

Research Critique Worksheet:

Title of Article: _____

Author(s): _____ Journal: _____ Mo/Yr: _____ Pages: _____

Reviewer: _____ Mentor: _____ Date: _____

Level I Research Design	Level II Research Design	Level III Research Design	MAJOR FINDINGS/STRENGTHS/LIMITATIONS
<p><u>Purpose of study:</u></p> <p><u>Research Questions:</u></p> <p><u>Research Variable:</u></p> <p><u>Research Design (Qualitative Non-experimental):</u></p> <p>Ethnography</p> <p>Phenomenology</p> <p>Grounded Theory</p>	<p><u>Purpose of study:</u></p> <p><u>Research Questions/Associative Hypothesis:</u></p> <p><u>Independent Variable:</u></p> <p><u>Dependent Variable(s):</u></p> <p><u>Research Design (Quantitative Non-experimental):</u></p> <p>Correlational (ex post facto)</p> <p>Comparative</p> <p>Case-control</p> <p>Cohort</p>	<p><u>Purpose of study:</u></p> <p><u>Research Questions/Causal Hypothesis:</u></p> <p><u>Independent Variable(s):</u></p> <p><u>Dependent Variable(s):</u></p> <p><u>Research Design (Quantitative Experimental):</u></p> <p>True Experimental (Random Controlled Trial)</p> <p>Quasi-Experimental</p>	<p><u>Findings:</u></p> <p><u>Strengths:</u></p> <p><u>Limitations:</u></p>
SAMPLE	MAJOR TOOLS (Quantitative) Level II-III Research Design	Systematic Reviews/Meta-analysis/Guidelines	QUALITY OF EVIDENCE
<p><u>Number (N):</u></p> <p><u>Type of sampling plan:</u></p> <p><u>Age:</u></p> <p><u>Gender:</u></p> <p><u>Health status:</u></p> <p><u>Diagnosis:</u></p> <p><u>Other:</u></p> <p>SETTING</p> <p><u>Type:</u></p> <p>Acute care hospital</p> <p>Community</p> <p>Nursing Home</p> <p>Other</p> <p><u>Location:</u></p> <p>Urban</p> <p>Rural</p>	<p><u>Name(s):</u></p> <p>#1 _____</p> <p>#2 _____</p> <p>#3 _____</p> <p><u>Reliability:</u></p> <p>#1 _____</p> <p>#2 _____</p> <p>#3 _____</p> <p><u>Validity:</u></p> <p>#1 _____</p> <p>#2 _____</p> <p>#3 _____</p>	<p>Systematic Review:</p> <p><u>Research Question:</u></p> <p><u>Independent Variable(s):</u></p> <p><u>Dependent Variable(s):</u></p> <p>Meta-Analysis:</p> <p><u>Research Question:</u></p> <p><u>Independent Variable(s):</u></p> <p><u>Dependent Variable(s):</u></p> <p>Guidelines:</p> <p><u>Purpose:</u></p> <p><u>Clinical Question:</u></p>	<p><u>Evidence Rating:</u></p> <p>Level I: Evidence from a systematic review or meta-analysis of mostly randomized controlled trials (RCT, experimental studies) or evidence-based clinical practice guidelines based on systematic reviews of experimental studies that are RCTs</p> <p>Level II: One well-designed RCT (true experimental study)</p> <p>Level III: Well-designed controlled trial without random assignment to group (quasi-experimental study)</p> <p>Level IV: Well-designed case-control or cohort study</p> <p>Level V: A systematic review of descriptive and qualitative studies (nonh-experimental quantitative or qualitative studies)</p> <p>Level VI: One descriptive or qualitative study (non-experimental quantitative or qualitative)</p> <p><u>Feasibility:</u></p> <p>Could this practice change be implemented easily in your organization and with minimal resources? _____Yes _____No</p> <p><u>Benefit/Risk:</u></p> <p>Would the benefits of this practice change outweigh the risks to patients? _____Yes _____No</p> <p><u>Comments:</u></p>

RESEARCH DESIGNS

Research Level and Design	Conceptual Base	Purpose	Research Question	Research Strategies	Sample	Data Analysis
<p>Level 1 – Qualitative, non-experimental</p> <p>Ethnography – investigation of cultures</p> <p>Phenomenology – describe experiences as the experiences are lived</p> <p>Grounded Theory – discovering what problems exist in a social scene</p>	<p>Little or no knowledge about the topic.</p> <p>Some knowledge of the variable, but variable has not been studied in a particular population.</p>	<p>Describe the dimensions of the one variable.</p> <p>Generate new theory.</p>	<p>What are the lived experiences of those who have survived a man-made disaster?</p>	<p>Observations</p> <p>Participant observation</p> <p>Open-ended interviews</p>	<p>Non-probability – no random selection of the sample.</p> <p>Small size.</p> <p>Subjects have experience with the topic.</p>	<p>Content analysis of words</p> <p>Descriptive analysis of the sample (frequency, percentage, mean, median, mode, standard deviation,, and other data analysis of the sample)</p>
<p>Level II – Quantitative, non-experimental</p> <p>Correlational (ex post facto) – investigation of relationships between two or more variables</p> <p>Comparative – describe differences in variables in two or more groups in a natural setting</p> <p>Case Control – comparison of a “case” such as persons with lung cancer with matched controls (similar but no lung cancer)</p> <p>Cohort – defined groups of people (cohorts) followed over time to study outcomes</p>	<p>Literature on variables but action of the variables cannot be predicted.</p>	<p>Test the relationship (differences, correlation, associations) between two or more variables.</p> <p>Test theory</p> <p>Test associative hypothesis(es)</p>	<p>What is the relationship between social support and dying patients' degree of hopelessness?</p> <p>What is the difference between men and women's feelings of hopelessness?</p>	<p>Multiple measurements with reliable and valid instruments.</p> <p>Self-report questionnaires</p> <p>Observation data collection</p> <p>Biophysiological data collection</p>	<p>Non-probability – no random selection of the sample.</p> <p>Probability – random selection of the sample</p> <p>As large as possible</p>	<p>Univariate descriptive statistics (frequency distributions, histograms, central tendency)</p> <p>Bivariate descriptive statistics (contingency table, Pearson's r)</p> <p>Multivariate statistics to analyze the relationships among three or more variables (multiple regression, ANCOVA)</p> <p>t-test – two groups</p> <p>ANOVA – three or more groups</p> <p>Chi square - proportions</p>
<p>Level III – Quantitative, experimental</p> <p>True experimental – There is manipulation of the independent variable (treatment; intervention), a control group, and random assignment to group.</p> <p>Quasi-experimental – There is manipulation of the independent variable (treatment; intervention) and either a control group or random assignment to group.</p>	<p>Previous research on relationships of variables.</p> <p>Action of variables can be predicted from the theoretical framework.</p>	<p>Explain and predict cause and effect relationships between the variables.</p> <p>Test theory</p> <p>Test causal hypothesis(es)</p>	<p>What is the effect of palliative care program on hopelessness in a dying patient?</p>	<p>Same as above.</p>	<p>Non-probability – no random selection of the sample.</p> <p>Probability – random selection of the sample</p> <p>As large as possible</p> <p>Statistical calculation of size (power analysis)</p>	<p>Same as above.</p>

Opinion of Authorities and/or Expert Committee Articles
(Level VII: Hierarchy of Evidence)

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Purpose of Article:

Summary of Major Points:

Comments: