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Gender Differences in Reward Allocation
Among Boys and Girls who Receive Allowance.

By:

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Bachelor of Arts, the University of Western Ontario, 2005

THESIS

Submitted to the Department of Psychology
in partial fulfilment of the requirements for the
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Abstract

Gender differences emerge at a very young age in children. Through socialization boys and girls are encouraged to adopt gender stereotypes. Among adults, salary is an area where there are consistent gender differences, with females typically asking for and receiving less than males. The present study examined differences in reward allocation (i.e., pay) among 91 boys and girls who receive an allowance or “pocket money” in grades one through four, to try to determine whether the differences noted among adults appear with first early pay experiences. Children were asked to complete a series of five tasks regarding gender stereotypes, occupations, chores and money and were tested using both a male and female experimenter. In addition children’s parents were asked to complete questions regarding the issue of allowance in their house. The results of this study were analyzed to investigate any gender differences and were compared to findings in both adult and preschool populations. Results indicated that while children may be becoming more progressive in their thinking and not holding as strict gender stereotypes as in the past, gender stereotypes were still found, as well as effects from the gender of the experimenter.

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Gender Differences in Reward Allocation

Among Boys and Girls who Receive Allowance.

It is well documented that women negotiate for lower salaries than their male counterparts (Callahan-Levy & Messe, 1979; Desmarais & Curtis, 1997; Leventhal & Lane, 1970), and differ in their perceived sense of personal entitlement for allocation of pay for comparable work (Desmarais & Curtis, 1997; Heckert et al., 2002; Leventhal & Lane, 1970; Major, 1994). For example, Callahan-Levy and Messe (1979) found that women university students “paid” themselves less than men for the same work. Interestingly, men in this study also paid women less for the same work. Similarly, Desmarais and Curtis (1997) found that women expect that they will be paid less than men in the working world and reported earning less than men in their previous summer job. More recently Heckert et al. (2002) found that women university students estimated significantly lower salaries at career entry and peak. These findings indicate that there is a large gap in social equality between the sexes in terms of pay and monetary compensation for work completed.

This distinction raises the two questions “From where do men and women get these expectations? And, developmentally, when do these differences begin?” It is possible that differences begin to emerge somewhere in childhood when the foundations for gender socialization and stereotyping begin. The present study will explore the early development of issues related to pay equity. Specifically, the study will examine young children’s understanding of the allocation of money/payment to see if they discriminate allocation of money as a function of gender.

The following document outlines the adult literature related to pay equity issues, followed by a review of research looking at gender issues and children. This literature is followed by an examination of research about monetary awareness and allowance as they relate to child populations.

Background Adult Literature

Over the past four decades a considerable body of research has demonstrated the disparity in income expectations and outcomes among men and women (Callahan-Levy & Messe, 1979; Desmarais & Curtis, 1997; Heckert et al., 2002; Leventhal & Lane, 1970; Major, 1994). Different theories have been proposed to account for the differences experienced by men and women when it comes to pay (Eagly, 1987; Major, 1994) and whether these differences are supported or not supported in society. For example, one overarching reason that has been suggested is that women's "typical" role in society differs from men's "typical" role and that stereotyped roles permit these differences to exist. Specifically, the prevailing view in psychology has been that women are generally associated with more "expressive" or "communal" traits such as warmth, nurturing and sensitivity, whereas men are generally associated with more agentic or instrumental traits such as dominance, independence and self-assertion (Bakan, 1966; Eagly, 1987; Wade, 2001). Women are expected to be more concerned with others' feelings and welfare, as well as maintaining harmonious relationships. This would predispose women towards accepting less money, so that they can ensure that others will also receive money and that everyone will be content. Men on the other hand are expected to be concerned primarily with their own welfare and security and protecting their own interests. This would make

it more acceptable for men to want more money and accept more money at the expense of others.

The impact of this socialization was demonstrated in a study conducted by Leventhal and Lane (1970). College students were given a hypothetical situation in which they would work with a fictitious partner. The gender of the partner was unknown; however information was given regarding whether they were more or less competent on a given task and then the participants were asked to allocate a reward to their “partner.” In the conditions in which the partner’s performance was superior, the males took less than half the reward, whereas in the conditions where the partner’s performance was inferior, males took more than half the reward. The women participants on the other hand when told their partner’s performance was superior, took much less than half of the reward, and when they were told their partner’s performance was inferior, they took half of the reward. Therefore, women may take less of the reward so that there is still a reward left for others, ensuring that everyone’s needs are met.

More recently, in a study conducted by Spence and Buckner (2000), male and female university students were asked to rate themselves on 16 instrumental traits, traditionally associated with masculinity and men, and 16 expressive traits, traditionally associated with femininity and women. The researchers suggested that changes in society may account for women to develop more “agentic” self-conceptions in adulthood in the area of traits related to competence such as ambition and self-reliance. Women, however, still rate themselves lower in the area of traits related to social dominance such as aggression and forcefulness and competitiveness. Given that many cultures around the world, including our own North American culture, place a higher value on typically

“male” traits than typically “female” traits (Turner & Gervai, 1995), women holding contradictory beliefs are in a “catch-22 situation” (Rudman & Glick, 2001). Specifically, women today recognize that these male traits are more valued by society and so strive to adopt them, yet women are still expected by society to possess typical feminine traits and be “nice” and likeable (Wade, 2001), and may suffer criticism from members of the society if they do not conform to this gender norm.

Traditionally men have been responsible for providing for their families (Deutsch, Roska & Meeske, 2003). This includes providing a home, automobiles, clothing and sufficient resources to put food on the table for the family (Tichenor, 1999). These tasks are strongly associated with working outside of the home and with earning money (Deutsch, Roska & Meeske, 2003). On the other hand the traditional role for women has them responsible for maintaining the household and performing tasks such as cooking, cleaning and childrearing, work which is performed in the home and is unpaid (Major, 1994). Housework is often determined solely on the basis of gender (Major, 1994; Tichenor, 1999), and women are accorded this responsibility. Even working-women are responsible for a majority of housework such as cooking and parenting children (Bond, Thompson, Galinsky & Prottas, 2003). The dual role of women (i.e., worker and home child caretaker) has been given the name the “second shift,” as women work outside the home, then return to the home to assume the chores and responsibilities inside the home (Major, 1994). The work that women perform inside the home for little or no pay illustrates how this work is deemed to be less important than work performed outside of the home.

Even when women work outside the home there is a distinct difference in the way the money they make is labelled and allocated within the household (Deutsch, Roska & Meeske, 2003). In dual-income households, women are not considered “co-providers” (Potucheck, 1997); often women’s income is seen as “helping out” or a “secondary income” assigned for a specific purpose such as car payments, or “extras” and not a necessity. This implies that the women’s contribution is peripheral and that the women could leave the work force at anytime and the family would not suffer financially (Hood, 1986; Potucheck, 1997).

Research also suggests that men’s identity and sense of self worth are strongly tied to earning potential as men reported stronger affect, both negatively and positively, about their incomes than women (Deutsch, Roska & Meeske, 2003). Among men, money is closely tied to status as well as power (Deutsch, Roska & Meeske, 2003). For example, Crowley (1998) found that when men earned less than women they reported more feelings of depression and conflict within the marriage.

In western society, men are expected to earn money. Women are expected to perform household chores and parent children. When women earn money, therefore, they are praised for it and receive special recognition for it since they are exceeding social expectations. In the home context, on the other hand, women are not praised excessively for achieving domestic or parenting duties, whereas when men parent or do housework, they are praised for their involvement and are considered a “good parent” (Deutsch, Roska & Meeske, 2003). Breadwinning tends to buy men out of childcare, whereas the same is not true for women since these tasks are expected of them.

Even when women are well-educated and have high paying successful careers, there is a double standard, with the expectation that they perform housework and childcare because these are a “woman’s job” and making money is in addition to this work, whereas for a man making money is the job and parenting or housework is in addition to that job. In addition, when women have higher paying careers than their husbands, they are still more likely to say that the family takes priority over their careers, whereas when men have a higher paying career, they are more likely to say that their career is more valued than the family (Steil, 1997).

Developmentally, the point at which these different views about pay allocation become apparent is not yet known. But practice would suggest that differential pay begins fairly early in development. One question for developmental researchers is to try to tease apart when and how young girls and boys come to have these expectations.

Background with Young Children

At present, with very young children, it is unclear whether there are differences in perceived equity for pay as a function of gender. Two major research studies (Lerner, 1974; Leventhal & Anderson, 1970) were conducted to determine whether children made differences in reward allocation as a function of gender. The results however conflict and since little work has been done in this area, the questions remain unanswered.

Specifically, Leventhal and Anderson (1970) found that children’s reward allocations were tied to their perceived level of competence. Preschoolers in this study were told that their performance on a certain task was superior, equal, or inferior to a peer. The girls in this study were more motivated to maintain “harmony” and were less likely to take more reward at another’s expense, results which are consistent with the

outcomes in the studies conducted with adults. This occurred even when the girls were told that their performance was superior to others, whereas the boys in this study took more than half of the reward when told their performance was superior to others.

In another study, Lerner (1974) did not find any significant differences in what preschool aged participants retained as a reward in both the superior and inferior conditions. Lerner added an interesting manipulation to the original Leventhal and Anderson (1970) study, in which a “supervisor” condition was added. The supervisor was responsible for rating the performance of the other two individuals, and while the preschoolers in the supervisor role were able to recognize differences in ability (superior vs. inferior performance), they allocated the rewards evenly, as the need for equality seemed to be more important. Lerner did, however, find that the girls had a tendency to keep more of the reward, especially in the superior performance condition. One explanation that Lerner offered for the difference in results was that the experimenter in the study by Leventhal and Anderson (1970) was male, whereas the experimenter in Lerner’s study was a female, and thus the gender of the experimenter might have had an impact on the responses of the participants.

More recently, two honours thesis studies (Anderson, 2003; Taylor, 2002) conducted with pre-school children examined this question, and used both a male and female experimenter. The gender of the experimenter did yield significant results in both studies; specifically, girls took fewer rewards when tested by a female experimenter and boys took fewer rewards when tested by a male experimenter (Anderson, 2003; Taylor, 2002). It was hypothesized that same-sex social comparisons may have played a role with this younger population in the reward allocation task.

If the gender of the experimenter influenced outcomes, especially for girls, then the source of reward, employer, parent etc., may be an important factor to consider when assessing children's understanding of reward allocation. The present study examined this issue by directly contrasting reward allocation of an older population of boys and girls when the gender of the experimenter is counterbalanced.

Gender Stereotypes in Children

In order for children to demonstrate any differences in reward allocation, it must be demonstrated that they are capable of incorporating and using gender stereotypic information. Since gender stereotypes influence the behaviours of adults, even if they are not cognizant of using these stereotypes, it is important to establish the level of understanding about stereotypes that children bring to reward allocation tasks. The following section outlines children's development of the concept of gender and gender stereotypes.

The process of gender stereotyping begins at birth, since the gender of a child is such a salient social category in cultures throughout the world. Gender alone often guides parents' and others' behaviour towards the child in terms of toy and activity selection, even though the actual sex differences between boys and girls are very small (Maccoby & Jacklin, 1974).

Specifically, at birth, infants are most often given a name that reflects their gender. In most western countries, this is followed by a series of events that allow children to be identified on the basis of gender. For example, parents provide an environment in which baby girls are dressed in pink dresses and are called "sweetie" and "princess" and baby boys are dressed in blue overalls and are called "big guy" (Pomerleau, Boldue, Malcuit,

& Cossette, 1990). In terms of toy and activity selection, the toys children play with tend to be highly gendered (e.g. Blakemore & Centers, 2005; Klugman, 1999; Marcon & Freeman, 1996), which may have an impact on cognitive and social development, since children spend so much of their time playing with these toys (Blakemore & Centers, 2005).

For example, the toys given to little girls tend to be dolls and clothing and they are given activities such as crafts, reading books and writing stories. Their toys tend to be more attractive in appearance and tend to emphasise nurturing and domestic skills. Little boys on the other hand are given toys such as cars and trucks, action figures, and spatial toys such as blocks and Lego; toys that tend to emphasize competition and active play and spatial manipulation. By 18 months, children demonstrate a preference for gender stereotyped toys; boys favouring cars and girls favouring dolls (Serbin, Poulin-Dubois, Colburne, Sen & Eichstedt, 2001). In addition, children's books tend to also be a strong facilitator of gender role stereotypes. Anderson and Hamilton (2005) found that in children's stories, men tended to be depicted as having a career and being a strong leader, whereas women tended to be depicted in more traditional roles as mothers and wives at home, and more of a passive follower. These "gendered experiences" (Blakemore & Centers, 2005) reinforce gender stereotypes and guide children toward adopting and internalizing the stereotypes. Children as young as 24 months demonstrate knowledge of gender stereotypes with respect to household activities, such as fixing a car is an activity performed by a man, and putting on makeup is an activity performed by a woman (Poulin-Dubois, Serbin, Eichstedt, Sen & Beissel, 2002). In addition, this socialization

process facilitates the widening of gender differences in terms of reading skills, aggression levels and visual spatial ability.

Before they reach their first birthday, babies are able to differentiate between “male” and “female” based on characteristics such as voice pitch and length of hair (Poulin-Dubois, Serbin, Kenyon, & Derbyshire, 1994) and are well on their way to becoming gendered. Hetherington and Parke (1975) describe a study in which a developmental psychologist asked parents to bring their newborns in to the lab dressed in gender-neutral “overalls” so the observers would not know their child’s gender. Babies however were brought into the experiment dressed in blue overalls or pink overalls with ruffles and bows. The need to identify gender and the use of gender as a salient social cue is clearly evidenced by this type of behavior.

In a meta-analysis, Maccoby and Jacklin (1974) established that consistent sex differences exist in children only in the following four areas: verbal ability, visual/spatial ability, mathematical ability and aggression. Specifically girls were found to begin reading earlier than boys and have better language skills and reading comprehension skills. Boys however, outperformed girls in terms of visual spatial skills and the ability to mentally manipulate objects. Boys were also higher in aggression levels than girls and often exhibited more anti-social and violent behavior.

However, recent research in the area of aggression has found that gender differences emerge in children between the ages of three and six, when children first begin to interact with a peer group in day care or school (Loeber & Hay, 1997). Boys still tend to exhibit more overt physical aggression in the forms of fighting or hitting, whereas girls tend to use more covert forms of relational aggression in the forms of gossiping, excluding or

insulting (Crick, 1995). While bullying other children on the schoolyard tends to occur at similar rates among boys and girls, little girls are much less likely than little boys to admit to this behavior (Pepler & Craig, 1995). In a related area, research has found that boys, from birth, are more physically active than girls (Pellegrini & Smith, 1998), and conversely girls tend to be more cautious and timid than boys (Feingold, 1994), more sensitive and emotional (Cervantes & Callanan, 1998), and more compliant with authority figures (Feingold, 1994).

In terms of mathematical ability boys tend to have better arithmetic reasoning skills, whereas girls tend to have better computational skills; however boys still tend to excel in math and science (Maccoby & Jacklin, 1974) and continue to do so in secondary school and college (Hyde, Fennema & Lamon, 1990). Interestingly boys tend to be more vulnerable to learning disorders and behavioral problems than girls (Halpern, 1997).

Recently, in a meta-analysis exploring the “gender similarities hypothesis;” it was proposed that boys and girls are actually similar on most, but not all psychological variables, confirming that there are in fact gender differences, but the cost of over-inflating gender differences can be potentially damaging for women and opportunities in the workplace (Hyde, 2005).

There is the potential that social/cultural influences and gender role expectations play an important role in this as well. Overall, there are some sex differences, which could account for differences in behaviors of boys and girls; however, these differences are small in number and none are specifically tied to reward allocation per se. Therefore, differences in outcomes in the present study would most likely be a product of gender

socialization, and in particular, understanding and use of gender stereotypes, than of sex differences.

Gender and Theory

Throughout the history of psychology various theorists have accounted for the process through which children identify with their gender and adopt gender stereotypes. Freud's psychoanalytic theory incorporates five stages of sexual development. At one point in development, termed the "phallic stage", children come to focus on their sexuality and their gender identity emerges as they identify with their same sex parent. Boys and girls are thought to navigate this exploration through different mechanisms. Boys, through resolving the Oedipal complex, where boys learn appropriate masculine behaviours from their father in an attempt to please their mother, although through fear of castration from their fathers for wanting this relationship with their mothers, they learn to repress these feelings. Girls resolve the Electra complex, where girls are encouraged to adopt feminine behaviours in order to please their father or other males (Freud, 1924/1961). While Freud's psychoanalytic theory paved the way for understanding that there would be developmental growth in the understanding of gender, and that parents may play a critical role in this developmental process, the mechanisms underlying this theory have not achieved support in the developmental literature (Signorella, Bigler & Liben, 1993), and hence, do not serve as the best source for explaining gender development. Instead, theories of cognitive development and social learning provide a clearer and better substantiated explanation of this process.

Social learning theory was introduced by Bandura (1989) and it asserts that children learn about gender role stereotypes first through observing behaviours of adults and that

it is then reinforced through encouragement or punishment (Bandura, 1989). For example, when little girls dress up in their mother's handbag and high heels, they are encouraged to continue this gender typed behaviour; however when little boys dress up in their mother's handbag and high heels, they are discouraged from this behaviour, since it is only appropriate behaviour for the opposite gender. Very early in development children label themselves as "boy" or "girl" and attach value to the label and behave consistently with gender stereotypes (Bussey & Bandura, 1984). Therefore, given social learning theory, children observe and are encouraged to adopt gender-typed behaviour. That is, girls observe adult women sharing and attending to others' needs and "promoting harmony" and are encouraged to do the same, whereas boys observe men asserting dominance and independence and are encouraged to do the same. With respect to money in adults and reward allocation among children, this suggests that men would be more likely to take more money, as they would have observed and been encouraged to be dominant and independent. Women would be encouraged to take less money since they would have observed and been encouraged to be "nice" and not greedy and concerned for others' welfare.

Gender represents one of the most important categories of organizing and processing information, and gender schema theory states that children acquire a basic gender identity by the time they are 3 years of age. This motivates children to learn about the sexes and incorporate this information into their "gender schema", which is an organized set of beliefs and expectations about what is right for girls and what is right for boys in society that is incorporated into their sense of gender. Firstly children form an "in-group-out-group schema," which is a way of processing social information such as objects,

behaviours and roles into what is socially acceptable for boys and girls, and then children form an “own-sex schema” where they begin to encode gender consistent information, and disregard gender inconsistent information that does not apply to them (Martin & Halverson, 1987). Gender schema theory states that children learn what is socially acceptable for boys and girls and they incorporate this into their gender schema.

Therefore, girls would learn that it is socially acceptable and proper to share and be concerned about others and boys would learn that it is acceptable to be concerned with their own interests. In terms of money and reward allocation, this would mean that girls would have learned and incorporated into their gender schema that it is not appropriate for them to take more reward or money, but to be considerate of others, whereas boys on the other hand would have learned and incorporated into their gender schema that it is appropriate for them take more money or reward.

Kohlberg (1966) proposed a cognitive developmental theory of gender identity, which is comprised of three stages of gender development. The first stage is basic gender identity, which occurs around age three when children label themselves as either a “boy” or a “girl.” The second stage is gender stability, when children realize that gender is stable over time and that little boys grow up to be men and little girls grow up to be women. Finally the third stage is gender consistency, which occurs between ages five and seven, when children realize that gender is constant across all situations and are not fooled by merely changing one’s appearance, that is, a boy dressing up in a dress is still a boy. It is at this point in development when children begin to self-socialize and choose gender appropriate activities and toys. Children pass through these three stages of gender identity development as they gradually attain a more mature understanding of what it

means to be a “boy” or a “girl.” These stages often coincide with other stages of cognitive development in children (Kohlberg, 1966). Given Kohlberg’s cognitive developmental theory it is expected that when children pass through the third stage of gender identity development, “gender consistency,” and learn that gender is stable across all situations, children learn through socialization and begin to self-socialize what is acceptable for boys and girls. Girls would learn to share and be nurturing and sensitive, and boys would learn to assert their dominance and independence. According to Kohlberg’s stages of gender development, the children in this study would correspond to the gender consistency stage of development when they will have realized that gender is stable across all situations.

All three of these theories combine to explain the socialization process through which children develop and maintain their gender identity and learn to act accordingly to gender role stereotypes through observation, encouragement and schema development. The internalization of these gender roles lays the foundation for further gender segregation, including occupation choice and beliefs surrounding pay equity in adulthood.

Gender and Occupation

At a very young age children assign objects, colours and animals to one of the genders and soon after certain occupations to one gender or the other (Eichstedt, Serbin, Poulin-Dubois, & Sen, 2002). For example, pastel colours, hearts, tiaras, and cats are seen as female things, as well as occupations such as nurses and teachers, whereas dark colours, fir trees, fire-fighter hats and grizzly bears are seen as male things, as well as occupations such as truck drivers and police officers.

Kuhn, Nash and Bruckner (1978) examined the development of gender-role concept in children. In this study, children were presented with paper dolls; one of the dolls was visibly male, while the other doll was visibly female. The children were shown pictures of traditionally male activities, traits or careers, such as playing baseball, being strong and flying planes, and were then asked which of the two dolls would be more likely to do or say what was illustrated in the picture. In a majority of the cases even children as young as two years old showed knowledge of sex role stereotypes. Interestingly in terms of traits, Kuhn et al. (1978) found that children also tend to have positive associations with their own sex and negative associations with the opposite sex; however by adulthood this line of thinking shifts, and typical male traits seem to be valued more by both genders than female traits.

Research has shown that career preferences in children are formed early and are influenced by one's gender, and that children even as young as five years old can express occupational dreams (Phipps, 1995). McMahon and Patton (1997) found that male and female children continue to hold stereotypical pictures about appropriate occupations for one's gender and boys in particular were quite critical of boys working in traditionally "female" jobs.

Although young children have very traditional ideas regarding gender-typical occupations and think that women are better at "female" jobs such as nurses, and men better at "male" jobs, such as truck drivers, however both jobs are valued and children do not think that women should earn less than men for their work in a "female" job (Levy, Sadovsky & Troseth, 2000).

It was also found that pre-school children want to have sex-consistent occupations. Levy et al. (2000) measured affective reactions towards gender-typed occupations. Two traditionally masculine occupations were used (airplane pilot and car mechanic) and two traditionally feminine occupations were used (secretary and clothes designer) and children were asked how they would feel if they grew up to have one of these gender typed occupations. Children were then asked to respond by selecting a face displaying one of five emotions (anger, disgust, happiness, sadness and surprise). The researchers found that both boys and girls reported greater happiness at growing up to have a gender-role consistent career. Apparently very few little girls want to grow up to be car mechanics and few boys want to grow up to be secretaries.

These beliefs and expectations of children can continue to develop and have an impact on later academic ability and subsequent career options. In a study conducted by Eccles (1994), it was found that elementary-school age and adolescent females view themselves as less competent in traditional “male” subjects in school such as mathematics, computers and physical science than their male counterparts.

Given that, in the past, young children clearly expressed knowledge of gender stereotypes related to careers, and that gender appropriate careers are valued by children more than gender inappropriate careers, it would be expected that children would express this same idea towards current chores. In order to ensure that our present sample of children is comparable to cohorts that have been tested in the past, we tested their knowledge of and acceptance of gender-role stereotypes related to adult occupations. In doing sought to determine whether these stereotypes are still held by children and will

then be able to draw conclusions about children's evaluations of their own work and remuneration.

Evidence of the gender division of labour can be seen in childhood, as boys tend to work earlier than girls and obtain jobs for which they would be paid, such as mowing lawns and delivering newspapers, whereas girls tend to do more household chores (White & Brinkeroff, 1981). While girls also begin to work outside their own home, they tend to be more involved in performing nurturing tasks within someone else's home such as babysitting and pet sitting. The combination of boys being paid earlier for their work and working outside of the home could contribute to reinforcing stereotypes about women's work and men's work early on in childhood. By reinforcing stereotypes related to work experience, early work experience may also impact on the development of beliefs about payment for boys and girls.

Monetary Awareness

Both boys and girls begin to demonstrate an interest in money emerging in the ages around five to eight years (Grunberg & Anthony, 1980). In a study examining children's understanding of money, it was established that children come to fully comprehend money when they are able to determine that 100 pennies are the same as a one dollar bill, and choose the one dollar bill (the same amount of money, except in a more convenient form) over 100 pennies (Grunberg & Anthony, 1980). It was established that receiving an allowance assists children in developing a concept of money as well as usage rules and contracts (Berti & Bombi, 1981). Children who received an allowance were found to have a more sophisticated understanding of money and the value of prices, as opposed to children who did not receive an allowance (Abramovitch, Freedman & Pliner, 1991).

Studies of children's understanding of economic concepts have found differences across cultures. Children in Malaysia and Zimbabwe were found to have a better comprehension of money and were more knowledgeable than the children in Britain to whom they were compared, since the first two groups have more experience with buying and selling than the British children (Abramovitch et al., 1991). In addition, it was also found that children who were allotted more experience with money had obtained a better understanding of it. The same was found for children of higher socio-economic status (Ward, Wackman, & Wartella, 1977), who would also most likely have more experience with money.

Allowance in Children.

Parents may hold many different attitudes and beliefs towards giving children an allowance and these values may become instilled in children, Parents can and do vary on issues such as at what age to begin giving an allowance, how much to give, whether or not it is tied to performing chores, and attitudes towards saving and lending out money. These attitudes can be based upon or influenced by religious, cultural or political beliefs (Furnham, 2001). For example, parents in Germany differ from parents in Great Britain in their view of what allowance should mean to children. German parents did not believe that receiving an allowance should be tied to performing chores; however, British parents were more likely to give an allowance after performing chores. Both sets of parents however were found to encourage savings in their children and discourage lending their pocket money to other children, even for children as old as 16 years of age (Furnham, 2001). In addition, it can be supposed that parents who do give their children an

allowance may take time to teach their children about financial matters, which would result in their children having a better understanding of money.

The Current Study

Children develop gender stereotypes early and as children grow older these stereotypes become more defined and incorporated in their sense of “self.” During childhood, children also become exposed to money and “work” in the form of household chores. Many receive an allowance from their parents, as part of, or as well as, receiving payment for household chores. This raises the question, does the combination of these three factors: acquiring and holding gender stereotypes, being exposed to work in the form of household chores, and receiving an allowance, predict what children will hold as views towards pay equity?

The current study was an exploratory study, which examined the impact of these three variables together at the age in development when money begins to be meaningful. That is, children’s adoption and internalization of gender role stereotypes, their knowledge regarding gender typed occupations, and their familiarity with financial reward were examined to see if and how children differentially allocate rewards to others. Half of the elementary school aged children in this study were questioned by a male experimenter and the other half by a female experimenter in order to control for any influence of the experimenter’s gender on the children’s responses.

Hypotheses

There are five hypotheses that were explored in the present research. The hypotheses allow for comparisons between the present study and previous research, as well as a connection across ideas. The specific hypotheses are outlined below.

In the present study, a series of six tasks were completed with each child. Four of the tasks allowed for comparisons with previous research. The first three hypotheses listed below allowed for comparisons with previous research examining children's endorsement of gender stereotypes, and in particular, about gender stereotypes related to adult careers.

- 1) In the present study children were presented with 10 stereotypic adult careers and asked to identify which gender, if either, is more likely to hold that occupation and which gender, if either, is more likely to be paid more for performing that job. It was expected that children who have adopted and internalized gender role stereotypes would demonstrate an adherence to stereotypes, for example, women would be more fitted to hold the occupation of nurse, and men more fitted to hold the occupation of construction work. It was hypothesized that children would allocate more money to women for "female jobs" and more to men for "male jobs." This allowed for the current study to be compared with previous results and expectations.
- 2) Children were presented with scenarios about children completing household chores and were asked to assign a reward to the child in the story who was completing the chore. In addition children provided an affect rating about the chore. The child's gender in the story was manipulated. Based on previous research with preschool children (Taylor, 2002), and the mixed results of previous reward based studies (Lerner, 1974; Leventhal & Anderson, 1970), specific outcomes were

not predicted, however, outcomes could support the following possibilities. Based on previous research findings among adults (Leventhal & Lane, 1970), it was hypothesized that girls may allocate less of a reward to females. Alternatively, consistent with Lerner (1974), children may not make distinctions as a function of gender or girls may take more reward (Lerner, 1974). If the slightly older children in this sample mirror adults, girls should receive less than boys. If these young children resemble their younger peers in previous research (Taylor, 2002), then differences in reward allocation should be impacted by the gender of the experimenter.

- 3) Similar to the chores task above, children in the present study were asked to assign themselves and another anonymous child a reward for completing all of the experimental manipulations. As above, we expected to test whether gender of the experimenter as well as gender of the anonymous child influenced the amount of reward allocated and whether access to allowance impacted self-reward. By manipulating the gender of the “other” child with respect to the participating child’s gender, we were able to look at what they allocate to the “other” child for performing the same work that they have just completed. For example it can be hypothesized that if children have internalised gender role stereotypes that women are paid less for comparable work, then children may allocate less of a reward to females than to males.

In addition, building upon previous research in the area of gender role stereotypes, it was also hypothesized that children who have internalized more traditional gender role stereotypes through socialization may allocate less of a reward to girls, whereas the children who do not hold such strict gender role stereotypes may allocate an even number of rewards to boys and girls. Further, based on the research, which demonstrates that boys tend to work outside of the home earlier than girls, boys may be more experienced with work and money and allocate less of a reward to girls.

Gender of the Experimenter

This study controlled for the gender of the experimenter by counter balancing whether participants were tested by a male or a female experimenter. There were two male experimenters, both similar in appearance (i.e., height, weight, skin colour and hair colour) and both psychology students (one graduate student and one fourth year undergraduate). There were two female experimenters, also similar in appearance (i.e., height, weight, skin colour and hair colour). One female was a graduate psychology student and one was enrolled in teacher's college. Employing experimenters of different genders followed from Lerner's (1970) suggestion that the gender of the experimenter may cue children to reward themselves differentially. This manipulation had not been tested directly to date with school-aged children. In the present study, this was an exploratory variable and the specific impact is not known but this manipulation may impact on reward allocation for chores. This manipulation was used in previous honours thesis studies (Anderson, 2003; Taylor, 2002); however the participants in the study were preschool children, and therefore younger than the participants in this research study. In the study by Taylor (2002) the gender of the experimenter did yield significant effects on

the children's responses in the toy reward allocation task and in the study by Anderson (2003), the gender of the experimenter had a significant effect in some of the tasks such as the affect rating task, the monetary reward task and the toy reward allocation task.

Affect Rating

- 4) Children were also asked to provide a rating of affect towards performing household chores. Previous work with preschoolers, suggested that very young children did not differentiate affect as a function of gender. In other, related studies, however, following from research in the area of social and cognitive theories of gender identity development, older children have been reported to be more positive toward gender-appropriate tasks (Kuhn et al., 1978; Levy et al., 2000). The present target group was older than preschoolers, and if the work suggesting greater positive affect is attributed to gender appropriate activities, then the children in the present study may attribute more positive affect to stereotypic gender appropriate behaviours.

Pay Equity

- 5) Finally pay equity was examined as children were asked about salary for adult occupations as well as salary for their own future occupations. Based on research with adults it can be hypothesized that if children have internalized gender stereotypes then children should allocate less money to women or that children will allocate more money to women for "female jobs" and more money to men for "male jobs." In addition, with respect to children's own future salary, it can be hypothesized that

if children are using gender stereotypic information to make decisions about their salary then boys should respond that they will make more than girls and girls should respond that they will make more than boys. If these children have not internalized gender stereotypic information then there should not be any differences.

Method

Participants:

The participants in this study were 91 elementary school students in grades one through four ($M = 2.59$, $SD = 1.04$) recruited through the local elementary school board and day/church camps in the Kitchener-Waterloo area. Children's ages ranged from 5 to 10 years of age ($M = 7.69$, $SD = 1.13$) and 48 of the participants were male (age $M = 7.63$, $SD = 1.23$) and 43 of the participants were female (age $M = 7.77$, $SD = 1.01$). There were 18 children in grade one, 21 children in grade two, 32 children in grade three and 20 children in grade four. Originally, 141 children were tested but only 91 children received an allowance. The sample used in the present study represents only the children who received an allowance.

Material and Procedures:

Two sets of materials were used in this research study. One set of materials was distributed to the parents of the children participating in this study; the second set of materials was used to test the child participants.

Parents' Materials

The parents were sent a package containing a questionnaire and an information letter and consent form. The information letter and consent form (see Appendix A)

requests that the parent complete the questionnaire and give permission for the child to participate in the research study. The questionnaire contained three sections (see Appendix B). The first section was comprised of nine questions regarding demographic information about the parent(s) in the family. The second section was comprised of 15 questions requesting information about who received allowance and the conditions for receiving allowance for each child in the family. The third section contained five questions and allows parents to elaborate on any rules or guidelines they may have regarding the use of allowance. The parents were asked to complete this questionnaire in their home and return it by mail to the researcher. The parents' questionnaire was used to confirm that the children did receive an allowance and the other questions were used in another research study.

Children's Materials

The children in this study were orally invited to participate in this study and were asked to complete six different tasks with the experimenter, four of which have been used in previous honours thesis studies investigating gender role stereotypes and reward allocation (see Appendix C). The experimenters requested verbal consent from the children prior to their participation in the study (see Appendix C). The children in this study were tested individually by either the male or female experimenter in a familiar area to them.

Occupational Stereotyping Task

The first task that children were asked to complete assessed their knowledge of occupational stereotypes. The task consisted of a list of ten occupations presented one at a time, where the child used a five point pictorial scale (see Appendix D) containing a

group of all male figures (a score of one), a group of three male figures and one female figure, a group of half male and half female figures, a group of three female figures and one male figure, and a group all female figures (a score of five), to identify which group is most likely to hold that particular occupation. For example, the child would be presented with the “teacher” and asked to point to the group that is most likely to hold this profession.

The occupations were identified as gender stereotypical professions and matched for salary range. The careers were derived from the most recent Statistics Canada 2001 census and include five traditionally male occupations, such as a farmer or a security guard, and five traditionally female occupations, such as a librarian and a kindergarten teacher. These occupations were of relatively equal pay and social status and the order in which the occupations were presented to children were counterbalanced across participants in this study (see Appendix E).

In order to train children with this scale, the children used the scale to identify who would be most likely to engage in each of two highly stereotyped play activities. Specifically, the child was first asked to complete a stereotyped children’s activity and asked to assign the appropriate gender(s). For example, the children were asked “which group would be more likely to play with Barbie dolls,” where the expected response would be “the all female group” and, as a more gender neutral question, the children were asked “which group would be more likely to play on the climber at recess,” where the expected response would be the group of mixed males and females.

Pay Equity Task

The second task was a manipulation used to assess children's knowledge of occupational stereotypes, more specifically in relation to pay equity. Children were asked about the wages of four different jobs, two traditionally male occupations and two traditionally female occupations of similar pay and status. For instance: "If an adult man and an adult woman were both security guards, who do you think would get paid more? Would men get paid more? Would men mostly get paid more? Would women get paid more? Would women mostly get paid more? Or would they both be paid the same amount?" The researcher recorded the children's responses.

Household Chores Task

The third task involved questions about household chores, and consisted of two parts. The first part measured the child's affect, or emotional response to performing a particular household chore, and the second part investigated how much monetary reward a child feels they should receive for performing the chore. The first part of this task that the children were asked to complete was a five point scale measuring affect relating to performing a household chore. At one end of the scale was a sad face, followed by a less sad face, in the middle was a neutral face, followed by a somewhat happy face and at the end was a happy face (see Appendix D).

The children were first asked some initial questions in order to ensure that they comprehended the scale and then they were presented with 10 hypothetical vignettes involving male and female children performing different household chores such as washing the dishes. Five different chores were represented, and each was tested once using a male child's name, for example, Tommy, and a girl child's name, for example, Becky. Each child completed the task for a parent but gender of the child and parent was

not fully counterbalanced. There were, however, girls who performed chores for their mother and for their father and boys who performed chores for each of their parents. The children were asked to judge the feelings of the child regarding performing the different chores. Prior to this study, a pilot study took place in which parents in the community were asked to complete a questionnaire regarding what household chores their children currently do, and if there were any gender preferences among the chores. The chores that were used in the children's materials were the chores that were most commonly performed by children in this age group as a result of the pilot study.

In order to assess monetary understanding and awareness in children, the experimenter initially presented each child with a penny, a nickel, a dime, a quarter, a loonie. The children were asked the monetary value of each of the coins and were then asked which of the coins is worth the most and the least. After monetary awareness had been established, the children were asked to complete the second part of the household chores task. Children were presented with a six point reward scale (see Appendix D) consisting of 0, 1, 2, 3, 4 and 5 quarters, and the children were asked the same 10 vignettes and how much each child should receive as compensation for performing each household chore. In addition to the survey on completing household chores, children were then asked which of the chores was the hardest, the easiest, and which one they would choose to do and how much they should be compensated for performing that chore.

Allowance Question

The fourth task involved the concept of receiving an allowance. This was examined by the experimenter asking the children questions such as, "Do you receive an

allowance, do you need to complete chores around the house in order to receive the allowance, and can you get more allowance if you wanted more in your house?" The children's responses were recorded in order to be compared to their parents' responses regarding allowance in the questionnaire included with the consent form.

Child's Projected Future Earnings

The fifth task involved asking both genders of child participants what they thought they would make relative to other men when they grow up and have a job, and what they thought that they would make relative to other women when they grow up and have a job. The children's responses were recorded.

Reward Task for Self and Other

The sixth task involved thanking the children for their participation in the study and asking children to select rewards for themselves for their participation and put them in a paper bag. The children were asked to select as many toys from a large assortment of toys such as stickers, bouncy balls and pencils that they felt they deserved for their participation in the study and asked "is that all?" when they finished to ensure that the concept of entitlement for completing a task was measured. Prior to this study a pilot study took place in which parents in the community were asked to complete a questionnaire regarding whether the toys were appropriate for this age group and whether there were toys that were appropriate for boys, girls and both genders (see Appendix F).

Following this task the children were asked by the researcher what they would select for the next child after they complete the study. The age of the next child was the same age as them, but the gender of the next hypothetical child was counter balanced across participants when asking the children to select an appropriate number of rewards

for them. The number and type of rewards chosen for the next child was recorded by the researcher.

Results

Six sets of analyses were conducted. The first and second set examined stereotypes that children hold towards adult occupations and monetary payment for these adult occupations. The third and fourth set examined children's attitudes towards performing hypothetical household chores and monetary payment for these chores. The fifth set of analyses examined how much money children thought they would make when they have jobs as adults relative to other adults. Finally, the sixth set of analyses examined the amount of toy rewards the participating children allocated to themselves versus another fictional child for participating in the study. Grade level was not included in the analyses due to a small sample size in the younger grades that received an allowance.

Before conducting any analyses, the information provided by parents was compared to the information provided by children to confirm that the children in the present sample did receive an allowance. Overall, out of the 141 children, 64.5% of the children and their parents were who were included in preliminary analyses and were in agreement about whether the child received an allowance and 35.5% of the children did not report the same answer as the parents. Only children who received allowance (as stated by the parent) were included in subsequent analyses, therefore 91 out of the 141 children tested.

To review, the following are the five hypotheses that were tested in this study:

- 1) For the stereotyped adult occupation measure it was hypothesized that children who have internalized gender role stereotypes would demonstrate an adherence to them (such that women would be more likely to hold the occupation of nurse, for example.) In addition, it was hypothesized that children might allocate more payment to women for “female jobs” and more payment to men for “male jobs.”
- 2) For the measure examining children’s future earnings, it was hypothesized that if children were using gender stereotypic information about careers to make decisions about their salary, then boys should respond that they will make more than girls and girls should respond that they will make more than boys.
- 3) For the measure examining affect towards performing household chores, it was hypothesized that children in this age group may attribute a more positive affect towards performing gender appropriate tasks (for example, helping with dishes may be a more appropriate task for females).
- 4) For the measure examining rewards for performing household chores, specific outcomes were not predicted. However, based on previous research it was hypothesized that children may allocate less of a reward to girls, or if children have not internalized gender stereotypes, then children may not make a distinction as a function of gender. Finally it was hypothesized that the gender of the experimenter may have an impact on the children’s responses.
- 5) Finally, for the measure examining reward for themselves and other children it was hypothesized that if children have internalized the gender role stereotypes that women are paid less than men for comparable work, then children may allocate less of a reward to the other child when it is a girl, than when it is a boy.

The gender of the experimenter was an exploratory variable, and no specific predictions were made.

Children's Responses to the Traditionally Stereotyped Adult Occupation Measure

Children responded to a 5 point scale which asked them to identify who was most likely to occupy each of the 10 occupations. A score of 1 indicated that only men would hold the occupation and a score of 5 indicated that only females would hold the occupation.¹ Mean scores as a function of occupation and gender of the child are presented in Table 1.

A frequency distribution for scores for each of the 10 occupations was conducted as a function of the gender of the child (see Table 1). More than 50% of the girls and boys indicated that letter carriers, flight attendants, kindergarten teachers and librarians were occupations that could be held equally by men and women. In addition, the occupations of farmer, security guard, nurse and sports referee were mixed, in the sense that some of these occupations were more gender stereotyped for one gender, than for the other. For example, more than 50% of the girls indicated that farmers and sports referees were occupations held primarily by men, whereas more than 50% of the boys, on the other hand, felt that both men and women could be farmers and sports referees. In these mixed cases, it is interesting to note that although the majority of boys or girls indicated a shift from stereotyped to neutral, the remaining children tended to uphold traditional gender stereotypes. For example, although more than 50% of girls indicated that nursing was a gender neutral occupation that could be held by both men and women, the remaining girls all indicated that nursing was primarily an occupation for women.

¹ Corresponding analyses using truncated scales are presented in Appendix G

Overall, only two occupations could truly be said to be gender stereotyped occupations for both boys and girls equally, that is, construction workers (male occupation) and perfume salespersons (female occupation). Overall, these results would indicate that the sample of children were not entirely supportive of traditional stereotypes for occupations. However, upon close examination, it was clear that some children clearly supported traditional occupational stereotypes. That is, for traditionally male occupations children either indicated the occupation was neutral or they indicated that it was occupied primarily by men. Similarly, for traditionally female occupations children either indicated that the occupation was held equally by men and women or held primarily by women. Occupations were aggregated into a group of male occupations and female occupations for analyses.

One 2 (male/female occupation) X 2 (gender of child participant) X 2 (experimenter gender) mixed model ANOVA was conducted to assess gender stereotype beliefs for occupations. Traditional stereotyped occupation served as the within subjects factor and gender of the child and experimenter served as between subjects factors. The dependent variable was the children's responses to the five point scale identifying the gender associated with each occupation. There were no significant main effects, the largest $F(1, 89) = 1.44, p = .23$ for child gender. There were no significant interactions, the largest $F(1, 89) = 1.23, p = .27$, for child gender by experimenter's gender.

Given that only two of the occupations were uniformly acknowledged as stereotypic, that is perfume sales person as stereotypically female, and construction worker as stereotypically male, the above analyses were reexamined using only the two stereotyped occupations. A 2 (male/female stereotyped occupation) X 2 (gender of child

participant) X 2 (experimenter gender) repeated measures ANOVA was conducted, with the stereotyped occupation as the within subjects factor and the gender of the child participant and the gender of the experimenter as the between subjects factors. The dependent variable was the children's responses to the five point scale identifying the gender associated with each occupation. There was a significant main effect for the gender associated with each occupation. There was a significant main effect for the stereotyped male and female occupations, $F(1, 85) = 302.76, p = .000$. The mean for male occupation of construction worker was ($M = 1.82, SD = .88$) and the mean for the female occupation of perfume salesperson was ($M = 4.36, SD = .88$). There was a significant interaction, $F(1, 85) = 5.54, p = .021$, for male/female stereotyped occupation by experimenter's gender.

As seen in Figure 1, responses were more polarized when tested by a female than when tested by a male. Specifically, when tested by a male experimenter, the mean for the occupation of construction worker ($M = 2.00, SD = .93$) was closer to the mean for the occupation of perfume salesperson ($M = 4.18, SD = .98$) than when these occupations were assessed when a female was the experimenter ($M_{\text{construction}} = 1.68, SD = .81$, versus $M_{\text{perfume}} = 4.49, SD = .78$). Therefore responses tend to be more extreme when tested by a female than when children were tested by a male.

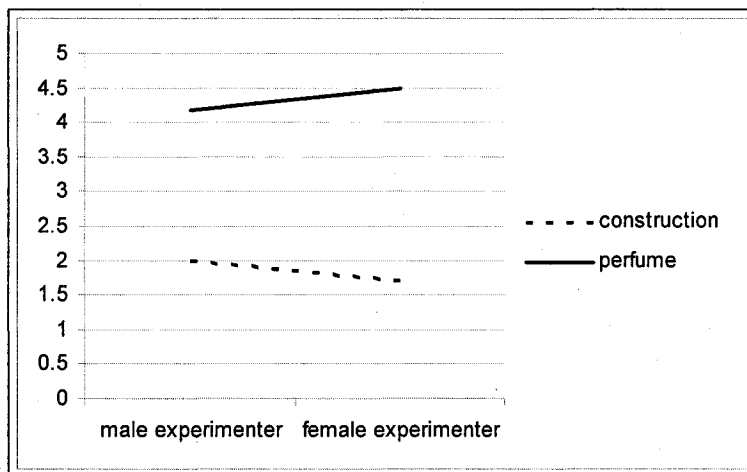


Figure 1. Children's assignment of gender to stereotyped occupation as a function of the gender of the experimenter.

In summary, when all occupations were assessed together, there were no significant outcomes. However, when only the highly stereotyped occupations were assessed, the presence of a female experimenter inflated the disparity in scores.

Children's Responses to the Traditionally Stereotyped Adult Jobs – Pay Measure

Children were asked to identify how much money adults would get paid for four of the occupations, two of which were traditionally male occupations (farmer and security guard) and two of which were traditionally female occupations (kindergarten teacher and nurse) using a 5 point scale, where 1 indicated that men would get paid more and 5 indicated that women would get paid more and 3 indicated equal pay.¹

A frequency distribution was examined for each of the four occupations as a function of the gender of the child. More than 50% of the boys and exactly 50% of girls felt that men and women would be paid the same for their work as a farmer and a kindergarten teacher. In addition, 50% of the girls felt that men and women would be paid the same for their work as a security guard. Boys (60.5%), on the other hand, felt that men would be paid more for their work as a security guard. Most girls (46.5%) and boys (50%) felt that women would be paid more for their work as a nurse (see Table 2).

One repeated measures 2 (gender of child participant) X 2 (gender of experimenter) X 2 (allocation of payment) mixed ANOVA was conducted with the gender of the pay recipient as the within subjects factor and gender of the child participant and gender of the experimenter as between subjects factors. The dependent

variable was how much payment would be allocated to adult men and women. There was one significant main effect for the gender of the payment recipient, $F(1, 81) = 70.3$, $p < .001$, such that overall women and men were compensated differently for their work. For female occupations, the mean was 3.54 ($SD = 0.78$) and for male occupations the mean was 2.38 ($SD = 0.69$). However this main effect was qualified by one significant interaction for the gender of payment recipient by gender of the experimenter, $F(1, 81) = 7.16$, $p < .009$.

As seen in Figure 2, when females served as the experimenter there was greater disparity in the allocation of payment to male and female occupations than when males served as experimenters. Specifically, when men served as experimenters the pay for male occupations was $M = 2.61$, $SD = .57$, and pay for female occupations was $M = 3.35$, $SD = .72$. However, when females served as the experimenter, pay for male occupations was lower $M = 2.19$, $SD = .73$, and pay for female occupations was higher $M = 3.67$, $SD = .97$. Overall, when females served as the experimenter, women were allocated more for “traditionally female jobs” and men were allocated more for “traditionally male jobs.” Interestingly, this result matches the pattern of the result of the above stereotyped occupation task.

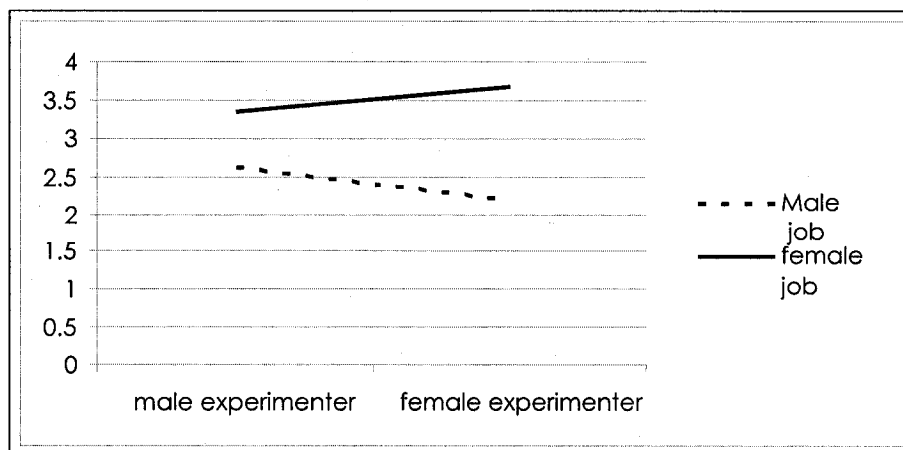


Figure 2. Children's allocation of pay to adults as a function of the gender of the experimenter.

In summary, the presence of the female experimenter resulted in more extreme responses for pay allocation for adult males and females.

Children's Own Projected Earning for Adult Occupations.

Children were asked about their projected earnings for occupations when they grow up and what they expected they would make relative to other men and women. Boys and girls were asked to compare their own expected salary to that of adult males, and to adult females. Specifically, they were asked two questions. They identified whether they thought they would make more than men, less than men, or the same as men, and then were asked if they thought they would make more than women, less than women or the same as women.

A frequency distribution was examined and 58.8% of the children said that they would make the same as men and 55.8% said they would make the same as women when they grow up (See Table 3 for means and frequencies). For those who felt they would not make the same, the answer was more often that they would make more than other adults (both men (34.1%) and women (33.7%)). Few children thought they would make less money than other adults (7.1% making less than men and 10.5% less than women).

A repeated measures 2 (pay relative to other men/women) X 2 (gender of child) X 2 (gender of the experimenter) ANOVA with pay relative to other men/women as the within subjects factor and gender of the experimenter and gender of the child as the between subjects factor, was conducted to examine the question of what children think

they will make relative to other men and women when they grow up. The dependent variable was the children's perceived salary for their future adult occupation on a 1 to 3 scale. There were no significant main effects or interactions, largest $F(1, 81) = 1.79, p = .19$ for pay relative to men/women by gender of the experimenter.

In summary, children of both genders tended to be quite optimistic about payment for work when they grow up and the experimenter did not impact on expectations.

Children's Responses to the Chore Measure – Affect Scale

Children were asked to indicate how a fictional child in a story would feel about performing 10 different household chores using a 5 point affect scale, where 1 was very sad and 5 was very happy.¹ Frequency distributions were conducted for each of the chore scenarios and are reported in table 4.

Overall, few children indicated that they would be “very happy” to do any of the chores. Being very happy to do chores only appeared with any regularity when boys were tested by a female experimenter. In most cases, children reported ratings of sad to neutral affect. The chore that children said the child in the story would feel the most sad about was helping with the laundry and the chore that the children said the child in the story would feel the most happy about was setting the table. Specifically, for the chore of making their bed, 58.3% reported that the child would feel neutral, happy or very happy. For the chore of setting the table 68.2% reported the child would feel neutral, happy or very happy. For the chore of helping fold and put away laundry, 39.6% reported the child would feel neutral, happy or very happy. For the chore of helping with the dishes, 57.7%

reported the child would feel neutral, happy or very happy. Finally for the chore of tidying up toys 55.1% reported the child would feel neutral, happy or very happy.

A repeated measures 2 (affect of boy/girl performing chore in story) X 2 (gender of the child participant) X 2 (experimenter gender) ANOVA was conducted with affect of boy/girl performing the chore as the within subjects factor and gender of the child participant and gender of the experimenter as the between subjects factor. The dependent variable was the child's response to how the boy or girl in the story would feel about performing a household chore. There were no significant main effects, largest $F(1, 84) = 1.95, p = .17$. However, there was a significant interaction, $F(1, 84) = 5.35, p < .023$, for gender of the child by gender of the experimenter. As seen in Figure 3, children tended to answer that the child performing the chore in the story was happier with an experimenter of the opposite gender, than with an experimenter of the same gender. Specifically, the mean for boys with a male experimenter was 2.59 ($SD = .62$) whereas for a female experimenter the mean was 2.92 ($SD = .66$). The mean for girls with a male experimenter was 2.92 ($SD = .44$), whereas the mean with a female experimenter was 2.62 ($SD = .72$).

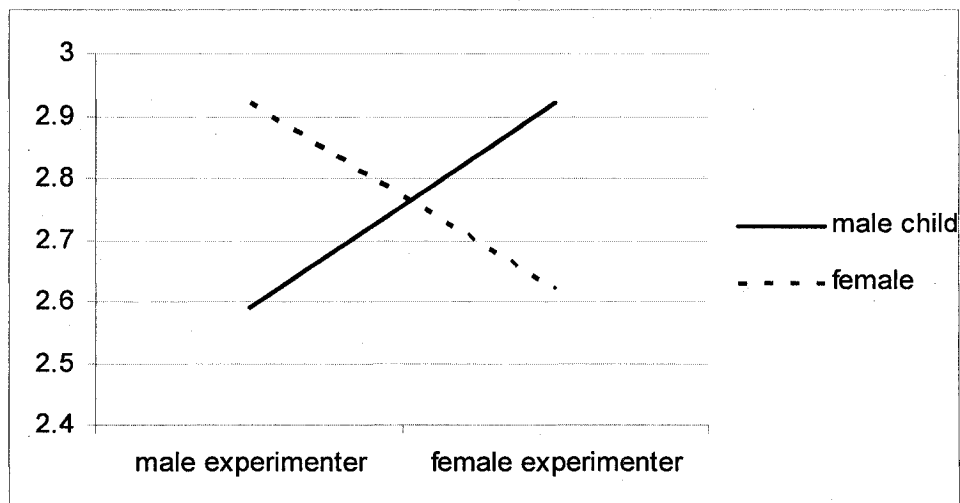


Figure 3 Children's responses of child affect towards household chores as a function of the gender of the experimenter.

In summary, the gender of the experimenter had a significant impact on children's response for affect for completing household chores, such that children's affect ratings were more positive when working with an experimenter of the opposite gender.

Children's Responses to the Chore Measure – Monetary Reward Scale

Children were asked to allocate quarters for each fictional child completing a household chore. Children used a 6 point scale, ranging from 0 quarters to 5 quarters. Frequency distributions were conducted for each of the 10 different chore scenarios and are reported in Table 5. Overall, helping with the laundry was the chore that children said the child in the story should receive the most amount of quarters for helping with, and the chore that the children said the child in the story should receive the least amount of quarters for was making their bed.

For the chore of making their bed, the mean number of quarters given was 2.38 ($SD=1.27$). For the chore of setting the table the mean number of quarters given was 2.98 ($SD=1.15$). For the chore of helping with the laundry, the mean number of quarters given was 3.75 ($SD=1.2$). For the chore of helping with the dishes the mean number of quarters given was 3.03 ($SD=1.24$), and for the chore of tidying up toys, the mean number of quarters given was 2.69 ($SD=1.38$).

A repeated measures 2 (reward for boy/girl in story) X 2 (gender of the child participant) X 2 (gender of the experimenter) ANOVA was conducted with reward for boy/girl as the within subjects factor and gender of the child and gender of the experimenter as the between subjects factor. The dependent variable was the child's

allocation of quarters for each child completing the household task in the story. One significant main effect was found for reward for boy/girl. $F(1, 85) = 6.73, p < .011$, such that the mean number of quarters allocated for girls in the story was less ($M = 2.92, SD = 1.01$) than the mean number of quarters allocated for boys ($M = 3.11, SD = .98$). Therefore, the boys in the story were being allocated more quarters for performing household chores, regardless of the gender of the experimenter and the gender of the child being asked about the story. There were no other significant main effects, nor were there any significant interactions, largest $F(1, 85) = 0.68, p = .411$, for reward for boy/girl by gender of the child by gender of the experimenter.

In summary, regardless of the gender of the child participant or the gender of the experimenter, children allocated more quarters to the boys in the story for performing household chores than to the girls in the story for performing the same chores.

Experimenter gender did not influence children's responses.

Reward Allocation – Toys for Self and Other

At the end of each testing session each child was asked to select as many toy rewards as they felt they deserved for their participation in the research study. There were 20 toys in total. Children were aware that they would keep these toy rewards. After selecting toys for themselves, they were asked to select toy rewards (from an additional array of the same 20 toys) that would be suitable for the next child that would be participating. The number of toys children took for themselves ranged from 1 to 20 toys, whereas the number of toys taken for another child ranged from 1 to 11 toys. Means are presented in table 6.

A repeated measures 2 (toys for self vs. other) X 2 (gender of the child participant) X 2 (experimenter's gender) ANOVA was conducted to determine whether the child's gender or the gender of the experimenter impacted reward allocation for selection of toys for themselves or another child. Allocation of reward to self vs. other was the within subjects variable and the between subjects variables were gender of the child participant and experimenter gender. The dependent variable was the number of toys selected by the child. There were two significant main effects, for self versus other, $F(1, 81) = 7.37, p < .008$, and experimenter's gender $F(1, 81) = 7.53, p < .007$.

Specifically, children allocated more toys to themselves ($M = 3.11, SD = 2.57$) than to the other fictional children ($M = 2.61, SD = 1.69$), and children took less toys overall when tested by a male ($M = 2.24, SD = 1.01$) than by a female ($M = 3.36, SD = 2.46$). There were no significant interactions, largest $F(1, 81) = 1.31, p = .26$, for toys for self versus other by gender of the experimenter.

In summary, children tended to reward more toys to themselves versus the next hypothetical child to complete the tasks. Children took more toys when working with a female experimenter than when with a male experimenter.

Discussion

At the outset of this research five hypotheses were outlined. The findings for each of these are examined individually below.

1) Occupational Stereotypes

It was hypothesized that children who chose stereotyped responses would adhere to them when asked about which gender would be more likely to hold a particular occupation. Past research has found that children develop and internalize gender

stereotypes from a very early age; therefore it was expected that children would confirm traditional gender stereotyped beliefs for different adult occupations.

Results from the occupation stereotype measure indicated that children did not hold as strong gender stereotypes for occupations as past research has found (Eichstedt et al., 2002; Levy, et al., 2000; McMahon & Patton, 1997). Generally, the children in our sample felt that both men and women were equally capable of performing the majority of occupations that have traditionally been strongly gender stereotyped. Only the occupations of perfume salesperson and construction worker remained gender stereotyped. The neutral ratings would suggest that the children in the present study may not have adopted and internalized strict gender role stereotypes for occupations. Alternatively, the present findings may indicate that traditional occupational stereotypes that were present in much earlier research may not be as salient in today's society.

It is important to note, however, that upon close examination of the distribution of responses, it is clear that children either support the neutrality of the majority of occupations or they adhered to the traditional stereotypes, such that many of the children's responses still lay on the side of traditional gender roles for occupations (as seen in Table 1). This means that there may be a progression or gradual shift in thinking, such that occupations are becoming less gender stereotyped compared to past research with children (Eichstedt et al., 2002; Levy, et al., 2000; McMahon & Patton, 1997). Young children may think that men and women are equally capable of performing most occupations; however, it is important to note that many children still retain internalized gender role stereotypes.

Interestingly, greater polarization was found in children's stereotyping for which gender would hold different adult occupation when tested by female experimenter than when tested by a male. Since women tend to talk to children in a more emotional manner than men, this perhaps had an influence on the children's responses (Block, 1983).

2) Occupational Payment

Based on past research, it was hypothesized for the occupational payment task that children who have internalized gender stereotypes may either allocate less payment to women as past research has demonstrated (Desmarais & Curtis, 1997; Heckert et al., 2002; Leventhal & Lane, 1970; Major, 1994), or allocate more payment to women for "female jobs" and more payment to men for "male jobs," since research has shown that children tend to think that adults are more capable of performing gender-consistent occupations (Levy et al., 2002). Interestingly, results for the occupational payment measure indicated that although children thought that men and women were both capable of performing traditionally male and female occupations, children felt that men should be paid more for performing the traditionally male jobs and women should be paid more for performing traditionally female jobs, consistent with Levy and colleagues' (2002) findings. In addition, the experimenter's gender played a significant role in the assignment of payment. Payments were more polarized when children were tested by a female experimenter, than a male experimenter. The two sets of results regarding occupations and payment seem to contradict each other, in the sense that children indicate that most jobs can be performed by a man or a woman, yet the men and the women would be paid differently for performing the same job.

These results are consistent with research done by Levy et al. (2002), however, which found that young children hold traditional ideas regarding gender stereotypes and that women are better at performing “female jobs,” and men are better at performing “male jobs.” This may be the reason why children felt that women should be paid more for performing “female jobs” and men paid more for performing “male jobs.” However, this result was found for both male and female experimenters, but much stronger when working with a female experimenter. This result could also be attributed to the fact that children may be more sensitized to gender stereotypes, especially those involving money, when a female is present

When children were asked about their future salary it was hypothesized that if children have internalized gender stereotypes for pay equity then boys should respond that they would make more than girls and girls should respond that they would make less than boys. If children have not internalized these stereotypes, then the results should not differ between the genders. The majority of children believed that they would make at least the same, if not more, money than others when they became an adult. Overall, children’s allocation of rewards to themselves and beliefs about future earnings may reflect an over-estimation of their performance consistent with results found in other literatures examining children’s estimations of cognitive performance (Freedman-Doan, Wigfield & Eccles, et al., 2000). In this case, children were very optimistic about themselves and their future income.

3) Children’s Affect Rating for Household Chores

Children were asked to assign an affect rating of how a child would feel about performing a household chore for one of their parents. It was expected that if children had

internalized gender role stereotypes, then they would provide a rating that was more positive to performing the gender appropriate task. Overall, children tended to answer that the child in the scenario would be happier performing the household chore when asked by an experimenter of the opposite gender, than when asked by an experimenter of the same gender. Perhaps children wanted to appear more enthusiastic about performing chores with an experimenter of the opposite gender than with an experimenter of the same gender, where perhaps children felt they could be more honest or truthful about feelings towards performing chores. For example, boys working with men can agree that performing household chores is not a fun activity, yet since household chores is a task primarily performed by women, boys may answer more positively when working with a female. Conversely, girls can agree that performing household chores is not a fun activity when working with a female, yet since this is something expected of women (Deutsch, Roska & Meeske, 2003), girls may answer more positively when working with a male experimenter.

4) Children's Reward Allocation for Household Chores

Children were also asked to assign a reward to a child for performing a household chore for their parents. The results from the chore payment measure indicated that children allocated more quarters when a boy was performing the household chore than when a girl was performing the chore. These results are consistent with the literature, in that males typically receive more compensation for their work than women (Leventhal & Lane, 1970). Also, the results support previous literature with adults, where men gain greater recognition when performing "household" chores (Deutsch, Roska & Meeske, 2003). Household chores are traditionally performed by women without compensation,

yet when men perform these chores they are praised for their contributions to the household (Deutsch et al., 2003; Major, 1994; Tichenor, 1999). Perhaps the children in our sample perceived domestic chores as “women’s work” and something expected of women, and thus did not allocate as much of a reward to girls as they did to boys.

5) Children’s Reward Allocation for Self and Other

Finally, children were asked to allocate rewards to themselves as well as to the next child to complete the tasks with the experimenter. Children took more toys for themselves than for the other children. Children’s selection of more toys for themselves also matched with the outcomes found for the projected earnings measure. Specifically, children tend to be overly optimistic about their earnings and value of their “work”.

These results are inconsistent with previous work involving young preschool aged children (Anderson, 2003; Taylor, 2002) and with work involving adults. Past research with adult women has found that women take less of a reward, so that there are still rewards left for others (Leventhal & Lane, 1970). Other research has shown that women take less because they tend to be more concerned with others’ feelings (Bakan, 1996; Eagly, 1987; Wade, 2001) and has indicated that women tend to want to promote harmony and to appear “nice”. Girls in the present study, however, took as many rewards as boys. The girls in the present sample may not have internalized strict gender role stereotypes pertaining to pay and women earning less than men or possibly the young girls in the sample may not be as aware of or may be moving away from these stereotypes.

The experimenter’s gender was an important factor to consider here, as children tended to take more rewards when working with a female than when working with a

male. This was interesting as it may suggest that children felt more entitled and may not restrict themselves as much when working with a female than working with a male. This difference as a function of the experimenter's gender may be attributed to stereotypic beliefs about women, namely that women are more sensitive and nurturing (Wade, 2001). Beliefs such as these might lead children to feel more comfortable in taking more things for themselves when they were with a female experimenter.

Understanding the Current research in Light of Previous Work with Children

Examining the impact that the gender of the experimenter has on children's responses in developmental research was a key factor in designing this research study. Previous work by Lerner (1974) and Leventhal and Anderson (1970) found conflicting results in children's reward allocation, and this was attributed to differences in design regarding the gender of the experimenter. Specifically, one study used a female experimenter and the other used a male experimenter. It was hypothesized that the gender of the experimenter might have had a significant impact on children. The outcomes in the present study supported the importance of the experimenter's gender for reward allocation in children. In addition, three other measures incorporated into the present study also showed differences in outcomes as a function of the gender of the experimenter: affect toward chores, occupational stereotyping and payment allocation for adult occupations.

With respect to reward allocation, as mentioned above, children took more toys when they were tested by a female experimenter than a male experimenter. Recall that in Lerner's study (1974), girls took more rewards than boys and the experimenter was always a female. In the Leventhal and Anderson study (1970), on the other hand, girls

took fewer rewards than boys, but the experimenter was always male. Common to both of these early studies was a difference in reward allocation as a function of the gender of the child. In the current study, gender of the child was not important for reward allocation; however gender of the experimenter did elicit different responses from children. The findings in the present study therefore provide support for the argument that the gender of the experimenter is an important cue for young children when they are assigning themselves a reward. In summary, some of the hypotheses were supported and some were not. Further research needs to be done in order to determine the specific features of the task that predict differential outcomes. One important consideration is the cohort difference in these two studies, as previous research in this area was conducted 30 years ago. Some differences in outcomes may be a product of differences in societal expectations between the two cohort groups.

Limitations and Future Directions

There are a few limitations to be mentioned in this research study. The division of children into younger and older groups was based on a limited sample size. It was a challenge to find young children who received an allowance, and hence, a finer analysis of developmental differences could not be made. Ideally, a large enough sample of children in each grade (from grade 1 to 4) would make it possible to examine more closely the outcomes in the present study with respect to previous research and in terms of developmental changes. In addition, it may be important in future work in this area to define specifically what is meant by allowance or pocket money, as some children were unclear about what constituted an allowance. Greater accuracy was assured by having the

additional reports from parents in the present study. This is an important factor to include in future research.

In future research it would be interesting to compare this group against children who do not receive an allowance and look at differences in gender stereotypes and reward allocation between these groups. Children who receive an allowance tend to have a more sophisticated knowledge of money, and might provide different responses to questions regarding payment for work. Another interesting factor to examine would be parents' education level and profession as an indicator of socio-economic-status, since literature has suggested that parents of higher socio-economic-status tend to give allowance and to teach about money according to research in the topic of allowance (Ward, Wackman, & Wartella, 1977). Culture and ethnicity would be another factor to consider, as some cultures hold different beliefs towards money and allowance, and may also hold stronger gender role stereotypes (Abramovitch et al., 1991; Furnham, 2001). Examining culture specifically may result in stronger gender role stereotypes and differences in pay allocation, as some cultures view men and women differently in terms of status and entitlement.

In summary, the present study extends our knowledge in the area of gender stereotypes and how they develop in children, along with issues related to monetary awareness and pay equity, and finally, the impact that experimenter's gender on developmental research with children. Interesting differences and similarities were found from past research which suggests that these children do not adopt traditional ways of thinking in some areas, yet still tend to in other areas. This may be an indication that although children are becoming more egalitarian in their thinking, they still have a way to

go before children come to think of the genders as completely equal. The present study also delineates the importance of counter balancing the gender of the experimenter in developmental research with children. Children hold certain beliefs and expectations about gender and make use of these when working with experimenters.

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Table 1. Frequencies, Means and Standard Deviations of Children's Responses to Adult

Stereotype Occupation Measure							
Occupation Adult Stereotype	Gender of Child	All Boys %	Mostly Boys %	Both %	Mostly Girls %	All Girls %	M (SD)
Construction	Boys	41.7	20.8	37.5	0	0	1.96 (.89)
Worker	Girls	53.5	27.9	16.3	2.3	0	1.67 (.84)
Sports	Boys	31.3	16.7	20	2.1	0	2.23 (.93)
Referee	Girls	34.9	41.9	23.3	0	0	1.88 (.76)
Farmer	Boys	25	20.8	54.2	0	0	2.29 (.85)
	Girls	32.6	30.2	34.9	2.3	0	2.10 (.88)
Security	Boys	31.3	27.1	41.7	0	0	2.10 (.86)
Guard	Girls	14	27.9	55.8	0	2.3	2.49 (.83)
Mail	Boys	22.9	2.1	68.8	4.2	2.1	2.60 (.96)
Carrier	Girls	23.3	18.6	53.5	4.7	0	2.39 (.90)
Flight	Boys	12.5	12.5	64.6	8.3	2.1	2.75 (.86)
Attendant	Girls	7	2.3	86	2.3	2.3	2.91 (.65)
Librarian	Boys	0	4.2	64.6	14.6	16.7	3.44 (.82)
	Girls	2.3	2.3	55.8	30.2	9.3	3.42 (.79)
Kindergarten	Boys	0	0	52.1	12.5	35.4	3.83 (.93)
Teacher	Girls	0	0	62.8	20.9	16.3	3.53 (.77)
Nurse	Boys	0	2.1	47.9	12.5	37.5	3.85 (.97)
	Girls	0	0	51.2	30.2	18.6	3.67 (.78)

Gender Differences in Reward Allocation 61

Perfume	Boys	0	2.1	25	16.7	56.3	4.27 (.92)
Salesperson	Girls	0	2.4	14.6	17.1	65.9	4.46 (.84)

Table 2. Frequencies, Means and Standard Deviations of Children's Responses to Adult

Pay Measure

Occupation Adult Payment	Gender	All Boys (%)	Mostly Boys (%)	Both (%)	Mostly Girls (%)	All Girls (%)	M (SD)
Farmer	Boys	13.00	19.60	67.40	0	0	2.54 (.72)
	Girls	16.70	26.20	50.00	4.80	2.40	2.50 (.92)
Security Guard	Boys	31.30	29.20	37.50	0	2.10	2.13 (.94)
	Girls	19.00	28.60	50.00	2.40	0	2.36 (.82)
Kindergarten Teacher	Boys	4.20	0	56.30	20.80	18.80	3.50 (.95)
	Girls	2.40	0	57.10	23.80	16.70	3.52 (.86)
Nurse	Boys	10.90	0	39.10	21.70	28.30	3.57 (1.22)
	Girls	4.70	4.70	44.20	27.90	18.60	3.51 (1.01)

Table 3. Frequencies, Means and Standard Deviations of Children's Responses to
Children's Projected Earnings

Project Earning as Adults (Gender of the Child compared with Other Men/Women)	Less %	Same %	More %	M (SD)
Boy Child – Projected Earning compared to other Men	11.1	60	28.9	2.18 (.61)
Boy Child – Projected Earning compared to other Women	17.8	40	42.2	2.24 (.74)
Girl Child – Projected Earning compared to other Men	2.5	57.5	40	2.38 (.54)
Girl Child – Projected Earning compared to other Women	2.4	73.2	24.4	2.22 (.47)
Total Children – Projected Earning compared to other Men	7.1	58.8	34.1	2.27 (.59)
Total Children – Projected Earning compared to other Women	10.5	55.8	33.7	2.23 (.63)

Table 4 Frequencies, Means and Standard Deviations of Children's Responses to Affect
for Household Chore Measure

Gender of Experimenter /Gender of Child	Household chore	Affect					M (SD)
		Very Sad %	Sad %	Neutral %	Happy %	Very Happy %	
Male	Make Bed	5.3	42.1	21.1	26.4	5.3	3.02(1.05)
Experimenter	Set Table	26.4	26.3	47.4	0	0	2.47 (.82)
/ Boy Child	Laundry	21	36.9	26.3	15.8	0	2.50 (.99)
	Dishes	31.6	26.3	36.9	5.3	0	2.39 (.95)
	Tidy Toys	15.8	31.6	52.7	0	0	2.57 (.80)
Male	Make Bed	0	19	76.2	4.8	0	2.95 (.44)
Experimenter	Set Table	0	19	57.1	19.1	0	3.21 (.75)
/ Girl Child	Laundry	9.5	47.6	38.1	0	4.8	2.64 (.79)
	Dishes	4.8	14.3	57.1	23.8	4.8	3.14 (.78)
	Tidy Toys	9.6	38.1	42.8	9.5	0	2.64 (.79)
Female	Make Bed	13.8	31	48.3	6.8	0	2.67(.84)
Experimenter	Set Table	3.4	20.7	27.6	37.9	10.3	3.39(.98)
/	Laundry	20.7	48.2	17.2	6.9	6.9	2.43(1.09)
Boy Child	Dishes	7.2	28.6	57.1	3.6	3.6	2.89 (.83)
	Tidy Toys	17.9	17.8	42.8	14.3	7.1	2.95 (1.2)
Female	Make Bed	13.6	40.9	36.4	4.5	4.5	2.61 (.94)
Experimenter	Set Table	22.7	13.6	45.4	18.2	0	2.80(1.12)
/	Laundry	22.7	31.8	40.9	4.5	0	2.41 (.92)

Gender Differences in Reward Allocation 65

Girl Child	Dishes	18.1	40.9	32.8	9	0	2.48 (.92)
	Tidy Toys	14.3	38.1	42.9	4.8	0	2.57 (.78)

Table 5. Frequencies, Means and Standard Deviations of Children's Responses to Quarter
Reward for Household Chore Measure

Child in story/Chore	Quarters						M (SD)
	0 (%)	1 (%)	2 (%)	3 (%)	4 (%)	5 (%)	
boy /make bed	9.9	20.9	28.6	17.6	13.2	9.9	2.33 (1.45)
girl/make bed	8.8	23.1	22	19.8	15.4	11	2.42 (1.49)
boy/laundry	1.1	4.4	4.4	20.9	27.5	41.8	3.95 (1.18)
girl/laundry	4.4	8.8	9.9	16.5	24.2	36.3	3.56 (1.49)
boy/tidy toys	7.7	17.6	15.4	20.9	18.7	19.8	2.85 (1.59)
girl/tidy toys	8.9	17.8	25.6	14.4	22.2	11.1	2.57 (1.51)
boy/dishes	4.4	7.7	18.7	23.1	23.1	23.1	3.22 (1.42)
girl/dishes	4.4	12.2	14.4	18.9	22.2	27.8	3.26 (1.53)
boy/set table	3.3	8.8	15.4	27.5	26.4	18.7	3.21 (1.34)

Gender Differences in Reward Allocation 67

girl/set table	4.4	17.8	20	25.6	21.1	11.1	2.74
							(1.39)

Table 6. Means and Standard Deviations of Children's Responses for Toy Rewards for
Self and Other

Gender of Child	Toys for Self with Female Experimenter M (SD)	Toys for Other with Female Experimenter M (SD)	Toys for Self with Male Experimenter M (SD)	Toys for Others with Male Experimenter M (SD)
Boy Child	3.34 (2.19)	2.70 (2.05)	2.47 (1.22)	2.12 (1.05)
Girl Child	4.05 (3.97)	3.45 (1.82)	2.19 (1.67)	2.09 (1.18)

Appendix A

Informed Consent Letter

Date

Dear Parent,

As part of an ongoing investigation of children's understanding of stereotypes, we would like to invite you to participate in a project which looks at children's understanding of gender stereotypes and money. We ask for your participation and for permission to include your child in this research project. This research project entitled "Gender differences and the role of allowance in reward allocation among boys and girls" is being conducted by Sarah Clift, a psychology masters student under the supervision of Dr. Eileen Wood in the Psychology Department at Wilfrid Laurier University in Waterloo Ontario. We are investigating whether young children are aware of gender stereotypes in different occupations and whether children use gender stereotypes and receiving an allowance to help them to decide how much someone should be paid for completing a task.

We would like to ask your child to participate in our study to see if children's early understanding of stereotypes is related to their understanding of pay or reward for performing a task. To examine this question each child will be asked to complete five tasks with one researcher in a familiar area within the school/camp/church. The tasks will take approximately 20 to 30 minutes to complete. If you agree to participate in this project you will be asked to complete a brief questionnaire (see attached). The questionnaire takes approximately 10 minutes to complete regarding your thoughts on the subject of allowance or pocket-money. You can be mail the questionnaire back to the researcher (please see attached envelope).

Participation in this study is completely voluntary. You or your child may decline to participate and withdraw from the study at any time. If you or your child choose to withdraw, all data about you and your child will be destroyed and not used in our analyses. The data collected from this study will be completely anonymous. There will be no reference to you or your child's name or any identifying piece of information. All data will be coded with a number and will be stored in a locked research lab at the University. When the research findings of this project are reported only group numerical scores will be provided. There are no foreseeable risks to you or your child in participating in this study and at the end of your child's participation in this study they will get to select a reward in the form of a small toy or trinket for themselves for their participation. The information collected will contribute greatly to our understanding of the development of social and economic equity among children.

If you have questions at any time about this research study or the procedures, or experience any adverse affects related to you participation in this study, you may contact the researcher Sarah Clift by email or contact Dr. Eileen Wood at Wilfrid Laurier University at 884-1970 extension 3738. This project has been reviewed and approved by the University Research Board. If you feel that you have not been treated according to the descriptions in this form, or your rights as a participant have been violated during the course of this project you may contact Dr. Bill Marr, Chair, University Research Ethics Board, Wilfrid Laurier University, (519) 884-0710, extension 2468.

Eileen Wood Ph.D.

Sarah Clift H.B.A

Project Title: "Gender differences and the role of allowance in reward allocation among boys and girls"

Faculty Researcher: Dr. Eileen Wood, Department of Psychology
Wilfrid Laurier University

Student Researcher: Ms. Sarah Clift, Masters Student
Wilfrid Laurier University

I agree to allow my child (Print child's name)
_____ to participate in the study listed above.

I do not agree to allow my child (Print child's name)
_____ to participate in the study listed above.

I (Parent's name _____) agree to complete the attached survey

Parent's Signature: _____ Date _____

A copy of the summary of our findings will be sent to the principal of your child's school so that it can be posted for you to review. If you would like a personal copy of the summary, please fill in your information below we would be happy to send a copy to you. If you would like a more detailed description of the study, or the data collection, a detailed description will be posted at your school for you to review.

Name (Please Print): _____

Address: _____

Appendix B

Parent's Survey: Please circle or write in your answer.

Name of your child: _____		
Your child's date of birth:		
(Month) _____	(Day) _____	(Year) _____
Gender of your child:	Male	Female
Your gender:	Male	Female
Your age in years: _____		
Your relationship to your child: _____		
Your highest level of education: Please check one		
<input type="checkbox"/> Elementary to grade 8		
<input type="checkbox"/> Some high school		
<input type="checkbox"/> Completed high school		
<input type="checkbox"/> High school plus some post secondary		
<input type="checkbox"/> College Diploma		
<input type="checkbox"/> Undergraduate Degree		
<input type="checkbox"/> Masters Degree		
<input type="checkbox"/> Doctorate Degree		
Your occupation: _____		
Spouse/Partner's occupation if applicable: _____		
Your marital status: Please check one		
<input type="checkbox"/> Married		
<input type="checkbox"/> Single		
<input type="checkbox"/> Divorced		
<input type="checkbox"/> Separated		
<input type="checkbox"/> Common-law		
<input type="checkbox"/> Widowed		
Number of children in your family living in the house: _____		

Child (oldest to youngest)	Child 1	Child 2	Child 3	Child 4	Child 5	Child 6
Is receiving allowance dependent upon completing chores? If yes, please describe the chores.	Yes No Chores:	Yes No Chores:	Yes No Chores:	Yes No Chores:	Yes No Chores:	Yes No Chores:
How important is it to this child that they receive an allowance?	1=not 2 3 4 5 6 7=very	1=not 2 3 4 5 6 7=very	1=not 2 3 4 5 6 7=very	1=not 2 3 4 5 6 7=very	1=not 2 3 4 5 6 7=very	1=not 2 3 4 5 6 7=very
Are there additional ways that this child can earn money in your house?	Yes No	Yes No	Yes No	Yes No	Yes No	Yes No
Does your child earn extra money outside the house?	Yes No	Yes No	Yes No	Yes No	Yes No	Yes No

2) Do your children receive their allowance from the same person each time they get it? Please check one:

- Yes
- No
- Varies across children

b. If yes, who gives the allowance to your children?

- c. If no, who are the people who give the allowance to the children and how is it decided who will give the allowance to the children?

- 3) Do you have any rules regarding what children can use their allowance for?

Yes No

- a. If yes, what are the important lessons that you want your children to learn by receiving or not receiving an allowance? (Please describe below)

- 3) What are the important factors on deciding how much allowance a child should receive? (1 = not important, 7 = very important)

Age	(not very)	1	2	3	4	5	6	7
Type of chore/work	(not very)	1	2	3	4	5	6	7
Effort	(not very)	1	2	3	4	5	6	7
Gender	(not very)	1	2	3	4	5	6	7
Quality of work done	(not very)	1	2	3	4	5	6	7

Please feel free to comment on any of the above:

- 4) Some parents do not believe in allowance. We would like to know more about why parents make that decision. Please share your thoughts with us about this important issue:

Appendix C

Verbal Protocols for Child Participants

Invitation to child to participate.

Gender _____ Grade _____ Age _____ Researcher's Gender _____ Parent ID _____

A. My name is _____. I am a student like you but I am going to school at the University. I am learning about children. I am hoping that you will help me to learn more about children by answering some questions for me. Ok? It is up to you if you want to answer my questions—you do not have to answer them. We can stop at any time if you want. Just let me know if you don't want to answer a question or you want to stop, OK?

First of all I am going to show you some pictures of people. (Layout the illustration of people)

(Instructions counterbalanced for presentation of gender across participants).

These people are in groups, and this group (point to group) is made up of all girls. This group is made up of mostly girls, and this group is made up of all boys, and this group is made up of mostly boys and this group is made up of an equal number of both boys and girls.

If I asked you “which group of people would play on the climber at recess?” which group of people would you point to? (Assume they point to all boys or all girls - so ONLY boys can play on the climber? (If girl points to boys, so YOU never play on the climber?))

(To confirm understanding) “Which group of people would play with Barbies?” (Once feel confident they grasp it) I am going to tell you about a job, and I want you to think about them, and then point to the group of people that you think can do the job.

1. Who can be a construction worker?

All Boys Mostly Boys Both Mostly Girls All Girls

2. Who can be a nurse?

All Boys Mostly Boys Both Mostly Girls All Girls

3. Who can be a security guard?

All Boys Mostly Boys Both Mostly Girls All Girls

4. Who can be a perfume salesperson?

All Boys Mostly Boys Both Mostly Girls All Girls

5. Who can be a letter carrier?

All Boys Mostly Boys Both Mostly Girls All Girls

6. Who can be a flight attendant?

All Boys Mostly Boys Both Mostly Girls All Girls

7. Who can be a sports referee?

All Boys Mostly Boys Both Mostly Girls All Girls

8. Who can be a kindergarten teacher?

All Boys Mostly Boys Both Mostly Girls All Girls

9. Who can be a farmer?

All Boys Mostly Boys Both Mostly Girls All Girls

10. Who can be a librarian?

All Boys Mostly Boys Both Mostly Girls All Girls

(Instructions counterbalanced for presentation of gender scale items across participants)

We are going to use our same scale again but this time we are going to use it for adults. So this is all women, this is mostly women, this is equal men and women, this is mostly men and this is all men. Now if I told you that an adult man and an adult woman both had a job as a farmer, could you tell me about how much money they get paid? Would the man get paid more than the woman as a farmer, would men mostly get paid more, would the woman get paid more than the man as a farmer, would women mostly get paid more, or would they get paid the same?

And if I told you that an adult man and an adult woman both had a job as a nurse, could you tell me how much they get paid? Would the man get paid more than the woman as a nurse, would men mostly get paid more, would the woman get paid more than the man as a nurse, would women mostly get paid more, or would they get paid the same?

And if I told you that an adult man and an adult woman both had a job as a security guard, could you tell how much they get paid? Would the man get paid more than the woman as a security guard, would men mostly get paid more, would the woman get paid more than the man as a security guard, would women mostly get paid more, or would they get paid the same?

And if I told you that an adult man and an adult woman both had a job as a kindergarten teacher, could you tell me how much they get paid? Would the man get paid more than the woman as a kindergarten teacher, would men mostly get paid more, would the woman get paid more than the man as a kindergarten teacher, would women mostly get paid more, or would they get paid the same?

B. Now I would like to show you some more pictures. Here are some pictures of a

face that is very happy, kind of happy, neither happy nor sad, just okay, and one that is kind of sad and one that is very sad. Can you show me the very happy face? Can you show me the very sad face? Can you show me the one that is neither happy nor sad, but just okay?

If you had just gotten a birthday present that you really wanted, what face would you make? If you hurt yourself while you were playing outside which face would you make? And if you were just watching TV. What face would you make?

Now I am going to read you some stories and you can show me the way that each boy or girl would feel about doing the chores.

1. Jacob's mommy would like Jacob to make his bed in the morning. How do you think Jacob feels about making his bed in the morning? 1 2 3 4 5
2. Sarah's daddy would like Sarah to set the table for dinner. How do you think Sarah feels about setting the table for dinner? 1 2 3 4 5
3. Matthew's daddy would like Matthew to help fold and put away the laundry. How do you think Matthew feels about folding and putting away the laundry? 1 2 3 4 5
4. Tracey's mommy would like Tracey to bring the dishes from the table to the kitchen after dinner. How do you think Tracey feels about helping mommy bring the dishes to the kitchen after dinner? 1 2 3 4 5
5. Michael's mommy would like Michael to tidy up his toys after he is finished playing. How do you think Michael feels about tidying up his toys after he is finished playing? 1 2 3 4 5
6. Jillian's daddy would like Jillian to help fold and put away the laundry. How do you think Jillian feels about folding and putting away the laundry? 1 2 3 4 5
7. Tommy's daddy would like Tommy to bring the dishes from the table to the kitchen after dinner. How do you think Tommy feels about helping mommy bring the dishes to the kitchen after dinner? 1 2 3 4 5
8. Laura's mommy would like Laura to tidy up her toys after she is finished playing. How do you think Laura feels about tidying up her toys after she is finished playing? 1 2 3 4 5
9. Alexander's mommy would like Alexander to set the table for dinner. How do you think Alexander feels about setting the table for dinner? 1 2 3 4 5

10. Becky's daddy would like Becky to make her bed in the morning. How do you think Becky feels about making her bed in the morning? 1 2 3 4 5

Now I would like to show you these coins (Lay out different coins)
Here is a penny, a nickel, a dime, a quarter and a loonie?

- Can you point to the penny?
- Can you point to the nickel?
- Can you point to the dime?
- Can you point to the quarter?
- Can you point to the loonie?

Can you show me which coin is worth the most amount of money? Can you show me which coin is worth the least amount of money? Can you tell me how much these two coins added together are? (dime and quarter)

Now I would like to show you these groups of quarters. Here are no quarters, there is one quarter in this group, there are three quarters in this group and here there are five quarters in this group.

Can you show me which group has the biggest number of quarters? Can you show me the group with nothing? Can you show me the group with the smallest number of quarters?

Can you show me the group that is just in the middle and does not have the biggest or smallest number of quarters?

Sometimes when dogs do tricks we give them treats. If these quarters were dog treats, how many treats would you give to a dog that did one trick? How many quarters would you give to a dog that did three more tricks? And how about if he did not do any tricks?

C. Now I am going to read you the same stories and you can answer the questions by pointing to the number of quarters in the picture.

1. Jacob's mommy would like Jacob to make his bed in the morning. How many quarters do you think Jacob should get for making his bed in the morning?
If you don't think Jacob should be paid for doing the chore pick the 0, if he should get a little pick the 1, if he should get paid a huge amount pick 5, and if he should get some but not a lot pick 3. 0 1 2 3 4 5
2. Sarah's daddy would like Sarah to set the table for dinner. How many quarters should Sarah get for setting the table for dinner? If you don't think Sarah should be paid for doing the chore pick the 0, if he should get a little pick the 1, if

- he should get paid a huge amount pick 5, and if he should get some but not a lot pick 3. 0 1 2 3 4 5
3. Matthew's daddy would like Matthew to help fold and put away the laundry. How many quarters do you think Matthew should get for helping fold and put away the laundry? If you don't think Matthew should be paid for doing the chore pick the 0, if he should get a little pick the 1, if he should get paid a huge amount pick 5, and if he should get some but not a lot pick 3. 0 1 2 3 4 5
 4. Tracey's mommy would like Tracey to bring the dishes from the table to the kitchen after dinner. How many quarters do you think Tracey should get for helping mommy bring the dishes to the kitchen after dinner? If you don't think Tracey should be paid for doing the chore pick the 0, if he should get a little pick the 1, if he should get paid a huge amount pick 5, and if he should get some but not a lot pick 3. 0 1 2 3 4 5
 5. Michael's mommy would like Michael to tidy up his toys after he is finished playing. How many quarters do you think Michael should get for tidying up his toys after he is finished playing? If you don't think Michael should be paid for doing the chore pick the 0, if he should get a little pick the 1, if he should get paid a huge amount pick 5, and if he should get some but not a lot pick 3. 0 1 2 3 4 5
 6. Jillian's daddy would like Jillian to help fold and put away the laundry. How many quarters do you think Jillian should get for folding and putting away the laundry? If you don't think Jillian should be paid for doing the chore pick the 0, if he should get a little pick the 1, if he should get paid a huge amount pick 5, and if he should get some but not a lot pick 3. 0 1 2 3 4 5
 7. Tommy's daddy would like Tommy to bring the dishes from the table to the kitchen after dinner. How many quarters do you think Tommy should get for helping mommy bring the dishes to the kitchen after dinner? If you don't think Tommy should be paid for doing the chore pick the 0, if he should get a little pick the 1, if he should get paid a huge amount pick 5, and if he should get some but not a lot pick 3. 0 1 2 3 4 5
 8. Laura's mommy would like Laura to tidy up her toys after she is finished playing. How many quarters do you think Laura should get for tidying up her toys after she is finished playing? If you don't think Laura should be paid for doing the chore pick the 0, if he should get a little pick the 1, if he should get paid a huge amount pick 5, and if he should get some but not a lot pick 3. 0 1 2 3 4 5
 9. Alexander's mommy would like him to set the table for dinner. How many quarters do you think Alexander should get for setting the table for dinner? If you

don't think Alexander should be paid for doing the chore pick the 0, if he should get a little pick the 1, if he should get paid a huge amount pick 5, and if he should get some but not a lot pick 3. 0 1 2 3 4 5

10. Becky's daddy would like Becky to make her bed in the morning. How many quarters do you think Becky should get for making her bed in the morning? If you don't think Becky should be paid for doing the chore pick the 0, if he should get a little pick the 1, if he should get paid a huge amount pick 5, and if he should get some but not a lot pick 3. 0 1 2 3 4 5

I just listed these chores:

Making the bed in the morning
Tidying toys
Helping to set the table for dinner
Bringing the dishes to the kitchen
Folding and putting away the laundry

Can you point to the chore that you think is the hardest chore to do?
Can you point to the chore that you think is the easiest chore to do?

If you had to do one of these chores in your house, which one would you pick? Why?

Can you use the scales we used for the other children to tell me how you feel when you are asked to do the chore?

Can you use this scale to tell me how much you think that you should get for doing it?

D. 1) Do you do any chores in your house? (Are you asked to help out around the house)

If yes, Which chores?

Are there any other chores or things you do to help around the house?

Can you use the scales we used for the other children to tell me how you feel when you are asked to do the chore (go through each chore the child has listed)?

Can you use this scale to tell me how much money you think that you should get for doing it?

Which of the chores (list the child's list of chores) would you say is the hardest chore you are asked to do?

If no, Imagine the chores that you might be asked to do around your house. What would it be?

- 1) Do you get money for doing these chores or jobs? (OR do you think you would get money if you did chores or jobs ?) Yes No
- 2) How much money do you get? (How much money do you think you would get?)
- 3) Who (would give) gives you the money?
- 4) Do you receive pocket money or an allowance from your parents? (Explain allowance) Yes No
 - a. Does the same person always give you the money?
 - b. How often do you get this money?
 - c. How much money do you get?
- 5) Can you get more allowance or pocket money in your house if you wanted it?
Yes No
 - a. If yes, is there anything you need to do to get more money? (More chores, ask for it?)
- 6) Do you know if any other children in your class receive an allowance from their parents?
- 7) How much allowance do you think the girls in you class get?
- 8) How much allowance do the boys in your class get?
- 9) Do you have a sister or brother?

10) If yes, does s/he or they get an allowance?

11) Does s/he or they get more money than you less money or the same as you?

12) (If different, why?)

13) When you grow up and have a job will how much money will you make compared to other adults? More money than men, same money as men, less money than men. More money than women, same money as women, less money than women

E. I would like to give you something for coming and helping me today. Here are a few things that you can choose from. I know you did a lot of work and worked really hard. Thank you for doing that. So here are some things that you can choose from. Please take any of these things that you think you deserve for coming and helping me today.

Prompt: Is that all?

of toys: _____

Type of toy(s) _____, _____, _____
_____, _____, _____

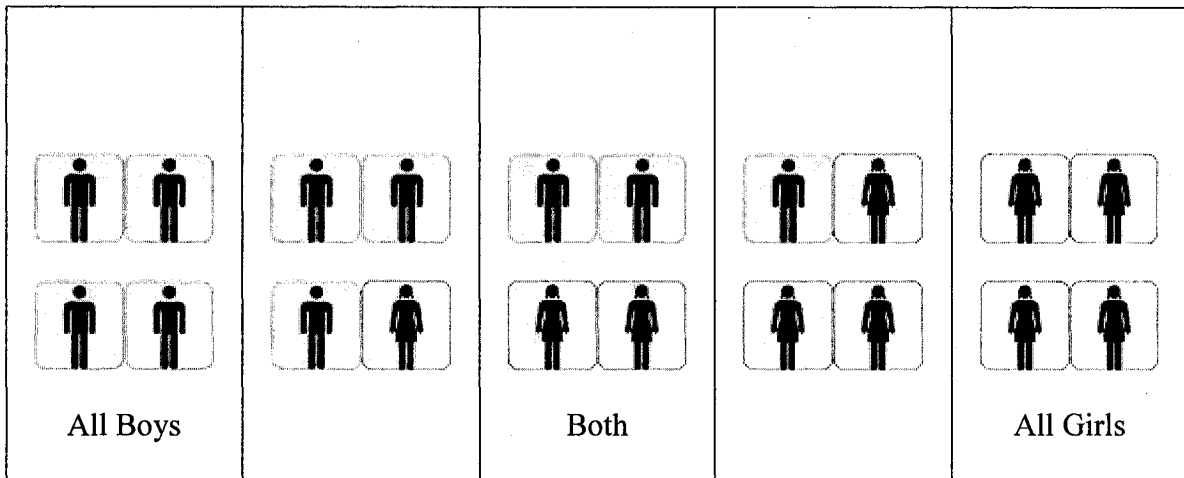
The child to help me with this study is a little (boy/girl) the same age as you. Could you pick out what you think that (boy/girl) deserves to get for helping me do the same tasks that you just did?

of toy(s) _____

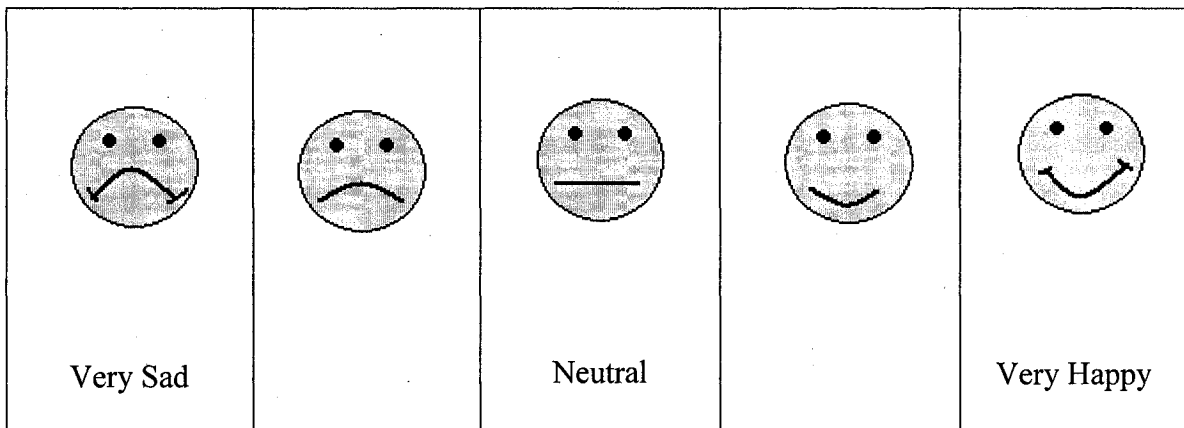
Type of toy(s) _____, _____, _____
_____, _____, _____

Appendix D

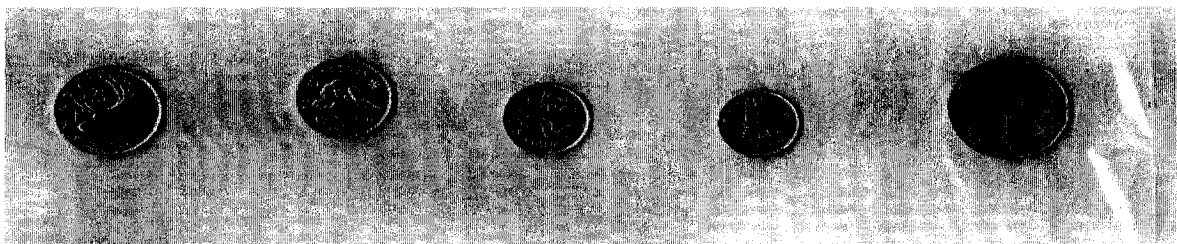
All Scales



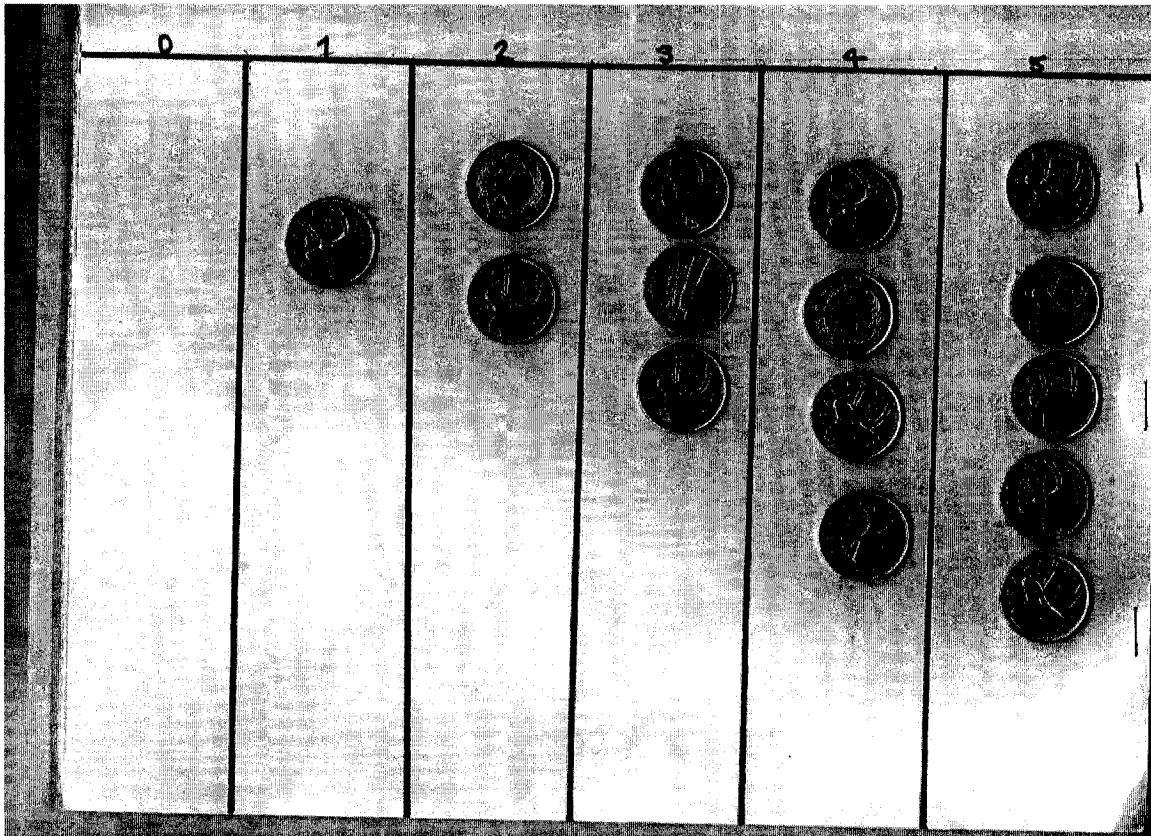
Gender Scale



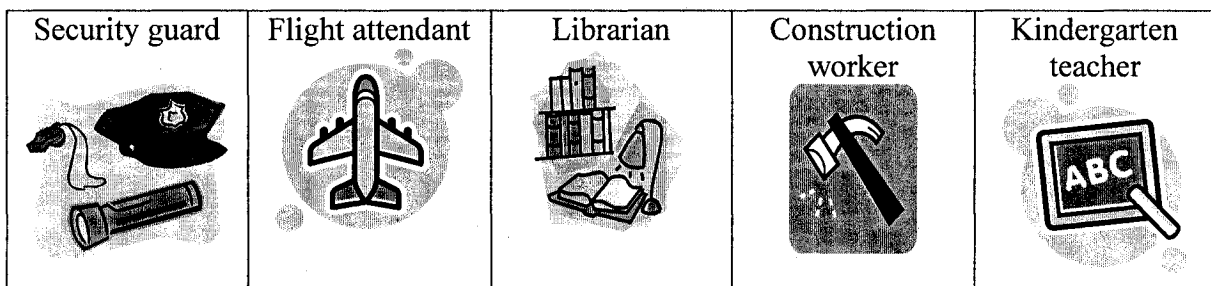
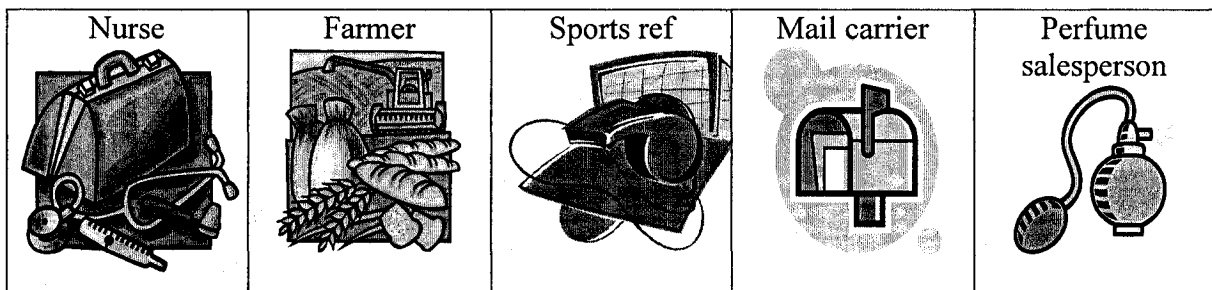
Affect Scale



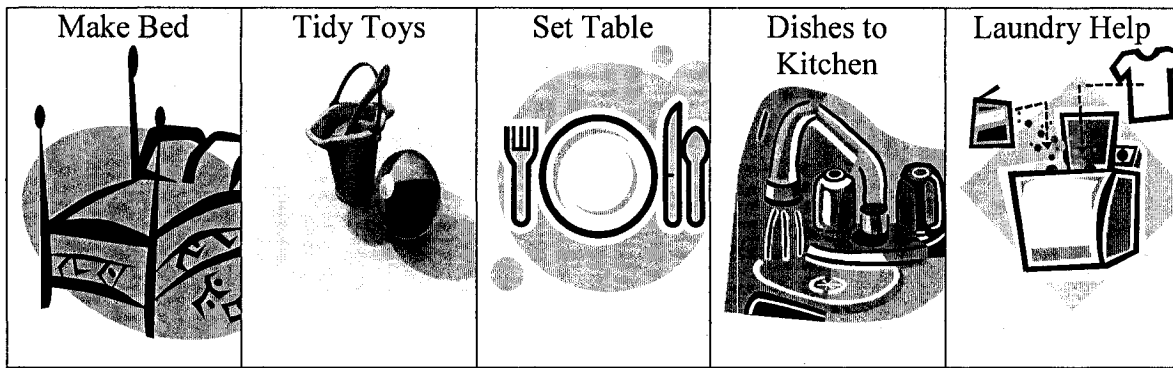
Coin Scale



Quarter Scale



Job Pictures



Chore Pictures

Appendix E

Job and Salaries from Statistics Canada 2001 Census Data

Occupation	Job Future	LMI - KW area
	Average wage per hour	Average wage per hour
Nurse	\$23.07	\$28.75
Farmer	\$10.01	\$13.15
Librarian	\$20.15	\$23.1
Perfume salesperson	\$10.22	\$9.9
Sports referee	\$11.18	no information
Flight attendant	\$13.41	no information
Mail carrier	\$14.52	\$20.5
Construction worker	\$20.93	\$22.15
Kindergarten teacher	\$24.43	\$26.25

Appendix F

Toy Rewards

Toy Inventory	Girl Toys				Boy Toys				Toys for Both			
	adult f	adult m	child f	child m	adult f	adult m	child f	child m	adult f	adult m	child f	child m
Finger puppet					4	2	3	2	3	3	2	3
Whoopee cushion					5	3	4	3	2	2	1	2
Finger skateboard					6	3	5	4	1	2		1
Toy car					5	3	5	4	2	2		1
Sports eraser					2	3	3	5	4	2	2	
Plastic tiara	7	5	5	5								
Sticker album	7	5	4	4							1	1
Fluffy pencil	7	4	3	2						1	2	3
Princess set	7	5	5	5								
Rhinestone bracelet	7	5	5	5								
Disney rulers									7	5	5	5
Bubbles									7	5	5	5
Blackboard set									7	5	5	5
Silly putty									7	5	5	5
Pez dispenser							1		7	5	4	5
Bouncy balls									7	5	5	5
Harmonica									7	5	5	5
Lego set					4	5	4	5	2		1	
Pokémon cards					5	5	4	4	1	5	1	1
Sizzlers					5	5	3	4	1		2	1

Appendix G

Analysis Using Truncated Scales

Three of the measures were also analyzed using a more liberal 3 point scale instead of the 5 point scale as used in the analyses reported in the current results section. In past studies (e.g., Anderson, 2003; Taylor, 2002) a 3 point scale was used with younger preschool-aged children because very young children find it challenging to use a more differentiated scale. Given that most of the children in the present study were much older the more extensive scale was deemed more suitable, however, analyses were conducted on truncated scores to allow for more direct comparisons with the findings from younger children.

Children's Responses to the Traditionally Stereotyped Adult Occupation Measure

The occupation stereotype measure was analyzed using a three point scale rather than the more conservative five point scale where 1 represented boys, 2 represented both and 3 represented girls. Mean scores are presented in the table below. One 2 (male/female occupation) X 2 (gender of child) X 2 (experimenter gender) X ANOVA was conducted. There were no significant effects, the largest $F(1, 89) = 1.1, p = .30$ for child gender, nor were there any significant interactions, the largest F was $(1, 89) = 1.83, p = .18$, for gender by experimenters gender.

The two occupations that were uniformly stereotyped (perfume salesperson and construction worker) were examined using a 3 point scale. A 2 (male/female stereotyped occupation) X 2 (gender of child) X 2 (experimenter gender) repeated measures ANOVA was conducted. There were no significant main effects, largest $F(1, 85) = 0.29, p = .59$ for child's gender, however there was a significant interaction $F(1, 85) = 6.48, p = .013$ for

male/female stereotyped occupation by experimenter's gender. For the occupation of perfume salesperson, when tested by a female the mean was 2.82 ($SD=.39$), however when tested by a male the mean was 2.66, ($SD=.58$). For the occupation of construction worker when tested by a female the mean was 1.22 ($SD=.42$), however when tested by a male the mean was 1.42 ($SD=.55$). These results are consistent with the findings using the 5 point scale in that children's answers tended to be more polarized and answer with a more extreme score when tested by a female experimenter, then when tested by a male experimenter (see Table 7).

Table 7. Truncated Frequencies, Means and Standard Deviations of Children's Responses to Adult Stereotype Occupation Measure

Occupation Adult Stereotype	Gender of Child	Boys %	Both %	Girls %
Construction Worker	Boys	62.5	37.5	0
	Girls	81.4	16.3	2.3
Sports Referee	Boys	48	20	2.1
	Girls	76.8	23.3	0
Farmer	Boys	45.8	54.2	0
	Girls	62.8	34.9	2.3
Security Guard	Boys	58.4	41.7	0
	Girls	41.9	55.8	2.3
Mail Carrier	Boys	25	68.8	6.3
	Girls	41.9	53.5	4.7
Flight Attendant	Boys	25	64.6	10.4
	Girls	9.3	86	4.6
Librarian	Boys	4.2	64.6	31.3
	Girls	4.6	55.8	39.5
Kindergarten Teacher	Boys	0	52.1	47.9
	Girls	0	62.8	37.2
Nurse	Boys	2.1	47.9	50
	Girls	0	51.2	48.8
Perfume	Boys	2.1	25	73

Salesperson	Girls	2.4	14.6	83
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Children's responses to the Traditionally Stereotyped Adult Jobs – Pay Measure

The occupation payment measure was analyzed using a three point scale rather than the more conservative five point scale where 1 represented that boys would be paid more, 2 represented both would be paid the same and 3 represented girls would be paid more. One repeated measures 2 (gender of child) X 2 (experimenter gender) X 2 (gender of pay recipient) ANOVA was conducted. There was a significant main effect for gender of pay recipient $F(1, 81) = 98.44, p = 0.000$. The mean for men $M = 1.55 (SD = .43)$, and the mean for women was $M = 2.39 (SD = .46)$. Such that men and women were compensated differently for work depending on their gender. There were no significant interactions, and the largest F for interactions was $F(1, 81) = 2.39, p = .13$ for pay recipient by experimenters gender. This is consistent with the earlier findings using the 5 point scale (see Table 8).

Table 8. Truncated Frequencies, Means and Standard Deviations of Children's Responses to Adult Pay Measure

Occupation Adult Payment	Gender	Boys %	Both %	Girls %
Farmer	Boys	32.6	67.40	0
	Girls	42.9	50.00	7.2
Security Guard	Boys	60.5	37.50	2.1
	Girls	47.6	50.00	2.4
Kindergarten Teacher	Boys	4.2	56.30	39.6
	Girls	2.4	57.10	40.5
Nurse	Boys	10.9	39.10	50
	Girls	9.4	44.20	46.5

Children's Responses to the Chore Measure – Affect Scale

The chore affect measure was analyzed using 3 point scale as opposed to the more conservative 5 point scale, where 1 represented sad, 2 represented neutral and 3 represented happy. A repeated measures 2 (affect of boy/girl performing chore) X 2 (gender of the child) X 2 (experimenters gender) ANOVA was conducted. There were no significant main effects, largest $F(1, 84) = 3.63$ $p = .06$ for affect of boy/girl performing chore, however there was a significant interaction of $F(1, 84) = 5.04$, $p = .027$ for gender of the child by gender of the experimenter. Means for boys with a male experimenter ($M = 1.76$ $SD = .42$) and with a female experimenter ($M = 1.93$ $SD = .42$). Means for girls with a male experimenter ($M = 1.94$, $SD = .35$) and with a female experimenter ($M = 1.71$, $SD = .47$). Therefore, using this scale children still tend to answer that the child performing the chore in the story is happier with an experimenter of the opposite gender, than with an experimenter of the same gender (see Table 9). Overall, the results obtained using a more liberal 3 point scale follow the same patterns as the earlier results obtained using the 5 point scale.

Table 9. Truncated Frequencies, Means and Standard Deviations of Children's Responses to Affect for Household Chore Measure

Gender of Experimenter / Gender of Child	Household chore	Sad %	Neutral %	Happy %
Male Experimenter / Boy Child	Make Bed	47.4	21.1	31.7
	Set Table	52.7	47.4	0
	Laundry	57.9	26.3	15.8
	Dishes	57.9	36.9	5.3
	Tidy Toys	47.4	52.7	0
Male Experimenter	Make Bed	19	76.2	4.8
	Set Table	19	57.1	19.1

Gender Differences in Reward Allocation 93

/ Girl Child	Laundry	57.1	38.1	4.7
	Dishes	19.4	57.1	28.6
	Tidy Toys	47.7	42.8	9.5
Female Experimenter	Make Bed	44.8	48.3	6.8
	Set Table	24.1	27.6	48.2
	Laundry	68.9	17.2	13.8
/ Boy Child	Dishes	35.8	57.1	7.2
	Tidy Toys	35.7	42.8	21.4
	Make Bed	54.5	36.4	9
Female Experimenter	Set Table	36.3	45.4	18.2
	Laundry	54.5	40.9	4.5
	Dishes	59	32.8	9
/ Girl Child	Tidy Toys	52.4	42.9	4.8