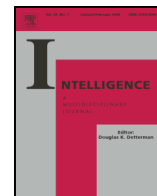


Contents lists available at ScienceDirect

Intelligence



Obituary

Joseph F. Fagan III (1941–2013)

Joseph F. Fagan III died on August 10, 2013 at age 71 in Cleveland, OH. A native of Hartford, Connecticut, he moved to Cleveland to join the faculty of Case Western Reserve University in 1968. He earned his bachelor's degree in English and Psychology in 1963 from the University of Hartford, and his master's and doctoral degrees in Experimental Psychology in 1965 and 1967, respectively, from the University of Connecticut.

His career was focused on understanding the cognitive development of children. His first publications, while still in graduate school, examined fundamental principles of learning and retention in normal and developmentally delayed children (e.g. Fagan, 1966). His work with research participants who are difficult to test was an early marker of his willingness to tread where others are reluctant to go. Fagan had a drive and a talent for developing methods to give a voice to those who could not speak.

When he joined the psychology faculty at Case Western Reserve, he adopted the novelty preference paradigm to examine the capabilities of infants. Collaborating in some work with Robert Fantz, himself a pioneer in studying perceptual development, but also charting a very independent line of research, Fagan used the novelty preference paradigm as a tool to uncover the fundamental perceptual and cognitive capabilities of infants. He was the first to demonstrate that infants can perceive color (Fagan, 1974). In an elegant series of studies he examined the development of face recognition abilities (e.g. Fagan, 1976, 1977a, 1977b). In a time before the use of computers to construct and present stimuli, Fagan's studies were marked by the precision of his stimuli and the elegance of his paradigms.

The examination of the development of perceptual skills and memory stimulated Fagan to consider the hypothesis that early cognitive development may be predictive of later cognitive ability (Fagan, 1975). He took advantage of the fact that his research team had tested many infants in Cleveland to do a simple test of the validity of the predictive power of novelty test performance. In a series of studies, he reported that moderate correlations were obtained between memory recognition scores obtained from infants as young as four months of age and their performance on vocabulary tests of

intelligence four to seven years later (Fagan, 1981; Fagan, 1984; Fagan & McGrath, 1981). The impact of this work is measured by the fact that the Fagan and McGrath paper was identified as a citation classic, one of the most widely cited papers published in the first two decades of *Intelligence* (Wicherts, 2009). The early work on infant intelligence has stood the test of time. Fagan reported that scores obtained from research participants were predictive of their IQ and academic achievement at age 21 (Fagan, Holland, & Wheeler, 2007). He firmly asserted that there is a continuity of intelligence from infancy to adulthood.

Fagan engaged in multiple studies examining the utility of a novelty preference test to discriminate healthy children from those who were developmentally delayed (e.g. Fagan, Singer, & Montie, 1985; Mundy, Seibert, Hogan, & Fagan, 1983; Singer, Drotar, Fagan, Devost, & Lake, 1983; Singer & Fagan, 1984). These studies demonstrated the value of having a non-verbal test that could be administered to infants in the first months of life that would identify those who may be at risk for intellectual impairment.

As the findings of his research and that of other investigators of the era reached the popular press, parents were intrigued that they might be able to test the intelligence of their baby. Already these parents were buying mobiles, blankets and play centers constructed on scientific principles to provide optimum perceptual and cognitive stimulation for their children. A simple commercial test of infant intelligence would be very popular with these parents.

It was in this context that the Fagan Test of Infant Intelligence (FTII) was developed (Fagan & Shepherd, 1987). With a Small Business Innovation Research Grant in 1985, Fagan set out to develop a test based on his research findings that could be used to identify infants at risk for mental retardation. When developed, Fagan permitted its use only by qualified investigators and clinical specialists. Some in the field misunderstood his intentions and criticized him for licensing and controlling the FTII. They did not know Joe Fagan. He was not interested in commercializing the test for public use. He wanted to ensure that it was used properly by clinicians and investigators to identify at-risk children who may benefit from early intervention. Since its introduction

<http://dx.doi.org/10.1016/j.intell.2014.06.005>
0160-2896

Please cite this article as: Gilmore, G.C., Joseph F. Fagan III (1941–2013), *Intelligence* (2014), <http://dx.doi.org/10.1016/j.intell.2014.06.005>

the FTII has been used around the world for clinical research purposes including in Brazil, Cambodia, Canada, China, the Czech Republic, Germany, Italy, Japan, Korea, Laos, Mexico, the Netherlands, Norway, Peru, Poland, the Seychelles Islands, Sweden, Switzerland, Taiwan, and Vietnam. It has been used by many groups in the USA including a series of studies by the NIEHS World Trade Center Working Group to assess possible neural damage to the offspring of pregnant women who were exposed to atmospheric fallout resulting from the World Trade Center disaster (e.g. Landrigan et al., 2004). Fagan believed that the early identification of children who are at-risk would lead to more effective interventions to help these children to reach their full intellectual potential.

In considering his career, it must be noted that Fagan was an excellent teacher and mentor. His classes at Case Western Reserve were always over-subscribed. He had a well-deserved reputation for offering a stimulating and challenging class that was also entertaining. He was inventive in engaging students and making his presentations memorable. Students long after taking his class still remember the time when he suddenly did a back flip in class to illustrate the power of novelty for capturing attention and being remembered. He used his own research findings to make his teaching more effective.

Fagan was a talented writer and was very effective in obtaining research funding throughout his career. He used these skills to create a graduate course on grant writing that was taken by many faculty members. The first assignment in his class was to write a letter to your grandmother about your research idea. If you can express the idea clearly to your grandmother, then a review panel also may be taken with your idea. Fagan was proud to cite the hundreds of millions of dollars in research funding that his students obtained after taking his class.

Joe Fagan was a consummate teacher and investigator. His research has made a significant impact in understanding infant perceptual and cognitive development and the continuity of intellectual development from infancy to adulthood. Importantly, the FTII has permitted clinical investigators throughout the world to identify and assist children who are at risk for developmental problems. His scholarly work has had an impact that will continue to positively affect the lives of children.

References

- Fagan, J. F. (1966). Short-term retention in normal and retarded children. *Psychonomic Science*, 6, 303–304.
- Fagan, J. F. (1974). Infant color perception. *Science*, 183, 973–975.
- Fagan, J. F. (1975). Infant recognition memory as a present and future index of cognitive abilities. In N. R. Ellis (Ed.), *Aberrant development in infancy: Human and animal studies*. Hillsdale, NJ: Lawrence Erlbaum Associates.
- Fagan, J. F. (1976). Infant's recognition of invariant features of faces. *Child Development*, 47, 627–638.
- Fagan, J. F. (1977a). Infant recognition memory: Studies in forgetting. *Child Development*, 48, 68–78.
- Fagan, J. F. (1977b). An attention model of infant recognition. *Child Development*, 48, 345–359.
- Fagan, J. F. (1981). Infant intelligence. *Intelligence*, 5, 239–243.
- Fagan, J. F. (1984). The intelligent infant: Theoretical implications. *Intelligence*, 8, 1–9.
- Fagan, J. F., Holland, C. R., & Wheeler, K. (2007). The prediction, from infancy, of adult IQ and achievement. *Intelligence*, 35, 225–232.
- Fagan, J. F., & McGrath, S. K. (1981). Infant recognition memory and later intelligence. *Intelligence*, 5, 121–130.
- Fagan, J. F., & Shepherd, P. A. (1987). *The Fagan Test of Infant Intelligence: Training manual*. Cleveland, OH: Infantest Corporation.
- Fagan, J. F., Singer, L. T., & Montie, J. E. (1985). An experimental selective screening device for the early detection of intellectual deficit in at-risk infants. In W. K. Frankenburg, R. N. Emde, & J. Sullivan (Eds.), *Early identification of children at risk: An international perspective*. New York: Plenum.
- Landrigan, P. J., Liyo, P. J., Thurston, G., Berkowitz, G., Chen, L. C., Chillrud, S. N., et al. (2004). Health and environmental consequences of the world trade center disaster. *Environmental Health Perspectives*, 112, 731–739.
- Mundy, P. C., Seibert, J. M., Hogan, A. E., & Fagan, J. F. (1983). Novelty responding and behavioral development in young, developmentally delayed children. *Intelligence*, 7, 163–174.
- Singer, L. T., Drotar, D., Fagan, J. F., Devost, L., & Lake, R. (1983). The cognitive development of failure-to-thrive infants: Methodological issues and new approaches. In T. Field, & A. Sostek (Eds.), *Infants born at risk for physiological and sensorimotor processes*. New York: Spectrum.
- Singer, L. T., & Fagan, J. F. (1984). Cognitive development in the failure-to-thrive infant: A three-year longitudinal study. *Journal of Pediatric Psychology*, 9, 363–383.
- Wicherts, J. (2009). The impact of papers published in *Intelligence* 1977–2077 and an overview of the citation classics. *Intelligence*, 37, 443–446.

Grover C. Gilmore
Case Western Reserve University, Cleveland, Ohio, United States

Available online xxxx