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# An intervention tool for use against gender stereotypes in children

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AN INTERVENTION TOOL FOR USE AGAINST  
GENDER STEREOTYPES IN CHILDREN

BY

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B.A. Oberlin College, 2003

THESIS

Submitted to the University of New Hampshire

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In

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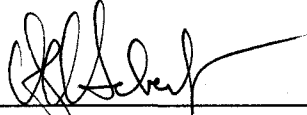
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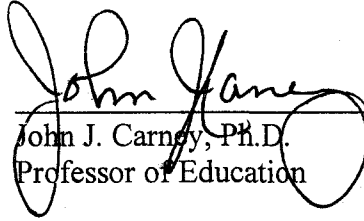
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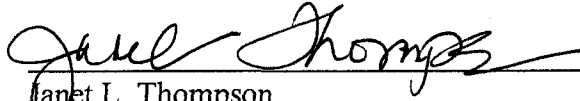
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ABSTRACT

AN INTERVENTION TOOL FOR USE AGAINST  
GENDER STEREOTYPES IN CHILDREN

by

Sarah N. Muller

University of New Hampshire, September, 2006

This study examines the occurrence of gender stereotyped beliefs and behaviors in young children and methods of intervening against gender stereotypes. Current literature on gender stereotype interventions is reviewed and evaluated. A new model of intervention, based on a coloring book made up of gender counterstereotypic images, is proposed. Implications and limitations are discussed.



## CHAPTER I

### PURPOSE OF THE STUDY

Gender stereotypes are a pervasive form of discrimination and oppression, based on an internalized set of beliefs about acceptable traits and behaviors for males and females. Gender stereotypes can take a variety of forms, from stereotypes about occupations and leisure activities to those about personality traits and family roles. Studies have shown that children begin to internalize these various stereotypes as young as 18-24 months of age (Poulin-Dubois, Serbin, Eichstedt, Sen, & Beissel, 2002; Serbin, Poulin-Dubois, Colburne, Sen, & Eichstedt, 2001) and that this process continues through early and middle childhood (Francis, 1998; Graham-Bermann & Brescoll, 2000; Katz & Ksansnak, 1994; Levy, Barth, & Zimmerman, 1998) as well as in adolescence (Alfieri, Ruble, & Higgins, 1996; Mendez & Crawford, 2002; Watts & Borders, 2005). The goal of this study is to increase flexibility in attitudes about gender stereotypes, with the hope that such an increase in flexibility will eventually lead to decreased gender-based oppression and domestic violence.

#### **Background and Rationale**

This study aims to create a tool for use with children in a brief, exposure-based intervention on internalized gender stereotypes. The intervention tool will consist of a coloring book comprised of a variety of images depicting males and females engaging in gender counterstereotypic behavior. The coloring book will be created according to implications in the current literature on the development of gender stereotypes and anti-

bias interventions for children. Implications for further interventions will be discussed.

It has been well-documented in the literature that children internalize gender stereotypes at a very young age. Serbin et al. (2001) found that children showed significant preferences for gender-stereotyped toys as early as 18 months of age and that 18-month-old girls were able to associate the toys with a boy's or a girl's face. Poulin-Dubois et al. (2002) found that 24-month-old girls and 31-month-old boys demonstrated knowledge of gender stereotypes in daily household activities. Although these studies do not provide evidence of the sources of these internalized stereotypes, the authors posit that such sources may include social learning and biological factors (Serbin et al.; Poulin-Dubois et al.). Other researchers have found that internalization of these stereotypes continues throughout childhood and adolescence, although there is some evidence of increased gender flexibility with age (Alfieri et al., 1996; Katz & Ksansnak, 1994).

Among the liabilities of rigidly internalized gender stereotypes, one of the most worrisome is their demonstrated correlation with the occurrence of domestic violence. This has been documented extensively with regard to adult victims and perpetrators of domestic violence. Fitzpatrick, Salgado, Suvak, King, and King (2004) found that men with more traditional ideas of gender role ideology were more likely to report perpetrating abuse against or being abused by their intimate partners. It has also been shown that men who report a high level of stress related to their conceptualization of the masculine gender role are more likely to approve of using violence against an intimate partner (Eisler, Franchina, Moore, Honeycutt, & Rhatigan, 2000; Jakupcak, Lisak, & Roemer, 2002). With the U.S. Department of Justice estimates of 691,710 non-fatal incidents of intimate partner violence in 2001, and intimate partner violence making up

20% of all violent crime against women in that year, it appears that domestic violence is a major problem in this country.

Studies have also shown that children from families in which domestic violence is present are more likely to demonstrate stereotyped beliefs about gender roles within the family. Graham-Bermann and Brescoll (2000) found that six- to twelve-year-old children from families where the mother reported physical and emotional abuse were more likely to agree with stereotyped statements concerning masculine power and violence. Lichter and McCloskey (2004) found that adolescents who, as children, had witnessed domestic violence between their parents were more likely to perpetrate dating violence, and that adolescents with more traditional beliefs about gender roles in relationships were more likely to perpetrate dating violence regardless of exposure to violence between their parents.

The research documenting a relationship between domestic violence and gender stereotyping demonstrates the importance of intervening against gender stereotyping at a young age. Children are beginning to internalize stereotypes about gender roles as young as 18 months of age, and traditional gender role ideology has been shown to be a significant predictor of domestic violence. An intervention aimed at the gender-stereotyped beliefs of children would constitute an attempt to catch children at the beginning of the internalization process and lay a foundation of greater flexibility for the future.

### **Implications**

A brief, exposure-based intervention against gender stereotypes has been shown to be effective in various other studies. Dasgupta and Asgari (2004) exposed a treatment

group of adult women to biographical information about women leaders and found, through various pre- and post-intervention measures, that this group was less likely to demonstrate gender-stereotyped beliefs after the intervention. Similar results have been found in research on the effects of brief, exposure-based interventions with children. Interventions involving symbolic images of non-traditional gender behavior (Katz & Walsh, 1991), concerts in which men and women play instruments that are not gender-stereotypical (Harrison, 2000), and gender-egalitarian stories (Flerx, Fidler, & Rogers, 1976) have all been shown to have some effectiveness in reducing gender stereotyping in children. The success of these treatments implies that some flexibility can be achieved after only a short-term intervention.

Effectiveness of brief, exposure-based interventions could suggest a dearth of counterstereotypic gender models in children's lives, both in media and family contexts. If children were used to seeing counterstereotypic gender models, an intervention using such images may not be novel for them and may have little to no effect. The success of such an intervention in creating more gender flexibility may imply that this is the first time children have seen an exception to gender stereotypes. This would point to a need for more counterstereotypic gender images in children's media, including music, television, literature, games, and coloring books. This would also point to a need for further research into current media images and stereotypes, and their effects on children's internalized gender roles.

The creation of a new intervention tool for promoting gender flexibility in children would have various implications. First, such a tool would contribute to the prevention of one predictor of domestic violence (as well as the other problems

associated with gender stereotyping) in a relatively quick and inexpensive way. Even a successful short-term intervention would undoubtedly be improved through more in-depth, follow-up work. However, it could at least serve as a beginning step for communities that lacked the resources to move further. Also, contributing to the available resources for potential change in this area could open the door to further research and development of preventive methods.

### **Definition of Terms**

*Counterstereotypic gender model* is defined as an image depicting someone who goes against traditional stereotypes for his or her gender (Dasgupta & Asgari, 2004).

*Gender flexibility* is defined as the willingness to apply an attribute to both sexes rather than exclusively to one sex (Trautner, Ruble, Cyphers, Kirsten, Behrendt, & Hartmann, 2005).

*Gender role ideology* is defined as one's beliefs about male and female roles within society and the family (Fitzpatrick, et al., 2004). It includes beliefs about household tasks and roles in intimate relationships. This term is used synonymously with family role.

*Gender stereotype* is defined as traditional beliefs about gender, with regard to traits, societal roles, and/or family/relationship roles (Shamai, 1994).

## CHAPTER II

### REVIEW OF THE LITERATURE

The literature on gender stereotypes is extensive and covers many dimensions of this area of study. Within this literature there is a large body of research related to gender stereotypes in young children (ages zero to five). This chapter will cover literature in the areas of gender development theories; research based on these theories; gender stereotypes in children, adolescents and adults; gender stereotype interventions with children and adults; and social learning based interventions with preschool children.

#### **Theories of Gender Development**

There is a large body of literature dealing with gender stereotypes in children, including literature about interventions designed to increase gender flexibility. Most of these studies fit into one or more of three major gender development theories: cognitive developmental theory, gender schema theory, and social learning theory. These theories advance different, yet somewhat coinciding, views of the mental and emotional mechanisms through which children develop concepts about their own gender, the gender of others, and the traits, activities, and behaviors typically associated with each gender. While much research has focused on examining the differences among these three theories and the extent to which each is correct (Bennett & Sani, 2003; Fagot, Leinbach, & Hagan, 1986; Flerx et al., 1976; Levy et al., 1998; Martin, Ruble, & Szkrybalo, 2002; Serbin, et al., 2001; Serbin & Sprafkin, 1986), there is also research that combines these

theories into a composite view of gender development (Bigler & Liben, 1992; Bussey & Bandura, 1999; Katz & Ksansnak, 1994).

There is also a large body of research about the biological aspects of gender development (e.g., Archer, 1996, Buss, 1995, Simpson & Kenrick, 1997). While this literature presents compelling evidence of a biological basis for some gender differences, it does not suggest that there is a biological foundation to gender stereotypes (Bussey & Bandura, 1999). This study takes differences in gender stereotypes as its focus, rather than fundamental gender differences; thus, the biological theories of gender development will not be examined in this review.

Cognitive developmental theory holds that gender development is mediated by cognitive development. That is, as children's cognitive abilities increase, their knowledge about gender increases as well (Bigler & Liben, 1992; Martin et al., 2002). According to this theory, these changes occur in a specific sequence during childhood. Two of the milestones of achievement most important to this study are the child's ability to accurately use gender labels (man, woman, boy, girl) and his or her understanding of gender constancy – that one's gender remains the same regardless of age or circumstances (Kohlberg, 1966). From this perspective, children's attainment of knowledge about gender stereotypes, as well as flexibility with regard to these beliefs, is a function of their developing cognitive abilities (Bigler & Liben, 1992; Martin & Ruble, 2004; Trautner et al., 2005).

Gender schema theory, originally advanced by Bem (1981), involves the idea that children use gender as a classification system, or a way to organize information. In order to make sense of the vast amount of information in our complex world, people use

categories that can serve as a means of grouping information and experiences and making their comprehension more manageable. Bem (1981) argues that gender is one of the first categories, or schemata, that children use to classify information. That is, children will sort objects, traits, activities, and behaviors into male and female categories before they begin to develop other, more complex means of classification. According to this theory, gender schemata are more salient for younger children than for older children, because they have not yet developed other schemata by which to make sense of the world. Their heavy reliance on gender as a means of processing information can lead to greater sex-typing, an idea that has been explored further in other studies (e.g., Bigler & Liben, 1992).

Social learning theory has been espoused by a number of authors (Albert & Porter, 1988; Bussey & Bandura, 1999; Perry & Bussey, 1979). Its basic premise is that gender development occurs as a result of social modeling, social cues, and social reinforcement. Gender roles are learned through observing and taking part in the social environment. These roles are also learned vicariously through media models such as television, books, toys, and games (Bussey & Bandura, 1999; Mischel, 1970). According to this theory, children who have more experience with traditional gender role models would learn greater stereotyping, while those who have more experience with non-traditional models would learn less stereotyping (Bussey & Bandura, 1999; Flerx et al., 1976).

### **Cognitive Developmental Theory Research**

Cognitive developmental factors have been shown to relate to children's gender stereotypes in various studies. Serbin and Sprafkin (1986) found that for three- to eight-



year-old children, knowledge of gender roles increased with age while tendency to classify information by gender decreased. Gender flexibility, however, did not increase until the age of six, when gender classification had decreased significantly, even though knowledge of gender roles had been steadily increasing throughout this age range. These results suggest that while stereotype knowledge may come from various sources (including social models), gender flexibility may be tied to a change in cognitive processing that occurs around the age of six. This flexibility, defined as the child's attitude about his or her gender role knowledge, is a separate part of his or her gender development and appears not to be parallel to his or her increasing knowledge of stereotypes (Serbin & Sprafkin, 1986).

Trautner et al. (2005) found a similar pattern by conducting a longitudinal study with 64 five- to ten-year-old children. The authors asked children, on a yearly basis, to rate various behaviors and traits in terms of typicality for males and/or females. All of the children surveyed appeared to follow a common trajectory, reaching peak rigidity at age five or six, and increasing in flexibility over the following two years. Furthermore, early individual differences in rigidity did not seem to correspond to individual differences that occurred closer to ten years of age (Trautner et al., 2005). This apparently predictable path suggests that rigidity and flexibility around gender stereotypes follow cognitive developmental stages, regardless of exposure to stereotypic models or other environmental factors.

Fagot et al. (1986) found a link between gender labeling ability and gender stereotyped behavior, thus also supporting cognitive developmental theories of gender stereotypes. The authors measured 21- to 40-month-old children's performance on a

gender-labeling task and then observed their behaviors in a child research laboratory classroom. They found that the ability to correctly label males and females predicted higher rates of aggression in boys, lower rates of aggression in girls, and higher rates of same-sex playmate selection for both sexes (Fagot et al., 1986). The results of this study suggest that the ability to correctly use gender labels, which is one of the milestones in cognitive developmental theory, is related to the development of gender stereotypes.

In their study of two- and three-year-old children, Kuhn, Nash, and Brucken (1978) found that gender constancy, defined as the understanding that one's gender is permanent, was highly related to gender stereotyping. Specifically, they found that children with higher gender constancy scores also exhibited higher rates of gender stereotyping. This study supports cognitive developmental theories of gender stereotypes because it demonstrates a link between gender constancy, another one of the milestones of gender development, and stereotype knowledge. In addition to measuring stereotype knowledge, the authors also measured attitudes and beliefs, and found that children who scored high on gender constancy also tended to attribute more positive qualities to their own sex and more negative qualities to the opposite sex (Kuhn et al., 1978). That is, when a girl understood her own gender to be permanent, she was more likely to hold more positive beliefs about girls and women, and more negative beliefs about boys and men.

### **Gender Schema Theory Research**

Levy et al. (1998) examined gender constancy, gender schematicity, and gender stereotypes in three- to five-year-old children. They defined gender constancy as knowledge of the permanence of gender and gender schematicity as the tendency to

classify information by gender categories. Although they examined cognitive developmental factors by including gender constancy in their measures, their results ultimately supported gender schema theory. They found that gender schematicity, and not gender constancy, predicted gender stereotyped behavior. The difference in findings between the Levy et al. (1998) study and the Kuhn et al. (1978) study discussed above may be due to the difference in how gender stereotypes were measured. Kuhn et al. used a laboratory-based measurement in which an experimenter rated children's responses on behavioral tasks. Levy et al. based stereotype measurement on parental ratings of their children's usual behavior. It is possible that these two measurements may have tapped into different aspects of stereotypes. This explanation would allow for both cognitive developmental and gender schema contributions to gender stereotypes in children. The difference in findings may also be due to the difference in ages of the participants. It is possible that cognitive development is a greater predictor of gender stereotypes in two- and three-year-olds, while gender schematicity is a greater predictor for three- to five-year-olds.

Bennett and Sani's (2003) study also supports gender schema theory by demonstrating the tendency to use gender categories in encoding and recalling information. They found that when asked to complete a recall task, five-, eight-, and eleven-year-old children all made significantly more within-gender errors than between-gender errors. Although their study did not relate gender schematicity to gender stereotypes, it did support gender schema theory by showing that children tend to use gender categories to classify information.

## Social Learning Theory Research

Most of the research indicating the impact of social learning on gender stereotype development comes from intervention studies. Perhaps this is not surprising, as it may appear easier to researchers to intervene with children's social models and environmental cues than with their cognitive or gender schema development. Thus, it may be easier to conduct experimental research on factors in the social environment.

Harrison (2000) conducted one such study by introducing an intervention to reduce gender-stereotyped preferences of musical instruments in seven- and eight-year-old children. Children in the experimental condition attended concerts in which men and women played instruments that were not traditional to their gender (e.g., men playing the flute, women playing percussion). Children in the control condition attended concerts in which performers played gender traditional instruments. Pre- and post-intervention measurements showed that children in the experimental condition chose significantly more non-traditional instruments for their gender (Harrison, 2000). These results demonstrate the power of social modeling in changing gender-stereotyped behavior, thus suggesting that this behavior is at least partially socially learned.

Another study that supports social learning theory is the Flerx et al. (1976) intervention with three-, four-, and five-year-old children. In this study, an experimenter read gender-egalitarian stories aloud to an experimental group and gender-traditional stories aloud to a control group. Pre- and post-tests indicated that the experimental intervention did reduce gender stereotypes, although this effect was stronger immediately after the intervention than in a one week follow-up measure. This implies that social modeling can have an effect on gender stereotyped behavior but that, as time goes on, if

non-traditional modeling does not continue, the social cues in the child's normal environment will bring his or her behavior back to its original level of gender stereotyping.

All of these theories explain gender development as a process that occurs early in life, starting in infancy, with peak changes occurring before the child enters first grade. While the differences between theories are important with regard to understanding the specific mechanisms and sequences involved in gender development, it is also important to recognize that all three contain aspects that contribute to the overall process. Cognitive development, gender schemata, and social learning all appear to affect and relate to the acquisition of gender beliefs and behaviors, and research and interventions would do well not to ignore any of them.

### **Gender Stereotypes in Young Children**

Gender stereotype knowledge has been demonstrated by children as young as 18 months old. Through a preferential looking paradigm study that measured the amount of time infants spent looking at different stimuli, Serbin et al. (2001) showed that 18-month-old children tended to look longer at toys that were stereotypical to their gender (e.g., girls at dolls, boys at trucks). The results of this study also suggested that 18-month-old girls, but not boys, were able to match pictures of faces to pictures of their corresponding gender-stereotyped toys. Katz (1996) reported that 32% of an 18-month-old sample spent more time with same-sex toys.

While these studies demonstrate some early knowledge of stereotypes, gender stereotypes have been shown to be stronger and inclusive of more dimensions at the two- to three-year-old range. Poulin-Dubois et al. (2002) found that 24-month-old girls

showed knowledge of gender stereotypes for household activities and that boys had begun to demonstrate this knowledge at 31 months of age. Incidentally, this gender difference follows the one found in the Serbin et al. (2001) study mentioned above, suggesting that knowledge of gender stereotypes may come earlier to girls than to boys. This timing difference could be interpreted in a number of ways, including a cognitive developmental interpretation that girls achieve the cognitive abilities necessary for attainment of stereotype knowledge earlier than boys. Alternatively, with regard to social learning theory, an explanation could be that the social cues for girls are stronger and more pervasive in early life, thus leading to an earlier acquisition of gender role knowledge. Furthermore, this difference may point to a difference in the number of same sex role models for boys and girls at this age.

Regardless of these gender differences, boys and girls both appear to attain significant knowledge of gender stereotypes at around two to three years of age. They also both appear to show gender-stereotyped preferences even earlier than that point (Serbin et al., 2001), indicating that some stereotyped behaviors may precede stereotype knowledge. Other studies that examine the two- to three-year-old age range include the Fagot et al. (1986) work, in which 21- to 40-month old children demonstrated gender stereotyped behavior with regard to aggression and playmate selection. The Kuhn et al. (1978) study also indicated that two- and three-year old children had substantial knowledge of gender stereotypes about children's activities, future roles, and traits. This study also concluded that while both age groups in the sample showed significant stereotype knowledge, the three-year-olds tended to stereotype a greater number of items than the two-year-olds (Kuhn et al., 1978).

Thus, children between two and three years of age appear to gain a large amount of gender stereotype knowledge and behavior. This includes knowledge about household activities (Poulin-Dubois et al., 2002), children's activities, future household and occupational roles, and traits (Kuhn et al., 1978). Increases in gender-stereotyped behavior include increases in aggressive behavior for boys, decreases in aggressive behavior for girls, and a marked tendency to select same-sex playmates (Fagot et al., 1986).

Much of the research on children's development of gender stereotypes deals with age ranges beginning at three years old. Some of these studies overlap with those previously mentioned, and some point to the directions of gender stereotype development in the next few years of life. Katz (1996) found that 30- and 36-month old children exhibited significant knowledge of stereotypes about clothes, toys, tasks, and occupations, and significant stereotyped behavior in terms of toy choice and playmate choice. Harris and Satter (1981) found that kindergarten children (age not specified) demonstrated significant knowledge of stereotypes in adult traits and occupations, had significantly more same-sex than opposite-sex friends, and preferred occupations traditional to their own gender. Roddy, Klein, Stericker, and Kurdek, (1981) found significantly stereotyped gender role knowledge and preferences in 48- to 77-month old children. And Flerx et al. (1976) found that four- and five-year-old children exhibited more gender stereotyping than three-year-old children, but that all three age groups showed stereotype knowledge.

Serbin and Sprafkin (1986) showed that within a three- to eight-year-old sample, the younger children were more likely to classify information by gender when other

classification methods were available and that both gender stereotype knowledge and flexibility increased within this age range. This suggests that three-year-olds may be more rigid than eight-year-olds, at least in terms of gender schematicity, but that they have not finished acquiring knowledge about gender stereotypes. This difference between dimensions of gender stereotype development indicates that such development does not follow one uniform process. Levy et al. (1998) also found differences between dimensions of gender development, with gender schematicity predicting stereotyped behavior and age predicting gender constancy, but with all four factors not necessarily being related.

It seems that certain aspects of gender stereotype development decrease after the age of three, such as gender schematicity and rigidity (Serbin & Sprafkin, 1986), while other aspects continue to increase, such as preferences for gender stereotyped toys and occupations, same-sex playmates (Harris & Satter, 1981; Katz, 1996; Roddy et al., 1981), and knowledge about various gender stereotypes. This three-year age may mark a turning point in gender stereotype development, or it may simply point to a difference in sampling methods (school and non-school populations). Nevertheless, it seems clear that gender stereotyping has certainly begun by this point and is in fact a strong phenomenon at this stage in life.

### **Gender Stereotypes in Older Children and Adolescents**

While gender stereotypes at higher ages are of less direct interest to the current study, it is worth noting that this development continues and can become stronger throughout childhood and adolescence. If gender stereotyping disappeared after early childhood, then it would be an isolated stage in the lifespan, and interventions would be



less necessary. However, this is not the case, as research shows that gender stereotype development tends to continue in older children and adolescents.

Katz and Walsh (1991) found that, in a study that included eight- and eleven-year-old boys and girls, eleven-year-old boys showed more stereotyped preferences than eleven-year-old girls or eight-year-old boys and girls. Lobel (1994) found that males who were judged to be feminine were also judged to be unpopular by fifth and sixth grade boys. Sellers, Satcher, and Comas (1999) found that third and fourth grade children gave responses that were significantly gender stereotyped when asked what they wanted to be when they grew up, and that these results did not vary by socioeconomic status (SES). Mendez and Crawford (2002) also found significant stereotypes in the career aspirations of eleven- to fourteen-year-old gifted students. And Alfieri et al. (1996) found that gender stereotype flexibility increased in the first year of junior high, regardless of which grade level this constituted in a given school district.

Katz and Ksansnak (1994) found various gender stereotype trends in their sample of eight- to eighteen-year-old participants. They found that across the sample, girls tended to have higher rates of gender flexibility than boys, both in terms of self-flexibility and tolerance of flexibility in others. They also found that flexibility of the social environment was higher for girls and for participants at the older end of the age range. This may explain the higher rates of gender flexibility in participants from either or both of these groups. If the social environment is more forgiving of deviation from gender stereotypes in girls and older adolescents, then girls and older adolescents may in turn be more forgiving of such deviations in themselves and others. Katz and Ksansnak found that the older participants showed more gender flexibility than the younger ones but that

the older participants also showed less interest in academic subjects that were not stereotypic to their gender. These findings are consistent with the studies from early childhood, where gender flexibility also increased with age, even though certain stereotyped preferences did not (Serbin & Sprafkin, 1986).

All of these studies show that gender stereotypes are still present in the minds of older children and adolescents, and that although flexibility increases, stereotyped behaviors and preferences still persist. This implies that interventions are still necessary in order to reduce gender stereotyping. While gender flexibility may naturally increase, possibly as a result of increased cognitive flexibility (Katz & Walsh, 1991), it does not appear to increase to the point of greatly lowering gender stereotypes. It does, however, point to the possibility of change. Perhaps interventions would work well if they were somehow connected to this mechanism of naturally occurring gender flexibility. Early interventions, made at the point of gender stereotype formation (two to five years of age), may help to make this process of increased gender flexibility happen earlier or to a greater extent.

### **Interventions against Gender Stereotypes in Adults**

Dasgupta and Asgari (2004) conducted two studies with adult women, designed to assess factors leading to change in in-group stereotyping. In the first study, they provided an experimental intervention to a treatment group of women in New York City. The intervention consisted of exposing the women to biographical information about famous women leaders under the guise of conducting a memory test. The control group received information about flowers. Before and after the intervention, the participants completed measures of self-reported beliefs about women and a task designed to measure automatic

stereotypes about women by measuring response latencies in a gender-to-trait matching test. The findings concluded that the intervention reduced automatic stereotyping but did not have a significant effect on self-reported beliefs (Dasgupta & Asgari, 2004).

In the second study, the authors examined the effects of increased exposure to women leaders in a natural setting. They used the same measures from the first study to assess female college students' self-reported and automatic stereotypes before and after spending one year at either a coeducational or all women's college. The results of the second study matched those of the first – that automatic stereotypes, but not self-reported ones, were reduced by increased exposure to women in leadership positions (Dasgupta & Asgari, 2004).

These two studies have a number of implications. One is that some aspects of gender stereotyping may be largely unconscious, and that one's perceived level of stereotyping may not be congruent with one's actual level. That is, while a person may report having very flexible and non-stereotyped beliefs, his or her automatic responses may reflect stereotyped attitudes at the unconscious level. This would have implications for further interventions, as researchers would have to decide which level of stereotypes to target and which would have the greater impact. Another implication of the studies is that social learning can change gender stereotyping, and so researchers could feel more confident in conducting further interventions based on this exposure model. One limitation of these studies is in the specificity of the samples. It is difficult to say whether these results can be generalized to other parts of the population, such as males, and to other ages. It also leaves the question of whether these results would be obtained for out-group stereotyping, since this study only focused on in-group beliefs. Furthermore,

because there was no long-term follow-up measure in the first study, it is impossible to know how long the reduction in automatic stereotypes lasted.

Shamai (1994) conducted a different kind of intervention study with adults. In this study, teachers attended workshops on gender flexibility training, and their sixth grade students were assessed for gender stereotypes in desired occupations before and after the teacher workshops. The only significant result of this study was that children of both genders tended to choose less stereotypically masculine occupations after their teachers had attended the workshops (Shamai, 1994). While this intervention did not appear to lead to the desired result of reducing gender stereotyping, it does provide a different approach to changing stereotypes and may need to be explored further. It would also have been helpful to measure differences in the gender stereotypes of the teachers before and after the intervention.

### **Interventions against Gender Stereotypes in Children**

There are several studies documenting interventions against gender stereotypes in children from each of the three gender development theories. Bigler and Liben (1992) conducted a cognitive based intervention with five- to ten-year old children. This intervention also overlapped with gender schema theory and social learning theory in that two of the treatment groups consisted of training children in multiple classification skills: one in a social context and one in a non-social context. A third treatment group received training in rules about gender and occupations, and a control group received training in an unrelated subject. Children in the rule-training group and the group that learned multiple classification in a social context showed significantly more egalitarian and less stereotyped views after the intervention than did those in the control group. The group

that learned multiple classification in a non-social context did not differ significantly from the control group (Bigler & Liben, 1992).

The implications of this study are that cognitive and gender schema based interventions can reduce gender stereotyping, particularly when presented in a social context. This suggests that all three theories have some merit in explaining gender stereotype development. The fact that the gender schema based intervention did not have an effect when it was not paired with a social learning aspect (Bigler & Liben, 1992) points to the importance of the social environment, at least in changing the course of gender stereotyping. However, the rule training intervention did have an effect (Bigler & Liben, 1992), which suggests that a social context may not be absolutely necessary. A weakness of this study is that the authors did not analyze differences between the treatment groups, and so it cannot be determined if one intervention was significantly more effective than the other.

Nathanson, Wilson, McGee, and Sebastian (2002) conducted an intervention based on gender schema theory in which kindergarten to sixth grade children were shown clips from a gender-traditional television show, and an experimenter gave commentary during the pauses between the clips. The commentary consisted of statements that pointed out how gender categories in real life were broader than those depicted in the television show. Children in the control group saw the same clips but heard no commentary during the pauses. The results of the study showed that the intervention reduced endorsement of stereotypes in the younger children only. This finding is consistent with earlier findings that gender schematicity is more rigid for younger children and decreases in salience with age (Serbin & Sprafkin, 1986). This implies that

gender schema based interventions may work well with younger children but that another approach may be necessary to counteract gender stereotypes in older people.

Katz and Walsh (1991) conducted an intervention designed to reduce gender stereotyping by showing eight- and eleven-year-old children symbolic modeling scenarios with vicarious social reinforcement. Participants saw depictions of children engaging in non-traditional gender behavior and receiving reinforcement from either peers or adults. The authors found that seeing peer reinforcement reduced more stereotypes for the younger participants and that seeing adult reinforcement reduced more stereotypes for the older participants, implying that a similar pattern may work in future interventions. Another significant finding was that more non-traditional behavior occurred for boys and girls in the pre- and post-tests when the examiner was male (Katz & Walsh, 1991). Because the examiner is a part of the social environment, this finding, along with the other results, supports a social learning based intervention. Harrison's (2000) intervention with gender-typed preferences for musical instruments, as outlined previously, also gives support for the efficacy of a social modeling type of intervention.

### **Social Learning Based Interventions with Young Children**

While a gender schema based intervention has been shown to be effective in reducing gender stereotypes in young children (Nathanson et al., 2002), there is some evidence that a social learning based intervention can also have significant effects with this age group. The Flerx et al. (1976) study of three-, four-, and five-year-old children showed that hearing gender-egalitarian stories reduced gender stereotyping and increased gender flexibility. However, these flexibility scores did show a decrease in the one-week follow-up measure. These findings imply that exposure to counterstereotypic models can

have a significant effect on children's gender stereotypes but that this effect diminishes over time. Exposure to non-traditional models may need to be introduced with more frequency and longevity in order to obtain lasting effects.

Roddy et al. (1981) conducted an in-home intervention with 48- to 77-month old children. This intervention involved the child being exposed to nontraditional audio materials, books, and toys for 80 minutes per day, for ten days. A control group received similar materials that did not go against gender stereotypes. All presentation was done by the parents, who received an explanation from the experimenter. Gender role stereotype measures were taken before and after the intervention. The authors found no significant effects by treatment condition; thus, the study did not support social learning theory in interventions. The authors suggest that home-based interventions are important but difficult to conduct and that school-based interventions may be more feasible (Roddy et al., 1981).

### **Conclusion**

The literature points to the existence of gender stereotypes in very young children and to their continued existence throughout childhood and adolescence. Support can be found for cognitive developmental, gender schema, and social learning theories of gender development, both in studies of the occurrence of gender stereotypes and in studies of interventions to counter them. It appears that gender schema based interventions may be more effective with younger children and that social learning based interventions may be more effective with older children and adults. However, the possibility of using social learning based interventions with young children cannot be ruled out. With attention to

the frequency and consistency of these interventions, more effective methods may be developed.

This study seeks to create a social learning based intervention for children in an effort to further explore the effectiveness of such programs. Past research findings have informed the design of this study in several ways. In order to promote a lasting reduction in gender stereotypes, the coloring book intervention tool will contain suggestions for effective use to be read by parents or teachers. These suggestions will be based on the current literature and will include techniques for extending the exposure to the counterstereotypic images for a duration of time, involving adult and peer discussion and reinforcement of the counterstereotypic models, and including the coloring book as part of a larger gender stereotype intervention program. This intervention will also involve gender schema theory in that the presentation of counterstereotypic models should refute children's current gender classification models and widen the categories. It will target gender flexibility rather than gender stereotype knowledge as the measure of interest.

This study focuses on young children because, according to the literature, that is the time in the lifespan when strong and multi-dimensional gender stereotypes begin to occur. An effective intervention at that point should lay the groundwork for future interventions and perhaps change the course of children's gender stereotype development. While a single brief, exposure-based intervention will probably have a limited impact on the child's gender stereotype development, it could be one important step in working towards reducing gender stereotypes at large. Planting a seed, when done effectively, can be the start of a long process of change.



## CHAPTER III

### PROCEDURES OF STUDY

The focus of this study is the design and creation of a coloring book to be used as a gender stereotype intervention tool for children. The design has been informed by the current literature on gender stereotype development in children, as well as the literature on gender stereotypes as represented in children's media. The coloring book includes 44 pictures of males and females of various ages engaging in activities that are counterstereotypic to their genders. The book also includes a brief section on suggestions for effective use and other ideas for gender stereotype intervention for parents and teachers. Copies of the coloring book pages are included as an appendix to this study.

As outlined in Chapter I, there are several reasons for creating an intervention tool of this kind. Intervening against gender stereotypes may prevent various forms of oppression and discrimination, including domestic violence, sexual harassment, and bullying. Intervention may also increase children's openness to various options for themselves and others, including occupational, social, and family roles. While the coloring book is not intended to change any naturally occurring gender or individual differences, it is intended to increase flexibility and reduce strict adherence to gender stereotypes. The creation of a coloring book would provide a resource for this type of intervention that could be used by families, schools, and communities. Using a coloring book as an intervention tool is advantageous because it can be done at low cost with little

extra effort from parents and teachers and can be adapted to the needs of a particular program.

The review of gender stereotype literature provided an initial framework for the intervention tool design. The selection of specific images included in the coloring book is based on items from the *Children's Occupation, Activity, and Trait* (COAT) and the *Occupation, Activity, and Trait* (OAT) scales (Bigler, 1997), the *Gender-Stereotyped Attitude Scale for Children* (GASC) (Signorella & Liben, 1985), and the scale used by Trautner et al. (2005). These scales include lists of activities and traits that have been rated as stereotypically masculine, feminine, or neutral by random samples of participants. The three scales were chosen because they have been shown to be reliable in other studies, they corroborate each other in terms of item selection, and they include a wide variety of items related to behaviors, traits, leisure activities, household tasks, and occupational roles. Scales from three different decades were used in an effort to ensure that the images included would be contemporary and not associated with a limited or outdated time period. For example, one of the stereotypically feminine items on the GASC is "be a telephone operator." This item appears to be no longer relevant to current gender stereotypes, as evidenced by its absence from the COAT, OAT, and Trautner et al. scales, and so it was not selected for use in the coloring book.

The coloring book contains images that show males and females engaging in activities that correspond to items from the opposite gender's stereotype on the COAT, OAT, GASC, and Trautner et al. scales. For example, one of the items classified as stereotypically masculine on the GASC is "fixing a car" (Signorella & Liben, 1985). The coloring book includes a corresponding image of a woman fixing a car (Appendix D,

p. 61). The coloring book contains only counterstereotypic gender images, with the assumption that stereotypic gender images are overrepresented in mainstream children's media (Kolbe & LaVoie, 1981; Narahara, 1998; Turner-Bowker, 1996; Weitzman, Eiffel, Hokada, & Ross, 1972), and thus do not need to be included in this intervention tool.

Of the 44 images included in the coloring book, 22 depict males and 22 depict females. Within these gender categories, an effort was made to include equal numbers of children and adults, with 11 pictures of boys, 11 pictures of men, 11 pictures of girls, and 11 pictures of women. Because some images include adults and children together, perfect equality was not achieved, but there are at least 11 depictions of each subgroup. The various ages were included in an effort to promote identification between the children using the coloring book and the children depicted inside, and to promote social modeling of adult figures. The coloring book also controls for actual numbers of males and females depicted, with 32 males and 32 females shown in the 44 images. Images are included from four categories: traits, leisure activities, household chores, and occupations. Because of overlap between categories and limited availability of certain types of images, not all categories are equally represented. However, a wide variety of images from each subgroup and category has been included, with the intention of targeting many different gender stereotypes.

Many of the images correspond to multiple scale items, thus refuting multiple gender stereotypes simultaneously. For example, there is an image of a man vacuuming while holding a baby (Appendix D, p. 85). This image corresponds to two of the feminine items on the GASC ("take care of children," and "clean the house"), two of the feminine items on the COAT and OAT ("baby-sit," and "vacuum a house"), and one of

the feminine items on the Trautner et al. scale (“are cleaning and tidying the house”). This image could also be considered to correspond to various traits on the scales, including “affectionate,” “gentle,” “helpful,” “loving,” and “neat” on the COAT and OAT, and “are affectionate and like to hug and kiss others,” and “like to give mother a helping hand with her domestic work” from the Trautner et al. scale. Images that correspond to multiple scale items are expected to present a more complex intervention against gender stereotypes. In the example of the man vacuuming while holding a baby (Appendix D, p. 85), the caption makes the vacuuming activity the primary focus of the page. Holding the baby becomes a secondary focus that a child may perceive in a more subtle and subconscious way. Other images, such as “Janie and Alyssa want to be firefighters” (Appendix D, p. 68) correspond to only one scale item (“Firefighter” on the COAT and OAT), and thus have a simpler and more direct target. For a complete list of images and corresponding scale items, see Appendices A and B, Tables 1 and 2.

The coloring book was constructed by retrieving appropriate, relevant, and non-copyrighted images from the internet. Google Image Search was used to find the original images, which were then modified with the use of the Kodak Easy Share computer program. The “coloring book” function of the Kodak Easy Share program was used to make the images black and white, to accentuate contours, and to eliminate finer details. These modified images were then traced by hand in an effort to further simplify edges and shapes for coloring. In several cases, extraneous figures and background objects were eliminated during the tracing process in order to emphasize the figure of central importance. Captions for the pictures were based on the corresponding items on the COAT, OAT, GASC, and Trautner et al. scales and have been modified to include

gender-specific names and pronouns. Names for the people depicted in the coloring book were chosen at random.

The coloring book was carefully constructed through a literature-based image and caption selection process, a controlled number of images from each subgroup (men, women, boys, and girls) and category (traits, leisure activities, household chores, and occupations), and a consistent method of modifying internet images. Efforts were made to include a broad range of images in order to represent many different facets of gender stereotypes. Efforts were also made to equally represent males and females of different ages. Applications and limitations will be discussed in the following chapters.

## CHAPTER IV

### APPLICATIONS

The coloring book has been designed for use in a variety of contexts. Part of the rationale for using a coloring book as an intervention tool is that it is a relatively non-directive instrument that can be adapted for different purposes, needs, audiences, and settings. In this chapter, various suggestions for use will be outlined, including applications in home and family settings, classroom settings, public settings, and counseling settings.

#### **Home and Family Settings**

In a home or family setting, the coloring book can be used fairly casually. Parents can offer the book to children simply as an addition to their collections or as an implicitly alternate perspective. Parents can give children quite a bit of freedom to interact with the book in their own ways and to make their own choices about how to use it. This approach would have the benefit of encouraging children's creativity and allowing them to generate their own thoughts and responses to the images depicted. This approach may also normalize the counterstereotypic images – by treating the book as if it were no different from any other coloring book in a child's collection, parents may send the message that counterstereotypic images are just as normal and natural as stereotypic ones.

A potential drawback to this approach is that children may rush through the book without much thought or toss it aside in favor of a different book or activity, thus missing the intervention altogether. Another potential drawback is that children may not be able

to read the captions on their own and may miss the meanings of some of the images. Because the effectiveness of the coloring book as an intervention tool has not been tested empirically, it is not known whether the combination of text and illustration will be more effective than illustration alone. It does seem possible, however, that some of the images could be misinterpreted without knowledge of the captions below. The non-directive approach may also have the disadvantage of not including significant social reinforcement or modeling, factors shown to be crucial in the Katz & Walsh (1991) study discussed in Chapter II.

An approach that parents and families can use to include more social reinforcement and modeling is to participate with children in using the coloring book. If parents color the pictures with the children, they may send the message that these images depict valid and acceptable behaviors. They may also send the message that counterstereotypic behaviors are appropriate for adults as well as children. Parents can also reinforce and extend the intervention by using the coloring book as a starting point for discussions about gender stereotypes. Some discussion questions that may be helpful for parents to ask are, “Did anything surprise you in this book?” “Can you think of anyone you know who is like the person in this picture?” “Which pictures in this book are like you?” and “Are there any activities in this book that you would like to try?” Specific discussion questions to use with each picture are included in the book’s accompanying script for parents and teachers.

Asking children if anything surprises them in the book can bring their stereotyped beliefs to light. For example, if a child answers, “I was surprised to see a man crying,” a parent can help that child explore his or her beliefs about the types of feelings that men

can have and the ways that men can express those feelings. This type of question and response can also lead to a discussion about why that image is surprising, and how the child has seen other people react to men who cry. If a child says that he or she has never seen a man crying, parents can talk about whether or not men cry and what would happen if a man did. Encouraging children to talk about surprising images in the book can make stereotyped beliefs explicit, rather than leaving them as unspoken assumptions. This allows parents and children to explore those beliefs out loud and to revise any biased or stereotyped thinking.

Asking children to identify people they know who are like the people depicted in the pictures can connect the coloring book to the external world and provide a sense of modeling. This question may lead to interesting responses, depending on how the child defines similarity to the person in the picture. For example, when asked to identify a person who is like the woman riding a motorcycle, a child may identify another woman he or she knows who rides a motorcycle, or he or she may identify a man who rides a motorcycle or a woman who does not ride a motorcycle. These responses would indicate which aspect of the coloring book image is most salient to the child and may suggest a pattern of how the child tends to categorize things – by gender, activity, neither, or both. Parents can also participate in identifying similar people, and can point out people whom children know who have the traits or do the activities depicted in the coloring book. Parents can also point out to children that all of the images in the book came from real photographs, so they are all images that occur in real life. This may help children see that the world does not always follow gender stereotypes, and may help them notice more people who do not always fit gender stereotypes.



Asking children to identify how they are similar to pictures in the coloring book can help them examine how much they fit into gender stereotypes. Asking them which activities in the book they would like to try can help them explore their attitudes about gender stereotypes as they apply to themselves. This line of discussion targets the intervention goal of increasing children's openness to various options for themselves and reducing strict adherence to gender stereotypes. Again, asking questions about similarities may provide clues about which categories or schemata a child tends to use for classifying information. A boy may say he is similar to a boy in the coloring book because they are both boys or because he likes to do the stereotypically feminine activity that he is depicted doing, or he may say he is similar to a girl in the coloring book because he likes to do the stereotypically masculine activity that she is depicted doing. Any of these responses could lead to a rich discussion about how flexible or rigid a child is with regard to gender stereotypes and his or her own traits and behaviors.

Because parents who use the coloring book may have varying levels of awareness of and concern about gender stereotypes, a paragraph written for adults is included with each coloring book page (Appendix E, p. 101). It is assumed that parents will vary in levels of familiarity and experience with talking to children about issues of gender, gender stereotypes, personal choices and preferences, and social norms. For this reason, specific suggestions are given about what to ask children and what to emphasize when coloring each picture. These suggestions should serve as guidelines and starting points to encourage open discussion about gender stereotypes. Parents can choose to focus on these discussion questions to a large extent and can move slowly through the coloring book, spending time carefully exploring each image and its implications.

Parents may also wish to combine the two approaches that have been outlined, leaving children to use the book on their own some of the time and coloring with them and discussing the images together at other times. Other ideas for using the coloring book in a home or family setting include supplementing the intervention with other counterstereotypic materials and activities and having children create or find new counterstereotypic images. Using supplemental materials would be beneficial because these materials would reinforce the coloring book intervention. Longer lasting interventions against gender stereotypes have been shown to be more effective than brief ones (Dasgupta & Asgari, 2004; Flerx et al., 1976), so the coloring book should be stronger as part of a larger gender stereotype intervention effort than as a stand-alone resource. Having children create new counterstereotypic images should encourage creativity and a more active role in the gender stereotype intervention. All of these suggestions for home and family use are included as a one page letter to parents in the coloring book and can be found as an appendix to this study.

### **Classroom Settings**

In a classroom setting, many of the same approaches can be used. Preschool, kindergarten, or early elementary teachers can introduce the coloring book as a part of the classroom curriculum. Teachers can use the same discussion questions previously outlined to help students talk about surprising images, examine stereotyped beliefs, and make connections to themselves and other people in their worlds. In a classroom or large group setting, these discussions would include many different perspectives from many different children, so there would be a greater opportunity for children to hear new ideas.

A large group discussion would also have the benefit of providing social reinforcement for counterstereotypic traits and behaviors.

In a classroom setting, teachers may be able to use various techniques to provide incentives for students to color the book and think about the counterstereotypic images. One method teachers can use is to set aside a specific coloring time that happens on a consistent and predictable basis. This would emphasize the coloring book intervention as an important part of the education happening in the classroom and may encourage students to treat it as serious schoolwork. Another method is to break up the book and only give students a few pages at a time. This may encourage students to spend more time on each picture rather than rushing through the book and then being unwilling to go back and revisit the pictures. When all of the pages are completed, teachers can then reattach them into a book that students can keep as a tangible accomplishment. Another method is to display completed pictures on the walls of the classroom or elsewhere in the school. This would serve to provide reinforcement for the students who have colored the pictures and would provide modeling for other people in the classroom and school.

As in the home and family settings, the coloring book may be best used in the classroom setting as part of a larger gender stereotype intervention. Teachers can use the coloring book as part of an effort to include more counterstereotypic books in their classroom libraries. This would be especially beneficial because many children's classroom libraries and booklists tend to be fairly gender-biased (Kolbe & LaVoie, 1981, Narahara, 1998). Even books typically classified as nonsexist have been shown to be biased, with the most notable discrepancy being that while females in these nonsexist books are often depicted doing stereotypically male activities or exhibiting

stereotypically male traits, males are rarely depicted doing stereotypically female activities or exhibiting stereotypically female traits (Diekman & Murnen, 2004). Teachers can also use the coloring book to reinforce gender flexibility in a larger career curriculum, such as by having adults come into the classroom as representatives of counterstereotypic career choices for males and females. Because the coloring book is relatively non-directive, teachers can adapt its use for a wide spectrum of other classroom activities and lessons.

### **Public Settings**

In public settings, the coloring book can be used as a tool for social activism. Organizations that have gender equality as a goal could have copies of the book available to consumers in an effort to spread the message that the traits and activities depicted within are appropriate for both genders. Copies could be placed in public settings such as libraries, restaurants that hand out coloring book pages to children, waiting rooms, and community bulletin boards. Permission would have to be obtained from the administrators of these settings, and there would probably be people who would not welcome the images within the book. However, the controversy that could be sparked would serve to open dialogues and generate discussion, and the book would be a tool for activism even among people who disagreed with its counterstereotypic message. In this application, as a tool for activism, the coloring book may be appropriate for adults as well and may not be limited to early childhood use.

### **Counseling Settings**

In counseling settings, the coloring book could be used as a therapeutic intervention for a variety of clients, including those affected by issues of domestic

violence, gender-related oppression and bullying, or gender identity disorder. Again, in this application, the coloring book may be appropriate for adults as well as children. For victims of domestic violence, coloring the counterstereotypic images could be a liberating, validating, and empowering exercise. For example, for a woman who had been forced to do all of the household chores and whose husband justified his abuse by emphasizing her servant-like status, the images of men vacuuming, washing dishes, doing laundry, and ironing clothes could be very powerful. She may never have considered that men would engage in such tasks, or her husband may have made her feel crazy for expecting him to do an equal share of this work. These images could show her that men do these household chores sometimes and would validate her in expecting men to do them. Similarly, the images of women in more powerful positions, such as the loud, strong, and adventurous women, and the leader, business executive, and engineer could encourage this woman to think of herself as more than just a servant to her husband. A counselor could work with a client such as this to examine the thoughts and reactions triggered by the counterstereotypic images.

For child victims of domestic violence, the coloring book could also be a therapeutic tool for refuting oppressive gender stereotypes that they may have learned from their parents. As indicated by Graham-Bermann and Brescoll's (2000) study, children may be more likely to agree with stereotypes about masculine power and violence if they are from families where physical and emotional abuse has been present. This suggests that these children may hold more rigidly stereotyped beliefs than their peers, and may benefit from a therapeutic intervention that targets this specific area. A child of the woman in the previous example may believe that his or her father was right

to expect the mother to do all of the work in the house and to hit or berate her when she did not do a task to his satisfaction. This child may see the coloring book images of men doing household tasks and realize that not all men refuse to participate in these activities and that perhaps his or her mother should not have been treated like a servant.

Realizations such as this one could be painful, and a counselor could help a child process his or her experiences and how they related to the images depicted in the coloring book.

For perpetrators of domestic violence, the coloring book could be used to challenge deeply held stereotyped beliefs about the roles of men and women. For example, coloring and discussing the counterstereotypic images could be a required exercise for men in a batterers' intervention program. These men may also feel trapped in rigid and confining gender roles, and the exploration of other depictions of masculinity may have a powerful impact.

For victims of gender-related oppression and bullying, the coloring book could be used to provide validating and normalizing images. For example, a boy who gets harassed for enjoying activities like knitting and making jewelry could look at these pages in the coloring book and realize that he is not the only boy in the world who has these interests. A girl who gets teased about being a tomboy because she is competitive and good at sports could look at these pages and realize that other girls share the same characteristics. This type of normalizing experience could increase children's self-esteem and help them feel stronger when faced with teasing, harassment, and bullying.

For people diagnosed with gender identity disorder, or people who do not identify with the gender role associated with their biological sex, the coloring book could serve as a tool for further exploring the way they perceive gender. There is a great deal of

controversy surrounding the way that gender identity disorder is diagnosed, with critics saying that the criteria are sexist and stereotyped (e.g., Feder, 1999, Langer & Martin, 2004). This coloring book could help clients explore some of those criteria and may help reduce the sense of pathology surrounding behaviors and traits that do not adhere to gender stereotypes.

### **Conclusion**

Family discussion, classroom instruction, social activism, and therapeutic intervention represent the wide range of potential applications for the coloring book tool. There may also be further applications beyond those outlined in this study. Common to all of the different settings and uses is the idea that the coloring book can increase flexibility by introducing and reinforcing counterstereotypic images. The coloring book is intended to be a tool for widening the boundaries of what is acceptable for males and females, and to open people's minds to different opportunities that they may otherwise reject on the basis of gender stereotypes. Children and adults who use this coloring book are encouraged to think of gender and identity in a more complex way than is afforded by the use of stereotypes.

## CHAPTER V

### LIMITATIONS AND IMPLICATIONS FOR FURTHER STUDY

One of the clearest limitations of this study is the lack of empirical evidence of the coloring book's effectiveness as an intervention tool. Further study should focus on conducting pre- and post-intervention measures in order to determine the coloring book's effect on stereotyped beliefs. If it were demonstrated that the coloring book significantly reduced gender stereotyped beliefs or significantly increased gender flexibility, then parents, teachers, and other adults could feel confident in using it as an intervention tool. Empirical evidence of the coloring book's effectiveness could also lead to further study in gender stereotype development and intervention.

Limitations in constructing the coloring book include the limited availability of gender counterstereotypic images found through the Google image internet search engine. Attempts to find certain images such as boys playing with dolls and girls playing with trucks were unsuccessful. It was also difficult to find images that represented diverse ethnicities and cultures, thus the majority of the images used depict Caucasian people. A wider variety of images may have been beneficial to include in the coloring book, but this variety proved to be impossible to find using the methods employed in this study. One way to improve the availability of images would be to find a larger database from which to choose. Another way to eliminate this problem would be to create original coloring book images rather than modifying already existing ones. If there were no limits on the types of images available for use, image selection could have been based more



fully on research-based factors without being influenced by this less relevant factor. Images could have covered a broader scope of categories, or representation of men, women, boys, and girls in each of the four chosen categories (traits, leisure activities, household chores, and occupations) could have been more equal.

Another limitation in the construction of the coloring book lies in the quality of the images. The modifications made with the Kodak Easy Share program and by hand were more successful with some images than others. Certain original internet images, such as the librarian, the boy jumping rope, the woman on the motorcycle, and the woman mowing the lawn, were either too small or had the central figure too far in the distance to be able to retain much detail. The faces of the people in these images, as well as other details, became overly simplified in the subsequent modifications. These images were included in the coloring book because it was determined that the benefit of including the content of the pictures outweighed the drawback of including pictures of lower quality. Other images, however, were excluded from the coloring book because the quality was determined to be too low for inclusion. Again, this problem could have been solved by using original images in the coloring book rather than modified images from the internet.

The coloring book was also limited by the nature of the gender stereotype scales from which items were chosen. Although three scales were included in an effort to represent a broader perspective and time period, only one of the scales (the COAT and OAT) includes a range of items from all four image categories (traits, leisure activities, household chores, and occupations). In fact, this scale is far more extensive than the other two, with 166 distinct masculine and feminine items. The GASC contains 26

masculine and feminine items, and the Trautner et al. scale contains 31 masculine and feminine items. It was, therefore, difficult to draw from the full range of items from the COAT and OAT while also striving for reliability by using items that appeared on more than one scale. Thus, some of the items chosen from the COAT and OAT did not appear on either the GASC or the Trautner et al. scales.

Future research should focus on testing the effectiveness of the coloring book as well as improving the coloring book's construction, as previously outlined. Future studies should also examine gender stereotypes in other forms of children's media, including television, music, and toys. Effectiveness of interventions in these other forms of media should be explored in an effort to create a more comprehensive gender stereotype intervention. Tools like the coloring book in this study represent limited attempts to intervene against gender stereotypes. When used alone, this coloring book may have limited effectiveness in changing ideas and increasing openness to different traits and behaviors. When used in combination with other activities and resources, this coloring book may have more opportunity to make an impact. In the future, there may be more equal representation of males and females in counterstereotypic roles in mainstream children's media, and tools such as this coloring book will not seem so unusual. Until then, the coloring book can be used as a beginning effort to move away from gender stereotypes.

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## APPENDICES

APPENDIX A

TABLE 1

MALE COLORING BOOK IMAGES AND CORRESPONDING SCALE ITEMS

<b>Caption</b>	<b>Corresponding GASC Item(s)</b>	<b>Corresponding COAT and OAT Item(s)</b>	<b>Corresponding Trautner et al. Scale Item(s)</b>
Juan cries a lot	None	“Cry a lot” “Emotional”	“Cry a lot, no matter if something bad or good happened”
Daddy takes care of the baby	“Take care of children”	“Baby-sit” “Affectionate” “Gentle” “Loving”	“Are affectionate and like to hug and kiss others”
Mark and Bill are affectionate	“Hug other people a lot”	“Affectionate” “Loving”	“Are affectionate and like to hug and kiss others”
Max likes to dance with his son	None	“Affectionate” “Charming” “Have good manners”	None
Jerry vacuums the house	“Take care of children” “Clean the house”	“Baby-sit” “Vacuum a house”	“Are cleaning and tidying the house”
George washes the dishes	“Wash dishes”	“Wash dishes”	“Are cleaning and tidying the house”
Tim and Andrew do the laundry	None	“Wash clothes”	None
Scott irons the clothes	None	“Iron clothes”	None
Robert is a librarian	None	“Librarian” “Enjoy/Good at English”	None
Peter is a ballet dancer	“Be a ballet dancer”	“Ballet dancer” “Take ballet lessons”	None
Ben teaches first grade	“Be a teacher”	“Elementary school teacher”	None

Appendix A continued

<b>Caption</b>	<b>Corresponding GASC Item(s)</b>	<b>Corresponding COAT and OAT Item(s)</b>	<b>Corresponding Trautner et al. Scale Item(s)</b>
Bobby is talkative	None	“Talkative” “Talk on the telephone”	None
Jason is shy	None	“Shy”	“Are fearful and afraid of many things”
Tommy is gentle	None	“Gentle”	None
Christopher is loving	“Take care of children”	“Baby-sit” “Gentle” “Loving”	None
Jeremy, Arthur, and Ricky are sewing	“Use a sewing machine”	“Sew from a pattern”	None
Frank and Henry are knitting	None	“Knit a sweater”	“Crochet and knit at home”
Pedro likes to jump rope	None	“Jump rope”	None
Joey has made a beautiful necklace	None	“Jewelry maker” “Make jewelry”	“Like to play with necklaces and bracelets”
Eddie washes the dishes	“Wash dishes”	“Wash dishes”	“Like to give mother a helping hand with her domestic work”
Seth mops the floor	“Clean the house”	“House cleaner”	“Like to give mother a helping hand with her domestic work”
Jacob is cooking dinner	“Cook in the kitchen”	“Cook dinner”	“Cook and bake at home”

APPENDIX B

TABLE 2

FEMALE COLORING BOOK IMAGES AND CORRESPONDING SCALE ITEMS

<b>Caption</b>	<b>Corresponding GASC Item(s)</b>	<b>Corresponding COAT and OAT Item(s)</b>	<b>Corresponding Trautner et al. Scale Item(s)</b>
Maria is loud	None	“Aggressive” “Loud”	None
Anna is strong	None	“Good at physical education” “Strong” “Lift weights”	“Are very strong and can lift heavy things”
Sunita is adventurous	None	“Adventurous”	“Are courageous and self-confident”
Bethany is a leader	None	“Act as a leader” “Confident” “Independent”	“Are courageous and self-confident”
Margaret rides her motorcycle	None	“Ride a motorcycle”	None
Alison is good at using tools	None	“Build with tools”	“Work a lot with tools”
Christina fixes the car	“Fix a car”	“Auto mechanic” “Fix a car”	“Fix broken things in their home” “Work a lot with tools”
Judy mows the lawn	“Mow the lawn”	None	“Mow the lawn in the garden”
Elizabeth takes out the garbage	“Collect garbage”	“Garbage collector” “Strong”	“Are very strong and can lift heavy things”
Beatrice is a business executive	None	“Act as a leader” “Ambitious” “Independent”	None
Katie is an engineer	None	“Construction worker” “Engineer”	None
Lisa is brave	None	“Brave”	“Are courageous and self-confident”

Appendix B continued

<b>Caption</b>	<b>Corresponding GASC Item(s)</b>	<b>Corresponding COAT and OAT Item(s)</b>	<b>Corresponding Trautner et al. Scale Item(s)</b>
The softball players are confident	None	“Professional athlete” “Confident” “Good at sports”	“Are courageous and self-confident”
<b>Caption</b>	<b>Corresponding GASC Item(s)</b>	<b>Corresponding COAT and OAT Item(s)</b>	<b>Corresponding Trautner et al. Scale Item(s)</b>
Megan brags a lot when she catches a fish	“Go fishing”	“Go fishing” “Brag a lot”	None
Emily likes to win	None	“Competitive” “Good at sports”	None
Lindsay built this model airplane	“Fly a plane”	“Build model airplanes”	“Like to assemble model ships and airplanes”
Jenny likes to play video games	None	“Play video games” “Competitive”	None
Amy is good at climbing	None	“Adventurous” “Good at physical education”	None
Stacey is good at science	None	“Scientist” “Use a microscope” “Enjoy/Good at science” “Smart”	None
Tanya does karate	None	“Practice martial arts” “Good at physical education” “Strong”	None
Janie and Alyssa want to be firefighters	None	“Firefighter”	None
Lillian wants to be a doctor	“Be a doctor”	“Doctor”	None

## APPENDIX C

### LETTER TO PARENTS AND TEACHERS

#### **To Parents and Teachers:**

This coloring book was created to help children and adults reconsider gender stereotypes. The author's intention is that people will color the pictures and recognize that many of these activities are open to them, whether they are males or females. Some discussion questions that can be used with this book are:

- Did anything surprise you in this book?
- Can you think of anyone you know who is like the person in the picture?
- Which pictures in this book are like you?
- Are there any activities in this book that you would like to try?

Some other activities that you can use to help children reconsider gender stereotypes are:

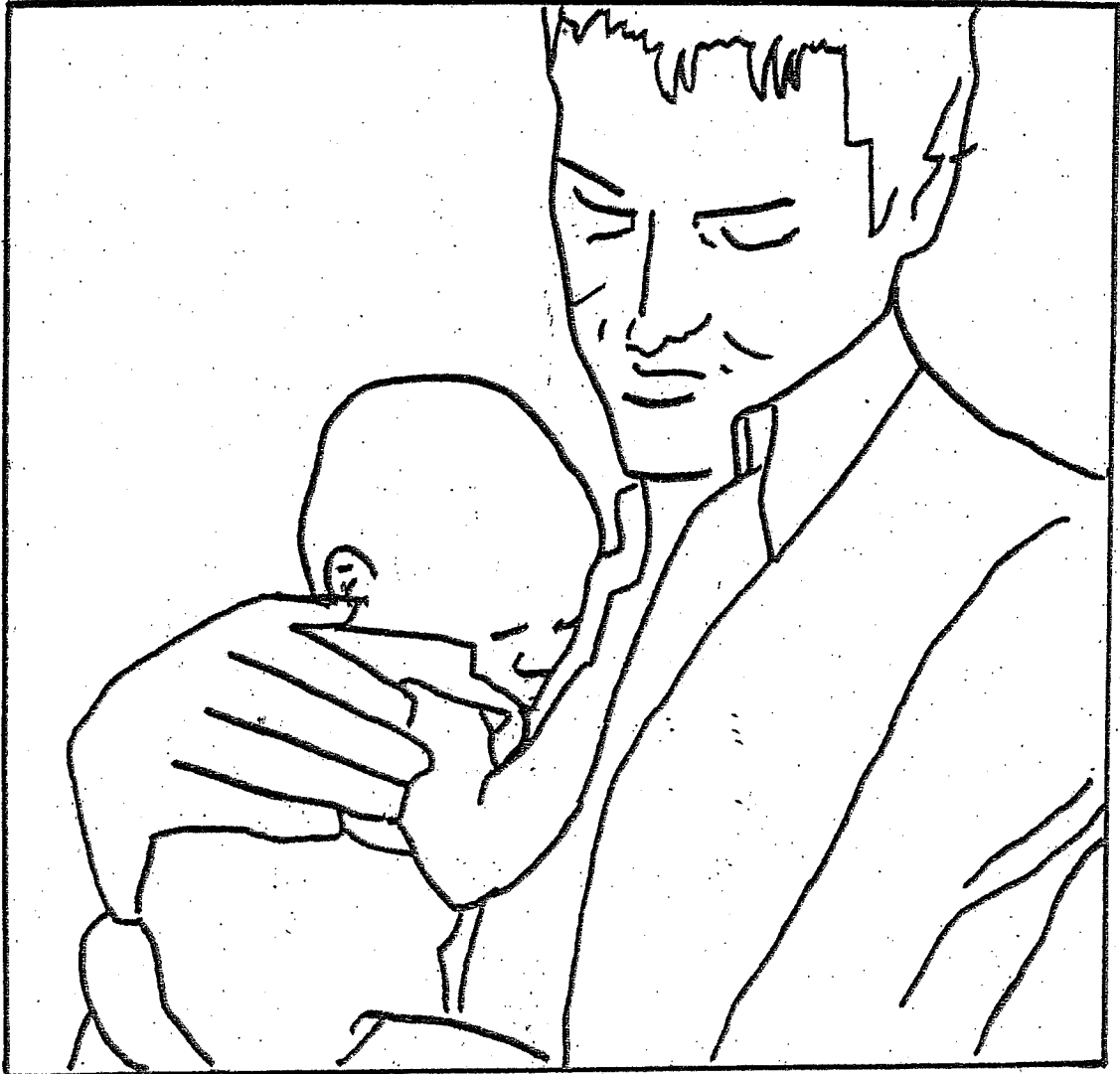
- Have children draw their own coloring book images.
- Talk to children about how males and females are depicted in books they read, television they watch, toys they use, and other media.
- Encourage children to consider many different occupations and activities.

Enjoy the coloring book!

APPENDIX D

COLORING BOOK PAGES





Daddy takes care of the baby



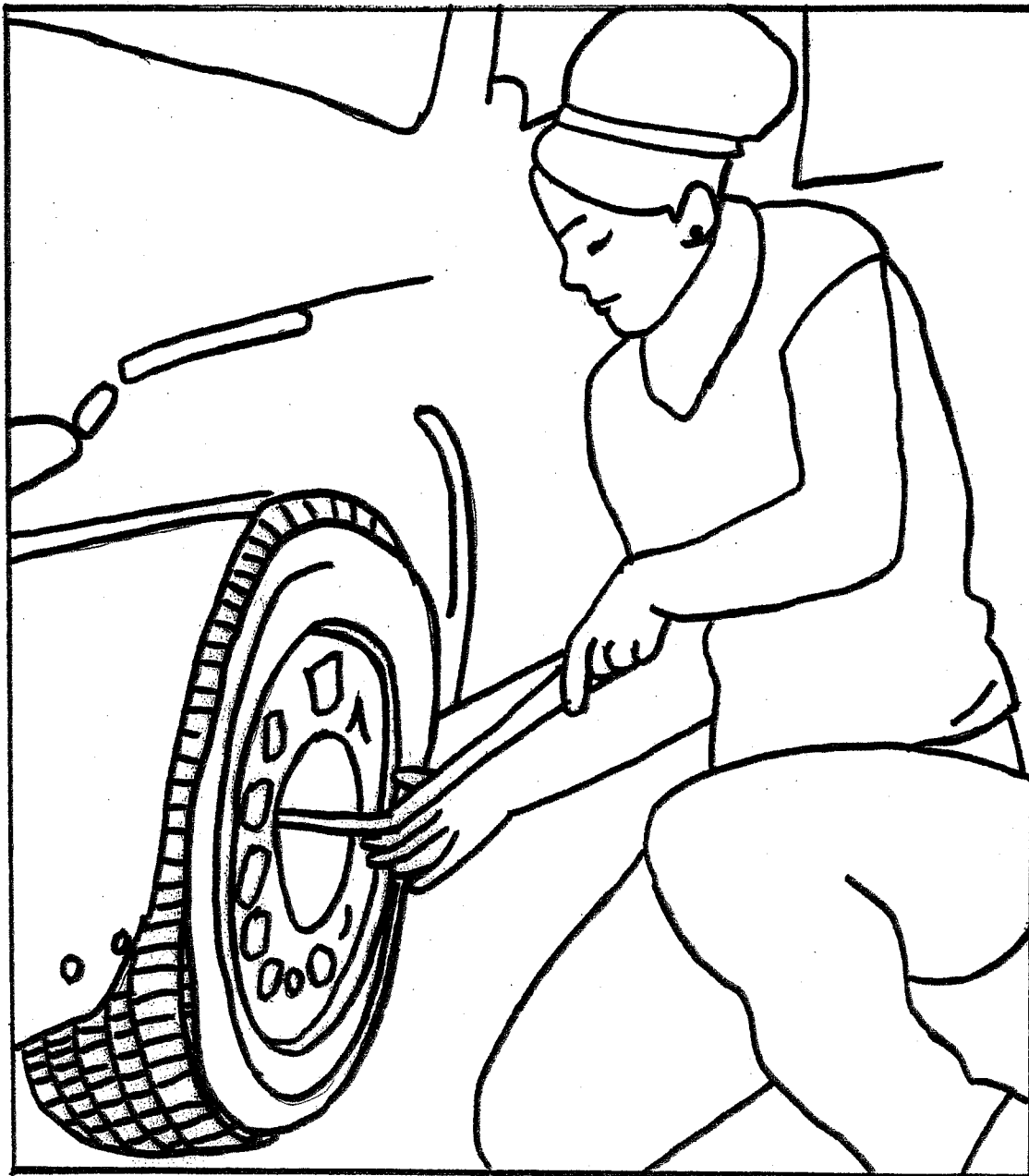
Bethany is a leader



Bobby is talkative



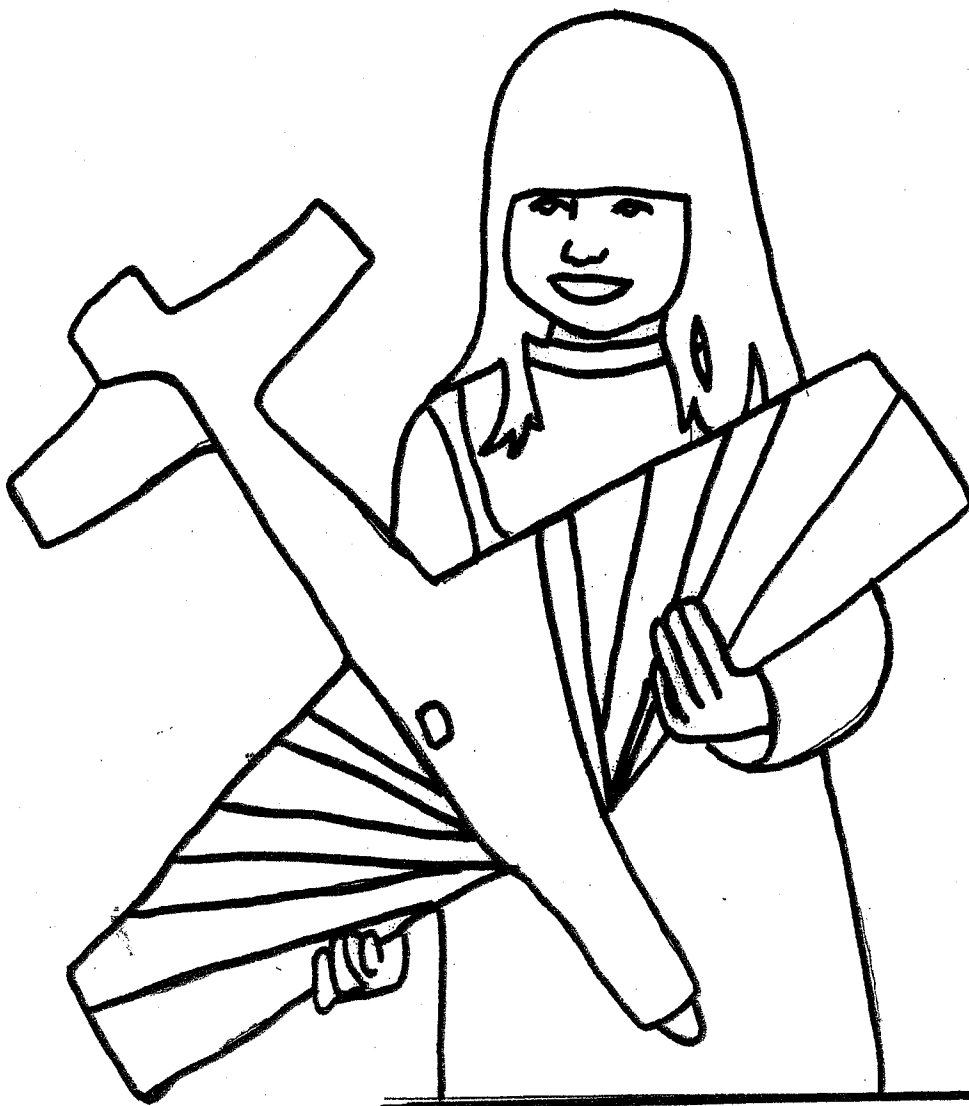
Emily likes to win



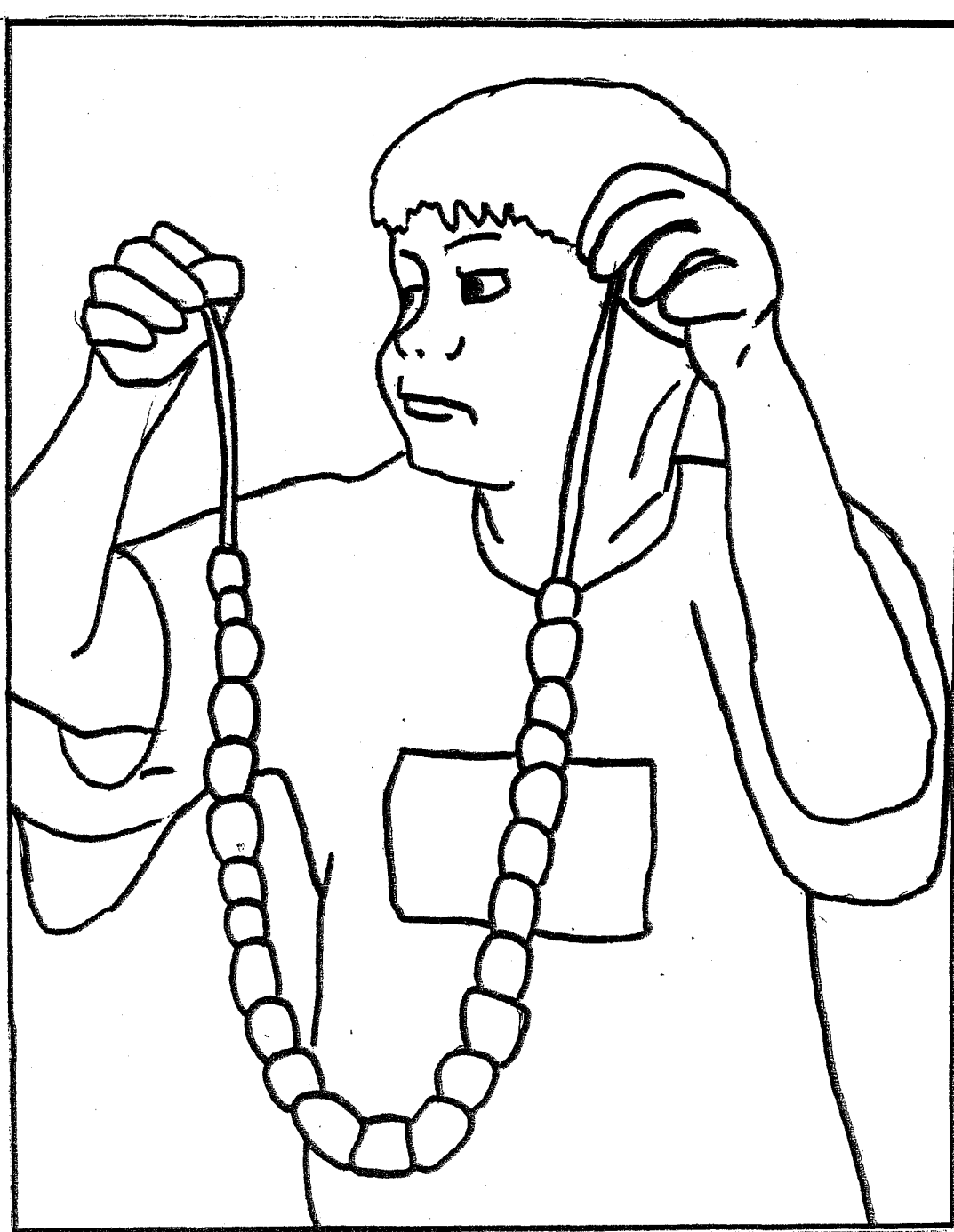
Christina fixes the car



Tim and Andrew do the laundry

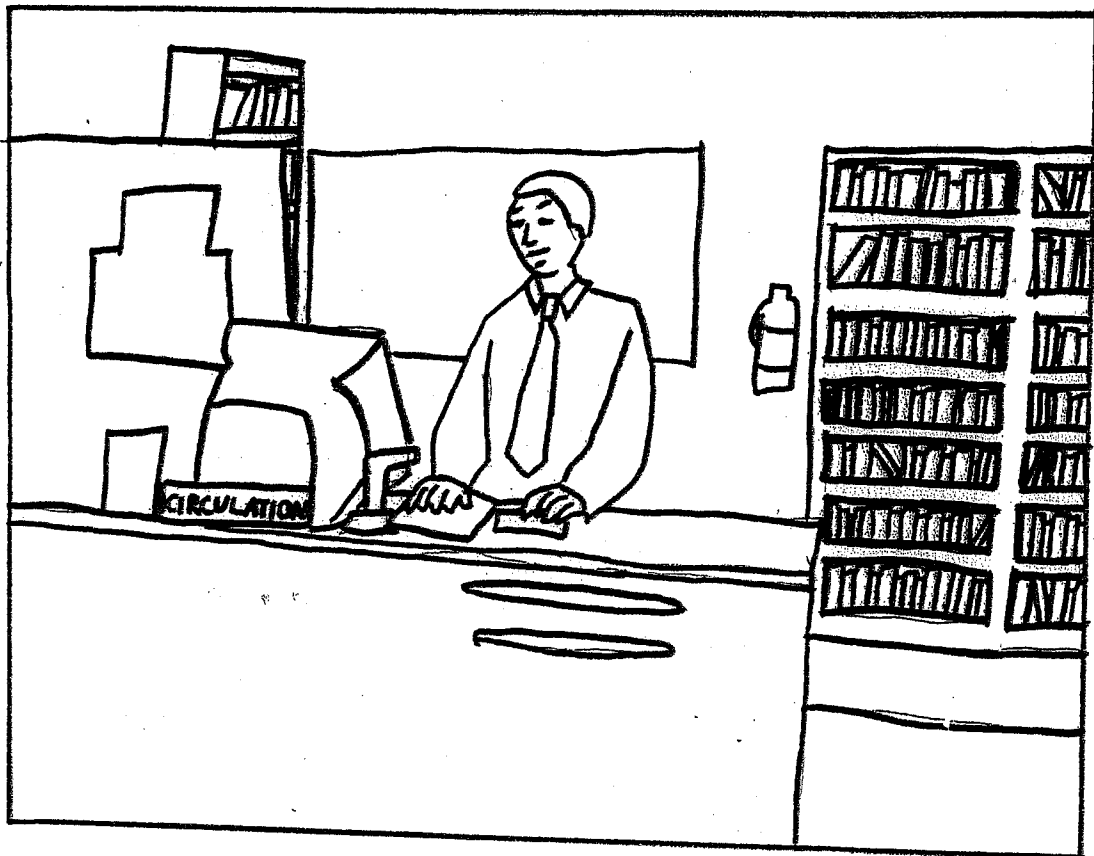


Lindsay built this model airplane



Joey has made a beautiful necklace





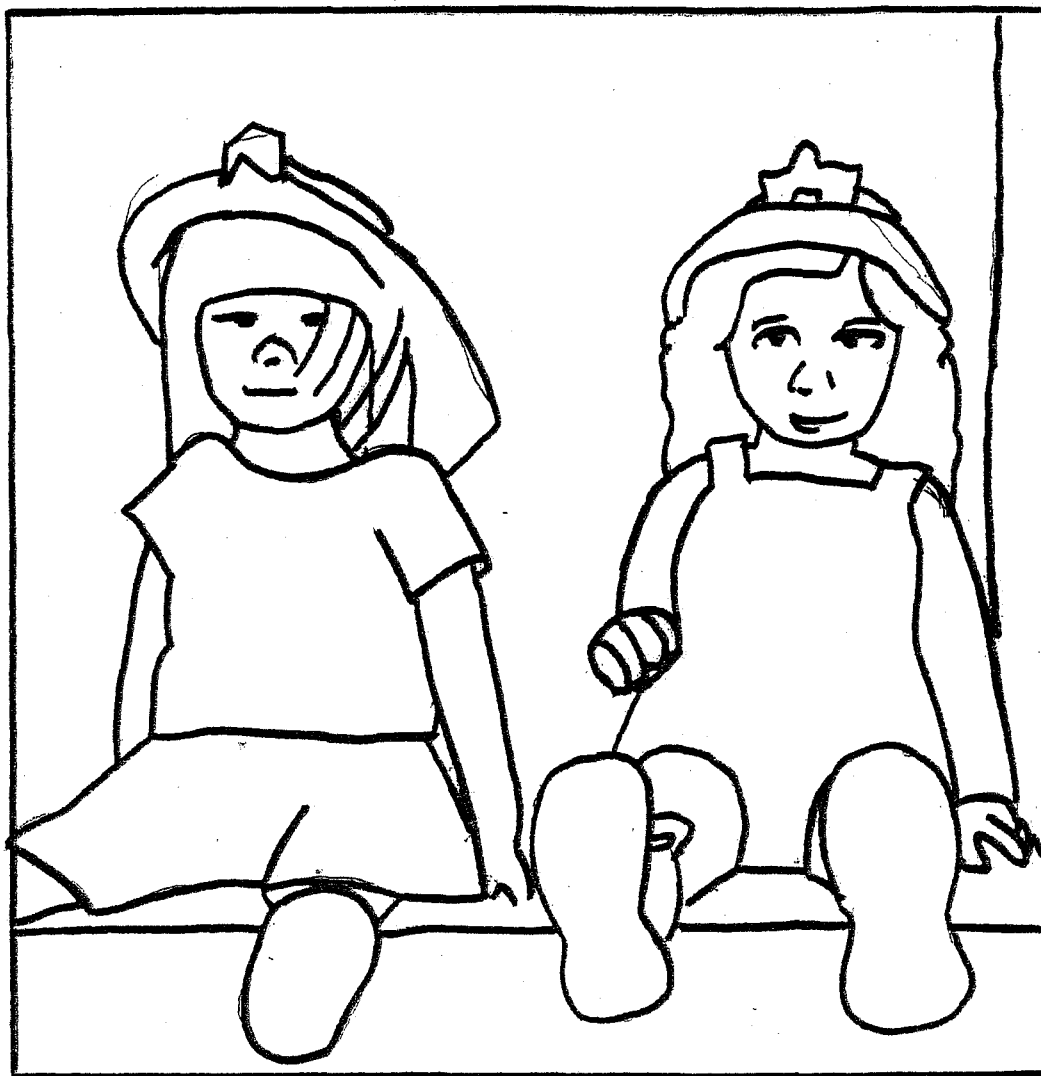
Robert is a librarian



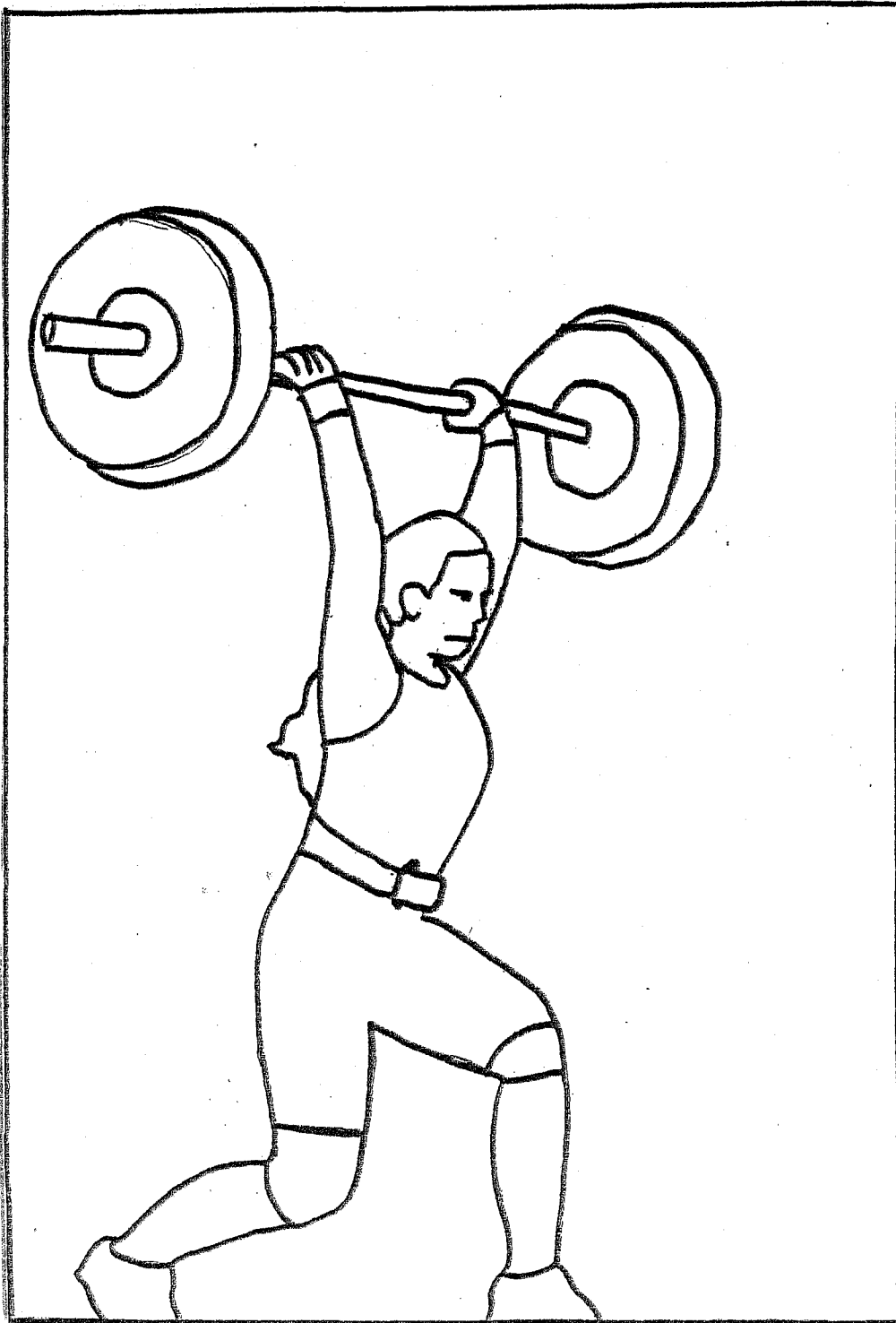
Beatrice is a business executive



Jacob is cooking dinner



Janie and Alyssa want to be firefighters



Anna is strong



Juan cries a lot



Megan brags a lot when she catches a fish



Jason is shy

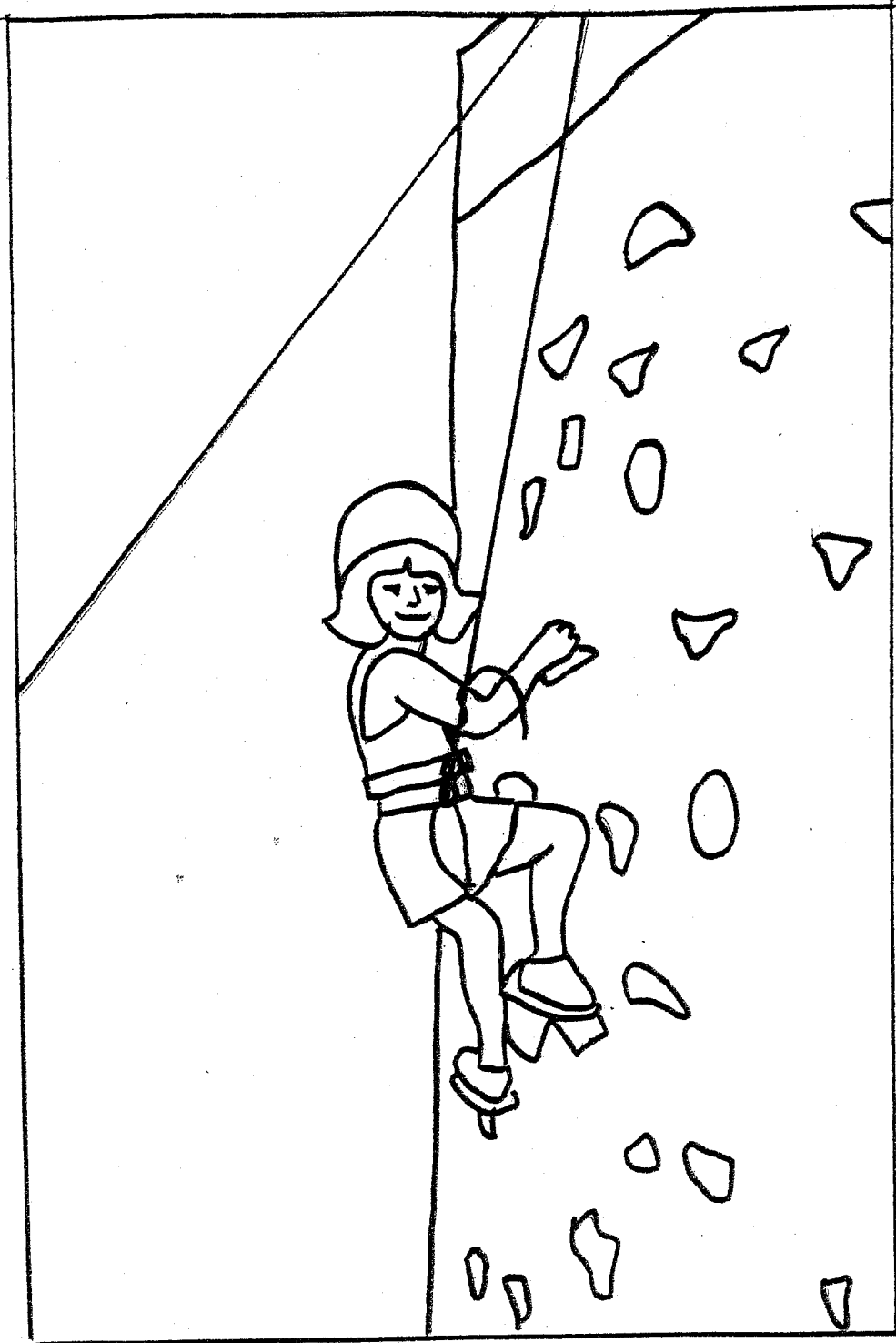




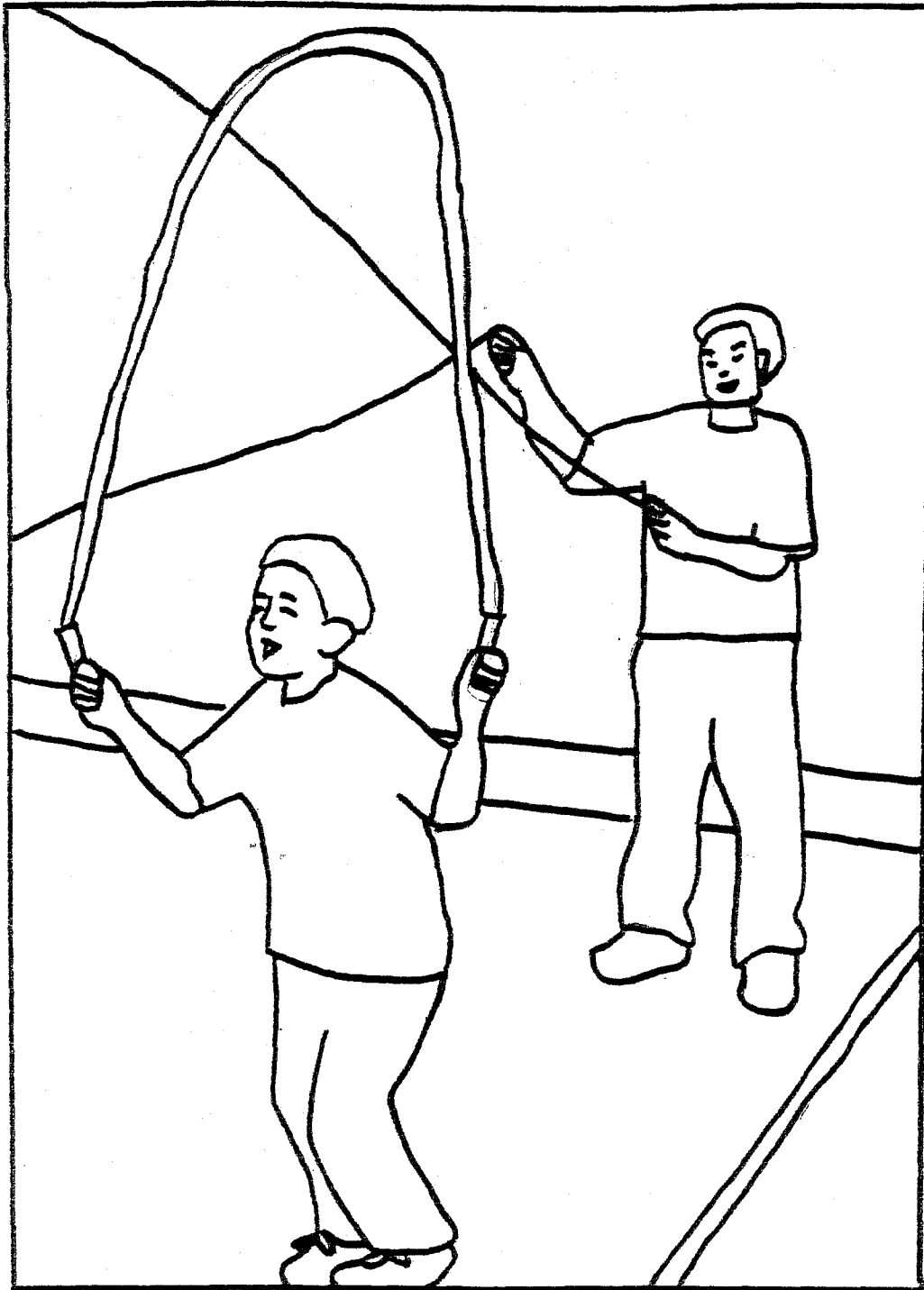
Elizabeth takes out the garbage



George washes the dishes



Amy is good at climbing

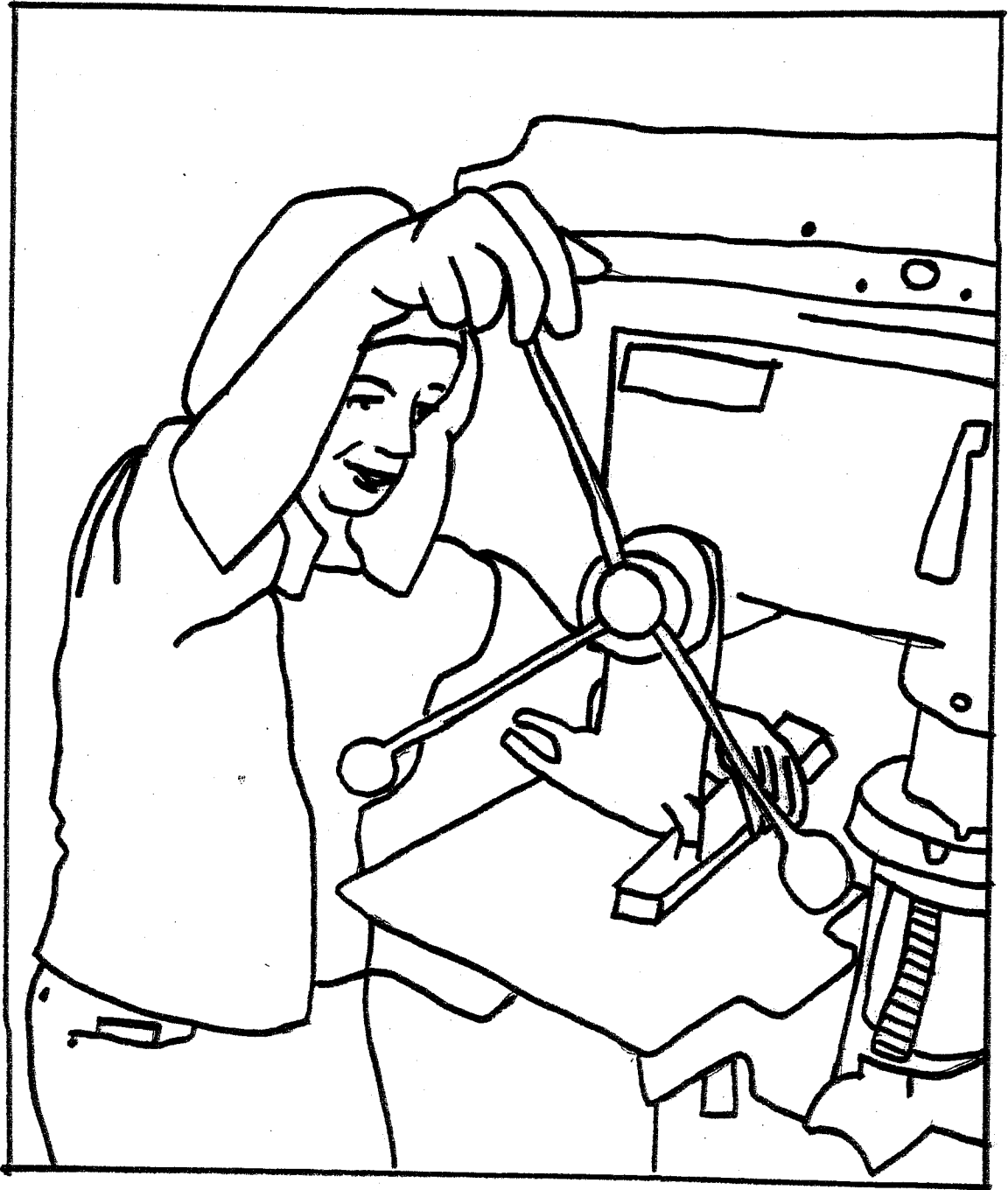


Pedro likes to jump rope

Appendix D continued



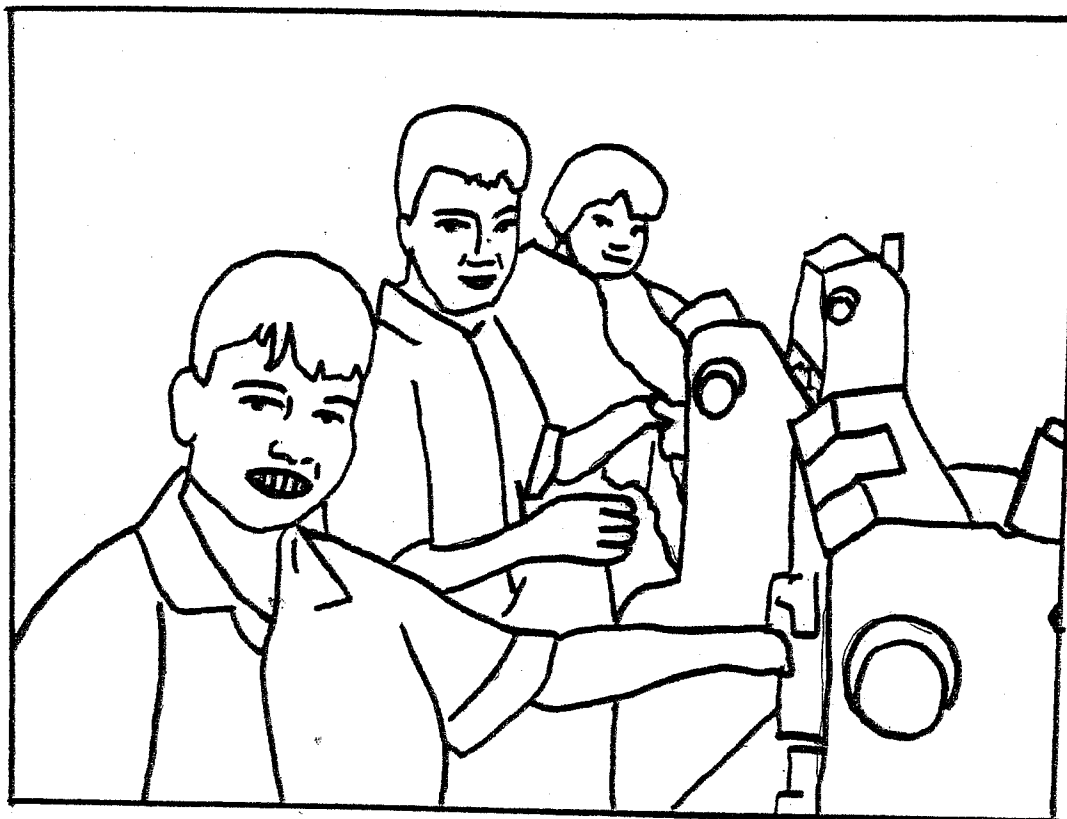
Peter is a ballet dancer



Alison is good at using tools

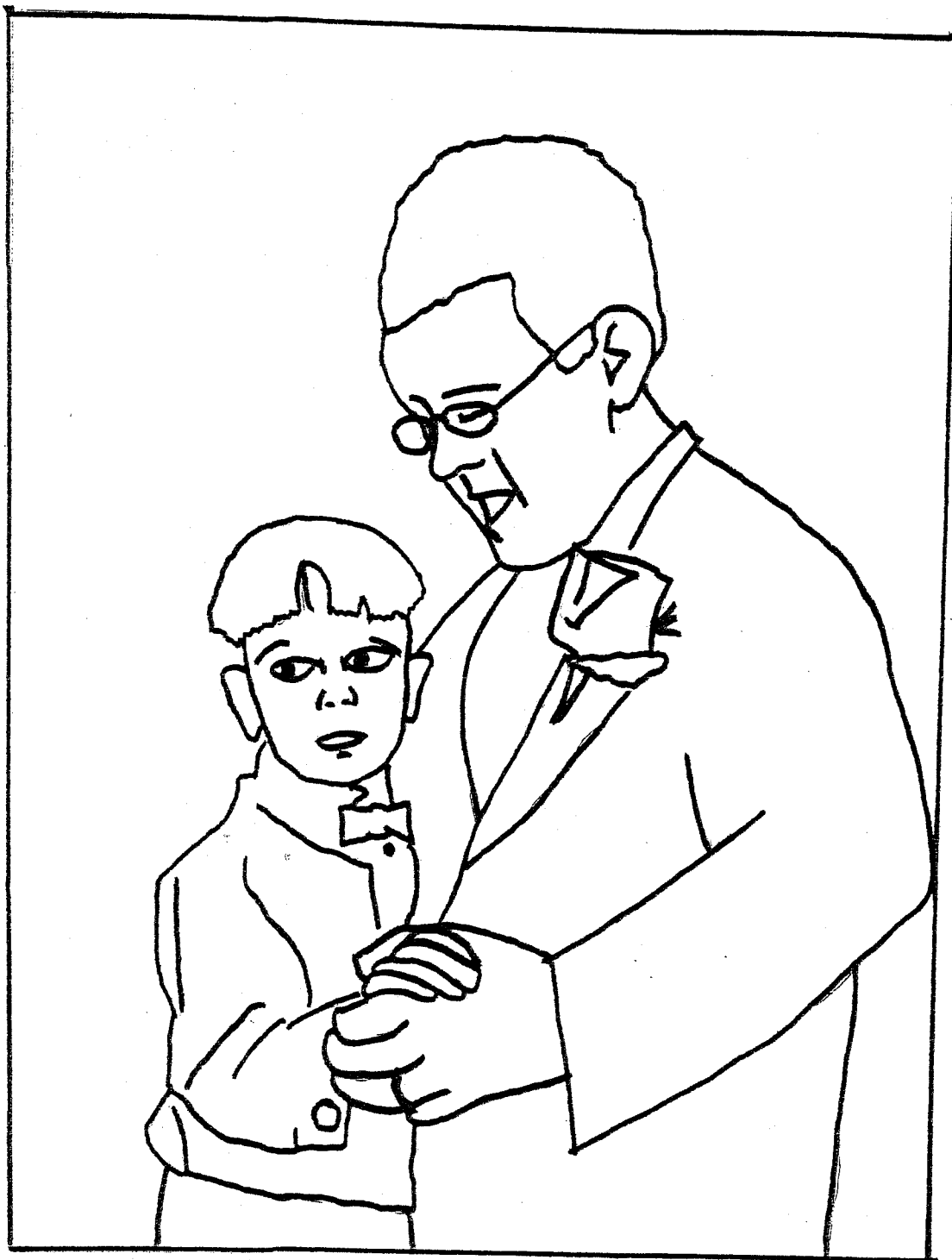


Lillian wants to be a doctor

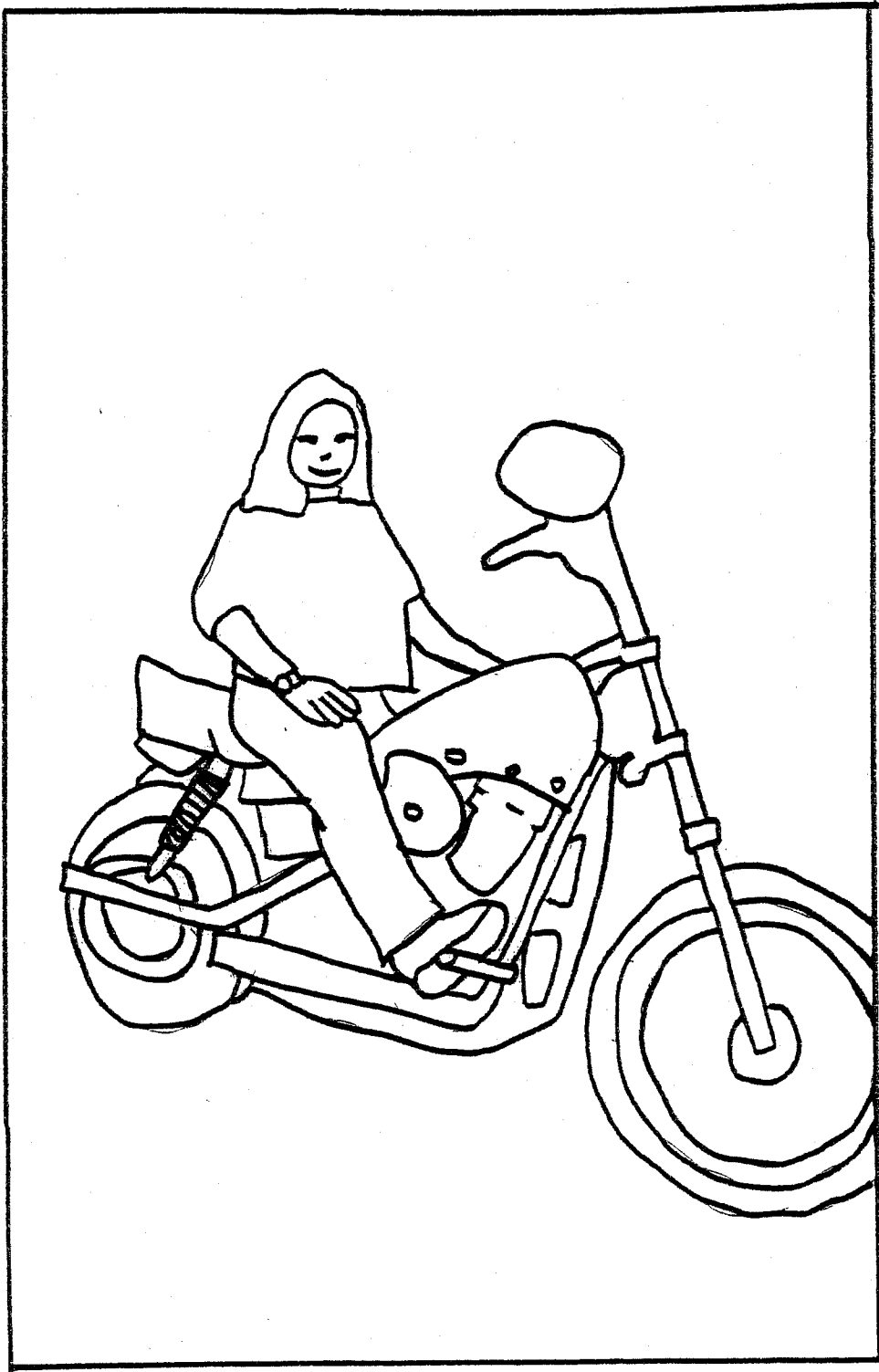


Jeremy, Arthur, and Ricky are sewing

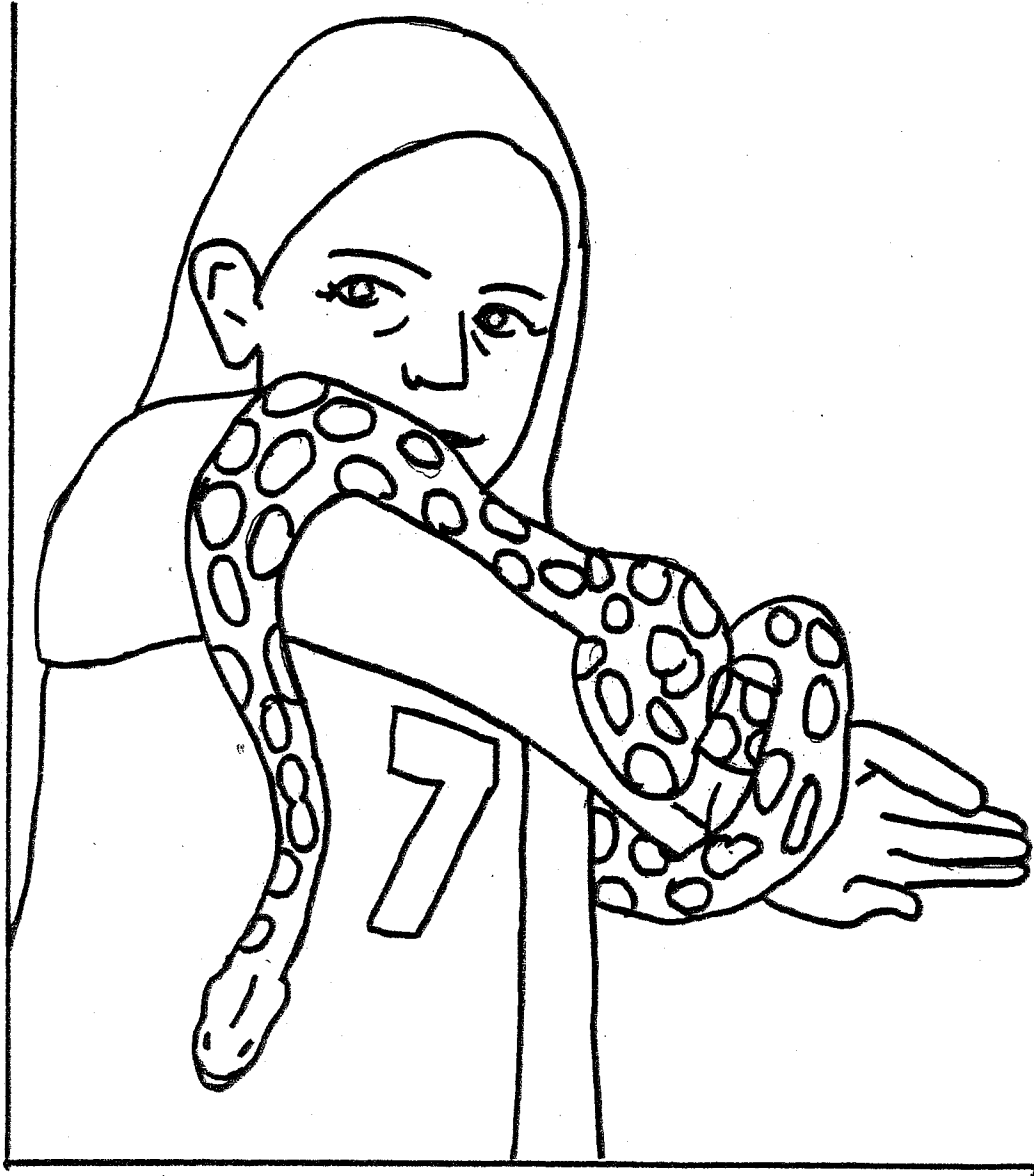




Max likes to dance with his son



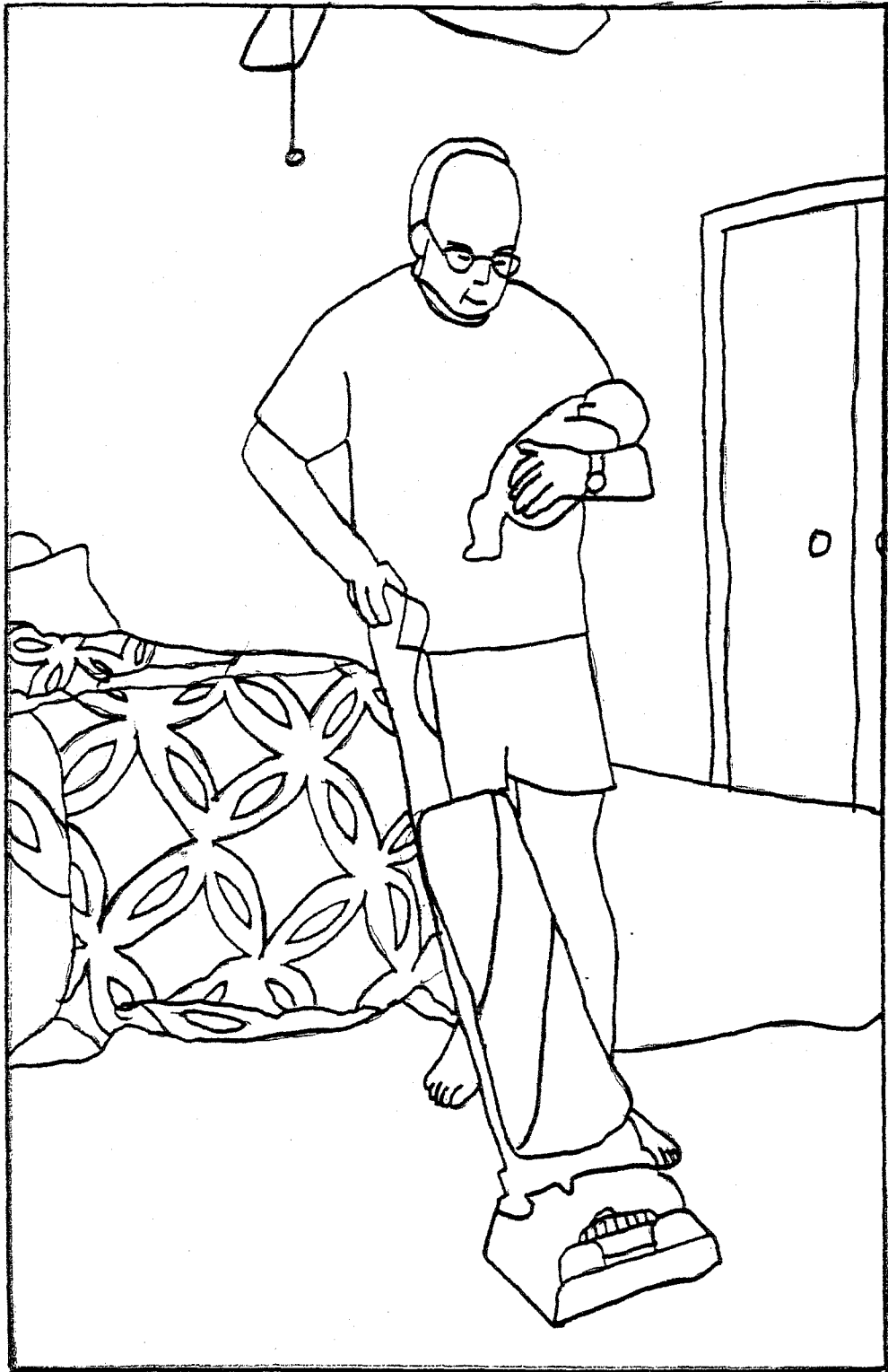
Margaret rides her motorcycle



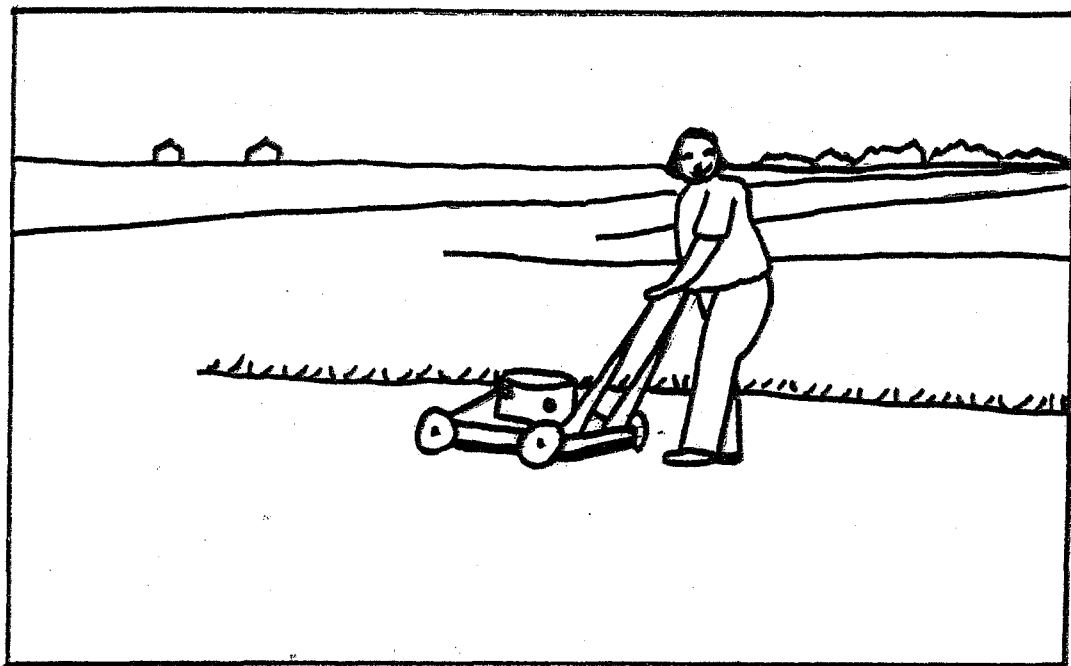
Lisa is brave



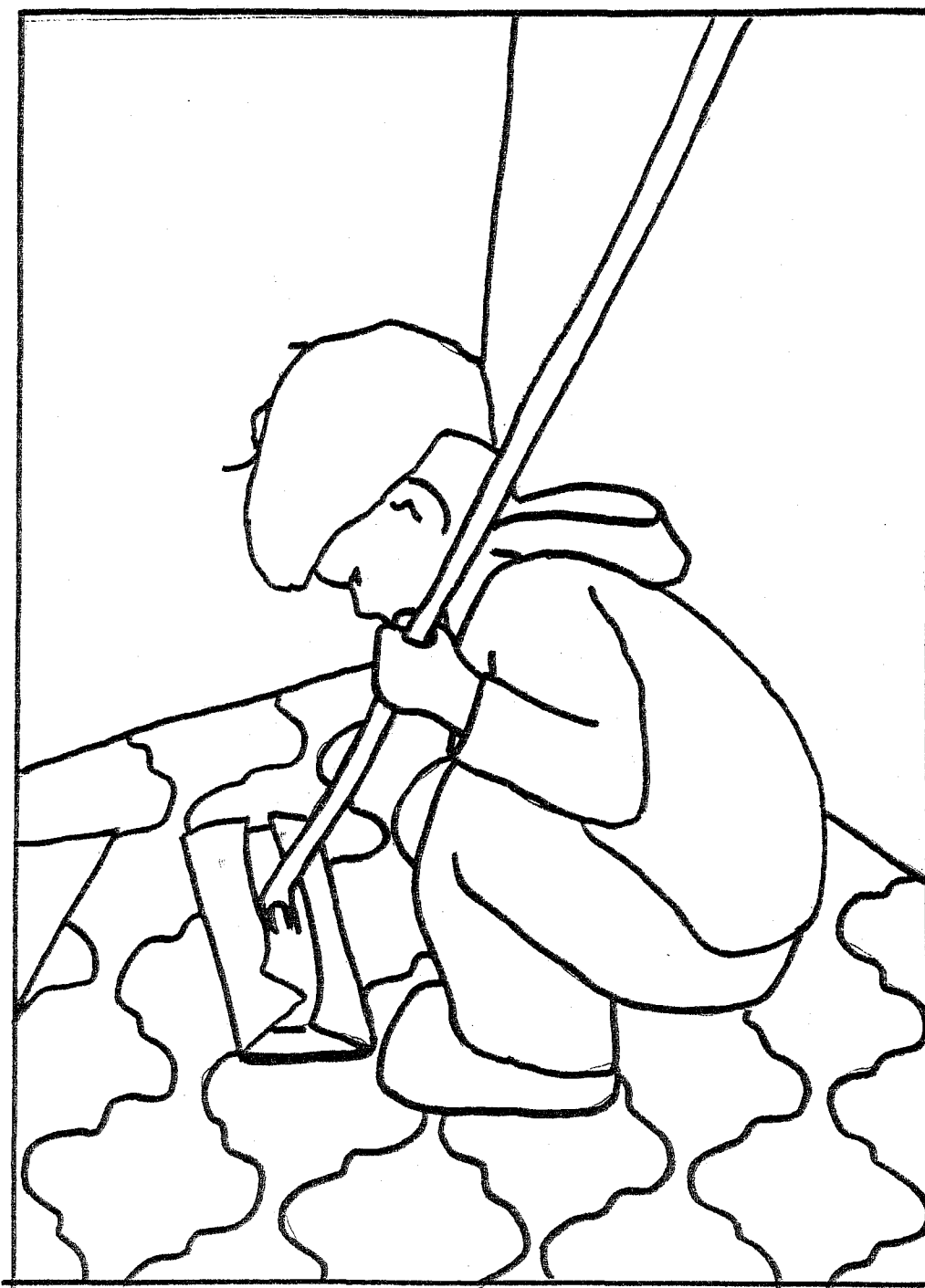
Tommy is gentle



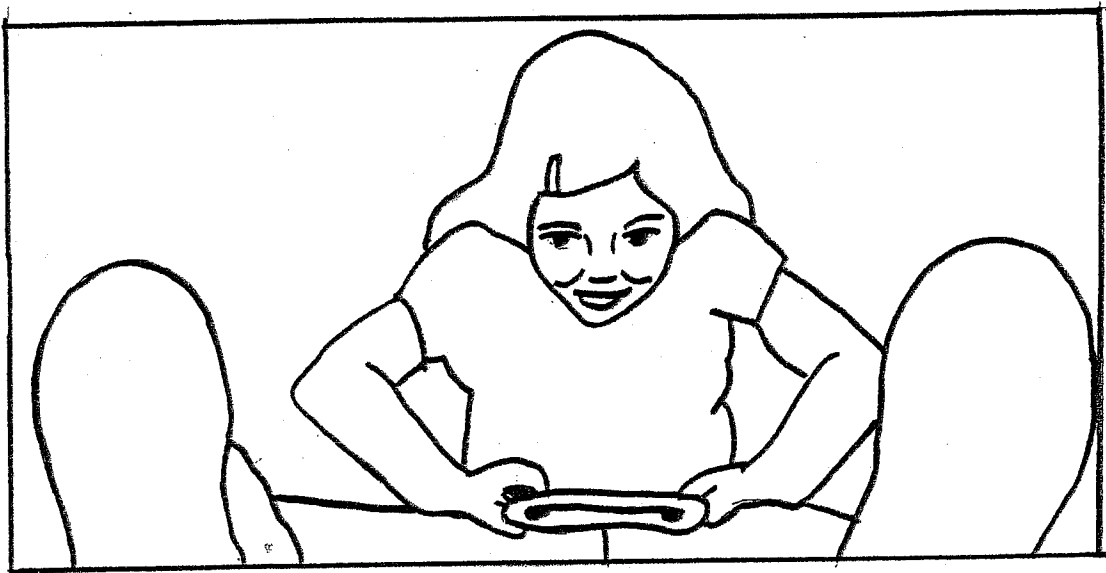
Jerry vacuums the house



Judy mows the lawn



Seth mops the floor

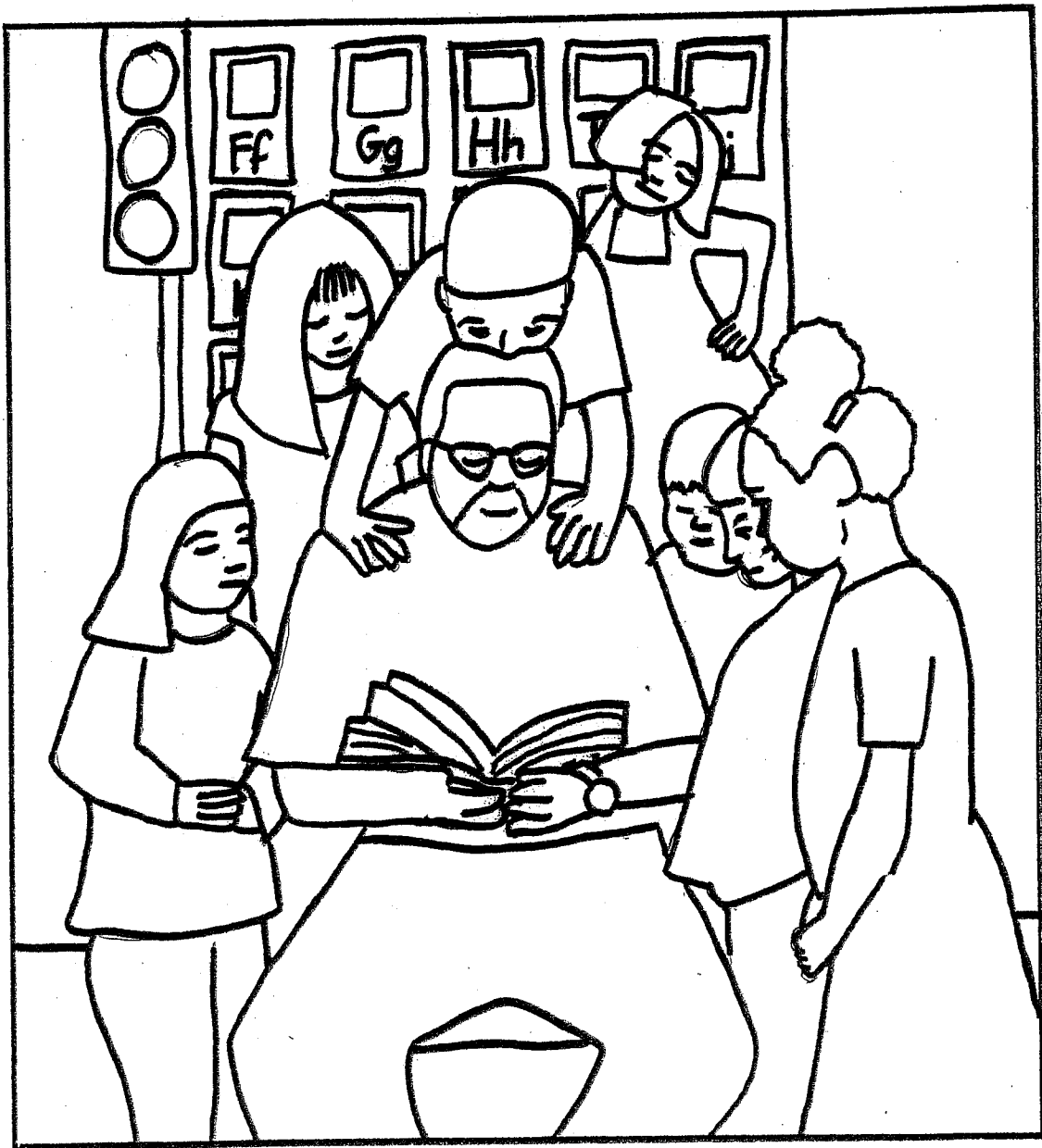


Jenny likes to play video games

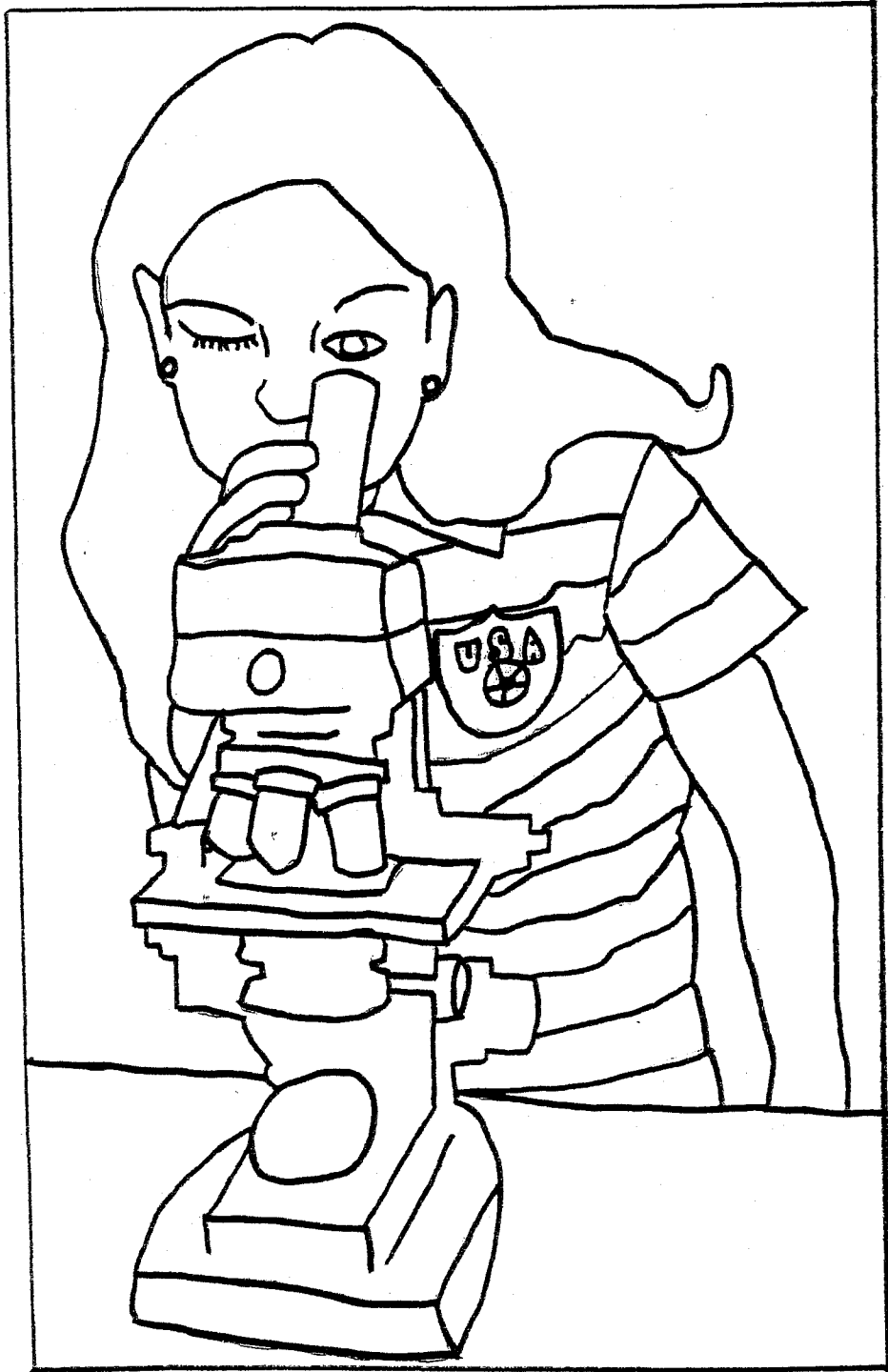




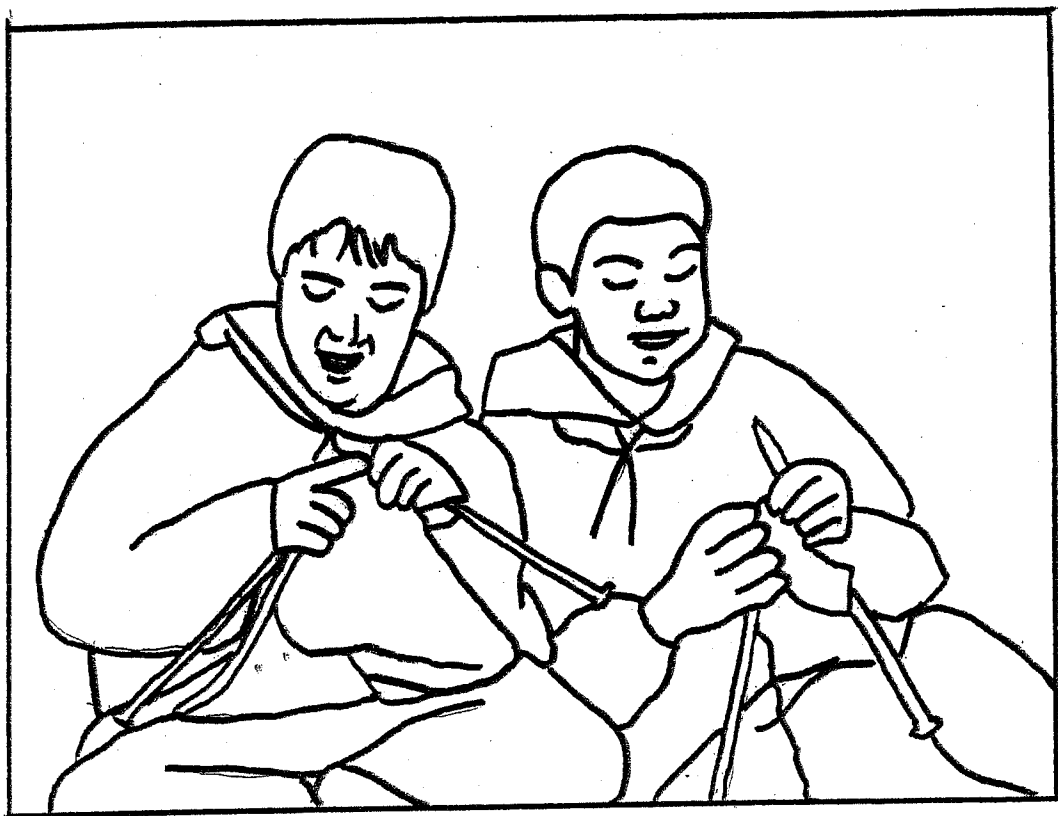
Katie is an engineer



Ben teaches first grade



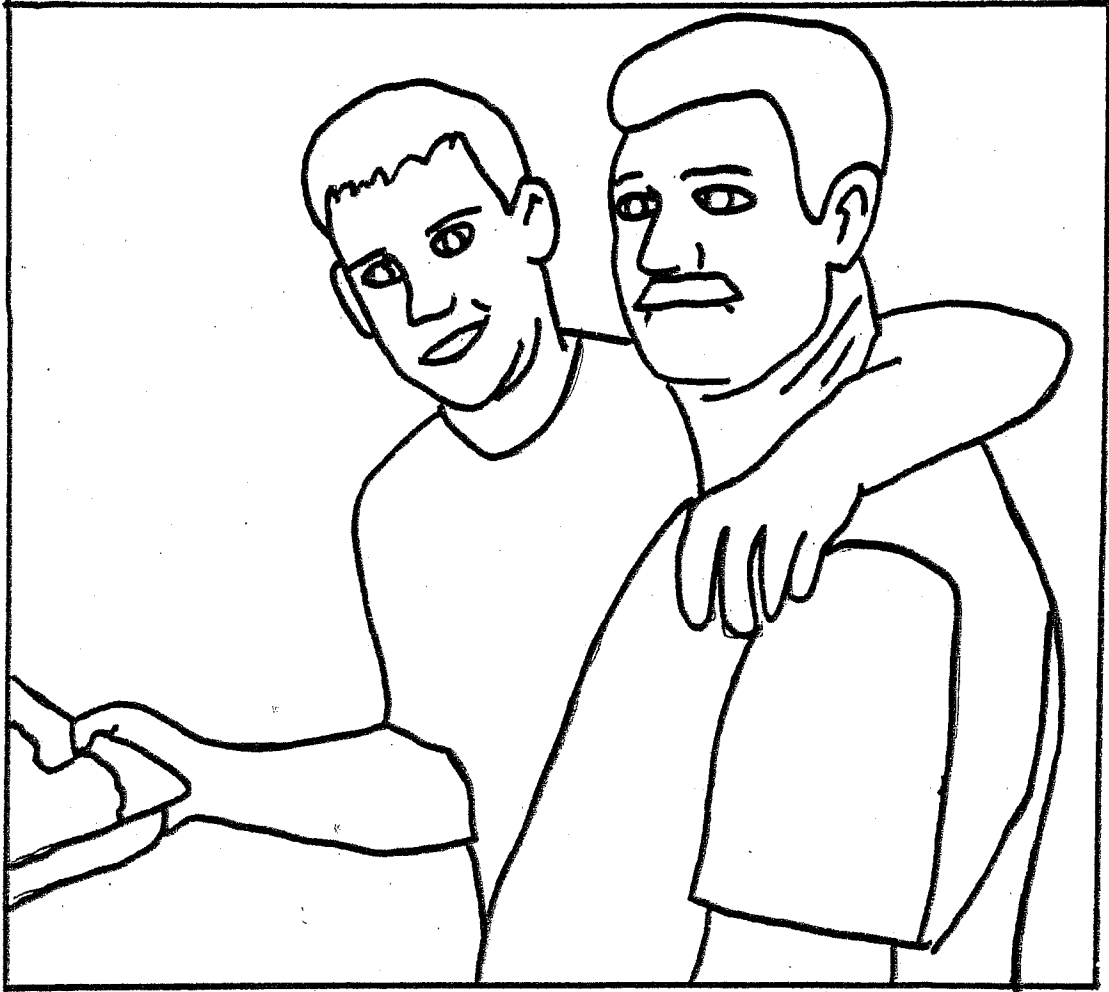
Stacey is good at science



Frank and Henry are knitting



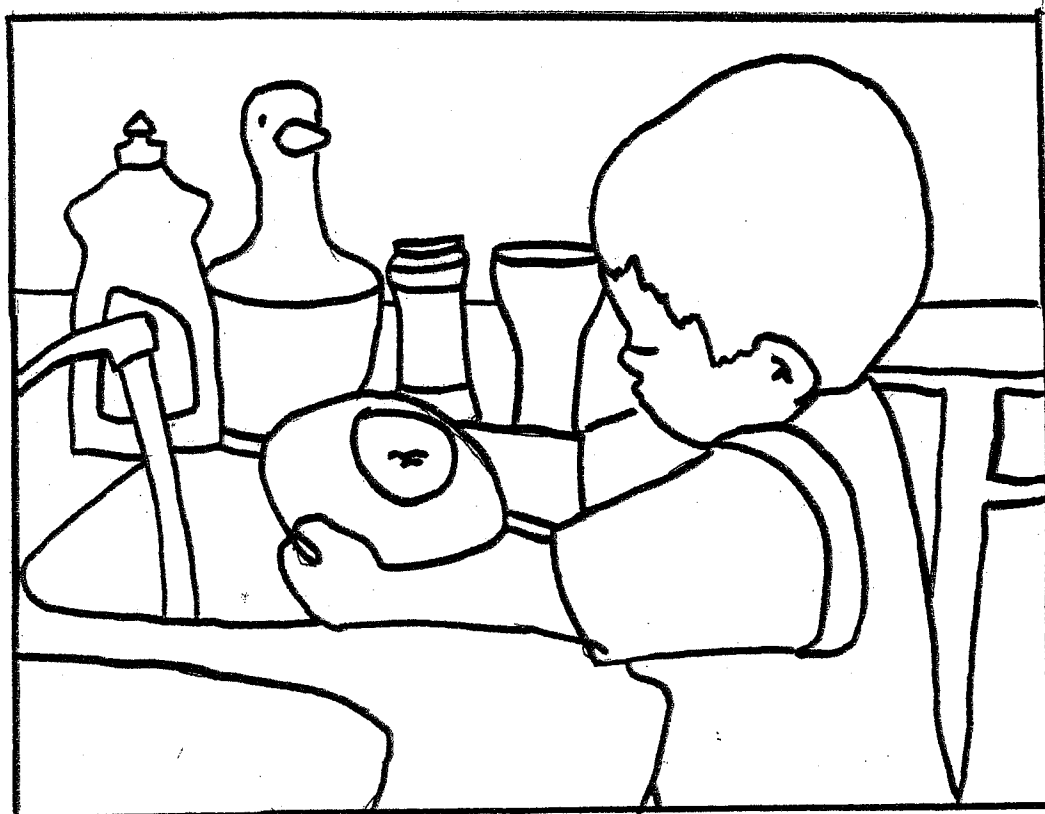
Maria is loud



Mark and Bill are affectionate

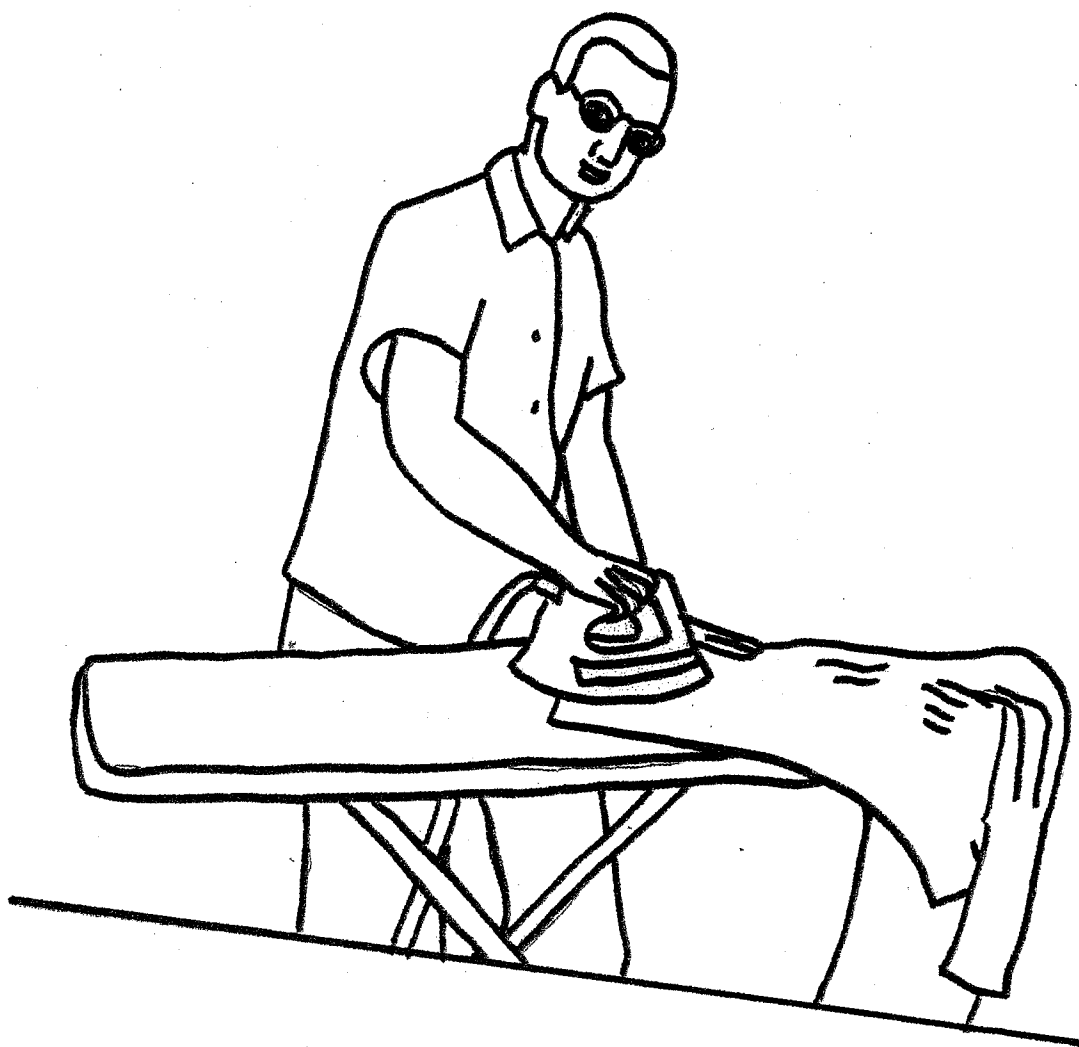


Tanya does karate

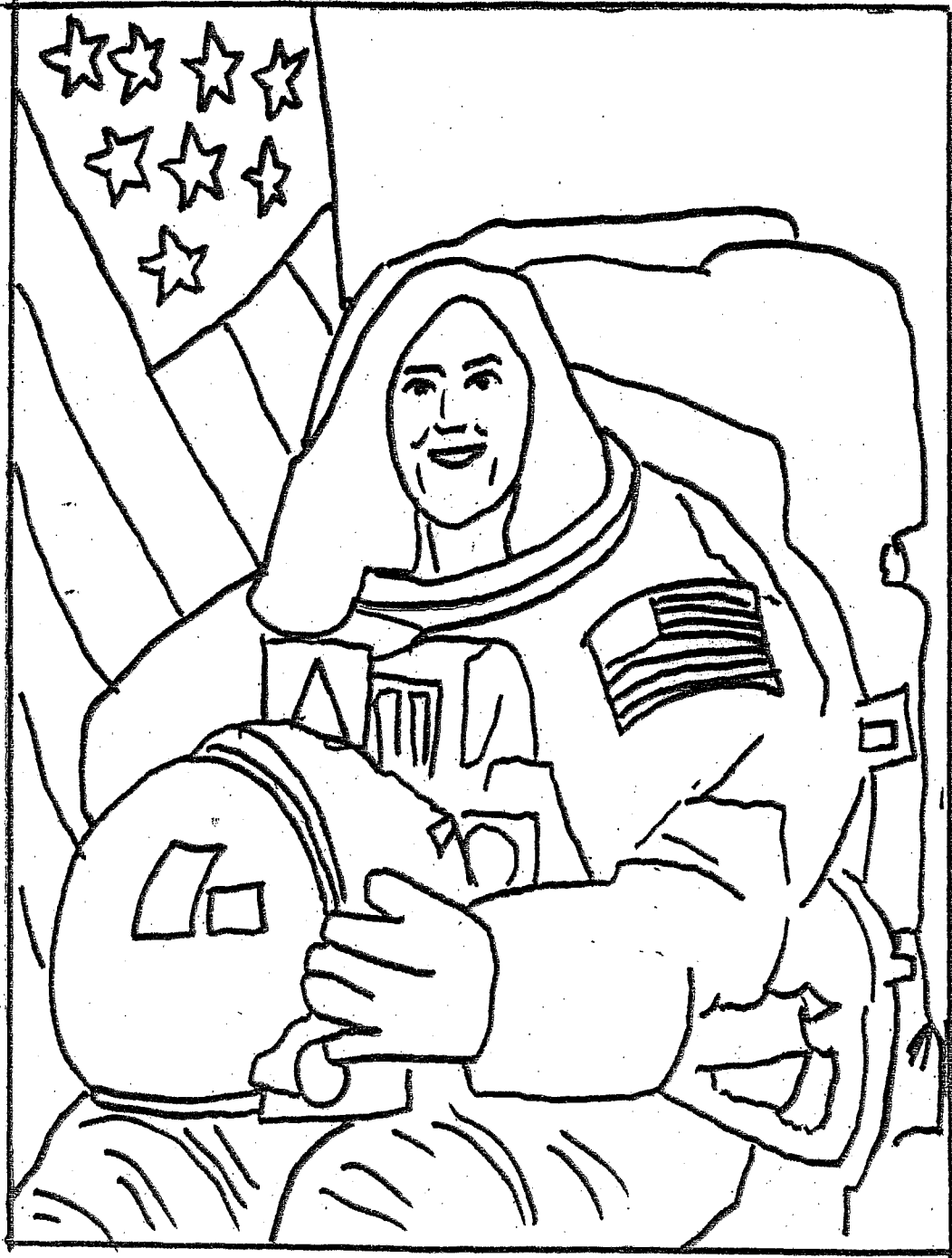


Eddie washes the dishes





Scott irons the clothes



Sunita is adventurous



Christopher is loving



The softball players are confident

## APPENDIX E

### PARAGRAPHS FOR ADULTS FOR EACH COLORING BOOK PAGE

Daddy takes care of the baby (p. 57).

This image is one of many in the coloring book that challenges stereotypes about men's family and household roles. You can ask children if they know any fathers who take care of babies, and whether they would like to try taking care of a baby. Point out that men can be (and often are) nurturing, gentle, and affectionate fathers. Let children know that they can grow up to be nurturing, gentle, and affectionate parents whether they are boys or girls.

Bethany is a leader (p. 58).

This image may help children reconsider their concept of a typical leader. You can ask children to imagine what kind of leader Bethany might be and who might be in the audience listening to her speak. Ask children if they know anyone who is like the woman in the picture. Ask children about their own experiences of being leaders, and encourage them that they can be leaders whether they are boys or girls.

Bobby is talkative (p. 59).

This image targets stereotypes about boys' behaviors and traits. Ask children if they know anyone who is like the boy in the picture or if the boy in the picture is like them. You can ask children to imagine who might be at the other end of the telephone and what kind of conversation they might be having. Let children know that there are boys who like to talk on the telephone and boys who like to chat, gossip, express

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themselves, and keep in touch with people. Encourage children to think of talkativeness as a trait that can be found in boys, girls, men, and women.

Emily likes to win (p. 60).

This image challenges stereotypes about traits that girls can have and activities that girls can do. Ask children if they know anyone who is like the girl in the picture or if they are like the girl in the picture. Point out that people can come in first place and can be competitive whether they are boys or girls. Let children know that there are girls who are fast runners and good athletes, and that these are characteristics that both boys and girls can have.

Christina fixes the car (p. 61).

This image challenges the idea that fixing a car is something that only a man can do. You can ask children if they know anyone who is like the woman in this picture, or if they are surprised by this image. Advise children that women can and do fix cars. This picture could be interpreted in several ways: maybe this is a woman who fixes cars for her job, maybe this is a woman who fixes cars as a way of helping out around the house, or maybe this is a woman who fixes cars as a hobby. Ask children if they would like to try working on a car sometime, and let them know that this is something they can do whether they are boys or girls.

Tim and Andrew do the laundry (p. 62).

This image is an example of males doing a household chore that is considered to be stereotypically female. This image shows a boy helping a man with the laundry. You

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can ask children if they help their parents with chores, and if so, which chores. Ask children if they would like to try helping with different chores, such as the ones depicted in this coloring book. Encourage children that they can learn to do household chores like laundry, whether they are male or female.

Lindsay built this model airplane (p. 63).

This image is one of several in the coloring book that targets stereotypes about activities that girls can do and enjoy. Ask children what kinds of skills they think a person must have in order to build a model airplane, and advise them that boys and girls can both have these skills. Ask children if they are like the girl in this picture, and if this is an activity that they would like to try. Encourage them that they can enjoy building model airplanes whether they are boys or girls.

Joey has made a beautiful necklace (p. 64).

This image targets stereotypes about activities that are appropriate for boys to enjoy. You can ask children if they know anyone who is like the boy in this picture, and if this picture is like them. Ask children what kinds of skills they think a person must have in order to make a beautiful necklace, and advise them that boys and girls can both have these skills. If children are surprised by this picture, you can point out that there are boys who like to make necklaces, and who are good at it. Encourage children that they can enjoy making jewelry whether they are boys or girls.

Robert is a librarian (p. 65).

This image targets stereotypes about acceptable occupations and careers for men. You can ask children if they know anyone who is like the man in the picture. If children

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are surprised by this image, point out that there are men who are librarians and that it is a job that can be done by a man as well as a woman. Ask children if this is something that they would like to try. Encourage them that this is an occupation that may be open to them when they grow up, whether they are boys or girls.

Beatrice is a business executive (p. 66).

This image challenges stereotypes about occupations that women can have. Ask children what kind of business they think Beatrice is in, and what kind of position they think she has. Point out that in some businesses there are women who are in charge, and that sometimes they give instructions to other people. Ask children to think of words that describe successful leaders in business and discuss whether those words can describe women as well as men. You can also ask children to think of people they know who are like Beatrice. Encourage children that this is a career they can pursue, whether they are boys or girls.

Jacob is cooking dinner (p. 67).

This image challenges stereotypes about boys' cooking abilities. You can ask children if they know anyone who is like the boy in this picture, or if they are surprised by the image. Let children know that there are boys who are good at cooking and who enjoy making food. You can ask children if they have ever tried cooking. If they have not, you can ask them if they would like to try it. Encourage children that they can learn to cook dinner and can be helpful around the house whether they are boys or girls.



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Janie and Alyssa want to be firefighters (p. 68).

This image targets stereotypes about career aspirations that girls can have. Ask children to think of words that describe firefighters, and discuss whether these words can describe both women and men. If children are surprised by this image, you can advise them that there are girls who would like to become firefighters, and that girls can grow up to be good at this profession. Point out that there are women who are strong and courageous firefighters. Ask children if this is a job they would like to do when they grow up, and encourage them that they can have this goal whether they are boys or girls.

Anna is strong (p. 69).

This image can help children explore their ideas about the traits and abilities that women can have. You can ask children if they know anyone who is like the woman in the picture. Ask children to think of women they know who lift heavy things at home, at work, or out in the community. If children are surprised by this picture, you can point out that there are some women who are very strong and can lift heavy things, and that there are some men who have trouble lifting heavy things. Discuss different kinds of strength with children, and advise them that physical strength is not necessarily a male trait.

Juan cries a lot (p. 70).

This image may help children explore their beliefs about the types of feelings that are “okay” for men to have and the ways that men typically express those feelings. Ask children about their experiences of men crying, and their thoughts about this behavior. You can use this image to point out that men do in fact cry, and that men experience the

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same range of emotions as do women, boys, and girls. Encourage children to think of all feelings and their expressions as appropriate and natural to both genders.

Megan brags a lot when she catches a fish (p. 71).

This image challenges stereotypes about girls' behaviors and activities. You can ask children if they know anyone who is like the girl in this picture – anyone who brags a lot, anyone who enjoys fishing, or anyone who brags about catching a fish. You can also ask children if they are like the girl in this picture. Let children know that there are girls who brag, girls who fish, and girls who brag about fish. Encourage children to think of bragging and fishing as behaviors that are not necessarily male or female.

Jason is shy (p. 72).

This image is one of several in the coloring book that challenges stereotypes about traits that boys can have. Ask children if they know anyone who is like the boy in the picture or if the boy in the picture is like them. If children are surprised by this picture, you can point out that there are boys who are shy. Encourage children to think of “shy” as a word that can describe boys, girls, men, or women.

Elizabeth takes out the garbage (p. 73).

This image targets stereotypes about household chores that women do. You can ask children if they know anyone who is like the woman in the picture, or if they are surprised by this image. Ask children what skills they think a person must have in order to be good at taking out garbage. You can let children know that people can have these skills whether they are women or men. You can also let children know that in some

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families women always take out the garbage, in some families men always take out the garbage, and in other families men and women take turns.

George washes the dishes (p. 74).

This image challenges the stereotype that washing dishes is a woman's responsibility. You can ask children if they know anyone who is like the man in the picture, or if they are surprised by this image. Point out that people can be responsible for washing dishes, can be good at washing dishes, and can smile while washing dishes, whether they are male or female.

Amy is good at climbing (p. 75).

This image targets stereotypes about activities that girls can do and abilities that girls can have. Ask children what kinds of qualities they think are necessary to be good at climbing, and advise them that there are girls who are strong, adventurous, and good at physical challenges. Ask children if they know anyone who is like the girl in this picture, and if this is an activity that they would like to try. Encourage children that they can try climbing, whether they are boys or girls.

Pedro likes to jump rope (p. 76).

This image challenges stereotypes about the types of athletic activities that boys can do. You can ask children what kinds of skills they think are necessary to jump rope. Point out that there are boys who are coordinated, graceful, and energetic enough to be good at jumping rope, and that many boys enjoy this activity. Ask children if they are like the boy in this picture, and advise them that they can enjoy jumping rope whether they are boys or girls.

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Peter is a ballet dancer (p. 77).

This image targets stereotypes about acceptable occupations for men. You can point out to children that there are men who enjoy ballet, are good at ballet, and who dance for a career. Ask children to think of words that describe ballet dancers, and discuss whether those words can describe men as well as women. Ask children if they would like to try ballet, and encourage them that this option is open to boys and girls.

Alison is good at using tools (p. 78).

This image challenges stereotypes about activities that women do and abilities that women have. Ask children to think of people they know who use tools, and encourage them to include women in this list. If children are surprised by this picture, point out that there are women who are good at using tools. Ask children if they like using tools, and let them know that they can try using them whether they are boys or girls.

Lillian wants to be a doctor (p. 79).

This image challenges stereotypes about career goals that girls can have. Ask children if they know anyone who is like the woman or the girl in this picture, or if they are like the girl in this picture. Ask children to think of words that describe doctors, and discuss whether these words can describe women as well as men. Let children know that there are women who are intelligent and capable doctors. Encourage children that they can grow up to be doctors whether they are boys or girls.

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Jeremy, Arthur, and Ricky are sewing (p. 80).

This image challenges stereotypes about activities that boys can do. Ask children if they know anyone who is like the boys in the picture, or if they are like the boys in the picture. If children are surprised to see boys sewing, you can advise them that there are boys who are good at sewing and who enjoy sewing. You can ask them what they think the boys might be making. Encourage children that they can try this activity whether they are boys or girls.

Max likes to dance with his son (p. 81).

This image may help children reconsider acceptable ways for men and boys to relate to each other. Ask children if they know anyone who is like Max or his son, or if they are surprised to see a father and son dancing together. Encourage children to discuss how Max and his son may be feeling in this image. Point out that people can be affectionate, well-mannered, and can enjoy dancing, whether they are male or female.

Margaret rides her motorcycle (p. 82).

This image targets stereotypes about activities that women enjoy. You can ask children if they know anyone who is like the woman in the picture, or if this picture surprises them. Let children know that women can ride motorcycles and that this is an activity that can be enjoyed by both men and women.

Lisa is brave (p. 83).

This image challenges stereotypes about traits that girls can have. You can ask children if they know anyone who is like the girl in the picture, or if they are surprised by this image. You can also ask children if the girl in this picture is like them. Let children

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know that some boys and girls are scared of snakes, that some boys and girls are not, and that some boys and girls would hold a snake even if they were scared. Advise children that there are many different kinds of courage, and that not one of these kinds is an exclusively male or female trait.

Tommy is gentle (p. 84).

This image targets stereotypes about traits that boys can have. Ask children if they know anyone who is like the boy in the picture, or if they are like the boy in the picture. Ask children if they would like to hold a bird in their hands, and whether they think they could be as gentle as Tommy. Let children know that “gentle” is a word that can describe boys, girls, men, or women.

Jerry vacuums the house (p. 85).

This image targets stereotypes about men’s roles and responsibilities in taking care of children and cleaning a house. You can use this image to discuss men’s abilities and roles in nurturing and caring for children. You can also ask children if the man in this picture reminds them of anyone they know. As with many of the images of men doing household chores, you can use this image to point out that vacuuming is an activity that is done by men and women.

Judy mows the lawn (p. 86).

This image targets stereotypes about women’s roles and responsibilities in household chores. You can ask children if they know anyone who is like the woman in the picture, or if they are surprised by this image. If children only know men who mow lawns, you can let them know that there are women who can and do mow lawns. Ask

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children if this is a chore that they would like to try someday, and advise them that they can learn to do this chore whether they are boys or girls.

Seth mops the floor (p. 87).

This image targets stereotypes about ways that boys can be helpful around the house. You can ask children if they have ever tried mopping the floor or if they would like to try it. Advise children that there are boys who are good at cleaning the house, and that some boys enjoy being helpful in this way. Encourage children that this is a chore that they can learn to do whether they are boys or girls.

Jenny likes to play video games (p. 88).

This image challenges stereotypes about activities that girls can do. Ask children if they know anyone who is like the girl in this picture, or if they are like the girl in this picture. If children are surprised by this image, you can point out that there are some girls who enjoy playing video games and that there are some boys who do not enjoy playing video games. Ask children if this is an activity that they would like to try, and advise them that they can play video games whether they are boys or girls.

Katie is an engineer (p. 89).

This image targets stereotypes about jobs that women can do. Ask children what kinds of tasks they think Katie has to complete, and what kinds of skills they think she has. Let children know that there are women who work on construction sites as builders, architects, engineers, and many other roles. Advise children that women in these careers are strong, intelligent, good leaders, good at using tools, and good at math and science.

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Ask children if this is an occupation that they would like to pursue, and encourage them that they can grow up to do a job like Katie's whether they are boys or girls.

Ben teaches first grade (p. 90).

This image targets stereotypes about men's occupations and careers. Ask children if they know anyone who is like the person in this picture. If they are surprised by this image, or if they only know female teachers, you can point out that there are men who teach first grade. Ask children to think of words that describe first grade teachers and discuss whether those words can describe men and women. Let children know that men are capable of teaching first grade, and that this is a career path that they can choose, whether they are boys or girls.

Stacey is good at science (p. 91).

This image challenges stereotypes about abilities and interests that girls can have. Ask children if they know anyone who is like the girl in this picture, and if they are like the girl in this picture. If children are surprised by this image, you can let them know that there are many girls who are good at science and who enjoy science. Encourage children that they can be good at science and can go into a career that involves science whether they are boys or girls.

Frank and Henry are knitting (p. 92).

This image targets stereotypes about activities that are appropriate for boys to enjoy. If children are surprised by this image, you can let them know that there are boys who are good at knitting and who think knitting is fun. Ask children if they enjoy



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knitting or if this is something that they would like to try. Encourage children that this activity is open to them whether they are boys or girls.

Maria is loud (p. 93).

This image targets stereotypes about the traits and feelings that women can have. Ask children who can be loud, or who is usually loud, and point out that loudness is a trait that can be found in males and females. While the caption describes Maria as being loud, the image can also be interpreted as a woman who is aggressive or angry. Ask children how they think Maria is feeling, and whether they are surprised by this picture. You can use this image to encourage children to think of all feelings and their expressions as appropriate and natural to both genders.

Mark and Bill are affectionate (p. 94).

This image may help children examine their opinions about acceptable ways for men to relate to each other. Ask children how they think men usually express their feelings of friendship, love, and affection. If children are surprised by this image, let them know that it is normal and natural for men to hug each other. Advise children that “affectionate” is a word that can describe men, women, boys, and girls.

Tanya does karate (p. 95).

This image targets stereotypes about activities that girls can do and skills that girls can have. You can ask children if they know anyone who is like the girl in this picture, or if they are like the girl in this picture. If children are surprised by this image, you can let them know that there are girls who do karate. Ask children if this is an activity that

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they would like to try, and advise them that they can enjoy martial arts whether they are boys or girls.

Eddie washes the dishes (p. 96).

This image challenges stereotypes about household chores that boys can do. If children are surprised by this image, you can point out that some boys do wash dishes. You can point out that some grown-up men wash dishes too. Ask children if they have ever tried doing this task, or if they would like to try it. Encourage children that they can help out with the dishes whether they are boys or girls.

Scott irons the clothes (p. 97).

This image challenges the stereotype that ironing is a woman's task. Ask children if they know anyone who is like the person in the picture, or if they are surprised by it. You can ask children why they think Scott is ironing – is it because his shirt is wrinkled, because his wife isn't home, because he usually does all of the ironing in the house, or another reason? Point out that ironing, like the other household chores depicted in this coloring book, can be done by both men and women.

Sunita is adventurous (p. 98).

This image targets stereotypes about traits and occupations that women can have. You can ask children to think of words that describe astronauts, and then discuss whether those words can describe women as well. Let children know that men and women can both be adventurous, and that women can do jobs that require courage, strength, and intelligence. Ask children if they have ever dreamed of being astronauts when they grow

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up. Advise them that this is a career that they could pursue whether they are boys or girls.

Christopher is loving (p. 99).

This image challenges stereotypes about activities that boys can do and traits that boys can have. You can ask children how they think Christopher might be feeling in this picture, and you can let them know that both boys and girls can have feelings of love, affection, and tenderness. You can also ask children if they have ever held a baby, or if they would like to try it. Advise children that it is natural for boys and girls to be loving and nurturing.

The softball players are confident (p. 100).

This image targets stereotypes about traits that girls can have and activities that girls can do. You can ask children to think of people they know who play sports. If they do not include girls in this list, you can advise them that many girls are strong, confident athletes. Ask children if they are like the girls in this picture, and if they would like to try playing on a team like this one. Encourage children that they can enjoy and excel at sports whether they are boys or girls.