Appendix D: Institutional Example: Hampden-Sydney College

Department of Psychology

Primary Trait Scoring Sheet for Senior Thesis

Title

5 Is appropriate in tone, structure, and length to psychology journals; fully explanatory of the study; identifies actual variables or theoretical issues of study; allows reader to anticipate design

4 Is appropriate in tone, structure, and length; generally explanatory of the study; identifies some variables or theoretical issues of study; suggests design

3 Suggests nature of the study; may identify only one variable of the study; does not allow reader to anticipate design; may contain superfluous information

2 Identifies only one variable of the study; contains superfluous information; lacks design information or is misleading

1 Patterned after another discipline or is missing

Abstract

5 Is appropriate in tone, structure, and length; fully descriptive of the study; identifies the problem, subjects, methods, findings, and conclusions or implications of the study

4 Is appropriate in tone, structure, and length; generally descriptive of the study; identifies most but not all of the elements of the study; may contain some superfluous information

3 May be lacking in tone, structure, or length; identifies only some elements of the study; does not summarize the article so that the reader understands what was done; contains superfluous information

2 Inappropriate in tone, structure, and length; is not descriptive of the study; contains irrelevant, inappropriate, or incorrect information

1 Inappropriate for the discipline or is missing

Introduction: Problem

5 Clear statement of problem under investigation; identifies the major construct or conceptual IV(s) and the behavior or conceptual DV(s) of interest; clearly states goal(s) of the study; problem identified in introductory paragraph

4 Problem under investigation stated in general terms; identifies only some of the conceptual IV(s) and DV(s) of interest; goals of the study stated less clearly; problem identified in introductory paragraph

3 Introductory paragraph may not identify problem under investigation; nature of problem being studied is not clear to the reader; conceptual IV(s) and DV(s) may not be identified; the reader has to find the goals of the study

2 Problem not identified in introductory paragraph; reader may be unable to determine the problem being investigated; the purpose and/or goals of the study are not apparent to the reader

1 Fails to identify purpose of the research

Introduction: Literature Review

5 Articles reviewed are relevant to the problem being investigated; coverage of previous empirical and theoretical studies is thorough; issues are clearly explained; issues related to the problem are discussed in a logical progression; the number of articles cited is fully sufficient for the task

4 Articles reviewed are relevant to the problem; coverage of previous empirical and theoretical studies may not be complete; some confusion over concepts or issues may be present; issues related to the problem may not be presented in a logical order; the number of articles is adequate for the task

3 Some articles reviewed are irrelevant to the problem, or relevant articles from the literature are not reviewed; important information about articles being reviewed may be left out, and/or irrelevant information may be included; confusion about some concepts or issues being discussed; issues related to the problem are not organized in a way which effectively supports the argument, are arranged chronologically, or are arranged article-by-article; the number of articles is fewer than necessary for the task

2 Articles reviewed are not directly related to the problem, though they may be in the same general conceptual area; important information from articles is ignored, and irrelevant information is included; lack of understanding of concepts or issues being discussed; presentation of previous research and theory not organized in a logical manner; inadequate number of articles reviewed

1 Research and theory related to current problem is not reviewed or discussed

Introduction: Hypothesis

5 Clear statement of expectation(s) for outcome of study, relating IV(s) and DV(s) as identified in statement of problem; is or can be stated in "if…then" form

4 Expectation for outcome(s) of study is stated, but not entirely clearly; one or more IV(s) or DV(s) may be left out of statement of hypothesis; is or can be stated in "if…then" form

3 Expectation for outcome(s) of study not clear; one or more IV(s) or DV(s) are left out; is not or can not be stated in "if…then" format

2 Confusion about expected outcome of study; IV(s) and DV(s) are not identified; cannot be stated in "if…then" form

1 No statement of hypothesis or expected outcome of study

Methods: Description

5 Contains effective, quantifiable, concisely organized information that allows the experiment to be replicated; is written so that all information inherent to the document can be related back to this section; identifies sources of all data to be collected; identifies sequential information in an appropriate chronology; does not contain unnecessary, wordy descriptions of procedures

4 As in 5, but contains unnecessary or superfluous information or wordy descriptions within the section

3 Presents a study that is definitely replicable; all information in document may be related to this section, but fails to identify some sources of data or presents sequential information in a disorganized, difficult way; may contain unnecessary or superfluous information.

2 Presents a study that is marginally replicable; parts of the basic design must be inferred by the reader; procedures not quantitatively described; some information in Results or Discussion cannot be anticipated by reading the Methods section

1 Describes the study so poorly or in such a nonscientific way that it cannot be replicated

Methods: Experimental Design

5 Student selects experimental factors that are appropriate to the research purpose and audience; measures adequate aspects of these selected factors; establishes discrete subgroups for which data significance may vary; student demonstrates an ability to eliminate bias from the design and bias-ridden statements from the research; student selects appropriate sample size, equivalent groups, and statistics; student designs a elegant study

4 As in 5, student designs an adequate study; choice of subgroups may exclude conditions that would make the study more complete, or may include conditions that are not necessary for answering the question

3 Student selects experimental factors that are appropriate to the research purpose and audience; measures adequate aspects of these selected factors; establishes discrete subgroups for which data significance may vary; research is weakened by bias or by sample size of less than 10

2 As above, but research is weakened by bias and inappropriate sample size

1 Student designs a poor study

Methods: Operational Definitions

5 Each of the independent (where appropriate) and dependent variables are stated in terms of clear and precise operational definitions

4 Major independent (where appropriate) and dependent variables are stated in terms of clear and precise operational definitions; some variables may not defined operationally, or operational definitions are not sufficiently precise and clear

3 Only some of the variables are operationally defined, and the definitions given are not sufficiently precise and clear

2 Major independent (where appropriate) and dependent variables are not operationally defined, and other variables are not defined in terms that are sufficiently clear and precise

1 Variables are not operationally defined

Results: Choice of Statistical Analysis

5 Student chooses methods of summarizing and analyzing data which are ideal for the dependent variable(s) (DVs), and for answering the research question given the parameters of the study (e.g., experimental or correlational study; number of IVs; number of levels of IVs; between- or within-subjects IVs; independent or matched treatment conditions; level of measurement of DV); data analysis is complete and thorough; statistical analyses are performed properly.

4 Choice of methods of summarizing and analyzing data are appropriate for the DV(s), and for answering the fundamental research question; statistical analyses are performed properly; data analysis may be incomplete: basic analyses are done, but not all follow-up or post hoc analyses are performed; analyses, though correct, are lacking in thoroughness.

3 As for 4, but some analyses may not be appropriate for the research question or analyses may not have been properly performed; descriptive statistics may be adequate, but inferential statistics are inadequate.

2 Data are not analyzed beyond the descriptive level; inferential statistics are not performed or are performed incorrectly.

1 There is no attempt to summarize or evaluate the data and only raw data are reported.

Results: Reporting Statistical Analyses

5 Student has reported results of all statistical analyses using proper format; all information that is necessary to validate statistical findings are reported.

3 Results of statistical analyses are not completely reported, or are reported in incorrect format.

1 Results of statistical analyses are not reported.

Results: Graphs and Tables

5 Choice and format of tables and graphs are appropriate for the data; the correct type of graph, where used, is used for each type of DV; tables, where used, are clear and effectively represent the findings of the study; the graphs/tables are

effectively captioned and labeled and have descriptive legends; graphs are visually "appealing" and do not have wasted space; one graph or table is presented per page.

4 As for 5, but with graphs or tables which do not present results as clearly; captions, labels, or legends are not completely descriptive of what is displayed in graph/table; graphs/tables may be more difficult to interpret; graphs may be lacking some visual "appeal."

3 Graphs/tables are not as clear as for 4; captions, labels, or legends may be inadequate or missing; an inappropriate type of graph may be used for the specific type of variable used; graphs may be too "busy," or have too much wasted space; size of graph as prepared is inappropriate (too small or large) for the circumstances; graph is lacking visual "appeal."

2 Graphs/tables do not clearly or effectively present the results; captions, labels, or legends are missing or inappropriate; too much or too little information is presented in the graphs or tables; graphs/tables are sloppy and appear to have been prepared in a haphazard manner.

1 Graphs/tables are missing or wholly inadequate for purposes of presenting the findings of the study; if present, graphs/tables have been prepared or drawn by hand.

Discussion: Interpretation

5 Student has summarized the purpose and findings of the research; has drawn inferences that are consistent with the data and scientific reasoning and relates these to the reader and intended audience; has identified whether findings are consistent or inconsistent with research hypothesis; has related results to previous research and theory; explains expected results and offers explanations for unexpected results; distinguishes between fact and implication.

4 As in 5, but may not adequately explain unexpected findings, or thoroughly relate findings to previous research or theory.

3 As in 4, but student overinterprets findings and draws conclusions from the data which may not be justified, or fails to draw conclusions which may reasonably be deduced from the findings.

2 Student summarizes the purpose and findings of the research; does not fully explain expected results, and ignores unexpected results.

1 Student does not relate findings to original hypothesis; results may or may not be summarized, but student fails to interpret their significance for the reader and the intended audience.

Discussion: Applications/Extensions of Findings

5 Student discusses possible applications of findings to contexts outside that of the study (e.g, outside of the laboratory); methods of the study are critically evaluated; student identifies questions that are unanswered as a result of current study; suggestions for further research or follow-up studies are identified and described.

4 As in 5, but student does not discuss possible applications to contexts outside that of the study.

3 As in 4, but the methods of the study are not critically evaluated.

2 Applications and extensions of research findings do not follow logically from the original research question, or are not made in the context of a stated theoretical framework.

1 Student does not discuss applications or extensions of the research findings, or suggest further research or follow-up studies.

References

5 List of reference citations is complete; all works cited in the body of the paper are listed, but only those works; references are listed in alphabetical order; proper APA reference citation format is followed.

4 As in 5, but references are listed which were not cited in the paper; minor errors in APA reference format may be present.

3 As in 4; student has not followed proper APA format for reference citations.

2 Student has failed to include all references cited in body of the paper; information in the references is incorrect or incomplete; references do not follow APA reference citation format.

1 Reference list is wholly inadequate, incomplete, or missing.

APA Format

5 Student has followed all conventions for proper format of a research report as described in APA Publication Manual (current edition).

4 Student has made minor deviations in APA format: e.g., incorrect form of page headers, improper section headings, or incorrect citation format of references.

3 As if 4, but more serious and consistent errors in APA format: e.g., subsections (e.g., *Subjects* or *Apparatus*) are omitted, absence of page headers or numbers, non-APA-style citation format, improper tense or voice for the paper, figures/tables inserted in incorrect location of paper, incorrect information included on Title page or critical information omitted, incorrect references to figures and/or tables.

2 Major errors in APA format: e.g., major sections of paper omitted, absence of title page, information presented in incorrect sections, critical information omitted, figures or tables left out.

1 Paper does not follow APA format.

Writing Quality

5 Student has written elegantly and cogently, using proper grammar, syntax, punctuation, spelling; the paper has a neat appearance and is free of typographical errors; wording is appropriate to the context; paragraphs are well-constructed; paper exhibits a logical "flow" from section to section; student used proper voice for the paper.

4 As in 5, but with occasional uncorrected typographical errors, or a very few minor errors in spelling, grammar, syntax, or punctuation; however, errors do not detract from the overall ability to convey meaning; the paper is not as elegant as in 5.

3 The paper exhibits numerous typographical errors and repeated errors in basic elements of writing; the student has not expressed his ideas with clarity and precision; transitions between paragraphs are awkward; wording of sentences tends to be simplistic in style and content.

2 The student has displayed serious and consistent problems in basic writing skill; the ability to express ideas is compromised by the poor writing quality.

1 The paper is seriously deficient in quality of writing.

Senior Thesis Primary Trait Analysis – Scoring Sheet

Student name _____

Rater name _____

Category	Weight	Rating	Score
Title	1	_____	_____
Abstract	1	_____	_____
Introduction: Problem	1	_____	_____
Introduction: Literature Review	2	_____	_____
Introduction: Hypothesis	1	_____	_____
Methods: Description	1	_____	_____
Methods: Experimental Design	2	_____	_____
Methods: Operational Definitions	1	_____	_____
Results: Choice of Statistical Analyses	1	_____	_____
Results: Reporting Statistical Analyses	1	_____	_____
Results: Graphs and Tables	1	_____	_____
Discussion: Interpretation	2	_____	_____
Discussion: Applications/Extensions…	2	_____	_____
References	1	_____	_____
APA Format	1	_____	_____
Writing Quality	3	_____	_____
Total	**22**		_____

Letter grade conversion:

Letter Grade	Total Score	Average Rating
A	93 - 110	4.25 – 5
B	75 - 92	3.4 - 4.2
C	57 - 74	2.6 - 3.35
D	39 - 56	1.75 - 2.55
F	22 - 38	1.0 - 1.7

A	99 - 110
A-	93 - 98
B+	87 - 92
B	81 - 86
B-	75 – 80
C+	69 - 74
C	63 - 68
C-	57 - 62
D+	51 - 56
D	39 – 50
F	22 – 38

(Contributed by Robert T. Herdegen III, Hampden-Sydney College)