Full quantitative critique (sucrose decreases infant biohavioral pain response to...

Research Critique: Sucrose Decreases Infant Biobehavioral Pain Response to Immunizations The words sucrose, decrease, pain response, and immunizations are the key words which describe the research topic at hand. However, the title is not descriptive of the article. Words like analgesia and age-related changes should have been included in the title in order to specifically describe the research. The research question is clearly stated in the abstract and in the background of the study. It is precisely stated and very much researchable because the research subjects can be studied in a controlled setting and the results and process can be duplicated in the future. Some of the research studies used in the literature review is not current; some are over 5 years old. They are appropriate researches which are very much related to the effect of sucrose on pain responses of infants. They are logically organized from studies on pain response in infants, immunizations, sucrose and then other relevant researches vital to the topic. They are also primary sources. The research design is randomized, prospective, and is a clinical trial. This method studied the research subjects in a much more specific and controlled set-up, and helped answer the research question accurately. Threats to validity are addressed through the randomized process of choosing subjects for the paper. There is enough data given in order to replicate this research. The gate-control theory of pain was used for this research. It fits this research because it helps explain the perception of pain in infants, the pain response, and the body’s reaction to pain. The subject selection for this research is random sampling, which is appropriate because it gives every member of the population a chance to be part of the research. The study also explains how subjects and the sample population were chosen for this research. The data gathering methods were

well-explained in the research. The author described how each sample would be chosen. The process of data collection from each research subject was also described specifically in the research. Pain scales were used to measure the results. Measures of variance were repeated in order to verify results. The methods used are very much appropriate for this research because they produced measurable results. This research made use of the Statistical Analysis Systems in order to analyze behavioral response to pain. Descriptive analysis through measures of variance was used in order to compare the control and treatment groups. The methods chosen were able to answer the research question in detail. The question posed by this research was completely answered. The portion on ‘ findings’ laid out the answer for each hypothesis posed by this research. It indicated details of the findings and further interpretations that may be drawn from such findings. These answers were also echoed and repeated in the conclusion portion of the research. An assumption that may be drawn from this research is that infants receive immunization when they are within 2 to 4 months of age. By assuming this, this study may proceed on the premise that the prospective research subjects for this study would be infants 2 to 4 months of age. Limitations of this research were specified by the author, but they are limitations that impede the generalizability of the research, not its reliability or validity. They are acceptable limitations. One other possible limitation is that there were only 40 infants chosen for this research. More could have been chosen to increase the applicability of the results. This research is applicable to nursing practice in the sense that it will help nurses establish ways in reducing pain and trauma for infants during immunizations. These results are important because they help establish evidence-based practices

that nurses can apply. For this research, I recommend that further studies be done covering a wider population of infants in order to increase the generalizability of results. Research related to specific types of immunization and their effects on infants should also be done in order to establish specific results relating pain to the immunization process.