes, the experiment ended and Little Albert and his mother moved before the boy was ever de-conditioned. What ever happened to the boy? Did his fear of white, furry objects remain for the rest of his life? Was there a grown man out there somewhere suffering from an unexplained terror of white rats, bunnies and stuffed animals? Many wondered about the answers to these questions for decades, but in 2009 a seven-year investigation by researchers finally shed some light on one of psychology's great mysteries.

Finding Little Albert

In 2009, psychologist Hall P. Beck and colleagues published the results of their efforts to solve the mystery of the boy's true identity. In an article that appeared in *American Psychologist*, Beck along with Gary Irons and Sharman Levinson presented compelling evidence that Little Albert was actually a little boy named Douglas Merritte. The boy was the son of wet-nurse Arvilla Merritte who was employed at the pediatric hospital at John Hopkins University where Watson also worked.

Sadly, the researchers discovered that the child had died at age six of hydrocephalus[3]. This medical condition, also known as "water on the brain," happens when there is a buildup of fluid inside the skull which can lead to convulsions, enlargement of the head and mental disability.

With the discovery of Little Albert's true identity and tragic fate, it seemed that questions about the boy had finally been put to rest.

But that's not the end of the story.

New Questions

In a paper titled "Little Albert: A Neurologically Impaired Child" published in the journal *History of Psychology*, researchers conclude that Little Albert was not the "normal" and "healthy" child that Watson presented him as in his experiment. "Albert's life was normal: he was healthy from birth and one of the best developed youngsters ever brought to the hospital," Watson and Rayner wrote in their original paper. Instead, the authors present evidence suggesting that Douglas Merritte likely suffered from a cognitive impairment, which means that the child's reactions in the experiment could hardly be thought of as universal.

After reading Beck's 2009 paper revealing Little Albert's identity, psychologist Alan J. Fridlund of the University of California at Santa Barbara was struck by a particular detail. According to the story, Merritte contracted meningitis in 1922, which eventually led to his death from hydrocephalus in 1925. Fridlund found this at the very least suspicious; if the child had suffered from a case of meningitis so severe that it caused hydrocephalus, it was unlikely he would have survived that long. "Speculation that Douglas developed hydrocephalus … was conceivable but implausible," Fridlund explained. "It required Douglas to have been infected with a strain of meningitis sufficiently virulent to cause hydrocephalus, yet mild enough for him to survive for 3 years in a time before antibiotics or antivirals."

Watson and Rayner conducted their experiment in 1920 and Merritte's doctor reported that the boy had contracted meningitis in 1922. While he had no evidence to contradict Watson's claim that the boy was healthy at the time of the experiment, Beck was not fully convinced. Film that Watson made of the experiment showed an unresponsive infant that reminded Beck of mentally challenged children he had worked with in the past.

It turns out Beck wasn't the only one questioning the story. Gary Irons, Douglas Merritte's uncle and closest living relative, learned from his mother that Douglas had "always had problems," suggesting that the boy was not the healthy and normal child Watson claimed. Shortly after, Fridlund contacted Beck with his suspicions that led to the collaboration and further evaluation of the Little Albert mystery.

Whether or not Douglas Merritte was the normal and healthy infant Watson and Rayner claimed him to be is crucial. If he was not, it not only indicates that the child was not a suitable participant, but calls into question the results of Watson's original study.

The Evidence

In addition to Fridlund's observations about the unlikelihood that the child could have survived three entire years, Beck's suspicions about the boy's behavior evidenced by Watson's video and reports from Merritte's family members that Douglas had experienced problems since birth, researchers were also able to find further sources that backed up their suppositions.

Watson's own words provided some clues. In 1930, he described the infant as a "wonderfully good baby. In all the months we worked with him we never saw him cry until after our experiments were made!" Obviously, all babies have different temperaments, but reports of an unemotional infant who rarely cried coupled with the fact that he died in early childhood of hydrocephalus raise major red flags.

The researchers further reviewed video of the child, and noted that "Albert" exhibited numerous signs that might indicate neurological impairment including slow reaction times, delayed language development[4] and an absence of social smiling normally exhibited by children of that age.

The researchers than asked William D. Goldie, a Clinical Associate Professor in the Departments of Neurology at the University of California, Los Angeles (UCLA) and the University of Southern California, to view the tape. Initially unaware that he was watching footage of Little Albert, Goldie provided analysis on the child's behaviors noting the infant's lack of curiosity and awareness of those around him. After he was informed that the child was Little Albert and that he later died of hydrocephalus, Goldie suggested that the child was indeed suffering from some type of neurological impairment at the time the video was made.

Irons was able to provide even more evidence. Fridlund learned from Irons that despite living until age six, Douglas was never able to walk or talk. Eventually, the researchers were able to access the boy's medical records. While the boy's birth was described as "normal," the child was readmitted to the hospital at six weeks of age. His records noted protruding eyes, a staring expression and hyperactive reflexes among other symptoms. After testing, the boy was diagnosed with congenital hydrocephalus. The child did also contract meningitis in 1919, most likely during procedures performed by the hospital.

Finally, researchers had definitive evidence that Douglas Merritte's hydrocephalus had been present since birth.

Explanations

Was Watson aware that the child was anything other than the normal, healthy boy described in the original paper? If he was aware, why would he select a cognitively impaired child for his experiment?

"At first glance, a "normal" baby would be the logical choice," Beck and Fridlund write. "Presumably, a more cognitively developed child would be easier to condition and the results would have greater generality. According to Watson and Rayner, Albert was chosen because he was "stolid and unemotional" and would experience "relatively little harm" from the fear induction procedure. If we accept the investigators' rationale, a concern for children prompted them to select such an impassive baby."

While it is possible that Watson selected Merritte out of a desire to cause the least possible harm, the authors also point out another, much darker possibility. Because of Arvilla's position as a wet-nurse, she may have felt pressured and obligated to allow her child to take part in the study. Forced into a position where she was dependent upon the university as her source of income, housing and health care for her child, she likely felt she had no other choice.

The evidence against Watson seems damning, but the researchers do note out that at no point is he mentioned in Merritte's medical records. While there is no way to conclusively prove that Watson knew he was conditioning fear in a neurologically impaired child, Fridlund and Beck argue that the circumstantial evidence strongly suggests that he did.

So where does this leave us? What are we to think of Watson and his experiment? By today's standards, the Little Albert experiment was both cruel and highly unethical[5]. Such an experiment could never take place today even with a healthy child, let alone a child as vulnerable as Merritte.

While such experiments would never be allowed today, Watson lived in a time when it was not uncommon for the mentally challenged to be subjected to unethical, invasive and dangerous medical experiments. Watson went so far as to defend his actions, suggesting that the ends justified the means. "You may think that such experiments are cruel, but they are not cruel if they help us to understand the fear life [sic] of the millions of people around us and give us practical help in bringing up our children more nearly free from fears than we ourselves have been brought up," he wrote. "They will be worth all they cost if through them we can find a method which will help us remove fear."

While Watson's goal might have been to find a way to remove fear, the fact is that if Fridlund and Beck are right about Merritte, it means that Watson intentionally misrepresented his experiment.

In concluding their article, the authors write:

> "Douglas Merritte died 5 years after the Watson and Rayner (1920) study, one of thousands of anonymous "experimental children" whom science and the law failed to protect. John B. Watson, however, gifted Douglas with immortality. He made Douglas psychology's legendary "lost boy." Advertising himself as an expert on child development, Watson developed the cover story that Douglas/Albert was "healthy" and "normal," and used the "Little Albert" study as one of the bases for the best-selling *Psychological Care of the Infant and Child* (1928), which preached regimentation and stoicism over spontaneity and nurturance, and profoundly influenced the ways of child rearing for generations to come."

So what does this discovery mean for Watson's legacy? I asked Dr. Fridlund for his thoughts, to which he responded:

> "My take is that the psychology field's attitude toward Watson has always been deeply ambivalent, in part because his evangelism for, and overselling of Behaviorism aroused such fierce antagonism, and because his affair with Rayner and forced resignation from Johns Hopkins was so tawdry and embarrassing for the times.
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> As to how this changes the perspective on Watson & Rayner (1920) itself, the Little Albert study was always controversial because of the ethics of fear-conditioning a child. These new findings, however, bring up issues of the widespread use of children in medical experimentation, the medical misogyny in wet nursing, the protection of the disabled, and by representing Little Albert as "healthy" and "normal," the nearly inescapable conclusion that the investigators committed scientific fraud."

More Classic Psychology Studies

- Harlow's Social Isolation Experiments[6]
- The Milgram Obedience Experiment[7]

- Bandura's Bobo Doll Experiment[8]

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