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Memorandum

Date: 25 July 1995

To:

From: Edwin C. May, Ph.D.

Re: SAIC Experiment Database

Cc: Michael Mumford, Ph.D. and Andy Rose, Ph.D. (AIR)

I have been asked to identify a complete list of experiments that were conducted at Science Applications International Corporation (SAIC) from 4 February 1991 through 30 September 1994. This memorandum lists the experiments, describes their justification, and tabulates their overall results. In addition, complete references to the original reports will be provided.

Background

SAIC was established in 1961 as a subsidiary of Science Applications, Inc. (SAI). SAIC was created to provide a more focused and efficient organization for the research and development of cognitive sciences. SAIC has since become a leading provider of cognitive sciences research and development services to the U.S. Department of Defense and other federal agencies.

Experiment Database Summary

All experiments may be found in one of two documents or additionally in separate publications:

- (1) May, E. C., Luke, W. L. W., and Lantz, N. D. (3 February 1993). Phenomenological Research and Analysis. Final Report: 6.2 and 6.3.
- (2) May, E. C., Luke, W. L. W., and James, C. L. (29 September 1994). Phenomenological Research and Analysis. Final Report.

Ten experiments were conducted by SAIC under government contract. These experiments include all pilot and formal series, and they contain all the trials that were conducted (i.e., there is no file-drawer problem, by definition). Table 1 shows the summary information for the 10 SAIC experiments.

Table 1.

SAIC Experiment Database (1991-1994)

Number	Experiment	Reference	Trials	Effect Size	P-Value
1	Target Dependencies	1 (11-30)	200	0.124± 0.071	0.040
2	AC of Binary Targets	1 (31-38)	300	0.123±0.058	0.017
3	MEG Replication	1 (39-48)	12,000s	MCF	MCF

Fax Transmittal Cover Sheet

SG1I

To: - ORD

From: Edwin C. May, SAIC

Fax Phone Number: (415) 322-7960

Date: Thu, Jul 27, 1995 • 14:22

Transmitting (7) pages, including cover sheet.

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Note:

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this is a copy of the report I gave to the AIR folks on Wednesday. Please call if you have any questions. I will give you a report about the meeting by Monday.