

Quantitative Research

THE READER'S COMPANION WORKSHEET

Article Title: _____

Author(s): _____

TITLE

Topic of interest Yes No Maybe

Method of interest Yes No Maybe

Population of interest Yes No Maybe

ABSTRACT

Results useful Yes No Maybe

INTRODUCTION

Why is the study being done (i.e., problem, concern, issue)?

What is the purpose of the study or the question(s) that the investigator is trying to answer (e.g., literature review)?

What are the central concepts and variables (e.g., pain level, confidence, exercise activity)?

Concepts under study:

The experimental (independent) variable is defined as:



The outcome (dependent) variable is defined as:

Other variables that the researcher has not thought about that might influence the results are:

Note that sometimes there are many factors included in descriptive surveys and not a primary or secondary outcome. If this is the case in the article that you are reading, provide an overall description.

Are most of the references recent (less than 5 years old)? Yes No

If no, is this a classic/groundbreaking reference or one that has re-emerged in importance (i.e., research relating to tuberculosis)?

Are experts cited? Yes No Not sure

METHODS

Design

What is the research design (e.g., survey, case control, cohort study)?

Sample

What are the characteristics of the participants who were included and excluded from the study (e.g., health status, age, education, gender, ethnicity, occupation, geographical residence, socio-economic status)?

Included:



Excluded:

Are the participants similar to those in your setting?

Yes No Somewhat

What are the procedures for choosing participants (e.g., convenience, quota, random selection, volunteers)?

Do you think the methods used to select participants for the study biased the results?

Selection bias Yes No

If yes, how?

Were there many refusals, withdrawals, dropouts, or deaths?

Participation bias Yes No

Human Rights Protection

Was informed consent obtained? Yes No

Was the participant reasonably able to take part? Yes No

Was the study potentially/actually harmful to participants/others? Yes No

List any ethical principles ignored (e.g., truthfulness, confidentiality).

Setting

What was the environment in which the data were collected?

Home setting Private room Laboratory Other



Experiment (if applicable)

What was the special treatment or intervention?

Did the participants in the study know whether they received the intervention or a placebo? Yes No

What methods, if any, were used to “blind” the participants, staff, and data collectors from knowledge about the study that might influence the results?

Was there any contamination or mixing of treatments across the study groups?

Were there any other factors related to the intervention/treatment that might have influenced the outcomes?

Performance bias Yes No

If yes, what were they?

Data Collection

What was the data collection method/tool used?

Questionnaire Interview Chart review Procedure

Observation Other _____

Were methods used to ensure that data were reliably collected (e.g., differences between raters, differences between times of measurement)?

Yes No Not reported

If yes, what were they?



Were methods used to ensure the validity of the collected data (e.g., expert review, comparison with other measures)?

Yes No Not reported

If yes, what were they?

Do you think that the measurement methods biased the results?

Measurement bias Yes No

If yes, how?

Data Analysis

What statistical methods were used to analyze the data?

RESULTS

Was the response rate satisfactory? Yes No Not sure

What are the main findings of the study?

What information is presented in tables, figures, or graphs? Are these easy to understand or confusing?

Were any of the findings statistically significant? Yes No Not sure

If yes, what were they?



Were there clinically meaningful results/trends?

Yes No Not applicable Not sure

If yes, what were they?

DISCUSSION

Do you agree with the investigator's opinions? Yes No Somewhat

If not, why not?

Are the results consistent with past research? Yes No Not applicable

If not, why not?

Does the interpretation make sense theoretically? Yes No Not sure

If not, why not?

Does the interpretation make sense clinically? Yes No Not sure

If not, why not?

OVERALL IMPRESSIONS

Overall, is the article important or significant for the practice of health care?

Yes No

Do the findings resonate (seem correct and familiar) with you and your practice?

Yes No

If yes, why? _____



Major limitations of the study (2 or 3):

Major strengths of the study (2 or 3):

Are the results applicable or relevant to other settings, populations, or disciplines?

USING RESEARCH RESULTS

Once you feel somewhat comfortable with the information in the article, ask yourself these questions:

Will information from the study help with the following?

- | | | | | |
|-------------------------------|------------------------------|-----------------------------|--------------------------------|---|
| Assessment: | Yes <input type="checkbox"/> | No <input type="checkbox"/> | Maybe <input type="checkbox"/> | Not applicable <input type="checkbox"/> |
| Procedure/protocol: | Yes <input type="checkbox"/> | No <input type="checkbox"/> | Maybe <input type="checkbox"/> | Not applicable <input type="checkbox"/> |
| Interventions: | Yes <input type="checkbox"/> | No <input type="checkbox"/> | Maybe <input type="checkbox"/> | Not applicable <input type="checkbox"/> |
| Interpersonal relationships: | Yes <input type="checkbox"/> | No <input type="checkbox"/> | Maybe <input type="checkbox"/> | Not applicable <input type="checkbox"/> |
| Quality improvement programs: | Yes <input type="checkbox"/> | No <input type="checkbox"/> | Maybe <input type="checkbox"/> | Not applicable <input type="checkbox"/> |
| Work life/environment: | Yes <input type="checkbox"/> | No <input type="checkbox"/> | Maybe <input type="checkbox"/> | Not applicable <input type="checkbox"/> |
| Education programs: | Yes <input type="checkbox"/> | No <input type="checkbox"/> | Maybe <input type="checkbox"/> | Not applicable <input type="checkbox"/> |
| Other: | | | | |

Are the findings consistent with policies, procedures, and standards?

- | | | | |
|---------------------------|------------------------------|-----------------------------|-----------------------------------|
| Require new policy: | Yes <input type="checkbox"/> | No <input type="checkbox"/> | Not sure <input type="checkbox"/> |
| Require new procedure: | Yes <input type="checkbox"/> | No <input type="checkbox"/> | Not sure <input type="checkbox"/> |
| Require new standard: | Yes <input type="checkbox"/> | No <input type="checkbox"/> | Not sure <input type="checkbox"/> |
| Can safety be maintained? | Yes <input type="checkbox"/> | No <input type="checkbox"/> | Not sure <input type="checkbox"/> |



Do you think that the findings are acceptable to the following people?

Clients: Yes No Not sure

Administrators: Yes No Not sure

Colleagues: Yes No Not sure

Other professionals: Yes No Not sure

Are the following required for using the results?

Equipment: Yes No

Staff: Yes No

Time: Yes No

Money: Yes No

Knowledge/skills: Yes No

Attitude change: Yes No

Is the benefit worth the effort of obtaining the resources and changing practice?

Yes No

Why or why not?

