On May 7, 1965, an extraordinary photo essay titled “Screams, Slaps, and Love” appeared in the pages of Life magazine. It portrayed the lives of 4 “utterly withdrawn children whose minds are sealed against all human contact and whose uncontrolled madness had turned their homes into hells.” Their diagnosis was “childhood schizophrenia,” the term applied at the time to the condition we know as autism. Two were nonverbal, 2 others had no language other than endlessly repeating television commercial jingles, and all 4 exhibited very disruptive behaviors such as head-banging to the point of bruising.

The article’s focus was on a novel treatment that had recently been developed for autism at the University of California at Los Angeles (UCLA). In an age when psychoanalytic ideas dominated therapy for autism in the United States, this new intervention was grounded in behaviorism. The therapists in the photo essay were depicted using rewards and punishments to change the children’s behavior. Mimicking speech led to food and hugs; uncooperative behavior was met with scolding and stern shaking. The essay’s most disturbing image showed a therapist administering an electric shock to one recalcitrant child (Fig 1).

Yet for many of the article’s original readers, its message was one of hope. The climax of the essay was a dramatic image depicting a mother’s joy after her son hugged another child for the first time. In hindsight, the article marked one of the earliest appearances of applied behavior analysis (ABA) in popular culture, one of the cornerstone therapies used for children with autism today. Far from alienating parents, it provided hope for children with extreme behavior problems and played a critical role in galvanizing the rise of the Autism Society of America. Yet it pointed forward to the controversies that would continue to beset ABA for the remainder of the century as well.

When the UCLA studies were conducted, parents of children with autism had little support and even fewer options. Psychiatrist Leo Kanner had described the syndrome for the first time only 2 decades earlier. By the 1950s, child psychiatrists had developed an elaborate psychodynamic explanation for the condition, regarding it as an analog to the emotional withdrawal seen
in abused and institutionalized children.\textsuperscript{4} Bruno Bettelheim, an unconventionally trained psychoanalyst in Chicago, brought these ideas to a wide audience in his best-selling 1967 book \textit{The Empty Fortress}.	extsuperscript{5,6} It described his program at Chicago’s Orthogenic School that removed autistic children from their allegedly abusive families and provided an environment allowing complete expression of their “repressed” egos, to the point of spitting, defecating, and biting caregivers. Reviewers were moved by the dedication of Bettelheim and his staff, seemingly unaware of the message that was being foisted on so-called “refrigerator mothers.”\textsuperscript{7} In the end, Bettelheim’s data were shown to be deeply flawed, but not before they added even greater misery to the lives of mothers of children with autism.

The philosophy exemplified by ABA could hardly have been more different. Its roots were in behaviorism rather than psychoanalytic theory. Behaviorism began in the early 20th century and flourished with the work of B.F. Skinner and colleagues in the mid-20th century. From the ABA perspective, treating autism did not require understanding its etiology or parental dynamics. Instead, changing behavior was a matter of reward and punishment. ABA’s champion was outspoken UCLA psychologist Ivar Lovaas, whose matchless confidence was exemplified by his oft-quoted claim that had he treated Adolf Hitler as a young child he could have turned him into a nice person.\textsuperscript{8} Lovaas believed that he could effectively treat severe childhood problems such as aggression and self-injury without taking into account underlying etiology, through intensive positive and negative reinforcement of overt, external behavior. Although his UCLA studies were performed in an institutionalized population, he sought to educate parents to become agents of therapy.\textsuperscript{9,10} Perhaps predictably, ABAs most vocal critic was Bettelheim, who charged that Lovaas’s work reduced children to the “level of Pavlovian dogs”\textsuperscript{9(p410)} and “pliable robots.”\textsuperscript{5(p412)} Such arguments at first appealed to many in the educated public, who saw Bettelheim as exemplifying humanistic and progressive values. It was the parents of children with autism who were most victimized by his writing and who would eventually challenge his public authority.

As detailed by sociologist Gil Eyal and his colleagues, “Screams, Slaps, and Love” played an interesting role in this story.\textsuperscript{11} Not far away, Bernard Rimland, a Navy psychologist based in San Diego, ignited what would eventually become a widespread revolt against the psychogenic theory of autism. After recognizing that his own son had autism, Rimland researched and in 1964 published his own book challenging the “refrigerator mother” theory. \textit{Infantile Autism}.\textsuperscript{12} Parents wrote to Rimland requesting help for their children, but he quickly realized he had little to offer. After publication of the 1965 \textit{Life} magazine article, parents in-undated both Rimland and Lovaas with letters pleading for more services and effective interventions for their children with autism. As a result, Rimland met Lovaas and observed his work at UCLA. After trying the therapy on Rimland’s son and seeing progress, Rimland and Lovaas formed an alliance with a dynamic group of parent advocates. Out of this network emerged the National Society for Autistic Children, today’s Autism Society of America.\textsuperscript{13,14}

To be sure, the use of aversive techniques such as electric shock deeply divided the autism community for many years. Lawsuits charged that the use of shock was tantamount to psychological abuse that could leave lasting emotional trauma.\textsuperscript{15} Vocal critic C.D. Webster portrayed shock therapy as an abuse of power by mental health professionals in institutional settings that should no longer be tolerated.\textsuperscript{16} Interestingly, few questioned the efficacy of aversive therapy, and many parents came to its defense as the only intervention that made their families’ lives tolerable. Eventually the rise of effective positive alternatives gave ABA advocates confidence that positive reinforcement alone could still be effective.\textsuperscript{17,18}

Perhaps its greatest legacy was the establishment of parent and patient advocacy groups that have continued to shape autism today.

\section*{REFERENCES}


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