



# Pokémon Contagion: Photosensitive Epilepsy or Mass Psychogenic Illness?

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**ABSTRACT:** We studied a reported illness outbreak occurring on December 16, 1997, involving more than 12,000 Japanese children who had various signs and symptoms of illness after watching an episode of a popular animated cartoon, Pokémon. While photosensitive epilepsy was diagnosed in a minuscule fraction of those affected, this explanation cannot account for the breadth and pattern of the events. The characteristic features of the episode are consistent with the diagnosis of epidemic hysteria, triggered by sudden anxiety after dramatic mass media reports describing a relatively small number of genuine photosensitive-epilepsy seizures. The importance of the mass media in precipitating outbreaks of mass psychogenic illness is discussed.

*The new electronic independence recreates the world in the image of a global village.*

Marshall McLuhan<sup>1</sup>

THE WORD Pokémon is a shortening of the term “pocket monsters,” from the original Japanese name *Poketto Monsuta*. It was created as a video game for the hand-held Nintendo Game Boy system. Pokémon creator Satoshi Tajiri introduced the game in 1996, and within a few months it became a best-seller. After this success, Nintendo created a television cartoon version of the game. Animated by Shogakukan Productions and directed by Hidaka Masamitsu, it debuted in Japan on April 1, 1997.

Sales of Pokémon products generate more than \$1 billion annually for Nintendo, from such items as video games and tapes, comic and coloring books, Internet sites, magazines, clubs, music CDs, trading cards, and several feature films.<sup>2</sup> Pokémon has become a recognizable global icon that is so popular in the United States that *Time* magazine featured it on the cover of its November 22, 1999, edition. The animated television series airs in the United States on the Warner Brothers Network and attains consistently high ratings.<sup>2</sup>

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The television cartoon centers on young boys and girls who wander the world of Pokémon looking for small creatures (called Pokémon) to capture, befriend, and train for battle against other trainers (and their Pokémon) in the Pokémon League. The ultimate goal is for the children to collect one of every “species” and become Pokémon Masters. There are at least 151 Pokémon characters, each with unique powers and individual personalities. The most popular character, Pikachu, resembles a yellow rat and has the ability to shock opponents with electricity.

## EPISODE 38

At 6:30 PM on Tuesday, December 16, 1997, Pokémon episode 38, entitled “*Dennou Senshi Polygon*,” meaning “Computer Warrior Polygon,” aired in Japan on TV Tokyo. The program was popular at the time of its broadcast and held the highest ratings for its time slot, with an average market share of about 15%.<sup>3</sup> In the episode, Pikachu and its human friends Satoshi, Kasumi, and Takeshi have an adventure that leads them inside a computer. About 20 minutes into the program, the group encounters a fighter named Polygon. A battle ensues, during which Pikachu uses its electric powers to stop a “virus bomb.” The animators depict Pikachu’s electric attack with a quick series of flashing lights.

In all, millions watched the program. In one city, Toyohashi, more than 70% of the 24,000