

Using Operational Definitions to Assess Performance on College Course Outcomes

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Overview

Operational definitions 300 undergraduate sections in Critical Thinking and Content.

Course rubrics were approved by a University Assessment Committee (6-8 Operational Definitions per course).

Today, we will present:

1. interrater agreements for 18 courses X 3 delivery modes and
2. predictive validity (i.e., correlations with quizzes, test scores) for a few Psych classes where available.

It appears that Assessment Rubric Scores do correlate with other classroom assessments.

Ed's Part - Background



Brian's Part – Method of Organizing the Data Collection to get Reliability & Scoring



General Rules for Core Assessment

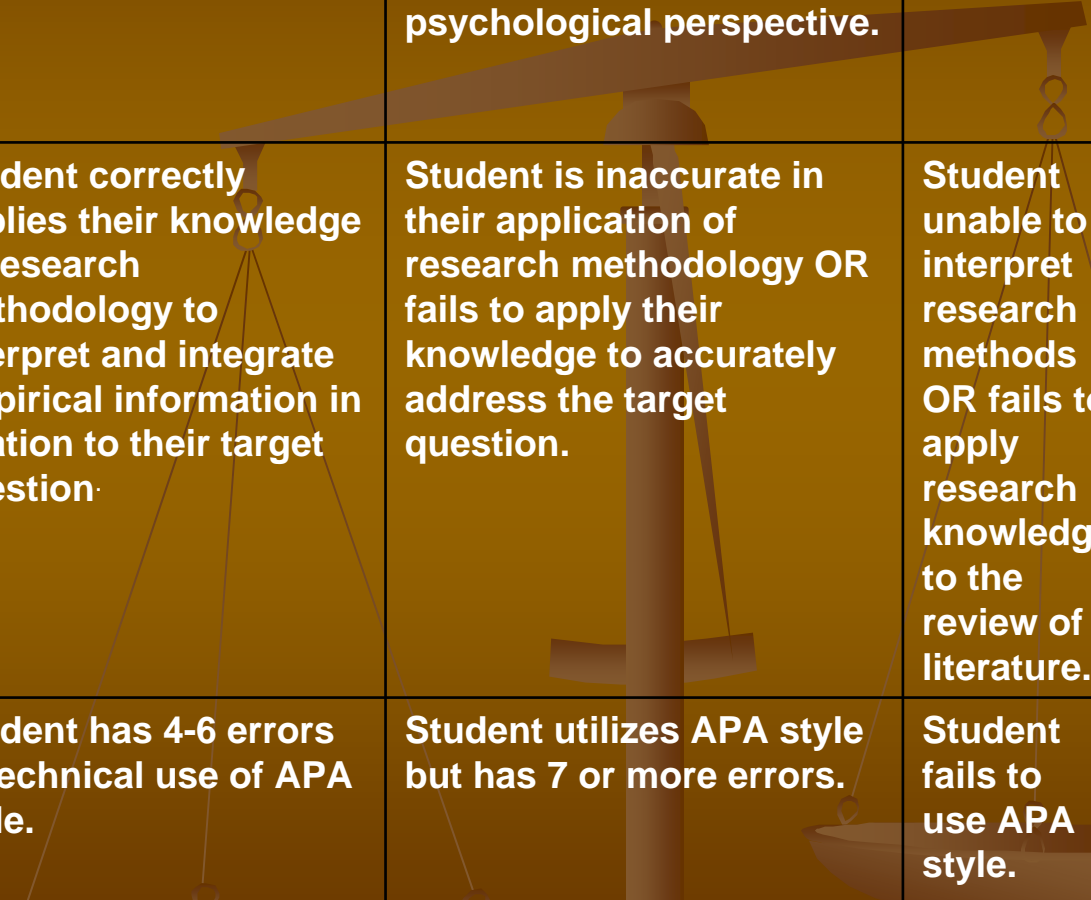


- **Core Assessment Requirements:**
- Core Assessment must address at least three-fourths (75%) of the Core Learning Outcomes for the course including activities associated with the ability to think critically and communicate effectively.
- Core Assessment may not be due earlier than three-fourths (75%) of the way through the course.
- Core Assessment must be worth at least 20% of the final course grade.
- Core Assessment must be uniform for all sections of a particular course and must be included in all syllabi. Modifications of the defined Core Assessment activity are not permitted.
- A detailed Core Assessment Rubric (CAR) specific to the relevant Core Assessment must be included in all syllabi. Modifications of the defined Core Assessment Rubric are not permitted.

Sample Core Assessment Rubric: Social Psychology

Competency CRITICAL THINKING	Exceeds Expectation (3)	Meets Expectation (2)	Does Not Meet Expectation. (1)	No Evidence (0)
Synthesis <small>Outcomes 1,3,4</small>	Identifies and incorporates 7 or more empirical, peer-reviewed research articles that directly address the target research question.	Identifies and incorporates 6 empirical, peer-reviewed research articles that are appropriate and relevant for addressing the research question.	Utilizes 5 or fewer research articles OR fails to utilize empirical, peer-reviewed research articles OR research articles are inappropriate for addressing the research question.	No references or empirical basis for paper.
Analysis <small>Outcomes 1,3,4</small>	Literature review provides a cohesive, accurate analysis of the question; literature review provides a clear portrait of the current research status on the topic.	Literature review is organized according to common themes, trends and findings that address the target question.	Literature review is presented as a series of unrelated findings/summaries OR literature review does not address the question OR information fails to show any cohesiveness to topic.	Fails to provide a review of literature; paper is editorial, opinion.
Evaluation <small>Outcomes 1,3,4</small>	Student accurately interprets and presents empirical findings while going beyond the presented information to highlight original gaps, errors, inadequacies or unanswered issues in the research base.	Student accurately interprets and presents empirical findings that correctly address the research question and summarizes gaps or inadequacies in the research base.	Student inaccurately interprets or presents the empirical findings OR findings do not address the research question OR fails to note any gaps/inadequacies in the research base.	No relationship between literature review and research question.

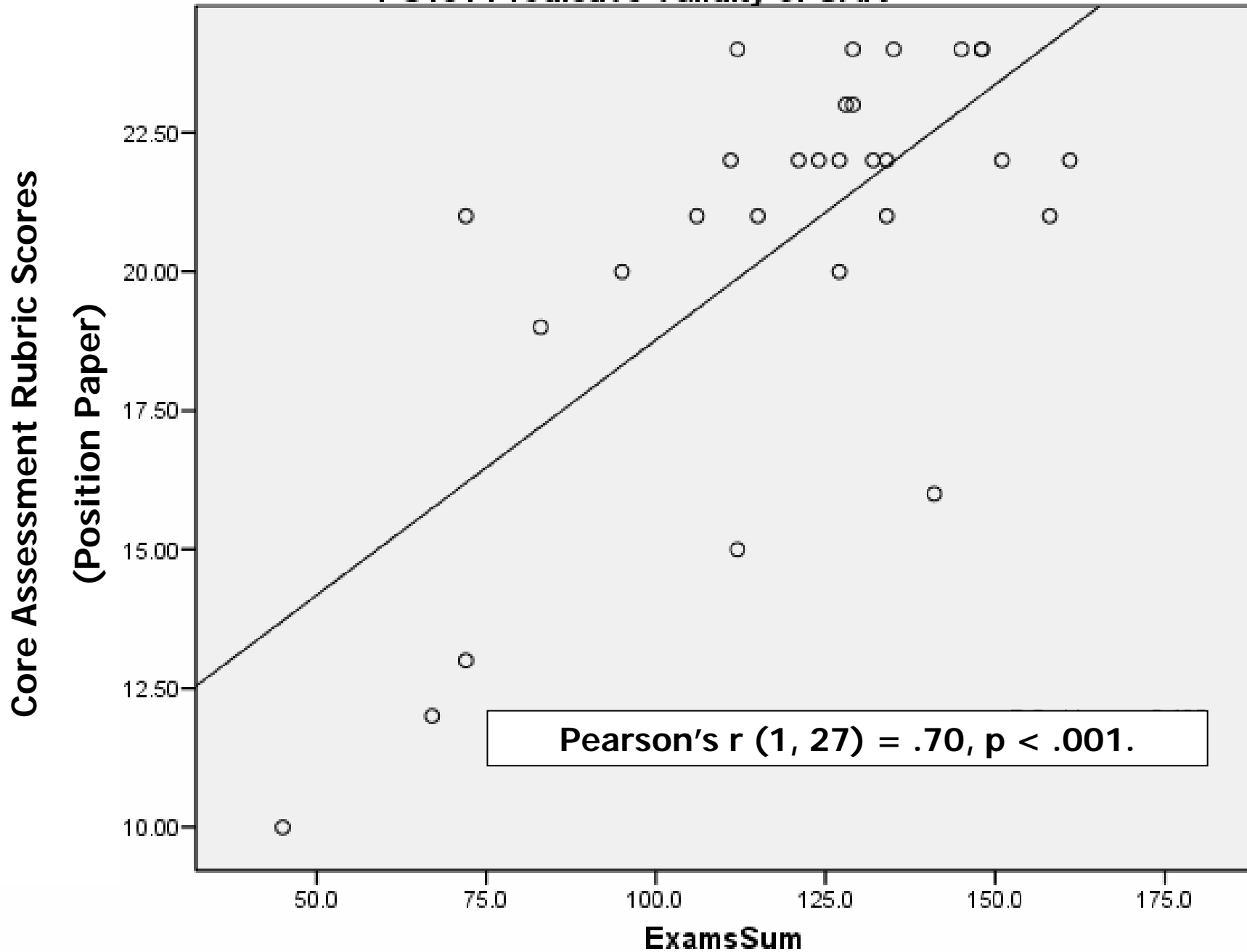
Sample Core Assessment Rubric: Social Psychology (cont.)



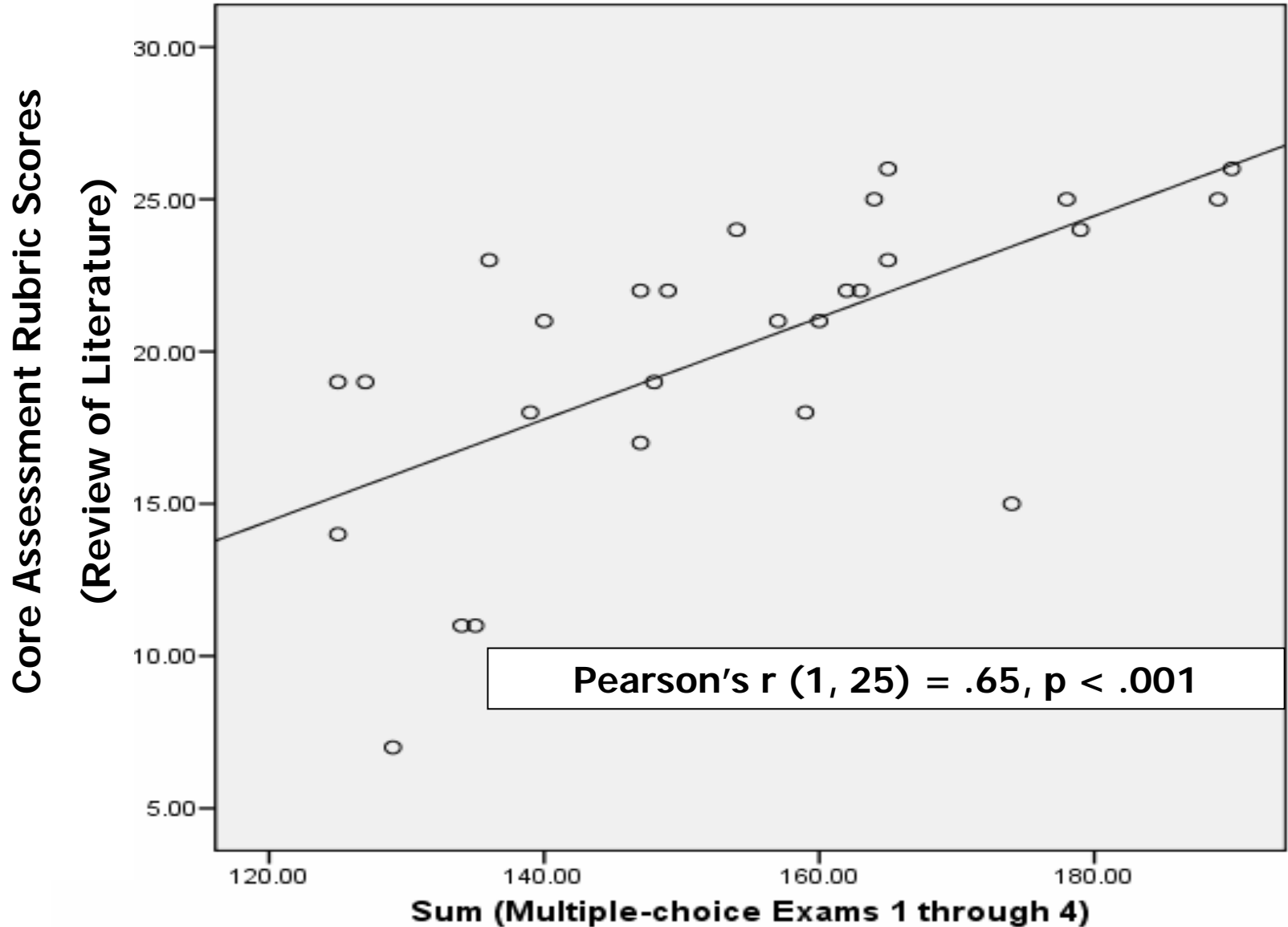
<p>Concepts Outcomes 1,3,4</p>	<p>Student proposes an insightful, original research question that utilizes current social psychological information to extend our understanding of humans as social creatures.</p>	<p>Student provides an appropriate researchable question that can be addressed within the scope of social psychology.</p>	<p>Student provides a philosophical or unanswerable question OR utilizes a research question that cannot be addressed from a social psychological perspective.</p>	<p>Fails to provide a research question.</p>
<p>Application Outcomes 1,3,4</p>	<p>Student shows a sophisticated knowledge of research methodology in their ability to critically evaluate the research question; addresses flaws or concerns with the research literature.</p>	<p>Student correctly applies their knowledge of research methodology to interpret and integrate empirical information in relation to their target question.</p>	<p>Student is inaccurate in their application of research methodology OR fails to apply their knowledge to accurately address the target question.</p>	<p>Student unable to interpret research methods OR fails to apply research knowledge to the review of literature.</p>
<p>Whole Artifact Outcomes 1,3,4</p>	<p>Student utilizes APA style throughout paper with fewer than 3 errors.</p>	<p>Student has 4-6 errors in technical use of APA style.</p>	<p>Student utilizes APA style but has 7 or more errors.</p>	<p>Student fails to use APA style.</p>

<u>DEPARTMENT</u>	<u>TRADITIONAL</u>	<u>ACCELERATED</u>	<u>INTERNET</u>	<u>N</u> (pairs)	<u>MEAN INTER-RATER AGREEMENT</u>
ACCOUNTING	EXAM	EXAM	EXAM	26	0.92
BIOLOGY	EXAM	EXAM	EXAM	3	1.00
BIOLOGY	PAPER	PAPER	PAPER	7	0.95
COMM. ARTS	PORTFOLIO	PORTFOLIO	PORTFOLIO	29	0.59
COMP. SCIENCE	FINAL EXAM	FINAL EXAM	FINAL EXAM	34	0.96
COMP. SCI.	FINAL PAPER	FINAL PAPER	~	20	0.92
CRIMINAL JUSTICE	CASE STUDY	CASE STUDY	~	19	0.60
CRIMINAL JUSTICE	CASE STUDY	CASE STUDY	CASE STUDY	30	0.62
ECONOMICS	FINAL EXAM	FINAL EXAM	FINAL EXAM	29	0.60
ECONOMICS	FINAL EXAM	FINAL EXAM	FINAL EXAM	16	0.81
ENGLISH	PORTFOLIO	PORTFOLIO	PORTFOLIO	31	0.94
ENGLISH	PORTFOLIO	PORTFOLIO	PORTFOLIO	31	0.90
PSYCHOLOGY	POSITION PAPER	POSITION PAPER	POSITION PAPER	17	0.90
PSYCHOLOGY	PAPER	PAPER	PAPER	29	0.71
PSYCHOLOGY	RESEARCH PAPER	RESEARCH PAPER	RESEARCH PAPER	25	0.65
PSYCHOLOGY	LIT REVIEW	LIT REVIEW	LIT REVIEW	26	0.69
SOCIOLOGY	TERM PAPER	TERM PAPER	TERM PAPER	30	0.56
SOCIOLOGY	MAJOR ESSAY	MAJOR ESSAY	MAJOR ESSAY	30	0.42
				N = 432	Grand Mean = .76

PS101 Predictive Validity of CAR



Predictive Validity of Core Assessment Scores: Social Psychology



Conclusions

