## PROJECT ADMINISTRATION DATA SHEET

		X ORIGINAL	REVISION NO.	
Project No. G-42-614_	(R6010-0A0)	GTRCXXXX	DATE 8 / 22 / 85	
Project Director: C. K. Hertzog		School A Late	Psychology	
Sponsor: DHHS/PHS/NIH/N				
Type Agreement: _ Grant No. 7 R	01-AG06162-01			
Award Period: From 8/1/85	To11/30/85	(Performance) 2/	(Reports)	
Sponsor Amount:	This Change	•	Total to Date	
Estimated: \$				
Funded: \$				
Cost Sharing Amount: \$ 2,700				
Title: Short Term Cha				
Title. Diote term one	ngo an inchesy o i	recumenty in the si		
ADMINISTRATIVE DATA	OCA Contact	John Schonk	x4820	
1) Sponsor Technical Contact:	OCA CONTACT	2) Sponsor Admin/Con		
Matilda W. Riley		Ruth S. McClure		
National Institute of Heal	<del></del>	National Institut	e of Health	
National Institute on Agin		National Institute on Aging .		
	<u> </u>	Management Office		
Associate Director				
Bethesda, MD 20205		Bethesda, MD 20		
4				
Defense Priority Rating: N/A		Military Security Classification: N/A		
RESTRICTIONS	(or)	Company/Industrial Propriet	ary:	
See Attached NIH	Supplemental Inform	nation Sheet for Additional	Requirements	
Travel: Foreign travel must have prior a				
-			•	
approval where total will exceed	greater of \$500 or 12	5% of approved proposal b	udget category.	
Equipment: Title vests withGIT_	<del></del>			
			£767178293031	
COMMENTS:			/s - <b>4</b>	
No funds may be expended	after 11/30/85.		ΔυG1985 ω ω	
			AUG THED A	
			Co ide season Office	
			15131415151H	
COPIES TO:	SPONS	OR'S I. D. NO. 02.108.	001.85.024	
Project Director	Procurement/GTRI Supply Services		GTRC	
Research Administrative Network	Research Security Services		Library	
Research Property Management Accounting	Reports Coordinator (OCA) Research Communications (2)		Project File Other A. Jones	

FORM OCA 65:285

# GEORGIA INSTITUTE OF TECHNOLOGY OFFICE OF CONTRACT ADMINISTRATION

J	SPUNSURED PROJECT TERMINATION	I/CLUSEUU I SHEET	
9	•		
0	•		
<del>3</del>		Date 9/10/86	
5x,620		Date	
	40 614		
roject No. G-	-42-614	School XXX	Psych.
	- N- (-) N/A		
ncivaes Supprojec	ct No.(s) N/A .		
•			
'roject Director(s)	C. K. Hertzog		GTRC XXXX
•			GINC MONN
	•		
ponsor DHHS	/PHS/NIH/NIA		
*		•	
Title Short	t Term Change in Memory & Metamemory in t	the Elderly	
iffective Completi	ion Date: 11/30/85	(Performance)	(Reports)
		•	
3rant/Contract Clo	oseout Actions Remaining:		
			will be submitted
	None	under G-42-615.	
•			
	Final Invoice or Final Fiscal Report - alres	adv submitted.	
		,	
	Closing Documents		
	Closing Documents		
	Final Report of Inventions		
	Govt. Property Inventory & Related Certificate		
-	Classified Material Certificate		
-			
	Other	•	
	•,		0 /1 /15
continues Project	No	Continued by Project N	0. G-42-013
OPIES TO:			
roject Director		Library	
lesearch Administ	rative Network	GTRC	
lesearch Property	Management	Research Communica	ations (2)
ccounting		Project File	
rocurement/GTR!		Other A. Jo	
lesearch Security		I. Ne	
leports Coordinate	or_IOCA)	R. Em	bry
egal Services.			

## IV. Progress Report Summary

[Note: The Progress Report covers the entire first year of grant activity, including the period 12/1/84 - 7/31/85, supported by 1 R01 AG05165-01 to the Pennsylvania State University, and the period 8/1/85 through 11/31/85, supported by 7 R01 AG06162 to the Georgia Institute of Technology]

#### Publications

- The following publications of the Principal Investigator of <u>direct relevance to the grant-related efforts</u> have been published, accepted, or submitted for publication during the grant period (12/1/84 11/30/85):
- Borgatta, E. F., & Hertzog, C. (1985). Introduction: Methodology and aging research. Research on Aging, 7, 3-6.
- Hertzog, C. (1985). An individual differences perspective: Implications for cognitive research in gerontology. Research on Aging, 7, 7-45.
- Hertzog, C. (1985). Applications of confirmatory factor analysis to the study of intelligence. In D. K. Detterman (Ed.), <u>Current topics in human intelligence</u>. Norwood, NJ: Ablex.
- Hertzog, C. (1985). Thurstone Temperament Schedule. In Keyser, D. J., & Sweetland, R. C. (Eds.), <u>Test Critiques</u> (Volume II). Kansas City, MO: Test Corporation of America.
- Hertzog, C., & Rovine, M. (1985). Repeated measures analyses in developmental research: Selected issues. Child Development, 56, 787-810.
- Schaie, K. W., & Hertzog, C. (1985). Measurement in the psychology of adulthood and aging. In J. E. Birren & K. W. Schaie (Eds.), Handbook of the psychology of aging (2nd Edition). New York: Van Nostrand Reinhold.
- Dixon, R. A., & Hertzog, C. (1986). A functional approach to metamemory development in adulthood. In F. Weinert & M. Perlmutter (Eds.), Memory development: Universal changes and individual differences. Contract under negotiation.
- Hertzog, C. (1986). On pooling covariance matrices for multivariate analysis. <u>Educational and Psychological Measurement</u> (in press).

- Hertzog, C., & Schaie, K. W. (1986). Stability and change in adult intelligence: I. Analysis of longitudinal covariance structures. <u>Psychology and Aging</u>, <u>l</u>, (in press).
- Hertzog, C., & Nesselroade, J. R. (1986). Beyond autoregressive models: Some implications of the trait-state distinction for the structural modeling of developmental change. Manuscript submitted for a special section of <a href="Child Development">Child Development</a> on structural equation modeling.
- Hertzog, C., Raskind, C. L., & Cannon, C. J. Adult differences in semantic information processing speed. Manuscript submitted for publication.
- Hultsch, D. F., Dixon, R. A., & Hertzog, C. Memory perceptions and memory performance in adulthood and aging. Manuscript submitted for publication.

Copies of selected articles and manuscripts are provided in Appendix A.

## Report

- 1. The goals of the project and the planned activities for Year 02 of the project are the same as originally proposed.
- 2. The following activities were completed during the first year of the project:
  - a. Theoretical/Methodological.
    - l. Completion of two manuscripts describing our perspective on metamemory research and aging (Dixon & Hertzog, 1986; Hultsch, Dixon, & Hertzog, submitted; see above);
    - 2. Completion of a paper on structural models for psychological states, as are being measured in the project (Hertzog & Nesselroade, 1986);
    - 3. Development of a procedure for pooling covariance matrices for multivariate analysis. This technique was needed to combine data collected by Dixon & Hultsch for analysis of the factor structure of the MIA scale, and is reported in Hertzog (1986).

### b. Empirical.

1. Analysis of the factor structure of the Dixon/Hultsch Metamemory in Adulthood (MIA) scales. This analysis supports the distinction between two separate dimensions of metamemory -- perceived self-efficacy and knowledge about memory functioning -- that is crucial to our research on metamemory. The results therefore indicate that current metamemory assessment techniques are measuring a domain of self-efficacy beliefs, and call into question 1) whether these beliefs may be discriminated from generalized self-efficacy beliefs, and 2) the accuracy of these beliefs at the individual level. Older persons may have incorrect perceptions of their memory capacities, and these perceptions and beliefs may influence their behaviors in memory-demanding situations. The data collected in Year Ol of the project is directly relevant to addressing the issue of convergent and discriminant validity of self-report metamemory measures.

The results of the factor analysis were reported at the 1985 meetings of the American Psychological Association. A copy of the paper is provided in Appendix A. The paper is being converted to a publication manuscript that will be submitted for publication in the near future;

- 2. Data collection for the large-scale validation study will be completed by the end of the grant period. As of 15 September, 350 adults, all members of a Family Practice in Annville, PA, had completed testing in the two session study measuring two metamemory instruments, personality factors, mood states, perceived locus of control, and memory performance.
- 3. A long-term weekly assessment of metamemory, memory, and affective states has begun for 2 members of the Cornwall Manor retirement community. As of 15 September, they have completed 6 assessments and will continue through the end of the project. This data collection is providing us with pilot data on the suitability of these measures for P-technique analysis. A third elderly participant "failed" our visual screening; she has been outfitted with new eyeglasses and is scheduled to start the repeated assessment procedures 26 September.

- 4. Microcomputer memory tasks have been programmed and are now being piloted for the first microcomputer experiment at Cornwall Manor. Collection of data is scheduled for 1 October 1985.
- 5. Data entry programs for the IBM PC have been written and debugged. Data from the validation study are now being entered into the microcomputers at Georgia Tech by the graduate assistant.
- 3. Specific Objectives for Upcoming Year
  - a. Complete key entry of data from validation study; analyze results.
  - b. Continue P-technique pilot data collection.
  - c. Analyze data from the first microcomputer experiment, scheduled for completion in the current grant period.
  - d. Run a series of microcomputer experiments examining memory in text and word list tasks using signal detection methods to estimate Memory Operating Characteristics (MOCs) in adults of varying ages. (The second series of microcomputer experiments described in the original proposal).
  - e. Write research reports on a, c, & d above.
  - f. Do preliminary analysis on the P-technique pilot data to prepare for a large-scale P-technique study to be conducted at Cornwall Manor next year.
  - 4. Human subjects protocols have not changed.