

## Table of Contents

	<u>Page</u>
Introduction.....	1
Aptitude by Treatment Interactions.....	2
Ordinal and Disordinal Interactions.....	3
Methodological Problems in ATI Research.....	7
ATIS Reported in the Literature.....	8
ATI Studies using the Personalized System of Instruction.....	10
Prediction of Academic Achievement.....	18
Personality Inventories.....	20
Study Habits and Attitudes.....	24
Summary of Findings.....	26
Method.....	26
Overview of the Present Study.....	26
Rationale for Selection of Predictor Variables.....	28
ACT.....	29
Grade Point Average before the course.....	29
CPI.....	29
SSHA.....	30
Criterion Variables.....	33
Final Exam.....	33
Cumulative Grade Point Average.....	33
Attitude toward Psychology.....	34
Participants.....	34
Methods of Instruction.....	35
Lecture.....	35
PSI.....	36

Data Collection.....	37
Outside of Class.....	37
During the Scheduled Class Period.....	38
Results.....	38
Equivalence of Groups.....	38
Interactions.....	39
Higher-Order Interactions.....	41
Two-way Interactions for Final Exam Scores.....	41
Two-way Interactions for Attitude toward Psychology.....	42
Validity Generalization on the Hold-Out Sample.....	42
Final Exam and Attitude toward Psychology Scores...	47
Prediction of the Criterion Variables.....	48
The ACT and the CPI as Predictor Variables.....	51
The ACT and the SSHA as Predictor Variables.....	53
Relative Contributions of the ACT, the CPI, and the SSHA.....	55
Discussion.....	58
Higher-Order Interactions.....	58
Two-way Interactions.....	60
Interactions of Ability by Methods of Instruction.....	60
Interactions of Personality Variables by Methods of Instruction.....	65
Main Effects due to Methods of Instruction.....	66
Prediction of Final Exam Scores and G. P. A.....	67
Prediction of Scores on the Attitude Scale.....	70
Relative Contributions of the ACT, the SSHA, and the CPI.....	70

Summary.....	72
References.....	74
Appendices.....	83
Appendix A.....	83
Appendix B.....	88
Appendix C.....	91
Appendix D.....	94