

14:21:30

OCA PAD INITIATION - PROJECT HEADER INFORMATION

06/28/89

Active

Project #: G-42-517
Center # : 10/11-6-P5073-1A0

Cost share #:
Center shr #:

Rev #: 0
OCA file #:
Work type : INST
Document : GRANT
Contract entity: GTRC

Contract#: 5 T32 AG00175-02
Prime #:

Mod # :

Subprojects ? : N
Main project #:

Project unit:
Project director(s):
SMITH A D

PSYCH

PSYCH

Unit code: 02.010.154
(404)894-2680

Sponsor/division names: DHHS/PHS/NIH
Sponsor/division codes: 108

/ NATL INSTITUTES OF HEALTH
/ 001

Award period: 890701 to 900630 (performance) 900930 (reports)

Sponsor amount	New this change	Total to date
Contract value	56,457.00	56,457.00
Funded	56,457.00	56,457.00
Cost sharing amount		0.00

Does subcontracting plan apply?: N

Title: RESEARCH TRAINING IN COGNITIVE AGING

PROJECT ADMINISTRATION DATA

OCA contact: Kathleen R. Ehlinger 894-4820

Sponsor technical contact

Sponsor issuing office

MATILDA W. RILEY, D.SC.
(301)496-3136
ASSOCIATE DIRECTOR, BEHAVIOAL AND
SOCIAL RESEARCH PROGRAM, NIA
BETHESDA, MD 20892

JOANNE COLBERT
(301)496-1472
NATIONAL INSTITUTE ON AGING
RM 5C-07, 9000 ROCKVILLE PIKE
BETHESDA, MD 20892

Security class (U,C,S,TS) : U
Defense priority rating : N/A
Equipment title vests with: Sponsor
NONE PROPOSED.

ONR resident rep. is ACO (Y/N): N
NIH supplemental sheet
GIT

Administrative comments -

TRAVEL MUST BE ABSORBED W/IN TRAINING EXPENSES. NO FUNDS CAN BE EXPENDED FOR
 TRAINEE STIPENDS TIL STATEM'T OF APP'T. FORMS ARE SUBMITTED & ACCEPTED BY NM



GEORGIA INSTITUTE OF TECHNOLOGY
OFFICE OF CONTRACT ADMINISTRATION

NOTICE OF PROJECT CLOSEOUT

Closeout Notice Date 07/20/90

Project No. G-42-517 _____ Center No. 10/11-6-P5073-1A0 _____
Project Director SMITH A D _____ School/Lab PSYCHOLOGY _____
Sponsor DHHS/PHS/NIH/NATL INSTITUTES OF HEALTH _____
Contract/Grant No. 5 T32 AG00175-02 _____ Contract Entity GTRC
Prime Contract No. _____
Title RESEARCH TRAINING IN COGNITIVE AGING _____
Effective Completion Date 900630 (Performance) 900930 (Reports)

Closeout Actions Required:	Y/N	Date Submitted
Final Invoice or Copy of Final Invoice	N	_____
Final Report of Inventions and/or Subcontracts	N	_____
Government Property Inventory & Related Certificate	N	_____
Classified Material Certificate	N	_____
-Release and Assignment	N	_____
Other _____	N	_____
Comments _____		

Subproject Under Main Project No. _____

Continues Project No. _____

Distribution Required:

Project Director	Y
Administrative Network Representative	Y
GTRI Accounting/Grants and Contracts	Y
Procurement/Supply Services	Y
Research Property Management	Y
Research Security Services	N
Reports Coordinator (OCA)	Y
GTRC	Y
Project File	Y
Other _____	N
_____	N



G-42-517

SECTION IV PROGRESS REPORT SUMMARY		GRANT NUMBER AG00175-03	
PRINCIPAL INVESTIGATOR OR PROGRAM DIRECTOR Anderson D. Smith		PERIOD COVERED BY THIS REPORT	
APPLICANT ORGANIZATION Georgia Institute of Technology		FROM 7/1/89	THROUGH 6/30/90
TITLE OF PROJECT (Repeat title shown in item 1 on first page) RESEARCH TRAINING IN COGNITIVE AGING			
<i>(SEE INSTRUCTIONS)</i>			

PROGRESS REPORT

1. PROGRAM GOALS AND PROGRESS

The goal of the training program is to provide the appropriate research academic context for training pre- and post-doctoral students in Cognitive Aging. The training program consisting of three pre-doctoral trainees and one post-doctoral fellowship is in its second year. For the first part of the year, the three pre-doctoral positions were filled, but one of the trainees resigned of the program because of a change in interest. The two remaining pre-doctoral students are completing their preliminary examinations for the doctoral degree in the Spring of 1990 and will propose their dissertations over the next few quarters. One of the students, Ms. Wendy Rogers won the Outstanding Thesis in Science award from the Society of Sigma Xi for her masters thesis in Cognitive Aging. We are currently recruiting a third trainee as an entering student in the fall of 1990. This year, the post-doctoral fellowship was filled for the first time by Dr. Raymond Shaw who completed his doctoral studies at the University of Toronto.

This past year the graduate curriculum was revised, replacing three, three-hour proseminars in general psychology with nine, three-hour core courses. Each pre-doctoral student selects six from this group, doubling the number of hours in basic psychology in the required curriculum. All cognitive aging students are required to take both Cognitive Psychology and Life-span Developmental Psychology during their first year.

2. TRAINING RELATED EXPENSE BUDGET

The Training-Related Expenses budget enhanced the program in several ways. First, funds are used to pay expenses for a visiting scientist for the Cognitive Aging seminar series. The visiting scientist (Fergus Craik in 1989) consults with the core faculty concerning the training program and meets individually with the trainees in informal discussions of their research. Second, funds are used for research expenses of the trainees, allowing them to pay expenses for older adults to participate in their studies. Third, because of the cut in travel funds, the funds allowed the trainees to attend professional meetings this year to make presentations of their research activities.

3. TRAINEES

PRE-DOCTORAL

A. Renee L. Babcock - Ms. Babcock (a second-year trainee) received her B.A. in Psychology from Hope College and a MA. degree in Applied Research and Evaluation in Psychology from Hofstra University. In 1988, she received the M.S. in Experimental Psychology from Georgia Tech with a specialty in Cognitive Aging.

She is working with Dr. Timothy A. Salthouse, a core faculty member. She will complete her preliminary examination this quarter and propose her dissertation.

B. Kathryn L. Berkovsky - Ms. Berkovsky received her B.A. degree in Psychology from Duke University and a M.Ed. from the University of Virginia prior to coming to Georgia Tech. During the past year, she completed her M.S. degree in Psychology, doing her thesis on social cognition and aging and working with Dr. Anderson Smith, a core faculty member. Because she has decided to get her doctoral degree in Industrial/Organizational Psychology, she has resigned her traineeship after the first year.

C. Wendy A. Rogers - Ms. Rogers (a second-year trainee) received her B.A. degree in Psychology from Southeastern Massachusetts University. She was awarded her M.S. degree in Experimental Psychology with a specialty in Cognitive Aging during her first year as a trainee. Her M.S. thesis received the Georgia Tech Award for the Outstanding M.S. thesis in science. She is working with Arthur D. Fisk, a core faculty member.

POST-DOCTORAL

D. Raymond J. Shaw - Dr. Shaw received his B.A. degree in Psychology from Georgetown University and his M.A. and Ph.D. in Psychology from the University of Toronto, working with Dr. Fergus I. M. Craik. He completed the requirements for the Ph.D. in January of 1990 and was appointed as post-doctoral fellow on February 1, 1990. He is working with Dr. Timothy A. Salthouse and Dr. Anderson D. Smith, two core faculty members in the Cognitive Aging training program.

4. RESEARCH PROJECTS OF TRAINEES AND 5. PUBLICATIONS

A. Renee L. Babcock (Research supervisor: Timothy Salthouse)

Ms. Babcock's primary interest is in the area of working memory. She is interested in developing empirical definitions of the theoretical construct in terms of the nature of the processing requirements in working-memory tasks. She is also interested in the processing requirements of spatial reasoning and spatial memory.

Journal articles:

Salthouse, T.A., Mitchell, D.R.D., Skovronek, E., & Babcock, R. L. (1989). Effects of adult age and working memory on reasoning and spatial abilities. *Journal of Experimental Psychology: Learning, Memory, & Cognition*, 15, 507-516.

Salthouse, T.A., Babcock, R.L., Skovronek, E., Mitchell, D.R.D., & Palmon, R. (1990). Age and experience effects in spatial visualization. *Developmental Psychology*, 26, 128-136.

Babcock, R.L., & Salthouse, T.A. (In press). Effects of increased processing demands on age in working memory. *Psychology and Aging*.

Salthouse, T.A., Babcock, R.L., Mitchell, D.R.D., Palmon, R., & Skovronek, E. (In press). Sources of individual differences in spatial visualization ability. *Intelligence*.

Conference presentations:

Babcock, R.L., & Salthouse, T.A. (1990, March). Age and working memory: Multiple regression analyses of the interrelations among age, storage capacity, and processing efficiency. Cognitive Aging Conference, Atlanta.

Shaw, R.J., Salthouse, T.A., & Babcock, R.L. (1990, March). Age and working memory: Effects of number and type of processing operations. Cognitive Aging Conference, Atlanta.

Salthouse, T.A., & Babcock, R.L. (1989, November). Decomposing adult age differences in working memory. Psychonomics Society, Atlanta.

B. Kathryn Berkovsky (Supervisor: Anderson Smith)

Ms. Berkovsky has examined the manner in which older and younger adults performed on a task involving social perception and judgment. The results showed that older adults failed to demonstrate the recall advantage for inconsistent information typically demonstrated by young adults on an impression formation task. The data implicate a reduction in elaborative information processing for older adults. Because Ms. Berkovsky's research interests have become more focused on Industrial Psychology, she has resigned from the training program after one year. (terminated September, 1989).

Journal articles:

Smith, A.D., Park, D.C., Cherry, K., & Berkovsky, K. (In press). Adult age differences in memory for concrete and abstract pictures. *Journal of Gerontology: Psychological Sciences*.

Conference presentations:

Berkovsky, K. (1990, April). The effects of inconsistent information: Age differences in impression formation. Southeastern Psychological Association, Atlanta.

C. Wendy A. Rogers (Supervisor: Arthur D. Fisk)

Ms. Rogers' general research interests include attention, the effects of aging on cognitive performance, and skill acquisition. More specifically, her recent research has been aimed at investigating age-related differences in automatic and controlled processing. The investigation of age-related differences in automatic process development allows an understanding of age-related changes in skill development. Future plans include the study of divided attention differences (and lack thereof) between young and old adult and the investigation of skill acquisition as it interacts with age and cognitive ability differences.

Journal articles:

Fisk, A.D., Rogers, W.A., & Giambra, L.M. (In press). Consistent and varied memory/visual search: Is there an interaction between age and response-set effects? *Journal of Gerontology: Psychological Sciences*.

- Rogers, W.A., & Fisk, A.D. (In press). A reconsideration of age-related reaction time slowing from a learning perspective: Age-related slowing is not just complexity-based. *Learning and Individual Differences*.
- Rogers, W.A., & Fisk, A.D. (In press). Age-related differences in the maintenance and modification of automatic processes: Arithmetic Stroop interference. *Human Factors*.
- Fisk, A.D., & Rogers, W.A. (In press). Development of skilled performance: An age-related perspective. In D.L. Damos (Ed.), *Multiple-task performance*. New York: Taylor and Francis.

Conference presentations:

- Rogers, W.A., & Fisk, A.D. (1989, November). Arithmetic Stroop interference as a function of age: Maintenance and modification of automatic processes. *Proceedings of the Annual Meeting of the Human Factors Society*, Santa Monica, CA.
- Lee, M.D., Rogers, W.A., & Fisk, A.D. (1989, November). Transfer of automatic component processes to compatible, incompatible, and conflict situations: Issues for retraining. *Proceedings of the Annual Meeting of the Human Factors Society*, Santa Monica, CA.
- Fisk, A.D., Giambra, L.M., & Rogers, W.A. (1990, March). Efficiency of associative and priority learning in young, young-old, and old adults. Cognitive Aging Conference, Atlanta.

D. Raymond J. Shaw (Supervisors: Timothy A. Salthouse & Anderson D. Smith)

Dr. Shaw is working on two projects, one with Dr. Salthouse and one with Dr. Smith. With Dr. Salthouse, Dr. Shaw has devised two new tasks that require simultaneous storage and processing of numeric or spatial information. These tasks allow for clear separation of the two features of working memory tasks, storage and processing of information. In a series of experiments conducted to date, large age differences have been found on performance with both tasks. The research is currently focussing on determining the effects of amount of target and non-target processing on the age differences in accuracy of reporting target information.

With Dr. Smith, he is examining age differences in contextual integration on memory tasks. Previous research required young and old adults to generate sentences that integrated pictorial information. In the present project, the generated sentences serve as "encoding protocols" to be presented to a new group of subjects. Half of the subjects are given protocols from older adults and half given protocols from younger adults. To the extent that group differences occur in incidental memory for the information in the sentences, the original age differences in memory may be more directly linked to age differences in encoding.

Journal articles:

- Loewen, E.R., Shaw, R.J., & Craik, F.I.M. (In press). Age differences in components of metamemory. *Experimental Aging Research*.