Comprehensive Exam - 2015
Critical Literature Review & Research Proposal

Guidelines for Writing Well
Strategies for Approaching these New Exams

Changes
Common Issues & Solutions

http://nursing.ucsf.edu/comp-exams

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UCSF Office of Career and Professional Development

General Guidelines for Writing

Structural Unity - *makes sense*
Significant Topic / Issue Identified
Organized Logically – Issue to Resolution
Valid Conceptual Approach & Analysis
Clear Interpretation & Implications

Stylistic Clarity - *reads clearly*
Precise – strong nouns, verbs
Concise sentences, paragraphs, sections
Transition signals -- paragraphs & sections

UCSF Office of Career and Professional Development
Vital Resources

Vital resource - Dept. Administrative Assistants
- CHS: Judy Alonzo & Sharon Solorio
- PN: Mary Margaret
- FHCN: Maggie Pena
- SBS: Brandee Woleslagle

Comp Exam Coordinators
- CHS: Beth Phoenix & Dana Drew-Nord
- PN: Roxanne Garbez
- FHCN: Barbara Hollinger & Mary Lynch
- SBS: Susan Chapman

Additional Resources

- Advisors - topic & format
- Specialty faculty
- Former sample comps on reserve for ideas about issues – not format
- Scientific Writing Program Coordinator
  Susana.Leong@ucsf.edu

- Consider other arrangements
  - Typist
  - Paid tutors & editors
  - Peers as editors & proofreaders

- Create a timeline
Graduate Division Language

The Comprehensive Examination should demonstrate student mastery of the major field and ability to think critically.

Specific Purpose: evaluation of your abilities to...
- Critique research as it applies to your area of specialization
- Apply advanced clinical & theoretical knowledge to practice
- Utilize writing skills to disseminate nursing information in a scholarly paper
- Demonstrate yourself as a consumer of research

Strategies – What’s different?

- Four Exam Options
  - Critical Literature Review
  - Research Proposal
  - Problem-solving
  - White Paper (new)

- Four Sections - defined & scale-scored (1-5)
  - I. Writing Quality (tech fail)
  - II Topic/Issue
  - III. Literature Review Analysis
  - IV. Discussion /Application

- Section Scoring weights
- Suggested number of articles for exam type
- 20 pages, NOT 30
- Quantitative & Qualitative Research Review
  - Tables in Appendices – shortens Lit Review with focus on substantive critiques
Strategies – What’s the same?

Same Pass / Fail Score
- Total points available – 330
- Points needed to pass -- 231

Same Process:
- Two readers // possible third reader // one retake possible
- See Orientation for Revised Exam (11/14) for details on process and options …
  
  http://nursing.ucsf.edu/comp-exams

Critical Literature Review Exam

Identifies gaps in literature, implications for practice, need for further research
- Unresolved issue in the literature
- Some argue one position. Others disagree
  Synthesize differing arguments. Present your approach, based on exam lit. critiques

Choosing a Topic…
- Pose a question
- Do initial searching
- Look for enough research but no clear synthesis of findings
- Argue a point with some evidence but not established in practice
Critical Literature Review Exam

Four Sections - defined & scale-scored (1-5)

- I. *Writing Quality *(tech fail)*
- II. Topic/Issue
- III. Literature Review Analysis
- IV. Discussion /Application

I *Writing Quality - Important*

(same for all exams)

1. Content & focus
2. Logic & flow
3. Structure & organization
4. Sentence structure
5. APA format *(6th ed.)*
6. Correct grammar, punctuation, word usage, spelling

Each category 1-5 points = 30 points total

Score of 15 points or lower = technical fail
II. **TOPIC / ISSUE** Presentation & Exposition

(4 areas – 5 max each X 2.5 = **50 points total**)

1. **Clarity of topic or purpose** – reason, well-defined purpose, concisely stated -- **issue appearing IN the literature**
   - State in 1 sentence
   - The purpose of this paper is to **examine the literature related to** the efficacy of using BNP to diagnose patients with heart failure.

2. **Problem significance** – for nursing practice, research

3. **Review Organization** – how organized, conceptualized approach, rationale of article selection

4. **Quality references** (significant, classic & current articles critiqued - primary sources. Avoid multiple articles from same overall study --different purposes but same sample, methodology, statistics, etc.)
   - Meta-analysis & lit review articles – for background or significance

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**II. TOPIC/ISSUE:** Significant / Controversial

Unresolved issues found in literature

- Evaluating Cognitive Function after Stroke
- Family Presence during Resuscitation
- BNP Levels in Diagnosis of Heart Failure
- Evaluation of Depression in Adolescence

**Title: Topic / Issue / Approach**

- The **Relationship** Between Atypical Psychotropic Use and Diabetes Mellitus: The **Role of Genetics**
- **Sociocultural Factors** in the **Development** of Diabetes Mellitus in Patients with Severe Mental Illness
II. TOPIC / ISSUE
Showing Significance - The Rationale

Show significance of the issue in its context – rationale for nursing practice or research

- 4.8 million in the U.S. have HF
- 50% are rehospitalized in 6 months
- no lab test for diagnosing HF
- BNP might provide better method for evaluation of SOB than symptoms

Why important as an issue for nursing?

II. TOPIC / ISSUE
Organization of Review

Conceptualization of approach
- Background, history – citations

Search & Selection articles critiqued
- Search process
  - Databases, number of searches, key words
- Selection process
  - 5-7 articles – how selected...
  - The journal articles were chosen because they include.......and the oldest is reviewed first....

Quality of References
- Select significant literature (classic, current). If appropriate, meta analysis & lit review articles for background but exam references should be primary sources
II. TOPIC / ISSUE

Selection Sample … Single Paragraph Rationale Language

Although extensive literature has been published regarding topic X, few studies analyze issue y related to . . . . Hence, this paper’s approach is to fill that gap with critiques based on their theoretical and empirical significance to the development of . . . . The selected articles also were chosen for their contribution to understanding and contextualizing salient issues impacting . . . . The first two critiques were the first to address factors concerning . . . . The third critique addresses the impact of . . . . The fourth critique explores apparent . . . . The fifth examines . . . . While the sixth and seventh critiques address . . . .

NOT chronological unless appropriate

III. LITERATURE REVIEW

Critical Analysis

(4 areas – 5 max each X 7.5 = 150 points total)

1. Quality of theoretical discussion
   - Clear discussion of relevant theory/conceptual framework

2. Quality of research tables**
   - Table used for objective information of study methodology & findings

3. Addresses elements of critique
   - Critique relevant study points, findings, conclusions & author’s interpretations

4. Quality of critique & interpretation
   - Accurate critiques & potential for knowledge contribution
III. Literature Review: Choosing a Theory

- Applicable to critical literature review issue
- Should further clarify, support, & explain your topic/issue
- Nursing theory not required
- Explain theory in text -- not just in an appendix – use it to frame your discussion

III. More on Theory

- Theoretical Discussion
  - Must address foundation of issue
  - Theory enables you to explain a phenomenon. No right or wrong theory
  - Focus on how you want to frame the argument you are making
  - Example of possible theories:
    - Possible mechanisms underlying increased risk of Type 2 Diabetes in people on atypical psychotrophic medications
Theories - possible mechanisms underlying increased risk of Type 2 diabetes in people on atypical psychotropics

<table>
<thead>
<tr>
<th>Theories</th>
<th>Possible Mechanisms</th>
</tr>
</thead>
<tbody>
<tr>
<td>Physiological</td>
<td>HPA axis &amp; sympathetic nervous system hyperactivity resulting in cortisol overproduction</td>
</tr>
<tr>
<td>Genetics</td>
<td>Diabetes only occurs in those with a genetic predisposition</td>
</tr>
<tr>
<td>Co-morbidity</td>
<td>Diabetes is really due to alcoholism or binge eating</td>
</tr>
<tr>
<td>Socio-cultural</td>
<td>Due to socioeconomic, disability, marital status, access to health care</td>
</tr>
<tr>
<td>Health care</td>
<td>Providers fail to adequately monitor overall health</td>
</tr>
<tr>
<td>Behavioral</td>
<td>Inactivity, diet, smoking due to the psychiatric illness</td>
</tr>
<tr>
<td>Medication</td>
<td>Side effects, appetite stimulation and subsequent weight gain</td>
</tr>
</tbody>
</table>

III. LITERATURE REVIEW

Critiques Elements & Quality of Interpretation

- Use well written - perhaps not so well written - research articles. Showing what’s there
  - Critique process should identify articles that may have similar study questions yet end with different results – all related to your defined issue/problem
  - Details in Research Tables in appendices

- Synthesis & interpretation of each study
  - Sample size too small to have power to find a difference between those with and without HF
  - Authors were biased; they knew the BNP level and may have changed treatment
  - Only generalizable to men

- Quality of Critique & Interpretation
*Elements of single critique: Your Analysis*

**Research literature:**
- Synthesize each study's findings presented in the Research Review Table
- Discuss relevant study points or findings or conclusion
- Include the study author's interpretation of findings & strengths /limitations (validity & reliability, and Levels of Evidence – Appendix III)

**Non-research literature:** main points + credibility of author/content

------------- Most of this in the Tables: Appendix I & II  -------------
- **Study Aim & Design** (RCT, longitudinal, survival analysis etc). If randomized, mention how they achieved randomization
- **Sample**, how recruited. Key inclusion & exclusion criteria. If is split into groups, brief mention of groups' demographics
- **Procedure** -- what happened over the time during the study?
- **Measures used** (appropriate?) **Statistical analysis** (appropriate?)
- **Results** (including p values?)
- **Conclusions** - authors' acknowledgments of limitations

Any overall synthesis -- including referencing other articles (in comparison to one being critiqued) -- saved for Discussion

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*Levels of Evidence: Appendix III*

- **Ia** – Evidence from Meta-analysis of Randomized Controlled Trials (RCT)
- **Ib** – Evidence from at least one RCT
- **IIa** – Evidence from at least one well designed, non RCT
- **IIb** – Evidence from at least well designed experimental trial
- **III** – Evidence from case, correlation, & comparatives studies
- **IV** – Evidence from a panel of experts
## III. Research Literature Summary Critique Tables

- Organize your articles into a table that compares & contrasts different critique components – see template – & briefly describe it
- Limit to 1 page/article
- Detailed table information **not repeated** in the Comprehensive Exam itself

*The Exam focuses on your critique, your analysis!*

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## III. Definitions: Quantitative vs. Qualitative

[http://nursingplanet.com/research/qualitative_research.html](http://nursingplanet.com/research/qualitative_research.html)

<table>
<thead>
<tr>
<th></th>
<th><strong>Quantitative</strong></th>
<th><strong>Qualitative</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>General Framework</strong></td>
<td>Seek to confirm hypotheses</td>
<td>Seek to explore phenomena</td>
</tr>
<tr>
<td></td>
<td>Positivist paradigm</td>
<td>Naturalistic paradigm</td>
</tr>
<tr>
<td><strong>Objectives</strong></td>
<td>To predict &amp; control</td>
<td>To understand (what, how, why)</td>
</tr>
<tr>
<td><strong>Tools</strong></td>
<td>Highly structured methods: questionnaires, surveys, &amp; structured observation</td>
<td>Use semi-structured methods: in-depth interviews, focus groups, &amp; participant observation</td>
</tr>
<tr>
<td><strong>Design</strong></td>
<td>Rigid design</td>
<td>Emergent design</td>
</tr>
<tr>
<td></td>
<td>Controlled &amp; experimental</td>
<td></td>
</tr>
<tr>
<td><strong>Focus</strong></td>
<td>Prediction</td>
<td>Rich “thick” description</td>
</tr>
<tr>
<td></td>
<td>Outcomes</td>
<td>Similarities &amp; contrasts</td>
</tr>
<tr>
<td></td>
<td>Generalizability</td>
<td>Process &amp; context</td>
</tr>
<tr>
<td><strong>Data analysis</strong></td>
<td>Statistical</td>
<td>Non-statistical</td>
</tr>
</tbody>
</table>

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### III. Research Tables - Quantitative

**Appendix I: Quantitative Research Literature Review Table**

<table>
<thead>
<tr>
<th>Citation</th>
<th>Conceptual Frame work /Theory</th>
<th>Aims</th>
<th>Design &amp; Methodolog y</th>
<th>Sample &amp; Setting</th>
<th>Variables</th>
<th>Measurement &amp; Analysis</th>
<th>Findings</th>
</tr>
</thead>
<tbody>
<tr>
<td>Author/s name, article title</td>
<td>Year of publication, journal</td>
<td>Theoretical basis of study</td>
<td>Study purpose</td>
<td>What were hypotheses/null hypotheses of stated research question?</td>
<td>Design?</td>
<td>Briefly describe procedures used to collect data</td>
<td>n = ?</td>
</tr>
</tbody>
</table>

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### III. Research Tables - Qualitative

**Appendix II: Qualitative Research Literature Review Table**

<table>
<thead>
<tr>
<th>Citation</th>
<th>Theoretical Framework</th>
<th>Design &amp; Methodology</th>
<th>Aims</th>
<th>Sample &amp; Sampling</th>
<th>Analysis</th>
<th>Findings</th>
</tr>
</thead>
<tbody>
<tr>
<td>Author/s name, article title</td>
<td>Year of publication, journal</td>
<td>Theoretical basis of study</td>
<td>Study design</td>
<td>Data sources</td>
<td>Data- collection strategies</td>
<td>Study purpos e</td>
</tr>
</tbody>
</table>

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IV. DISCUSSION & APPLICATION

(2 areas - 5 max each = 10 x 10 = 100 points possible)

1. Critical & Original Analysis – of your critiques
   - Analyzes body of literature & theoretical discussion presented in Area III / your critiques
   - Summarizes theoretical discussion & significant accomplishments in literature

2. Integration, Synthesis, Implication of critiques
   - Describes relationship between major findings
   - Identifies gaps & future research
   - Formulates pertinent researchable questions, propositions, hypothesis
   - Discusses implications & significance for nursing practice

Review of Exam Scoring

- I: Quality of Writing* ……. 30 points
- II: Topic or Issue….. 50 points
- III: Literature Review …. 150 points
- IV: Discussion & Application…. 100 points

- Total points available – 330
- Points needed to pass – 231
**Former Excellent Lit. Review Comments**

Body Mass Index (BMI) -- Measure, Predictor of Obesity in School-Aged Children

- Problem clearly articulated
  - Immediately linked to theoretical perspective
- Literature Review clearly structured
  - Divided into topical headings
  - Multiple discipline research summarized
  - Analytical critique
- Conceptual framework appropriate
  - Linked to problem in lit & relevant intervention

**Former Good Lit. Review Comments**

Relevant Factors for Appropriate Clinical Management of Women with Atypical Pap Smears

- Topic -- important & well articulated
  - Good conceptual approach & organization
- Literature Review -- organization!
  - 5 Biomedical, 3 Psychosocial Factors
  - Full depth of critiques & analysis
- Discussion & Application
  - Conclusion too short
  - Missing theoretical approach, gaps in lit. Still passed!!
Former Weak Lit. Review Comments

Efficacy of Light Therapy on Institutionalized Dementia Patients

- Topic significant BUT research on issue -- tenuous
  - Problem as stated -- NOT a lit. review option UNLESS problem restated to reflect more focus & broader research base that included controversy
- Final focus shifted to significance of nocturnal sleep disturbances
- Good review of the literature that existed. Good theoretical framework

All parts need to work together!

Common Weaknesses / Strengths

- Unclear Topic / Significance: State what & why
- Undefined Organization: Show how
  - Selection & order of articles unclear
- Literature Critiques: Show your assessment
  - Just listing & describing
- Discussion & Application: Critically analyze
  - Unclear what this review means for nursing practice
Checklist

- Select **significant** topic / issue
- Research **relevant** Literature

- **Outline structure** of 3 sections – **draft**

- **Review** content, structure, language
- Get reader/advisor **reviews**
- **Revise, edit** for clarity, logic, style
- **Follow Comp Orientation Process**

Common Reasons for Not Passing

- Started too late for necessary time & effort
- Did not meet with advisor to obtain feedback & ensure being on track
- Did not follow advisor’s advice
- Changed comp topic at last minute
- Primary editor’s English composition skills not adequate for appropriate feedback on writing
Research Proposal Option

Evaluates ability to **identify a significant research question** relevant to nursing practice & **design a methodology** for addressing the question

- Study does not have to be carried out but must have access to UCSF faculty with research experience to mentor you.

- Good choice for building on this topic for future research or doctoral work

- Could be taken back to your workplace for implementation if approval given by institution
Research Proposal – now four areas

I. Writing Quality (tech fail) 30

II. Study & Context 70

Specific problem, Aims, Significance to nursing & society

Clarity / Significance of issue / Comprehensive yet Succinct

III. Conceptual / Theoretical Framework & Literature Review 125

(Paper Tables: App I & II)

- Perspective, Preliminary Work, Theoretical, Research Base for Hypothesis

Clarity & Quality

IV. Methodology (quantitative & qualitative) 105

Criteria (design, environmental resources/ constraints, sample & selection process, consent forms, materials/tools, with copy of tools in appendix, procedures, data analysis, resources, limitations)

Adequate / Consistent / Clear / Appropriate / Feasible / Integrity / Realistic

Excellent Research Proposal Comments

“Premenstrual Negative Affect Symptoms as Possible Relapse Trigger for Chemically Dependent Women in Recovery”

- Significant Problem

Excellent Design & Organization

- Literature Review

Sharply focused, specifically supported variables
Linked to conceptual framework, study design

- Methodology

Complex analytical strategy
**Excellent Research Proposal Comments**

“Premenstrual Negative Affect Symptoms as Possible Relapse Trigger for Chemically Dependent Women in Recovery”

- **Significant Problem**
  Excellent Design & Organization

- **Literature Review**
  Sharply focused, specifically supported variables
  Linked to conceptual framework, study design

- **Methodology**
  Complex analytical strategy

**Weak Research Proposal Comments**

“Effect of Blue Cohosh on Active Phase of Labor”

Study -- important issue without clear aims

Imprecise focus -- NOT clearly stated
Lacked ample literature references for major terms

Methodology – NOT put together well

Hypothesis NOT stated
Research design flawed