

This Week's Citation Classic

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Rosenthal R & Jacobson L. *Pygmalion in the classroom: teacher expectation and pupils' intellectual development*. New York: Holt, Rinehart & Winston, 1968. 240 p.
[Harvard Univ., Boston, MA and South San Francisco Unified Sch. District, San Francisco, CA]

This work summarized the evidence that expectations held by behavioral researchers for the responses of their research subjects could come to serve as self-fulfilling prophecies. In addition, the results of the first experiment to demonstrate that teachers' expectations could affect the actual intellectual performance of their pupils is reported. [The *Science Citation Index*[®] (*SCI*[®]) and the *Social Sciences Citation Index*[™] (*SSCI*[™]) indicate that this book has been cited over 700 times since 1968.]

Robert Rosenthal
Department of Psychology
and Social Relations
Harvard University
Cambridge, MA 02138

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"In 1963 I published a paper in the *American Scientist*, summarizing the evidence that experimenters' expectations might affect the responses obtained from their research subjects within the context of the psychological experiment.¹ I ended that paper by suggesting that the same type of self-fulfilling prophecy might operate in the classroom such that teachers' expectations for the intellectual performance of their pupils might actually affect those pupils' intellectual performance. Shortly after publication of this article I received a letter from a most unusual school principal, Lenore Jacobson. She wanted to know whether this suggestion (a) was part of the rhetoric of scientific writing (i.e., the 'suggestions for future research') or (b) was really going to get done. If it were to be the latter she knew of a school where the experiment could be conducted: hers.

"The results of our collaborative research were reported in this book and were greeted

by an awesomely bimodal response: you loved it or you hated it. There were good reasons to love it and bad reasons to love it. The chief good reason to love it was that it was a well-designed and well-conducted study on an important question. The chief bad reason to love it was that it implied to the environmental theorists (of the origins of IQ differences) that 'genes don't matter;' it implied no such thing, of course. There were good reasons to hate it and bad reasons to hate it. The chief good reason to hate it was that you didn't think of it first. The chief bad reason to hate it was that it implied to the genetic theorists (of the origins of IQ differences) that 'genes don't matter;' it implied no such thing, of course. There were also some wonderfully inept statistical critiques of the *Pygmalion* research. This got lots of publications for the critics of our research including one whole book aimed at devastating the *Pygmalion* results, which only showed that the results were even more significant than Lenore Jacobson and I had claimed.

"In recent years there have been many replications of the *Pygmalion* effect and even more replications of the more general finding of interpersonal self-fulfilling prophecies. Altogether, 345 studies have been conducted and they show beyond doubt that interpersonal self-fulfilling prophecies not only occur, but that their average size of effect is far from trivial.² More recent work on *Pygmalion* effects has also led to the development of a four factor theory of the mediation of teacher expectancy effects and the development of instruments to measure pupils' sensitivity to the nonverbal cues emitted by their teachers.^{3,4} The work goes on and it continues to be fun.

"This work may have been cited frequently because it addressed experimentally a question of both scientific importance and social relevance and because of the extreme praise and criticism it evoked."

1. Roacathal R. On the social psychology of the psychological experiment: the experimenter's hypothesis as unintended determinant of experimental results. *Amer. Sci.* 51:268-83, 1963.
2. Rosenthal R & Rabin D B. Interpersonal expectancy effects: the first 345 studies. *Behav. Brain Sci.* 1:377-86, 1978.
3. Rosenthal R. *On the social psychology of the self-fulfilling prophecy: further evidence for Pygmalion effects and their mediating mechanisms*. Module 53. New York: MSS Modular Publications, Inc., 1974. 28 p.
4. Rosenthal R, Hall J A, DiMatteo M R, Rogers P L & Archer D. *Sensitivity to nonverbal communication: the PONS test*. Baltimore: Johns Hopkins University Press, 1979. 432 p.