

Preservation and Change in Two Temperamental Types

Results:

This study assessed a large group of adolescents, 15 to 16 years old, who have been members of a longitudinal sample classified originally at 4 months of age as high or low reactive to unfamiliar events.

The behavioural and biological features that are the expected outcomes of high or low reactivity were present. Specifically, more high than low reactive adolescents were affectively subdued while interacting with the unfamiliar examiner in the laboratory setting and in the interview at home.

Further, the high reactives described self as less relaxed and more worried about unfamiliar social situations than low reactives. In addition, the adolescents who had high reactive showed shallower habituation of the N400 waveform to discrepant scenes and sentences that ended with a word that rendered the sentence incongruous. Finally, the high reactives were more likely to display sympathetic tone in the cardiovascular system; more low reactives displayed greater parasympathetic tone. This evidence implies that aspects of the infant temperaments are preserved for 15 years and supports the assumption that the two groups differ in the inherited neurochemistry of the amygdala and its projections.

Published Work:

Kagan, J., Snidman, N., Kahn, V., Towsley, S., Steinberg, L., & Fox, N. (2007). The preservation of two infant temperaments into adolescence. *Monographs of the Society for Research in Child Development*, 72(2), vii, 1-95.

Kagan, J. (2004). The limitations of concepts in developmental psychology. *Merrill-Palmer Quarterly*, 50(3), 291-298.

Researchers' Contacts:

Professor Jerome Kagan, Department of Psychology, Harvard University,
33 Kirkland Street, Cambridge, MA 02138, USA.
Telephone 617 495 3870. Fax 617 495 3825.
E mail jk @wjh.harvard.edu