

Running Head: Effects of Children's Books on Career Perceptions

The Effects of Children's Books on First Graders' Perceptions  
of Availability of Careers to Each Gender

Jennifer L. Cotton and Amanda J. Ernstberger

Hanover College

PSY 462

Winter 2008

The Effects of Children's Books on First Graders' Perceptions  
of Availability of Careers to Each Gender

Choosing a career can be a difficult decision to make for some individuals. It becomes even more difficult when there are fewer options available due to personal beliefs. As a child we can all remember being asked, "What do you want to be when you grow up?" Our answers ranged from very simple to quite extraordinary and, for some, changed almost every day. During childhood, career options seem to be endless. Anything is possible, even what is not realistic.

As time goes on, children grow up, and ideas about the world change. Gottfredson (2005), a developmental psychologist, has found that as children age and their self-concept and gender identity develop, they begin to narrow the field of potential careers based on their perception of the appropriateness of a certain career for their gender. Sometimes children's ideas narrow to extremes, and they begin to believe, for example, that only boys can be doctors, and only girls can be nurses. This trend reaches its peak around age 5, when the trend reverses.

As we observe the changes in children's perceptions of available careers, we wonder where these stereotypes originate. Francis (2002) describes stereotypes as being "deeply embedded" within children's minds and Golombok and Fivush (1994) suggest that "children learn culturally prescribed gender stereotypes very early in development". The child learns what is expected of him or her and how a girl or boy "should" act beginning at infancy. Parents hold different expectations about what a female or male baby is like and alter their own behavior accordingly. Baby boys are played with more and baby girls are encouraged and expected to be more socially interactive. As children continue to grow, they observe others around them and become familiar with traditional gender roles. Gender roles are the behaviors and attitudes considered appropriate for males and females. According to the social learning theory, children

imitate and model the behaviors of those around them as a basis for their own behavior (Berk, 2003). The behaviors that are reinforced and encouraged by family members and others within their environment teach children what is the appropriate way to act for boys and girls. Thus it is likely that children learn stereotypes from these observations in the home or at school.

In addition to the potential influences mentioned by Golombok and Fivush (1994), media influences such as television, video games, movies, and literature must be considered. Although often ignored in favor of studying the effects of television and video games, children's literature may have a significant impact on perceptions of career options. Previous research shows that gender stereotypes do exist within children's literature and therefore could be affecting children's perceptions (Dougherty, 1987; Gooden, 2001; Gottfredson, 2005; Heintz, 1987). A 2001 article states that sex differences are still common in children's literature and describes the potential negative effects of such trends, such as low self-esteem for girls and a devaluing of women's roles in society (Gooden & Gooden, 2001). In fact, many sources suggest a continuing male dominance in children's literature. One such study by Heintz (1987) examines fourteen award winning children's books to compare the number of male and female characters with the type of activity and the occupation in which these characters were involved. The results show that males are present in these books twice as often as females, and males had three times as many career choices as females. This biased representation of sexes could have negative implications for the female audiences, who may, in turn, believe that they have fewer opportunities in the career world. A study by Carole R. Beal (1994) shows that in children's literature the female roles are largely limited to mother and teacher and many times have left the negative impression that it is the "girl's job to do the dishes". Similar studies have found that female characters are acted upon rather than active. In children's literature, girls are represented

as sweet and naïve characters, while boys are represented as strong, adventurous, and independent characters (Ernst, Jett-Simpson, & Masland, 1993 as cited in Singh, 1998).

Other researchers, although acknowledging that sex differences still exist, have found a growing shift toward gender equality in children's literature (Beal, 1994; Dougherty, 1987; Gottfredson, 2005). This trend of equality may help to prevent the development of gender stereotyped ideas about career choice (Dougherty, 1987). Beal (1994) describes the recent roles that female characters play in the literature as being more likely to be friends with the males rather than portrayed as helpless, as in the past. Girl characters are now more likely to be shown as brave, a characteristic traditionally associated with males. However, the trend toward gender equality has been primarily for females and is not often seen with male characters (Diekman & Murnen, 2004). In addition, a recent study suggests that gender biases have not been considerably reduced since the 1980's (Hamilton et al., 2007). This disparity suggests that even if a trend toward gender equality does exist, the trend is not strong enough to keep children's literature from perpetuating gender stereotypes.

Although both genders now have more career options than in the past, adults still tend to choose stereotypical careers (Fronczek & Johnson, 2003). Allowing these differences to continue prevents true gender equality, since many stereotypically male careers have higher pay and higher social status. Thus, limiting career ambitions for females is also limiting social status and income. Arguably even more important is simply the fact that by assigning certain careers as more appropriate for men or women, both sexes are limited in their options and may not feel as though they can pursue the career that they truly desire. In addition, Singh (1998) suggests stereotypes lead to complacency with current roles, leading to a static society.

Fortunately, Gooden and Gooden (2001) suggest that stories which portray non-stereotyped roles may counter the effects of stereotypes seen in other books. Thus, we hypothesize that participants who hear a children's story in which careers coincide with stereotypical careers for each gender will demonstrate career-related gender stereotypes more than students who hear a story in which characters' careers do not coincide with current stereotypes. We also expect that this literature will affect the child's own career ambitions.

### Methods

#### *Participants*

We sampled a group of 79 first grade students (35 male, 44 female) during their second semester of first grade. Students ranged in age from 6-8 years old. Participants were students in six first grade classes at two local elementary schools.

#### *Materials*

In this study, participants were randomly assigned to listen to one of two books recorded on cassette tape. They were provided with an illustrated copy of the story with which to follow along as they listened to the tape. The book was written by one of the researchers and told the story of a young girl who went to work with her parents, a police officer and a preschool teacher. The gender of the parent who worked at each job varied. In the gender typical condition, the father was the police officer, and the mother was the preschool teacher. In the gender atypical condition, the careers were switched. In addition, the gender of each parent's colleagues varied with the gender of the parent so that the parent was not the sole example of the gender in that career. Beyond this variation, and the coinciding variation in the illustrations, the two stories are identical.

After hearing the story, participants completed a review sheet compiled by the researchers, consisting of five comprehension and recall questions. This measure was used to determine whether or not each participant was aware of the details of the story. In addition, participants completed a career stereotype measure, designed by the researchers, on which five careers were listed, including: nurse, firefighter, teacher, scientist, and police officer. The participants were told to circle only the word “boy”, only the word “girl,” or both words in order to indicate who can hold each career.

Children's perceptions of career ambitions were divided into two categories, general career ambitions and specific career ambitions. Participants' general career ambitions were measured by agreement with the statement “I can do be anything I want to be.” Agreement was measured by students circling “yes,” “not sure,” or “no.” Participants' specific career ambitions were measured by the open-ended question, “What do you want to be when you grow up?”

### *Procedure*

Prior to the study, a brief description of the study and an informed consent form was sent home with all students in the participating classrooms. Active parental consent and children's assent was necessary for students to be available to participate.

Participants were randomly assigned to one of two conditions. The gender typical group consisted of 40 students (26 males, 14 females). The gender atypical group consisted of 39 students (9 males, 30 females). During the school day, participants listened to a cassette tape of the story, while following along with the illustrated copy of the book. Participants in the gender typical group listened to the version of the story in which the father was a police officer and the mother was a preschool teacher. Those in the gender atypical group listened to the version of the story in which the father was a preschool teacher and the mother was a police officer.

Immediately after participants heard the story, they completed a review sheet which included comprehension and recall questions about the story, such as “Was the mom or dad a police officer?” In addition, participants completed the career stereotypes, general career ambitions, and specific career ambitions measures. Following the completion of the assessments, parents were sent a debriefing form.

### Results

The review sheet served as a manipulation check in order to determine whether or not students understood the story and were aware of each parent's career. An analysis of descriptive statistics revealed that at least 84% of the participants answered each question correctly, with 100% of the participants correctly identifying the gender of the parent in each career.

In our analysis of the career stereotypes measure, we assigned a value of one to answers which coincided with current gender stereotypes and a value of two for answers which indicated that both genders could hold that career. Answers which indicated that only the gender not typically associated with the career were disregarded. There were no more than four of these for each career. A 2(gender) x 2(condition) x 5(career) analysis of variance showed a significant effect of condition on children's views of the availability of careers to both genders. Follow-up analyses indicated a trend in the expected direction for all 5 careers, with students more likely to indicate that both genders could have the career in the gender atypical condition than in the gender typical condition (see Figure 1). Significant differences by condition emerged for ratings of the nurse. Specifically, participants in the gender atypical condition ( $M = 1.79$ ) were being more likely than those in the gender typical condition ( $M = 1.55$ ) to indicate that both genders could become a nurse,  $F(1, 77) = 3.96, p = .05$ . Marginally significant differences by condition emerged for ratings of the scientist. Specifically, participants in the gender atypical condition ( $M$

= 1.88) were more likely than those in the gender typical condition ( $M = 1.69$ ) to indicate that both genders could become a scientist,  $F(1, 74) = 2.93, p < .10$ .

The general career aspirations measure was scored so that a value of three was given to answers which indicated that the participant agreed with the statement that they could be anything that they wanted to be, a value of two was given to those who stated they were not sure, and a value of one was given to those who disagreed with the statement. Descriptive statistics showed that responses did not differ by the gender of the participant or by condition. Overall, children endorsed the notion that their career options were not limited, with 84.5% of participants agreeing with the statement. (See Figure 2)

Careers listed by children in response to the specific career aspirations question (i.e., "What do you want to be when you grow up?") were coded as gender typical, gender atypical, or gender neutral by independent ratings of the researchers and, in cases of disagreement, a third party. A chi-squared analysis revealed that both genders were more likely to choose gender typical careers than gender atypical or gender neutral careers, regardless of condition,  $X^2(2) = 7.79, p < .05$ . Follow-up chi-square analyses showed that males were significantly more likely than females to select gender typical careers,  $X^2(1) = 7.28, p < .01$ , and females were significant more likely than males to select gender atypical careers  $X^2(1) = 6.87, p < .01$ . Males and females did not differ in their tendency to select gender neutral careers. (See Table 1)

### Discussion

Our first hypothesis which stated that participants who read literature in which careers coincided with gender stereotypes would endorse gendered career stereotypes more than participants who read literature in which careers did not coincide with current stereotypes, was partially supported. The overall trend showed that participants in the gender atypical condition

were more likely than participants in the gender typical condition to state that careers were available to both genders. This difference was statistically significant for the career of nurse and marginally significant for scientist.

These results support the idea that exposure to non-stereotyped literature may decrease the influence of stereotypes on children's perceptions of career availability and are impressive given that children were exposed only to one instance of gender-atypical career behavior. However, future research would be needed to determine how long after exposure to the literature it would continue to have an effect. In addition, it would be beneficial to examine the influence of multiple exposures to non-stereotyped literature through both exposure to multiple examples of non-stereotyped literature and repeated exposure to one example. Future research should also examine the influence of previous exposure to stereotypes on the magnitude of the effect of a single non-stereotyped book.

Our second hypothesis that participants in the gender atypical condition would be less likely to have stereotypical specific career aspirations than those in the gender typical condition was not supported. In fact, participants in both groups were significantly more likely than not to have career ambitions which coincided with current gender stereotypes. In addition, females were significantly more likely than males to choose careers which did not coincide with current gender stereotypes. However, it interesting to note that almost all of the participants agreed with our measure of general career aspirations, in essence stating that they could be whatever they wanted to be. It is likely that although children are being told that they can do anything to which they put their minds, this statement is being contradicted by other messages children are receiving through exposure to stereotypes and the behavior of others. It is also possible that the

children truly believe that they can do anything, but what they want to do happens to coincide with gender stereotypes.

In order to examine why children are continuing to choose careers which coincide with gender stereotypes, it would be beneficial to ask participants why they chose the career and examine how they feel about other careers. In addition, future research should explore the effects of the careers of parents or guardians and other important people in the child's life upon the child's own career ambitions.

Teachers or parents who may want to minimize the effects of gender stereotypes on children should look for books in which the following are true: occupations are represented as gender-free, achievements are not evaluated on the basis of gender, and the language used in the text is gender-free (Singh, 1998).

#### References

- Beal, C.R. (1994). *Boys and Girls: The development of gender roles*. (pp. 169-173). New York: Mc-Graw-Hill.
- Berk, L. E. (2003). *Child Development*, 6th edition. Boston, Massachusetts: Pearson Education
- Diekman, A. B. & Murnen, S. K. (2004). Learning to be little women and little men: The inequitable gender equality of nonsexist children's literature. *Sex Roles, 50*, 373 -385.
- Dougherty, W. H., & Engel, R. E. (1987). An 80's look for sex equality in Caldecott winners and honor books. *Reading Teacher, 40*(4), 394-398.
- Francis, B. (2002). Is the future really female? The impact and implications of gender for 14-16 year olds' career choices. *Journal of Education and Work, 15*(1), 75-88.
- Fronczek, P., & Johnson, P. (2003). Occupations: 2000: Census 2000 brief. United States Census Bureau. Retrieved April 5, 2008, from [www.census.gov/hhes/www/ioindex/reports.html](http://www.census.gov/hhes/www/ioindex/reports.html)

- Golombok, S., & Fivush, R. (1994). *Gender Development*. Port Chester, NY: Cambridge U.P.
- Gooden, A. M., & Gooden, M. A. (2001). Gender representation in notable children's picture books, 1995-1999. *Sex Roles, 45*(1-2), 89-101.
- Gottfredson, L. S. (2005). Applying Gottfredson's theory of circumscription and compromise in career guidance and counseling. In S. D. Brown & R. W. (Eds.), *Career development and counseling: Putting theory and research to work* (pp. 71-100). Hoboken, NJ: Wiley.
- Heintz, K. E. (1987). An examination of sex and occupational-role presentations of female characters in children's picture books. *Women's Studies in Communication, 10*(2), 67-68.
- Singh, M. (1998). Gender issues in children's literature. *ERIC Digest*. Retrieved March 3, 2008, from [www.eric.ed.gov](http://www.eric.ed.gov)

Figure 1. Mean ratings of availability of careers to each gender.

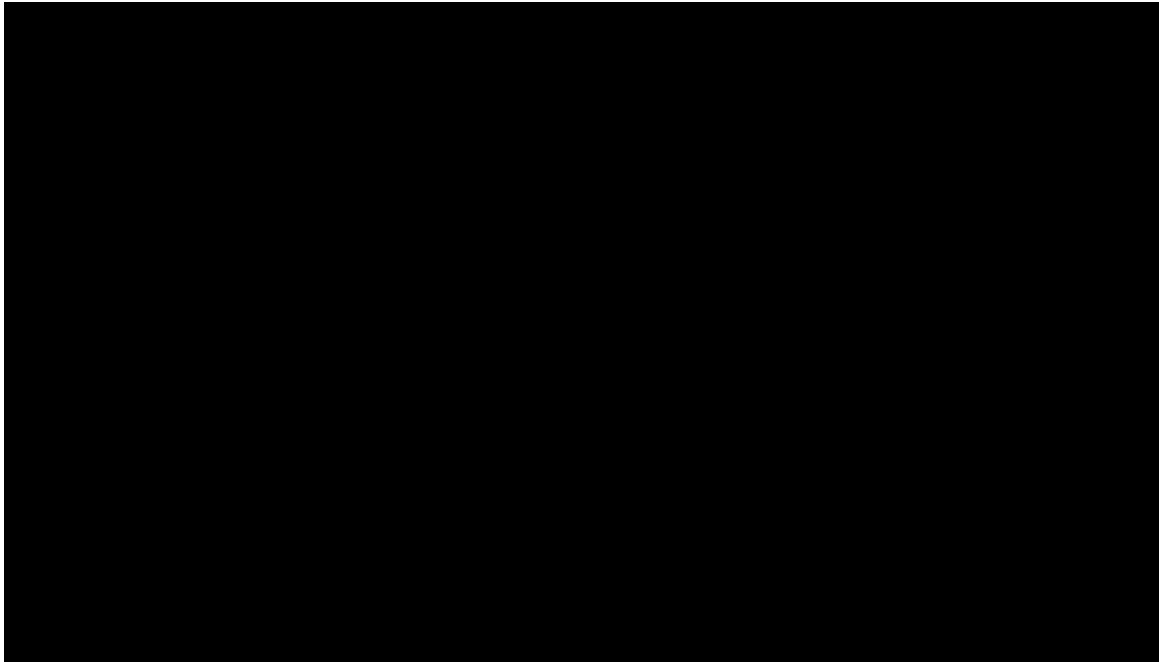


Figure 2. Ratings of general career ambitions.

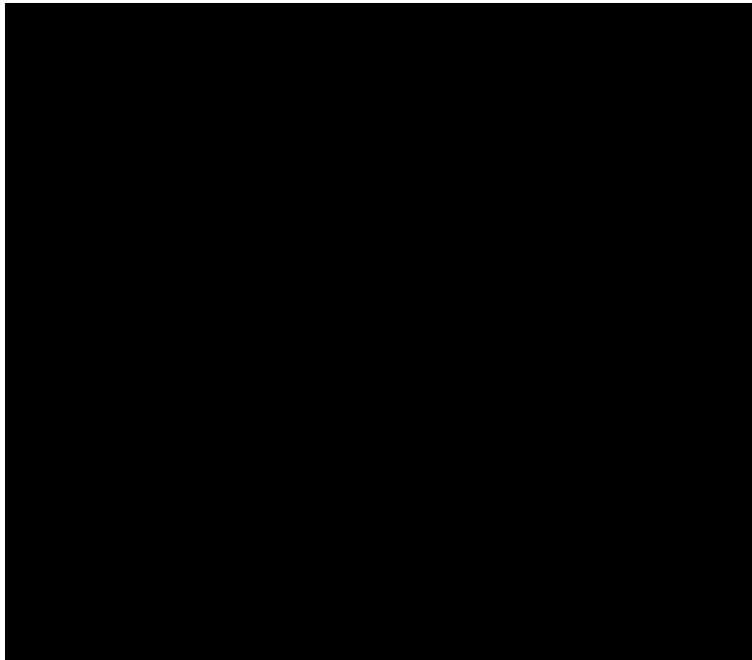


Table 1. Types of specific career ambitions for each gender.

Condition	Gender	
	Male	Female
Gender Typical	84.8%	55.8%
Gender Neutral	6.1%	9.3%
Gender Atypical	9.1%	34.9%