Effect of Infant's Perceived Gender on Adolescents' Ratings of the Infant Douglas Degelman, Veronika Dvorak, and Julie Ann Homutoff Vanguard University of Southern California

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An original research proposal by Julie Ann Homutoff has been edited and adapted by Douglas Degelman to illustrate basic elements of a research proposal.

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## Abstract

The role of the perceived gender of an infant and the gender of adolescents on ratings of the infant will be explored. Thirty-six junior high students (18 boys and 18 girls) will view a photo of a 3-month-old infant. Students will be told the infant's name is either "Larry," "Laurie," or they will not be told the infant's name. Each student will rate the infant on 6 bipolar adjective scales (firm/soft, big/little, strong/weak, hardy/delicate, well coordinated/awkward, and beautiful/plain). It is predicted that both the name assigned to the infant and the students' gender will affect ratings. Implications of the results for parenting and for future research will be discussed.

## Effect of Infant's Perceived Gender on Adolescents' Ratings of the Infant

Many researchers agree that gender role socialization begins at the time of an infant's birth (Haugh, Hoffman, & Cowan, 1980; Honig, 1983). Most parents are extremely interested in learning whether their newborn infant is a boy or a girl, and intentionally or not, this knowledge elicits in them a set of expectations about sex role appropriate traits (Rubin, Provenzano, & Luria, 1974). Empirical research suggests that these initial expectations, which form the basis of gender schemas (Leone & Robertson, 1989), can have a powerful impact on parents' perceptions of and behavior toward infants (Fagot, 1978; Lewis, 1972). Gender contributes to the initial context within which adults respond to an infant and may become an influential agent in the socializing process and the development of the child's sense of self (Berndt & Heller, 1986).

Stereotyped expectations may influence gender role socialization and the acquisition of sex-typed behavior through a self-fulfilling prophecy process (Darley & Fazio, 1980). Preconceived gender-based expectations may cause the parent to elicit expected behavior from the infant and to reinforce expected behavior when it occurs; this would confirm the parents' initial expectations.

Several studies (Condry & Condry, 1976; Culp, Cook, & Housley, 1983; Delk, Madden, Livingston, & Ryan, 1986; Rubin et al., 1974) have explored the effects of infant gender on adult assignment of sex-typed labels and have demonstrated that adults sex-type infants. These studies have examined a variety of subject populations and included infants of varying ages. Parents in one study, for example, were asked to rate and describe their newborns shortly after birth when the primary source of information about the baby was his or her gender (Rubin et al., 1974). Although the infants did not differ on any objective measures, girls were rated as smaller, softer, more fine-featured, and more inattentive than boys. Other studies have revealed that parents treat male and female infants differently. Culp et al. (1983) found that both male and female parents behave differently toward unfamiliar infants on the basis of perceived sex. This study suggests that adults are inclined to perceive traits in an infant that are consistent with an infants' gender label. Also, Fagot (1978) observed that parents of toddlers reacted differently to boys' and girls' behavior. Parents responded more positively to girls than boys when the toddlers played with dolls, and more critically to girls than boys when the toddlers engaged in large motor activity.

As a group, these studies suggest that adult responses coincide with culturally specified sex stereotypes associated with the gender label assigned to an infant and independent of actual infant gender differences. These studies have addressed how both perceptions and behaviors might be affected by expectations associated with the gender label assigned to the infant.

Although many studies have examined sex stereotyping of infants by adults, particularly parents, very few studies have examined children's or adolescents' sex-typing of infants (Haugh et al., 1980; Vogel, Lake, Evans, & Karraker, 1991). Stern and Karraker (1989) reviewed available studies of sex-biased perceptions of infants who were labeled either male or female, and concluded that adults' perceptions often are not influenced by knowledge of an infant's sex; however, young children were found to rate infants in a sex-stereotyped fashion much more frequently than were adults. None of the studies included in the review examined sex stereotyping of infants by older children and adolescents. One question motivating this study, therefore, was how sex-stereotyped perceptions of infants change during the early adolescent period, particularly junior high (middle school) age.

Although few studies have investigated adolescents' sex-stereotyped perception of infants, a number of studies have examined adolescents' sex stereotyping of older individuals. Many of these studies, using varied methods, have found that sex stereotyping increases with age between 3 and 14 years (Berndt & Heller, 1986; Martin, 1987; Scanzoni & Fox, 1980; Skrypnek & Snyder, 1982). Some studies have found a curvilinear relationship between age and sex stereotyping, with younger subjects and adolescents using sex stereotypes less than other children (Stern & Karraker, 1989). However, most of these studies suggest a consistent increase in sex stereotyping from preschool through middle childhood, a plateau, and then a decrease through adolescence.

The purpose of this present study is to systematically examine the effects of gender of adolescents and infants' perceived gender, and their interaction, on adolescents' ratings toward the infant. Several studies suggest that differences in the ratings of a perceived male or perceived female infant are a function of the actual gender of the observer (Condry & Condry, 1976; Vogel et al., 1991). Girls tend to rate infants as more beautiful than boys do, when there is a choice between the adjectives of plain and beautiful. Also, older women, particularly mothers, tend to give more positive ratings than other subjects (Bell & Carver, 1980).

Participants for the present study will be selected to represent the adolescent age period (12-14 -year-olds). Consistent with the findings of Haugh et al. (1980) and the studies reviewed here, it is expected that the act of labeling infants with gender-typed first names will elicit responses of learned attributes associated with gender-category labels. Any stimulus that elicits the gender category, such as a "genderized" first name or designation as "male" or "female" will elicit a potentially broad set of associated attributes. The prediction is that if adolescents are given minimal information about an infant, adolescents will use sex-related cues (i.e., name of infant) to make evaluations about the infant. The second hypothesis is that males and females will rate the perceived infant differently regardless of the name assigned to the infant. The last

hypothesis is that the effect of the infants' perceived gender will depend on the adolescents' gender (an interaction effect).

### Method

### **Participants**

Thirty-six junior high students (12-14-year-olds) attending a public school in West Covina, California will be used as participants. The students are a part of a leadership class. The school is located in a predominantly middle-lower class neighborhood. Informed consent will be obtained from parents or legal guardians, and an incentive will be used so that students will be motivated to get their informed consent papers signed.

## Design

This study can be considered a 2 (gender of the adolescent) X 3 (infant name condition) between-subjects factorial design, because there are two independent variables. The gender of the adolescents has two levels, male or female, and the infant name condition has three levels: Laurie, Larry, and the control condition. The dependent measures are the adolescents' ratings of the infant on each of the six bipolar adjectives.

## Materials

A color image (see Figure 1) of a 3-month-old infant will be used for all the conditions. The infant's image will be photocopied on 21.6 X 27.9 cm paper. Several sex-typed adjectives (see Figure 1) will appear on the paper with the infant's pictures. Six bipolar adjective pairs (firm/soft, big/little, strong/weak, hardy/delicate, well coordinated/awkward, and beautiful/plain) were chosen for this study based on previous studies that used similar adjectives (Haugh et al., 1980; Rubin et al., 1974; Stern & Karraker, 1989; Vogel et al., 1991). All materials are exactly the same except for in each condition, the first name of the infant changes. In one condition the infant will be assigned a gender-typed first name of Laurie, in another condition the infant will be assigned a gender-typed first name of Larry, and in the control condition the infant will not be assigned a first name. The phrase "this infant" will be used instead of a name.

# Procedure

Twelve adolescents in the leadership class will be randomly assigned to each of the three infant gender-typed name conditions. The gender of the students will be balanced in the conditions. Students will be tested in groups on three consecutive days. Students and parents will be told that the studies purpose is to see how an infant's traits can be detected from their physical appearance.

Each group will be tested on a separate day. On that day, students will be told of the importance of not telling other potential subjects about the details of the study. They will also told that they will be given the results and the purpose of the study when all the research has been collected.

All students will be tested in the same classroom using study carrels, to block their views from one another. They will be asked to not make noise or distract each other in anyway. The materials will be passed out to each student. The directions will be read out loud in a neutral tone. The same directions will be given to every group. Students will be told that there are no right or wrong answers and that answers should be based on their opinions. Any questions will be answered before the students begin rating the materials. After each student is finished and the materials are collected, the student will be thanked for participating in the research.

#### Results

The six pairs of bipolar adjectives will be rated by the adolescents in each condition of the independent variable. The resulting possible range of values is 1-5. For example, students have

to rate an infant on the bipolar adjective pair "firm" and "soft," "1" meaning more firm and "5" meaning more soft. Scores on each of the bipolar adjectives will be analyzed. The mean and standard deviation for each condition of the independent variable will be obtained. These are the descriptive statistics.

The inferential statistical procedures that will be performed are the two-way, betweensubjects ANOVA and Tukey's HSD, to see which groups are significantly different.

## Discussion

The results of this study will be restated and evaluated in light of the initial hypotheses. If the results are as predicted, the generality of sex-stereotyped perceptions of infants will be extended to the population of adolescents. How the results relate to previous research and to the theoretical issues discussed in the introduction will also be discussed. Practical implications of the results for parenting will also be considered.

Limitations of the current research will be identified, along with suggestions for how future research can build upon the findings of the current study. One limitation to the generalizability of the findings is the use of only one photograph of one infant of a particular age. Future research could utilize photographs of infants of a variety of ages to establish the robustness of the results of the present study. Finally, the results and importance of this study will be summarized.

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Figure 1. JPEG image of infant and bipolar adjectives rating scale.

Please rate the infant [Laurie, Larry, no name] on each of the following items, placing a mark in the space nearest the adjective you feel best describes the infant.

firm:\_\_:\_\_:\_\_:\_soft big:\_\_:\_\_:\_\_:\_\_:little strong:\_\_:\_\_:\_\_:\_:weak hardy:\_\_:\_\_:\_\_:\_\_:delicate well-coordinated:\_\_:\_\_:\_\_:\_\_:awkward beautiful:\_\_:\_\_:\_\_:\_\_:plain