8. Kathleen Steinkirchner (Prof. Kirsten Condry) Psychology

Kathleen's short paper demonstrates the great value of clear and concise writing about scientific research. In this paper she evaluates research on whether television advertising influences young children's beliefs about gender roles. Kathleen clearly describes the method of the study and includes sufficient detail to explain the subtleties of the results. Then she offers a critique of the research on several levels, addressing issues of both reliability and validity, and offering suggestions for improvement. Kathleen's critique is especially perceptive and discerning for someone who is not a psychology major, showing a keen understanding of empirical design and procedure. Overall Kathleen's paper is well-organized and insightful – two ideals of scientific writing.

In 2005, researchers studied the effect that commercials had on children's views of proper gender usage of toys. One of the most prominent reasons the study was done was that exposure to commercials is extremely high. Children see well over 40,000 commercials per year. It is therefore necessary to see what effects these commercials are having on children. Another significance of this study is to examine gender stereotypes as portrayed in commercials. Finally, the researchers wished to test two different theories that have been portrayed. The first, the cultivation theory, suggests that children's beliefs are skewed based on what is seen on television. The second, the social learning theory, suggests that what is observed by children on television is imitated. The authors believed this to be a good research topic to explore because very few researchers have investigated the portrayal of nontraditional gender roles in media. This can be done by examining participants' behaviors and toy preferences after manipulating gender in children's toy commercials.

To perform this study, first and second graders (both male and female) were assigned to groups that were shown one of three varieties of commercial sets. After watching a commercial set, the children were then asked whether they thought two different toys were for boys, girls, or both boys and girls. The first toy was a Harry Potter Lego set, and the second a Playmobile Airport set. Both were chosen for their gender neutrality.

The six commercials used consisted of two that showed boys playing with genderneutral toys, two non-toy commercials, and two public service announcements. The three commercial sets were set up as follows: The first set consisted of all six commercials that were not manipulated. The next set contained non-traditional commercials, in which the two toy commercials were manipulated so that girls' faces covered the boys' faces. The third set, the control group, contained two non-toy commercials for two beverages depicting an equal sex ratio in place of the toy commercials.

The toy sort the children performed was done by showing the child an index card with a picture of a toy on it and asking them to classify it as being for girls, boys, or both girls and boys. The toys tested with the index cards were the Harry Potter Lego set, Playmobile Airport set, a generic wooden blocks, a generic wooden train set, a doll and a dump truck.

The results showed that boys were more likely to classify a toy as being for both boys and girls than the girls were in the nontraditional condition for both toys, and more so for the Playmobile Airport Set than the Harry Potter Legos. The girls showed little difference between the traditional and nontraditional conditions for the Harry Potter Legos but were more likely to report the Playmobile Airport Set to be for both boys and girls after seeing the nontraditional commercials. It was also discovered that children who had seen the same commercials prior to the study were less affected by the nontraditional conditioning. The authors concluded that the gender of models in advertising does have an effect on children's beliefs of what gender should play with specific toys. Thus, advertisers should consider how they may be affecting the development of children's conceptions about gender.

Overall, the research was well done. However, there are a few flaws that may have affected the results significantly. First of all, children who had seen the commercials

used in the study previously should not have been counted in the results. Having seen the commercials previously, the children may have already been conditioned to the traditional view of which gender the toy was designed for. If a child who had seen the commercial before was shown the nontraditional commercial and then classified the toy as being for boys only, these results would not be very accurate since there is a possibility that he would have been affected by the nontraditional condition had he not seen it and classified the toy as being for both girls and boys.

Another weakness of this study is that the sample size is not very large and may not be considered random since all children were from the same school. Only 62 children were used for the study, about half of whom were males and half were females. This leaves relatively small numbers for each of the three commercial sets. Using a larger sample size would increase the accuracy of the results significantly. By testing children from the same school district a bias is introduced that may have affected the results. The bias involved could be based on the fact that the children probably have very similar curriculums and are taught many of the same values. Also, being in the same school and growing up in the same area of the country may further amplify the effect of the bias. The children could be considered to be living in the same environment, something that is usually controlled for in studies to prevent bias and increase randomness so as to achieve more accurate results. This bias could be eliminated by using children from several elementary schools from various cities and social classes.

The usage of poor-quality editing of the children's faces in the nontraditional toy commercials is another weak point of the study. These choppy commercials may have influenced the views of those children who watched the nontraditional toy

advertisements. The authors admit that the girls' faces remained static and did not change facial expression. Seeing the girl show no emotion or excitement toward the toy in the commercial may cause the viewers to think that the toy is boring to the model and, therefore, consider it not to be intended for girls to play with.

One last flaw of the research setup was the method by which the children were shown the commercials. Groups of ten children were shown the commercial sets in the same room at the same time. Although this saves on time and resources, and although talking was discouraged, opinions may have been manipulated based on seeing fellow students' reactions to the commercials. This may not have had a huge impact on the results but it certainly could affect them. In order to avoid this, the children should have been shown the commercial sets one at a time, with no distractions. Perhaps a future study could take all of these flaws into account and use a similar method to study the same topic.

Children today are exposed to media in massive amounts and what they are seeing seems to be having an effect on their values and beliefs. Advertisers should be aware of this and adjust their commercials accordingly. Perhaps by studying the long-term effects of commercials on children's perceptions of gender appropriateness based on commercial models we can convince advertisers to take this into account more seriously.

Source: Pike, J.J., & Jennings, N. A. (2005). The effects of commercials on children's perceptions of gender appropriate toy use. *Sex Roles*, 83-91.