Relations Between Maternal and Adolescent Values and Beliefs: Gender Differences and Implications for Occupational Choice.

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Abstract

It has been demonstrated that self perceptions of abilities and values may account for some of the observed sex differences in occupational preference and subsequent occupational choice (e.g., Jozefowicz, Barber, & Eccles, 1992). This paper moves beyond these established differences by examining how individual differences in these values and self perceptions may be formed. Data were collected as part of a longitudinal examination of adolescent development (Michigan Study of Adolescent Life Transitions - MSALT). The study began in 1983 when students were in the sixth grade. Extensive survey data assessing a broad range of attitudes, values, and beliefs were collected during the spring and fall of the students sixth and seventh grade years. Parents and teachers of these students also filled out surveys. A subsample of these students were followed up in the spring of 1988 (Wave 5). Three hundred and ninety-five of the 1200 students surveyed at Wave 5 had mothers who also filled out surveys. The sample in the present study consisted of 384 mother-adolescent pairs from 8 predominately white, lower-middle to middle class school districts. Results obtained from 4 MANOVA analyses revealed that the males and females in this sample differed significantly on a number of self perceptions skills and values. Mothers of males and mothers of females did not differ in their reported personal values or the job characteristics they preferred for their adolescents. In contrast, mothers of males and mothers of females did differ significantly in their perceptions of their adolescents' skills and potential efficacy in jobs (all obtained differences were in gender-stereotyped directions). Finally, the pattern of relations between mothers and sons and mothers and daughters were similar, although the strength of some the relations did differ by gender.

Introduction

Gender differences in work and family values, self perceptions of skills and abilities, and occupational aspirations have been proposed as mediators of gender differences in occupational behavior (e.g., Marini, 1978; Eccles. Adler, Futterman, Goff, Kaczala, Meece, & Midgley, 1983; Eccles & Hoffman, 1984; Eccles, 1987). For instance Jozefowicz, Barber, & Eccles (1992) found that male and female seniors in a predominantly white lower-middle to middle class
sample differed significantly in their expectancies to do well in certain careers, their self perceptions of job-relevant skills, their lifestyle values, their valued future job characteristics, and their occupational aspirations. In turn, these values and self perceptions discriminated between those males and females who aspired to certain careers and those who did not. More specifically, adolescents who expected to be efficacious in certain careers, who felt they possessed particular skills, who valued particular lifestyles, or who valued certain job characteristics tended to prefer occupations consonant with those beliefs and values. These findings exemplify the importance of using both self perceptions of ability and values when investigating gender differences in occupational preference and subsequent occupational choice.

The present study was designed to move beyond the established gender differences in self perceptions of skills, career efficacy, values, and occupational aspirations in order to examine some of the processes by which values and self perceptions may be formed, particularly as they relate to gender. It has been suggested that parents may be influencing adolescent values and self perceptions through their own values and beliefs. These socialization influences can be either direct (e.g., communication) or indirect (e.g., modeling) and may vary based on the gender of the parent and/or the gender of the child (e.g., Eccles (Parsons), Adler, & Kaczala, 1982; Eccles, et al., 1983; Eccles & Hoffman, 1984). The present study takes a preliminary look at the potential influence of maternal values and beliefs on female and male adolescent values and beliefs by examining (a) the potential mean level differences in the values and beliefs of mothers of sons and mothers of daughters and (b) the pattern of relations between adolescent and maternal values and beliefs.

Methods

Study Overview

Data were collected as part of a longitudinal examination of adolescent development (Michigan Study of Adolescent Life Transitions - MSALT). The study began in 1983 when students were in the sixth grade. Extensive survey data assessing a broad range of attitudes, values, and beliefs were collected during the spring and fall of the students sixth and seventh grade years. Parents and teachers of these students also filled out surveys. A subsample of these students were followed up in the spring 1988. Three hundred and ninety-five of the 1200 students surveyed at Wave 5 had mothers who also filled out surveys. The sample in the present study consisted of 3841 mother-adolescent pairs from 8 predominately white, lower-middle to middle class school districts.

Subjects

The sample included 153 mother-son pairs and 191 mother-daughter pairs from 8 lower-middle to middle class school districts in southeastern Michigan. The sample was predominately white (96%). The mean age of the adolescents at the time of the survey was 15 years. Seventy-nine percent of the adolescents' parents were married and living together, 16% of their parents were divorced, 3% of their parents were separated, and 2% fell into other marital categories (e.g., widowed, never married). The median number of siblings living in the adolescents' home (not including the adolescent) was 2. The median level of educational attainment for the mothers in this sample was some college or technical school. The median level family income reported by the mothers was $30,000 to $39,999.

1 11 mother-adolescent pairs were excluded from the analyses because of missing mother (N=4) and missing adolescent (N=7) data.
Measures

Three sets of values and beliefs were assessed using 7-point, Likert-scale items. For the adolescents these included: 1) lifestyle values - values regarding work, competitiveness, relationships, and leadership; 2) valued job characteristics - specific job characteristics adolescents desire in their future occupational settings; and 3) self perception of skills and efficacy in future jobs. For the mothers these included: 1) maternal lifestyle values - values regarding work, competitiveness, and relationships; 2) valued job characteristics for adolescent - specific job characteristics mothers desire in their adolescents' future occupational settings; and 3) perception of adolescents' skills and efficacy in future jobs. Most of the maternal value measures were single items since mothers were not surveyed as extensively about their values as the adolescents were. Each set of items was factor analyzed. Factors obtained from the analyses were further broken down based on theoretical and conceptual grounds. Scale items, alphas, means, and standard deviations are presented in the Appendix (Eccles & Barber, 1991).

Results

In order to reduce the chances of Type I error, multivariate analysis of variance (MANOVA) was used. Values measures were included in one MANOVA and perceptions of skills and future efficacy were included another MANOVA for both adolescent (Table 1) and maternal measures (Table 2). Correlation analyses were conducted in order to examine the relations between maternal and adolescent values and beliefs (Table 3 and Table 4).

Table 1.
Gender Differences in Values and Self Perceptions of Skills and Efficacy in Future Careers.

<table>
<thead>
<tr>
<th>Measures</th>
<th>Females Mean (SD)</th>
<th>Males Mean (SD)</th>
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</thead>
<tbody>
<tr>
<td><strong>Lifestyle Values</strong></td>
<td></td>
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</tr>
<tr>
<td>1. High Status/Competitive</td>
<td>4.6 (1.1)</td>
<td>5.1 (1.0)**</td>
</tr>
<tr>
<td>2. Material Wealth</td>
<td>4.6 (1.5)</td>
<td>5.0 (1.4)*</td>
</tr>
<tr>
<td>3. Risk Taking</td>
<td>4.8 (1.1)</td>
<td>4.9 (1.1)</td>
</tr>
<tr>
<td>4. Careerism</td>
<td>5.4 (1.0)</td>
<td>5.4 (1.0)</td>
</tr>
<tr>
<td>5. Family and Friends Before Job</td>
<td>4.6 (1.2)</td>
<td>4.5 (1.1)</td>
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<tr>
<td>6. Travel Flexibility</td>
<td>4.7 (1.3)</td>
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<tr>
<td><strong>Valued Job Characteristics</strong></td>
<td></td>
<td></td>
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<tr>
<td>1. Challenging/Responsibility</td>
<td>5.6 (1.1)</td>
<td>5.7 (1.0)</td>
</tr>
<tr>
<td>2. People/Society Oriented</td>
<td>5.4 (1.4)</td>
<td>4.4 (1.4)**</td>
</tr>
<tr>
<td>3. High Status/Wealth</td>
<td>6.0 (9)</td>
<td>6.1 (9)</td>
</tr>
<tr>
<td>4. Flexibility to Meet Family Needs</td>
<td>6.0 (1.5)</td>
<td>5.8 (1.5)</td>
</tr>
<tr>
<td>5. Machinery/Manual Work</td>
<td>3.1 (1.4)</td>
<td>3.8 (1.6)**</td>
</tr>
<tr>
<td>6. Math/Computer Work</td>
<td>4.1 (1.4)</td>
<td>4.5 (1.6)*</td>
</tr>
<tr>
<td><strong>Self-Perception of Skills and Efficacy in Future Jobs</strong></td>
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<tr>
<td>1. Independence/Self Confidence</td>
<td>5.2 (1.1)</td>
<td>5.4 (1.0)</td>
</tr>
<tr>
<td>2. Leadership and Supervision</td>
<td>4.8 (1.2)</td>
<td>5.0 (1.2)</td>
</tr>
<tr>
<td>3. Science</td>
<td>3.1 (2.0)</td>
<td>4.9 (1.7)**</td>
</tr>
<tr>
<td>4. Homemaker and Childcare</td>
<td>5.1 (1.5)</td>
<td>3.4 (1.4)**</td>
</tr>
<tr>
<td>5. Working with Others</td>
<td>5.4 (1.1)</td>
<td>4.9 (1.1)**</td>
</tr>
<tr>
<td>6. Mechanical</td>
<td>2.6 (1.4)</td>
<td>4.1 (1.6)**</td>
</tr>
<tr>
<td>7. Creativity</td>
<td>5.1 (1.5)</td>
<td>5.3 (1.3)</td>
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<tr>
<td>8. Intellectual</td>
<td>5.2 (1.3)</td>
<td>5.4 (1.2)</td>
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</tbody>
</table>

*a First MANOVA Set (F=4.976, p<.001); b Second MANOVA Set (F=32.74, p<.001)

Reported gender differences are based on univariate tests of significance *p<.05  **p<.01  ***p<.001.
Adolescent Lifestyle Values

Males valued high status and competition and tended to value material wealth more than females. Females and males did not differ in the value they placed on risk taking, careerism, putting family and friends before work, or travel flexibility.

Adolescent Valued Job Characteristics

Females valued people and society oriented job characteristics more than males. Males valued jobs that involved manual work and work with machinery and tended to value math and computer work more than females. Females and males did not differ in the value they placed on job characteristics involving high status or wealth, challenge or responsibility, or flexibility to meet family needs.

Adolescent Self-Perception of Skills and Efficacy in Future Jobs

Females rated themselves as more skillful than males in the domains of homemaking and childcare and working with others. Males rated themselves as more skillful than females in the domains of science and mechanical skills. Females and males did not differ in their ratings of skills in the domains of leadership and supervision, independence and self confidence, intelligence, or creativity.

Maternal Lifestyle Values and Valued Job Characteristics for Adolescent

Mothers of females and mothers of males did not differ in their reported lifestyle values. Mothers of females and mothers of males did not differ in the job characteristics they valued in their adolescents' future occupations.

Perception of Adolescents' Skills and Efficacy in Future Jobs

Mothers of females rated their adolescent as more skillful in the domains of homemaking and childcare, creativity, and also tended to rate them as more skilled at working with others in comparison to mothers of males.

Table 2.
Values and Perceptions of Adolescents' Skills and Efficacy in Future Careers for Mothers of Females and Mothers of Males.

<table>
<thead>
<tr>
<th>Measures</th>
<th>Mothers of Females Mean (SD)</th>
<th>Mothers of Males Mean (SD)</th>
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</thead>
<tbody>
<tr>
<td><strong>Maternal Lifestyle Values</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1. High Status/Competitive (^a)</td>
<td>3.6 (1.5)</td>
<td>3.5 (1.5)</td>
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<tr>
<td>2. Risk Taking (^a)</td>
<td>3.6 (1.5)</td>
<td>3.7 (1.6)</td>
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<tr>
<td>3. Careerism (^a)</td>
<td>5.7 (1.5)</td>
<td>5.6 (1.3)</td>
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<tr>
<td>4. Family and Friends Before Job(^a)</td>
<td>4.4 (1.4)</td>
<td>4.3 (1.6)</td>
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<tr>
<td>5. Travel Flexibility (^a)</td>
<td>3.7 (1.4)</td>
<td>3.7 (1.3)</td>
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<tr>
<td><strong>Valued Job Characteristics for Adolescent</strong></td>
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<tr>
<td>1. Challenging/Responsibility (^a)</td>
<td>5.7 (9)</td>
<td>5.8 (9)</td>
</tr>
<tr>
<td>2. People/Society Oriented (^a)</td>
<td>5.7 (1.0)</td>
<td>5.6 (1.1)</td>
</tr>
<tr>
<td>3. High Status/Wealth (^a)</td>
<td>4.4 (1.5)</td>
<td>4.5 (1.4)</td>
</tr>
<tr>
<td>4. Flexibility to Meet Family Needs ( ^a )</td>
<td>5.4 (1.3)</td>
<td>5.3 (1.3)</td>
</tr>
<tr>
<td>5. Manual Work (^a)</td>
<td>3.5 (1.3)</td>
<td>3.9 (1.4)</td>
</tr>
<tr>
<td><strong>Perception of Adolescents' Skills and Efficacy in Future Jobs</strong></td>
<td></td>
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<tr>
<td>1. Independence/Self Confidence ( ^b )</td>
<td>5.3 (1.2)</td>
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<td>2. Leadership and Supervision ( ^b )</td>
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<td>5.0 (1.2)</td>
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<tr>
<td>3. Science ( ^b )</td>
<td>3.7 (1.8)</td>
<td>4.9 (1.7)**</td>
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<tr>
<td>4. Homemaker and Childcare ( ^b )</td>
<td>5.1 (1.3)</td>
<td>3.9 (1.3)**</td>
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<td>5. Working with Others ( ^b )</td>
<td>4.9 (1.1)</td>
<td>4.6 (1.1)**</td>
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<td>6. Mechanical ( ^b )</td>
<td>3.1 (1.5)</td>
<td>4.3 (1.7)**</td>
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<td>7. Creativity ( ^b )</td>
<td>5.2 (1.2)</td>
<td>4.6 (1.3)**</td>
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</table>

\( ^a \) First MANOVA Set (F=1.27, p=24); \( ^b \) Second MANOVA Set (F=31.37, p<.001)

Reported differences are based on univariate tests of significance \(^*p<.05\) \(^**p<.01\) \(^***p<.001\).
Mothers of males rated their adolescent as more skillful in the domains of science and mechanical skills in comparison to mothers of females. Mothers of females and mothers of males did not differ in the ratings of their adolescents' skills in the domains of leadership and supervision or independence and self-confidence.

Table 3.
Inter correlations Between Maternal and Adolescent Ratings of Valued Job Characteristics in the Adolescents' Future Occupation.

<table>
<thead>
<tr>
<th>Adolescent Measures</th>
<th>1</th>
<th>2</th>
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<th>4</th>
<th>5</th>
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<td>.07</td>
<td>-.01</td>
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</table>

Note: The 5 Maternal Measures are the same as the Adolescent Measures 1 - 5. Correlations between mother and daughter measures appear on the top line. Correlations between mother and son measures appear on the bottom line. Correlations that differ significantly from each other have been boxed in. *p<.05 **p<.01

Relations Between Maternal and Adolescent Values

In general, mothers' lifestyle values were unrelated to their adolescents' lifestyle values with one exception: mothers of females who valued putting family and friends before work had daughters who devalued material wealth (r = .17). This relation was not significant for mothers and sons.

Focusing on valued job characteristics (Table 3), mothers of females who valued job flexibility in order to meet family needs in their daughters' future occupation had daughters who devalued job characteristics that emphasize challenge and responsibility. Mothers of females who valued challenge and responsibility in their daughters' future job had daughters who valued high status and wealth job characteristics. Mothers of females who felt that people and society job characteristics should be important in their daughters' future job had daughters who valued manual work in their future occupation.

Finally, mothers of females who placed high value on manual work in their daughters' future jobs had daughters who placed higher value on math and computer work in their future jobs. None of these relations existed between mothers and sons.

Mothers of males who valued manual work in their sons' future job had sons who devalued job flexibility in order to meet family needs in their future occupation. This relation did not exist between mothers and daughters.

Mothers of females and mothers of males who valued manual work in their adolescents' future job had adolescents who also valued manual work in their future occupation.

10
Table 4.
Intercorrelations Between Maternal and Adolescent Ratings of the Adolescents' Current Skills and Efficacy in Future Careers.

<table>
<thead>
<tr>
<th>Maternal Measures</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
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<tr>
<td>Adolescent Measures</td>
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<td>.19**</td>
<td>.07</td>
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<td>-.01</td>
<td>.06</td>
<td>.22**</td>
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<td>2. Leadership</td>
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<td>.07</td>
<td>.03</td>
<td>.11</td>
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<td>3. Science</td>
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<td>.02</td>
<td>.12</td>
<td>.22**</td>
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<td>.06</td>
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<td>-.06</td>
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<td>.12</td>
<td>.44**</td>
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<td>-.02</td>
<td>.20**</td>
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<td>6. Mechanical</td>
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<td>.40**</td>
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<td>.29**</td>
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<td>7. Creativity</td>
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<td>.15*</td>
<td>.09</td>
<td>-.06</td>
<td>.03</td>
</tr>
</tbody>
</table>

Note: The 7 Maternal Measures are the same as the Adolescent Measures 1 - 7. Correlations between mother and daughter measures appear on the top line. Correlations between mother and son measures appear on the bottom line. Correlations that differ significantly from each other have been boxed in. * p<.05   ** p<.01
do well in science-related careers. Mothers of females who rated their daughters as skillful with mechanical things had daughters who rated their intellectual abilities high. This relation did not exist between mothers and sons.

Mothers who rated their adolescents as creative had adolescents who also believed they were intelligent. However, this relation was stronger between mothers and sons than between mothers and daughters. Mothers of females who felt their daughters were creative had daughters who believed they were skillful in the domains of leadership, independence, working with others, and creativity. Mothers of males who felt their sons were creative had sons who believed they lacked mechanical skills.

Discussion

The female and male adolescents in this study do not differ extensively in terms of their values and self beliefs. Both females and males valued risk taking, career, high status jobs, challenging jobs, and job flexibility to meet family needs. In addition, both males and females rate their skills in the general domains of leadership, independence, intelligence, and creativity similarly. Thus, contrary to some conceptualizations about gender differences in personality traits and values, females perceive themselves to be just as confident and capable in leadership roles as males and males value the integration of family and friends with work. However, males and females do differ along the traditionally gender-stereotyped domains of people vs. thing orientation: males value high status and competition and jobs that involve manual work more than females and females value people and society oriented job characteristics more than males. In addition, females and males differ in their self perceptions of skills and future efficacy in the domains of homemaking and childcare, working with others, science, and mechanical skills. Therefore, what continues to differ by gender are not global achievement values and traits but more specific job values and self perception of skills in "people" vs. "thing" domains. These findings support a model which suggests that females are not necessarily deficient in terms of achievement values and traits but that they choose to achieve in different occupational and family domains (e.g., Eccles, 1987).

Mothers' general lifestyle values do not differ as a function of their adolescents' gender. Since gender composition of the family was not taken into account and many of these mothers have both sons and daughters, this result was not unexpected. In addition, there was no reason to predict that the mothers' own lifestyle values would be influenced by the gender of their children. Similarly, mothers of daughters and mothers of sons do not differ in the job characteristics they value in their adolescents' future careers. It could be that other variables such as families' social class are more strongly related to the job characteristics adolescents' value.

Mothers of males and mothers of females do not rate their adolescents' skills differently in the domains of leadership, independence, or working with others. Mothers of males and mothers of females do rate their adolescents skills differently in the domains of homemaking and childcare, creativity, science, and mechanical skills. These findings are consistent with the adolescent findings with 2 exceptions: adolescents do differ in their self perceptions of "working with others" skills and do not differ in their self perceptions of creativity. The latter may be a result of the difference in the maternal and adolescent scales and the former may be explained further by the correlation results (see below).

In general, the relations between maternal and adolescent values are weak or non existent. This is consistent with earlier work (e.g., Eccles, et al, 1983).
that found few relations between parental and child values. A number of factors could be contributing to the lack of relations between parental and child values: (1) the values being measured are too broad; (2) what may be important are children's perceptions of parent values; or (3) the factors that influence children's values may be found in other contexts (e.g., peer or school environment). It is also interesting to note that when relations between maternal values and adolescent values did appear they occurred more often between mothers and daughters than between mothers and sons.

In general, mothers' ratings of their adolescents' skills relate to the adolescents' ratings, although these relations are not particularly strong. This is consistent with previous work which found stronger relations between parental and adolescent perception of skills than between parental and adolescent values (Eccles & Parsons, et. al., 1982). In addition, Eccles (Parsons), et. al., (1982) found that the adolescents' self perceptions skills were more strongly related to parents perceptions of the adolescents' skills than to actual performance. Thus, mothers could potentially be influencing the self perceptions of their adolescents through their own beliefs. However, this needs to be tested controlling for the adolescents' ability levels.

Correlation's between mothers and daughters are strongest relative to mothers and sons in the female stereotyped domains of homemaking and creativity. One explanation for this difference could be that males who are skillful in these domains are less likely to report being skillful in these domains based on the perceived negative social consequences that may result from being good at traditionally female tasks.

Finally, when mothers of females rate their daughters as skillful in working with others it relates to positively to daughters perceptions of homemaking and childcare skills and not to other domains. In contrast, when mothers of males rate their sons as skillful in working with others it is associated with the more achievement oriented domains of leadership and intelligence. These findings suggest that mothers are either sending different messages to sons and daughters about how the skills of working with others should be utilized or females and males are interpreting and applying the same messages to different domains.
References


Appendix

Adolescent Scale Items, Alphas, Means and Standard Deviations

Lifestyle Values
(1 = Strongly disagree...7 = Strongly agree)

High Status/Competitive

Alpha = .70
Mean (SD) = 4.6 (1.2)
I'd like to accomplish something in life that will be well known.
I feel that winning is very important.
I'd like to be famous.
I would rather be president of a club than just a member.
When a group I belong to plans an activity, I would rather organize it myself than have someone organize it and just help out.
It is important to me to perform better than others on a task.

Travel Flexibility

Alpha = .59
Mean (SD) = 4.7 (1.3)
If I had a great career opportunity in another location, I would expect my spouse and family to move.
If my spouse had a great career opportunity in another location I would move.
I would expect my spouse to rearrange their work schedule to meet the needs of our family.

Careerism

Alpha = .56
Mean (SD) = 5.4 (1.1)
Doing my very best at the tasks I take on is very important to me.
I want to do my best in my job even if this sometimes means working overtime.
I expect my work to be a very central part of my life.

Risk Taking

Alpha = .55
Mean (SD) = 4.7 (1.1)
I more often attempt difficult tasks that I am not sure I can do than easier tasks I believe I can do.
I like to try things I've never done before.
I would rather do something at which I feel confident and relaxed than something which is challenging and difficult (reverse coded).
I really enjoy working in situations involving skill and competition.

Material Wealth

Alpha = .52
Mean (SD) = 4.6 (1.5)
I would give up a secure job for a chance to make big money.
I would like a lot of expensive possessions.

Family and Friends Before Job

Alpha = .47
Mean (SD) = 4.6 (1.2)
I would turn down a promotion in my career if it meant moving away from close supportive friendships.
If I get married, it would be more important to me to help my spouse achieve in a career which brings recognition and prestige from others than to achieve fame and recognition myself.
I would readjust my work schedule or work part-time to meet the needs of my children.
Valued Job Characteristics

Different people may look for different things in their work.
Please indicate how much you would like a job with each characteristic.
(1 = Not at all...7 = A lot)

Challenging/Responsibility
Alpha = .75
Mean (SD) = 5.7 (1.1)
You get a chance to participate in decision making.
You get a chance to work on difficult and challenging problems.
You are your own boss most of the time.
You can learn new things and new skills.

People/Society Oriented
Alpha = .66
Mean (SD) = 5.4 (1.4)
Gives you an opportunity to be directly helpful to others.
Involves working with children.

High Status/Wealth
Alpha = .62
Mean (SD) = 6.0 (0.9)
Has high status and prestige.
Gives you a chance to earn a great deal of money.
Provides enough money to support yourself and your family on your own.

Machinery/Manual Work
Alpha = .57
Mean (SD) = 3.2 (1.4)
Involves a lot of work with your hands.
Involves operating heavy machinery.

Math/Computer Work
Alpha = .47
Mean (SD) = 4.1 (1.5)
Uses a lot of math.
Involves the use of a computer.

Flexibility to Meet Family Needs
Mean (SD) = 5.7 (1.5)
Makes it easy to take time off for family responsibilities.

Homemaker and Childcare
Alpha = .60
Mean (SD) = 5.1 (1.5)
Taking care of children.
* How likely would you be to succeed in a career working with children?
* How likely would you be to succeed in a career as a full time mother?

Mechanical
Alpha = .60
Mean (SD) = 2.7 (1.4)
Repairing mechanical equipment
* How likely would you be to succeed in a career fixing things?

Leadership and Supervision
Alpha = .78
Mean (SD) = 4.8 (1.2)
Supervising others
Being a Leader
* How likely would you be to succeed in a career supervising others?

Intellectual
Alpha = .74
Mean (SD) = 5.2 (1.3)
Logical, analytic thinking
Intelligence

Working with Others
Alpha = .64
Mean (SD) = 5.3 (1.2)
Listening to and understanding others
Teaching and explaining to others
Patience

Creativity
Mean (SD) = 5.1 (1.5)
How good are you at creativity?

Science
Mean (SD) = 3.1 (2.0)
* How likely would you be to succeed in a career doing physical science or engineering?

Self-Perception of Skills and Efficacy in Future Jobs

Here is a list of skills and abilities.
Compared to others, how good are you at each of the following:
(7-point Likert scale: A lot worse than others. A lot better than others)

* The following questions ask how likely you would be to succeed in several kinds of jobs:
(1 = very unlikely...7 = very likely)

Independence/Self Confidence
Alpha = .82
Mean (SD) = 5.2 (1.1)
Independence
Assertiveness
Self-confidence
Decisiveness

Maternal Scale Items, Alphas, Means and Standard Deviations

Maternal Lifestyle Values
(1 = Strongly disagree...7 = Strongly agree)

Travel Flexibility
Alpha = .59
Mean (SD) = 3.7 (1.4)
If I had a great career opportunity in another location, I would expect my spouse and family to move.
If I had a great career opportunity in another location, my spouse would be happy to move.
If my spouse had a great career opportunity in another location I would be happy to move.

High Status/Competitive
Mean (SD) = 3.5 (1.6)
I feel that winning is very important.
Careerism  Mean (SD) = 5.6 (1.3)
I want to do my best in my job even if this sometimes means working overtime.

Risk Taking  Mean (SD) = 4.3 (1.6)
I would rather do something at which I feel confident and relaxed than something which is challenging and difficult (reverse coded).

Family and Friends Before Job  Mean (SD) = 4.4 (1.6)
I would rather help others achieve their goals than achieve fame on my own.

Valued Job Characteristics for Adolescent
Different people may look for different things in their work. Please indicate how much you would like your child to have a job with each characteristic.
(1 = Not at all...7 = A lot)

Challenging/Responsibility  Mean (SD) = 5.7 (0.9)
They get a chance to participate in decision making. They get a chance to work on difficult and challenging problems. They are their own boss most of the time.

People/Society Oriented  Mean (SD) = 5.7 (1.0)
Gives them an opportunity to be directly helpful to others.

Flexibility to Meet Family Needs  Mean (SD) = 5.4 (1.3)
Makes it easy to take time off for family responsibilities.

High Status/Wealth  Mean (SD) = 4.6 (1.4)
Has high status and prestige.

Manual Work  Mean (SD) = 3.7 (1.4)
Involves a lot of work with their hands.

Perception of Adolescents' Skills and Efficacy in Future Jobs
Here is a list of skills and abilities. Compared to others, how good is your child at each of the following:
(7-point Likert scale: A lot worse than others...A lot better than others)

* The following questions ask how likely your child would be to succeed in several kinds of jobs:
(1= very unlikely...7= very likely)

Mechanical  Mean (SD) = 5.6 (1.3)
Reparing mechanical equipment
How likely would you be to succeed in a career fixing things?