To explore the interrelationships among family communication patterns (FCP) and children's cognitive development and political socialization, 718 parent-child pairs were interviewed by telephone on the extent to which children were encouraged to and did discuss politics with people of different views. In addition, subjects were asked questions designed to measure their political knowledge and interest and their media exposure. The study revealed significant relationships between parents' and children's levels of political knowledge, discussion, and media exposure, indicating that children in families with concept-oriented FCPs tended also to become concept-oriented. In a surprising finding, the data showed that soociooriented FCPs—patterns emphasizing harmonious communication—inhibited political interest only for the older children in the sample (those in grades 11 and 12 as opposed to grades 4 and 5), which suggested that until children reached the formal operations stage in cognitive development, they did not recognize inconsistencies between the conflict inherent in politics and efforts to maximize harmonious personal relationships. These results suggest that both the nature and the effects of parent-child communication may depend on messages stressed by parents and the children's own abilities and goals. (The survey instrument and results are appended.) (MM)
FAMILY COMMUNICATION PATTERNS AND POLITICAL
DEVELOPMENT: A DEVELOPMENTAL APPROACH

Jeanne M. Meadowcroft
School of Journalism and Mass Communication
Mass Communications Research Center
University of Wisconsin-Madison

and

Steven H. Chaffee, Director
Institute for Communication Research
Stanford University

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Meadowcroft

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INFORMATION CENTER (ERIC)."

At birth children become members of particular social groups, and communication within these groups is thought to influence the way children come to view the world around them (Whorf, 1956; Hess & Shipman, 1974; Chaffee, McLeod, and Wackman, 1966, e.g.). Stryker (1964) notes the importance of the family and of parent-child communication in influencing the meaning a child attaches to symbols and also how the child defines himself.

Chaffee, et al. (1966) identify two dimensions of family communication patterns (FCP) and state that these structures influence a child's construction of social reality (McLeod & Chaffee, 1972). Two independent communication dimensions are identified by these authors: socio- and concept-oriented family communication patterns. Each dimension defines consistent messages which are emphasized in the parent-child communication. Although the dimensions vary between families, the dimensional emphasis is thought to be fairly stable within a given family over time (see, e.g., Chaffee, et al., 1970).

Socio-oriented communication stresses harmonious interpersonal relationships, encouraging the child to behave in ways to maximize harmony. In these families, the child is prohibited from expressing dissent and given little chance to be exposed to information he could use to form his own point of view. The child may be advised to avoid controversy, defer to adults, and to give in on arguments.

Concept-oriented communication tends to stress the importance of the child developing and expressing his own point of view. The child is encouraged to challenge the ideas of others, to express his own views, to weigh all the evidence before reaching a conclusion, and to participate in controversial discussions. The child does so free of fears of endangering social relationships in the family.

The authors wish to acknowledge their thanks to Professor Mark Miller (University of Tennessee) for his contributions to this paper.
These communication structures are internalized by the child and to form a corresponding framework he uses to structure relevant experience and information. Chaffee, et al. (1973) state that these structures act as constraints or barriers to perfect communication, causing the child to focus his attention toward specific information in the environment at the expense of other information and to adopt goals consistent with the family's communication structure.

The purpose of this study is to focus on the implications of cognitive developmental theories which suggest there may be another set of constraints operating in the family's communication structure: the child's level of cognitive development. Developmental theorists, such as Jean Piaget, have defined cognitive development by a series of stages of mental growth. These stages describe mental structures which serve as coding processes (Baldwin, 1969) the child uses to structure and make sense out of the world. Children organize all beliefs and thoughts around the particular way of thinking associated with their stage of development; as these stages progress, the child views his world differently, tending to prefer more complex and efficient ways of thinking (Piaget, 1971).

Palermo and Molfese (1973), e.g., found that the understanding of words continues to develop long after early childhood and after words have become a part of the child's own vocabulary. They suggest that this continued development is due to the acquisition of specific cognitive skills which allow the child to more fully understand the meaning of words, and they note that the increased understanding of words occurs especially as the child experiences Piaget's "cognitive revolution," (when the child is about 7 years old) and again at about age 13 when the child enters the final stage of development defined by Piaget. Other researchers looking at the development of conceptions of society and social reality (e.g., Falvell, 1974; Baldwin, 1906; Selman and Byrne, 1972, 1973, 1975), have found that the child's ability to understand the intentions and thoughts of others is dependent upon the child's ability to perform specific mental skills.
This study will examine the role a child's cognitive development plays in the family's communication and on the child's perception of social reality. Social reality here will be limited to the child's perceptions of his political environment, defined by levels of political knowledge, political interest, frequency of political discussion, and exposure to political information in the mass media.

FCP and Political Socialization

The relationship between family communication patterns and political socialization variables for adolescents has been well documented. Chaffee, McLeod, and Wackman (1973) state, "there is considerable evidence that parental constraints on the child's interpersonal communication in the home influence the process of political socialization," (p. 364). A shortcoming of the literature, from the perspective of this study, stems from the fact that samples have tended to focus on adolescents, particularly 9th graders. Chaffee, et al. (1966) state that this is "an age at which we hoped to find political socialization under way but not complete." Even if ninth grade is marked by important transitions in the political socialization process, however, such transitions will be difficult to recognize without including a variety of other age groups for comparisons. For example, in their study of parental influences on adolescent media use, Chaffee, et al. (1970) conclude that important developmental effects of family communication patterns on the child's media use were not supported by the data. Although their sample included both 6th and 9th graders, one might wonder if the results would be different if a wider age range was studied (e.g., by including pre- and postadolescents in the sample).

Research on family communication patterns and adolescent political socialization is quite extensive, however. Consistently, researchers have found that the socio-oriented family communication dimension acts to inhibit an adolescent's political development. Children from concept-oriented homes, on the other hand, are more aware
of their political environment. These children tend to be more interested in politics, know more about politics, discuss politics more frequently, and to expose themselves to political information in the mass media more frequently than children from socio-oriented families. Concept-oriented children also tend to admire public officials more than other children, to be more active and successful in school, and to participate in politically related school activities. (See, e.g., Chaffee, et al., 1966; Chaffee, et al., 1973; Jackson-Beeck and Chaffee, 1975; McLeod, et al., 1972). Not only do their present political activities stand out, but concept-oriented children also expect to be politically active in the future (Sheinkopf, 1973). Evidence further supports this notion, suggesting that concept-oriented children grow up to be adults who are more interested in politics, knowledgeable about politics, and who are politically active. (Chaffee, et al., 1973).

These findings are expected to be replicated in this study. Concept-oriented communication is expected to be positively associated with political knowledge, political interest, political discussion, and political media exposure. Socio-oriented communication is expected to be negatively related to these political dependent variables.

**Political Socialization and Cognitive Development**


(We stress) that even in the very earliest stages of political life the child is not simply a reflecting glass which mirrors the image of others. Rather, the child's own needs and drives, mental and physical endowments, and evolving cognitive structure vitally influence the way in which political stimuli are initially interpreted and absorbed and later on are sought out and used. (p. 331)
Easton and Dennis (1973) found that young children (grades 2 and 3) are initially able to relate to politics in only a symbolic or representative way. Young children in their sample had images of government organized around the concept of the president. The tendency for older children in their study (grades 4 to 8) was to increasingly identify government with voting and Congress, indicating an awareness and understanding of the concepts of participation and representation.

Mereleman (1973) also suggests that certain cognitive skills are important in the child's perceptions of politics. He identifies three necessary conditions for ideological thought: (1) the ability to think causally, to reason from cause to effect, (2) which enables the child to recognize causes of political effects are under human control, and (3) the child's view of political causation must at least be partially communicable to others.

A careful look at the studies of cognitive development and the understanding of words and political concepts suggests that a child's understanding of concepts increases when he experiences the "cognitive revolution" (when he is about 7 years old) and again when he is about 13 years old and has reached the final stage of cognitive development defined by Piaget.

Results from research on political socialization and cognitive development are expected to be replicated here: as a child's cognitive skills become more complex, he will know more about politics, be more interested in politics, discuss politics, and be exposed to political information in the mass media more frequently.

To summarize, the literature reviewed above suggests that the child's family communication structure influences his political development and that a child's level of cognitive development affects the child's ability to comprehend political concepts. Cognitive abilities, therefore, define the skills a child has at his disposal in processing information and in forming his view of the world, and family communication structures, once internalized by the child, provide a framework which can be used to structure experience and information. The question now is if one
would expect similar cognitive skills to be necessary conditions for a child's efficient participation in the family's communication structure.

The theory proposed here suggests that efficient participation in the family's communication structure is dependent upon the cognitive abilities of the child. The child's cognitive skills are expected to affect not only the depth of his understanding of political concepts, but also to act as a constraint in the family's communication to the extent that the child is unable to comprehend and internalize the central messages conveyed within the family's communication structure. Until the child realizes, for example, that the underlying emphasis in the socio dimension to maximize harmony in interpersonal relationships is inconsistent with political debate, he will be relatively unaffected by the socio-oriented constraints. Similarly, a child in the concept-oriented dimension may be unable to comply with the demands of the family communication, until he gains the cognitive skills necessary to formulate and express his own opinions about political concepts. The present study will allow for such comparisons across a wide age range and will, therefore, provide a better data base for the study of developmental change than offered by previous sampling designs.

As shown in figure 1, interactions between FCP, cognitive stage, and the indicators of political development are hypothesized. Concept-oriented communication is expected to be positively related to political knowledge, political interest, political discussion, and political media exposure, especially for older children in the sample. Socio-oriented communication is expected to be negatively related to the dependent variables, especially for children at the final stage of cognitive development.

Methods

Sample

This study is based on a sample of 718 parent-child pairs interviewed as part of a National Science Foundation grant (#SES-7913435) to study the election
Figure 1. Expected Interaction Patterns Between Cognitive Development and FCP on a Child's Political Development.
campaign and preadult political socialization. A representative sample was drawn from the state of Wisconsin using a random digit dialing telephone procedure during a 7-week period between January 29 and March 18, 1980. The telephone interviews lasted approximately 30 to 40 minutes. The child was interviewed first followed by one of his/her parents. In two-parent homes, a parent was randomly selected to be included in the sample. Because more children live with their mothers in one-parent homes, 57 percent of the parents included in the sample are female. In this sample, the children's ages range from 10 to 17 years old with approximately 100 children in each age group. The parents' ages range from 27 to 69 years of age.

**Family Communication Patterns**

Consistent with the conceptual definitions of family communication patterns (McLeod, et al., 1966), these concepts are measured as separate dimensions rather than as FCP typologies (see, e.g., McLeod & Chaffee, 1972). Moreover, since family communication is a relational variable, both parent and child estimates of the family communication are included in the operationalization.

The socio dimension was measured by asking both parents and children how often the parent told the child not to say things that make other people angry. To measure the concept dimension, parents and children were asked to estimate how frequently the parent encouraged the child to question other people's opinions about politics. In addition, the child was asked how often he found himself talking with people whose ideas about politics are different from his. Inspection of the inter-item correlations (Table 1) suggests that these items indeed tap separate dimensions.

The index for each dimension was computed using the following procedure. Missing values (ranging from 1 to 3 percent) were first recoded to the mean. A principle components factor analysis (Table 2) was used to create factor scores for each dimension. The factor scores for each dimension were then split at the midpoint to permit comparisons of high and low groups. Despite the discriminant validity apparent from Table 1, the reliability estimates are low due to the limited number
Table 1
Inter-Item Correlations of Family Communication Dimensions

<table>
<thead>
<tr>
<th>Concept Dimension</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>(1) Talk to others with different opinions (child's estimate)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(2) Encourage child to question others (child's estimate)</td>
<td>.20</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(3) Encourage child to question others (parent's estimate)</td>
<td>.19</td>
<td>.24</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Socio-Dimensional</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(4) Tell child not to make others angry (child's estimate)</td>
<td>.04</td>
<td>.03</td>
<td>-.01</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(5) Tell child not to make others angry (parent's estimate)</td>
<td>-.03</td>
<td>-.05</td>
<td>-.04</td>
<td>.17</td>
<td></td>
</tr>
</tbody>
</table>
of items comprising each scale. Alpha estimates of the reliability of these two dimensions are .30 for the socio scale and .45 for the concept scale.

**Cognitive Stage**

According to Piaget's theory and his estimates of ages associated with each stage of cognitive development, only two stages are expected to be represented in this sample: concrete operations (ages 7 to 11) and formal operations (ages 12 and older). In this study, grades associated with these age groups were picked to operationalize each stage. Concrete operations will be represented by children in 4th and 5th grades, and formal operations will be represented by children in 11th and 12th grades. Grades were selected, because it was thought that a child's grade in school would be a more precise measure of cognitive skill than the child's age, the only alternative measure available in the data.

The children at different stages are also assumed to have differing cognitive skills. Piaget states that a cognitive revolution abruptly occurs at concrete operations which causes the child to see the world in a new, efficient, and organized way. These children possess cognitive skills which enable them to form mental representations of a series of actions. The child has acquired the ability to think causally, but is still limited by egocentrism to solving concrete problems directly before him. He begins to develop the ability to take the role of another in this stage; however, he will not fully develop this ability until he reaches the final stage, formal operations. Children at concrete operations have gained other important skills: (1) the ability to understand relational terms, (2) the ability to reason simultaneously about part of the whole and the whole (e.g., about Ronald Reagan and all Republicans), and (3) the ability to arrange objects along quantifiable dimensions.

In the final stage, formal operations, the child learns to go beyond the present and to think abstractly. He is able to construct informal hypotheses about his universe. He generates and systematically explores possible outcomes and solutions.
Table 2
Principal Components Factor Analysis For Family Communication Dimensions

<table>
<thead>
<tr>
<th>Item</th>
<th>Factor I</th>
<th>Factor II</th>
</tr>
</thead>
<tbody>
<tr>
<td>Encourage child to question others (child's estimate)</td>
<td>.51 (1)</td>
<td>.02</td>
</tr>
<tr>
<td>Encourage child to question others (parent's estimate)</td>
<td>.48 (2)</td>
<td>-.16</td>
</tr>
<tr>
<td>Talk to others with different opinions (child's estimate)</td>
<td>.41 (3)</td>
<td>.04</td>
</tr>
<tr>
<td>Tell child not to make others angry (child's estimate)</td>
<td>.02</td>
<td>.69 (1)</td>
</tr>
<tr>
<td>Tell child not to make others angry (parent's estimate)</td>
<td>-.05</td>
<td>.24 (2)</td>
</tr>
</tbody>
</table>

NOTE: Numbers in parentheses indicate the ranked loading of the item on the factor.
to situations and problems, and his role-taking skills are fully developed. He is aware of what he knows and of his own thoughts. In formal operations, the child emerges, equipped with the cognitive skills of an adult.

**Dependent Variables**

**Political Knowledge.** Political knowledge is defined here as the amount of correct information the child has about politics. Thirty-two knowledge questions were combined to form an index of political knowledge. These questions fall into three classes. First, ten questions assessed the child's awareness of the major presidential candidates (Anderson, Baker, Brown, Bush, Carter, Connally, Crane, Ford, Kennedy, and Reagan). Second, eight items dealt with the child's ability to identify the party affiliation of eight major candidates (Baker, Brown, Bush, Carter, Connally, Ford, Kennedy, and Reagan). Finally, 14 questions assessed the child's recognition of specific party symbols and personalities. The questions for these items follow. "When I read each of these things, which party comes to mind . . . (elephant, donkey, rich people, Franklin D. Roosevelt, right of center, poor people, liberal, labor unions, Abraham Lincoln, Lyndon Johnson, Richard Nixon, conservative, business, and left of center)?" The child received one point for each correct response, zero otherwise.

**Political Interest.** Political interest is defined here as a child's cognitive orientation toward politics and will be viewed as an indicator of the child's sensitivity toward his political world. Three questions were asked to measure the child's political interest: (1) how interested are you in following the political campaign, (2) how much attention do you pay to what the president does, and (3) how much attention do you pay to what the United States government is doing with other countries, such as Russia and China, or in the Middle East? The child's responses to these questions were averaged to form a measure of overall political interest.
Political Discussion. Five questions thought to measure this concept were submitted to principle component factor analysis: (1) How often do you usually talk with other people about national politics? (2) Is national politics something you like to talk about, or is it something other people bring up? (3) How often do you make an effort to learn more about something you heard in the news? (4) When you try to learn more about current national politics, where do you look most often for more information? and (5) How often do you talk politics with your (parents)? Factor analysis showed that only three of these questions appear to measure political discussion (questions 1, 3, and 5 above). To form an index of the child's overall political discussion, responses to the three questions which loaded on the political discussion factor were averaged. The reliability estimate of the index is .63.

Political Media Exposure. This concept refers to the child's attention to and exposure to political news in the mass media. This includes watching political news on television, listening to political news on the radio, and reading political news in newspapers and magazines. News about politics includes news about local, national, or international politics. Responses to eight questions were used to form the child's political exposure index: (1) How much attention did you pay to articles in the newspaper about national politics and government? (2) How much attention do you pay to news on the radio? (3) In the past week, how many -- if any -- magazine articles have you read about national politics or government? (4) About how often do you watch news programs like 60 Minutes, or news specials? (5) Is the national news something you try to watch on television, or is it just something you happen to watch because other people have it on? (6) How many days in the past seven did you watch the national news on television? (7) How much attention did you pay to news on TV about politics and government? and (8) How many days in the last seven did you read a newspaper? Because of the variety of scales used in
these questions, scores were standardized so that responses to all questions were on the same metric. An index of the child's overall political media exposure was then formed by averaging the responses. The reliability estimate of this index is .54.

Parental Control Measures

Identical procedures were followed to create indices for the child's parent, indicating the parent's levels of political knowledge, interest, discussion, and exposure to political information in the mass media. It was thought important to control for the possible content of the parent-child communication in making inferences about the influence of the structure of that communication on the child's own political development. Without such controls, a structural interpretation may be in doubt.

In addition, the mother and father's educational levels and the family's social class were also measured. Education was measured as the last grade of schooling completed, and social class was measured by asking the parents if they felt they were in the upper, upper-middle, lower-middle, middle, working, or lower class.

Summary of Hypotheses

The present study is an attempt to build upon existing theory concerning the influence of the family's communication structure on the child's perception of social reality (defined here as the child's perceptions of his political environment). Using the dimensions of family communication as defined by Chaffee, et al. (1966), the relationship between family communication patterns and political socialization variables has been well documented. Results consistently show that the socio-oriented family communication dimension acts to inhibit an adolescent's political development and that the concept-oriented dimension enhances an adolescent's political development. These findings are expected to be replicated here.

H1: Socio-oriented communication is negatively related to political knowledge, political interest, political discussion, and to exposure to political information in the mass media.
H2: Concept-oriented family communication patterns are positively related to political knowledge, political interest, political discussion, and to exposure to political information in the mass media.

Political socialization research suggests that a child's political development is positively related to the child's level of cognitive development. Support for this notion is also expected in the present study.

H3: Children at formal operations will know more about politics, be more interested in politics, discuss politics more frequently, and be exposed to more political information in the mass media than children at concrete operations.

Unlike the previous research, this study proposes that a child's efficient participation in the family's communication structure is dependent upon the cognitive abilities of the child. Therefore, interactions are hypothesized between the family's communication structure, the child's cognitive stage (grade), and the dependent variables indicating the child's perceptions of his political environment. The following hypotheses, therefore, will also be tested.

H4: Concept-oriented communication is positively related to political knowledge, political interest, political discussion, and exposure to political information in the mass media, especially for children at formal operations.

H5: Socio-oriented communication is expected to be negatively related to political knowledge, political interest, political discussion, and to exposure to political information in the mass media, especially for children at formal operations.
Results

As discussed earlier, in order to insure that analysis included children of differing cognitive abilities, only children from 4th & 5th and 11th & 12th grades were included in an analysis of variance. This strategy is reinforced by two findings. Although quite unexpected, it was found that socio-oriented FCP is positively associated with the child's grade in school (p<.01), and concept-oriented FCP tends to be negatively associated with grade (p=.18). In examining Figure 2, it is quite apparent that variance is greatest for these extreme groups. During the intermediate years, especially for grades 8th through 10th, the FCP dimensions are relatively stable. In a supplementary regression analysis which included all grades in the sample, the effect of including this intermediate group was to depress interaction effects clearly present in the analysis of variance. Unless otherwise specified, therefore, the findings reported in this section are derived from the analysis of variance in which only the extreme groups are included in the analysis.

Findings

Main effects: The main effects hypotheses for concept-oriented FCP and for the child's level of cognitive development (grade) are supported by the data. As shown in Tables 3-6, both variables are positively related to political knowledge, political interest, political discussion, and political exposure (p<.01). In the regression equation, influences due to the parent's education and social class are nonsignificant. However, parental levels of political knowledge are significantly related to the child's political knowledge (p<.01); parental exposure to political information in the mass media is related to the child's exposure (p<.05), and the parent's level of political interest is significantly related to the child's political interest (p<.05). A similar trend was found for the relationship between the parent and child's frequency of political discussion, although the relationship is not significant (p<.10).
Figure 2. Mean FCP Dimension Score by Grade in School.
Table 3

Analysis of Variance: Political Knowledge by Concept-Oriented Family Communication, Socio-Oriented Family Communication, and Level of Cognitive Development

<table>
<thead>
<tr>
<th>Source</th>
<th>df</th>
<th>MS</th>
<th>F</th>
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</thead>
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<td>Concept-oriented family communication (A)</td>
<td>1</td>
<td>454.81</td>
<td>15.95*</td>
</tr>
<tr>
<td>Socio-oriented family communication (B)</td>
<td>1</td>
<td>1.71</td>
<td>&lt;1</td>
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<tr>
<td>Cognitive development stage (C)</td>
<td>1</td>
<td>1903.11</td>
<td>66.76*</td>
</tr>
<tr>
<td>A X B</td>
<td>1</td>
<td>0.45</td>
<td>&lt;1</td>
</tr>
<tr>
<td>A X C</td>
<td>1</td>
<td>0.00</td>
<td>&lt;1</td>
</tr>
<tr>
<td>B X C</td>
<td>1</td>
<td>112.89</td>
<td>3.96**</td>
</tr>
<tr>
<td>A X B X C</td>
<td>1</td>
<td>2.26</td>
<td>&lt;1</td>
</tr>
<tr>
<td>Error</td>
<td>253</td>
<td>28.51</td>
<td></td>
</tr>
</tbody>
</table>

*p < .01

**p < .05
Table 4

Analysis of Variance: Political Interest by Concept-Oriented Family Communication, Socio-Oriented Family Communication, and Level of Cognitive Development

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<thead>
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<th>Source</th>
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<tbody>
<tr>
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<td>7.26</td>
<td>31.90*</td>
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<tr>
<td>Socio-oriented family communication (B)</td>
<td>1</td>
<td>.20</td>
<td>&lt;1</td>
</tr>
<tr>
<td>Cognitive development stage (C)</td>
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<td>3.96</td>
<td>17.40*</td>
</tr>
<tr>
<td>A X B</td>
<td>1</td>
<td>.12</td>
<td>&lt;1</td>
</tr>
<tr>
<td>A X C</td>
<td>1</td>
<td>.11</td>
<td>&lt;1</td>
</tr>
<tr>
<td>B X C</td>
<td>1</td>
<td>.68</td>
<td>3.00</td>
</tr>
<tr>
<td>A X B X C</td>
<td>1</td>
<td>.06</td>
<td>&lt;1</td>
</tr>
<tr>
<td>Error</td>
<td>253</td>
<td>.23</td>
<td></td>
</tr>
</tbody>
</table>

*_{p} < .01
Table 5
Analysis of Variance: Political Discussions by Concept-Oriented Family Communication, Socio-Oriented Family Communication, and Level of Cognitive Development

<table>
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<tr>
<th>Source</th>
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<tr>
<td>Concept-oriented family communication (A)</td>
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<td>20.21</td>
<td>59.79*</td>
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<tr>
<td>Socio-oriented family communication (B)</td>
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<td>.06</td>
<td>&lt; 1</td>
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<td>A X C</td>
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<td>.01</td>
<td>&lt; 1</td>
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<td>B X C</td>
<td>1</td>
<td>1.22</td>
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<tr>
<td>A X B X C</td>
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<td>.47</td>
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<tr>
<td>Error</td>
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<td>.34</td>
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</tr>
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</table>

*p < .01
Table 6
Analysis of Variance: Political Exposure by Concept-Oriented Family Communication, Socio-Oriented Family Communication, and Level of Cognitive Development

<table>
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<tr>
<td>Socio-oriented family communication (B)</td>
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<td>0.95</td>
<td>&lt;1</td>
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<td>Cognitive development stage (C)</td>
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<td>72.27</td>
<td>41.21*</td>
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<tr>
<td>A X C</td>
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<td>0.11</td>
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<tr>
<td>B X C</td>
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<td>0.09</td>
<td>&lt;1</td>
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<td>A X B X C</td>
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<td>0.94</td>
<td>1.73</td>
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<tr>
<td>Error</td>
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*p < .01
Interactions: As discussed earlier, both concept- and socio-oriented FCP were expected to interact with grade and the dependent variables. A significant interaction was found for socio-oriented FCP, grade, and the child's level of political knowledge (p<.05). The interaction pattern, however, is unexpected. As shown in Figure 3, for children at concrete operations (grades 4 & 5), socio-oriented FCP is positively related to the child's political knowledge; for adolescents (grades 11 & 12), however, the relationship is negative. A similar interaction trend (p<.10) was found for the child's political interest. As shown in Figure 4, socio-oriented FCP is positively related to political interest for 4th & 5th graders but has little effect on political interest for adolescents in the sample. All other interaction hypotheses are not supported by the data.
Figure 3. Mean levels of political knowledge by levels of socio-oriented FCP and cognitive stage.
Figure 4. Mean levels of political interest by levels of socio-oriented FCP and cognitive stage.
Discussion

This study found that family communication is a much more complex phenomenon than was previously thought and suggests that a greater understanding of family communication would emerge if parent-child communication is studied as a developmental process.

The most interesting finding is that the previously held notion that socio-oriented family communication structures act to inhibit a child's political development is not supported for all children in the sample. The fact that the family's socio-orientation inhibits a child's political knowledge and political interest ONLY for the older children in the sample suggests that some cognitive variables may be intervening in the family's communication. This finding suggests that young children in socio-oriented homes have a natural curiosity about the world of politics and that they do not internalize and become fully affected by the messages conveyed in the family's communication structure until they reach formal operations. Until that time, the child's cognitive level may be too simplistic for him to recognize that the conflict nature of politics is inconsistent with the dimension's emphasis on maximizing harmonious interpersonal relationships. In this case, the young child's cognitive level would act as a constraint in the family's communication, making him unaware or unable to cope with the demands of the socio-oriented communication.

Accepting a cognitive development interpretation is, of course, tenuous, given the surrogate measures of grade in school as an indicator of cognitive skills. A developmental interpretation is further weakened, since corresponding interactions between concept-oriented FCP, developmental stage, and the dependent variables were not supported by the data. It is possible, however, that the grades included in this study are inappropriate to test the concept-oriented interaction hypotheses. Due to the exploratory nature of the study and to the complexity of cognitive development theory, it was difficult to determine which cognitive stages would be
important to include in the sample and exactly which cognitive skills would intervene in each of the family communication dimensions. Taking cues from Merelman and Piaget, it seemed that necessary skills would include the ability to think abstractly and that these skills would differ for children from concrete and formal operations. Although these skills have been shown important to the understanding of political concepts, it is possible that different skills are necessary for effective participation in interpersonal communication within the family. For example, the Selman-Byrne (Byrne, 1973; Selman and Byrne, 1974) model of the development of perspective taking suggests that children's abilities to understand the motives and intentions of others is a developmental skill. If these role-taking skills are necessary conditions for the child's effective participation in concept-oriented communication, developmental differences may be found only if younger children are included in the sample. According to the Selman-Byrne model, even the youngest children in this study would be expected to recognize that other people have individual cognitive perspectives and to understand that one person's thinking can be the object of another's. Perhaps these skills are sufficient to allow the child to fully participate in the concept-oriented family communication structure. A more appropriate sample, therefore, might include children who have not yet experienced the cognitive revolution and who are still at the egocentric perspective-taking level (younger than 6). Socio-oriented children, on the other hand, may need the more sophisticated perspective-taking skills associated only with the final stage of cognitive development in order to perform the task of maintaining harmonious interpersonal relationships. Until that time, the child would not be expected to internalize, fully comprehend, and act in ways consistent with demands of socio-oriented family communication.

It is also interesting to note that the interactions which occur for socio-oriented communication and stage are for the more cognitive or processing-oriented dependent variables: political knowledge and political interest. It would not be unreasonable to think that these variables would be more dependent upon the
child's cognitive abilities than frequency of political discussion and exposure to political information in the mass media -- variables which are not fully under the control of the child.

Having made the case for a developmental interpretation of the data, the authors wish to make it clear that the use of surrogate measures as indicators of cognitive stage or ability in this study severely limits the confidence they place in a developmental interpretation. In fact, as one examines Figure 2 which shows the main effects for FCP dimensions by grade, it seems that two different developmental processes may be operating here. For example, the negative slope of concept-oriented FCP and the positive slope for socio-oriented FCP from 4th through 6th grades may be due to the influence of the child's developmental skills which affect interpersonal communication within the family. Once the child has reached cognitive maturity (after 6th grade), the FCP dimensions tend to stabilize until after 10th grade when social developmental factors and goals, such as the adolescent's preparation for a more autonomous, adult life; are complemented by the values underlying the concept-oriented dimension. In preparing oneself to function in an adult world, therefore, perhaps concept-oriented communication becomes salient and useful to the adolescent, accounting for the increase in the concept dimension and decline in socio-oriented family communication.

The effects of the parent's own levels of political knowledge, interest, discussion, and media exposure are also influential in the child's political development. This suggests that not only the structure of the communication is important, but also the content of that communication.

Finally, it is important to note that the interaction found between the child's grade in school and the family's communication patterns has methodological implications for research in this area. As mentioned earlier, most researchers have conceptualized family communication patterns as stable within a given family over time. By limiting their samples to adolescents, they have failed to note the dynamic
nature of family communication structures. This finding also casts doubt on measurements used in generational studies of FCP where adults are asked to recall the family communication patterns in their homes when they grew up and comparisons are then made to see if these parents communicate the same way with their own children (see, e.g., Chaffee, et al., 1973). If FCP structures change as the child matures, the recall measures used in these studies will be unstable and will differ, depending on the age the respondent chooses as a reference point.

Conclusions

Although the findings reported here could be explained by either a cognitive or social development interpretation, this study has been valuable in that it suggests that the child is quite active in the family communication. The nature of the parent-child communication and the effects of that interaction may depend not only upon messages stressed by the parent in the communication but also upon the child's own abilities and goals.
Appendix A: Questionnaire Items

1. Do you pay a lot of attention, some, or very little to what the president is doing? (A lot, some, very little)

2. How much attention do you pay to what the US government is doing with other countries, such as Russia, China, or in the Middle East? (A lot, some, very little)

3. How interested are you in following this political campaign? (A lot, some, very little)

4. On how many days in the past seven did you watch the national news on television? (0,1,2,3,4,5,6,7)

5. How much attention did you pay to news on TV about national politics and government? (None, a lot, quite a bit, some, very little)

6. Is the national news something you try to watch on television, or is it just something you happen to watch because other people have it on? (Like to watch, other people, some of both, neither)

7. How many days in the last seven did you read a newspaper? (0,1,2,3,4,5,6,7)

8. How much attention did you pay to articles in the newspaper about national politics and government? (None, a lot, quite a bit, some, very little)

9. In the past week, how many — if any — magazine articles have you read about national politics or government? (0,1,2,3,4,5,6,7,8+)

10. Let's turn to the election campaign. Who have you heard of who is running for president? (Anderson, Baker, Brown, Bush, Carter, Connally, Crane, Ford, Kennedy, Reagan)

11. I'm going to read each candidate's name again. This time, please tell me if you think of him as a Republican or a Democrat. If you don't know, just tell me. (Baker-R, Brown-D, Carter-D, Connally-R, Ford-R, Kennedy-D, Reagan-R)


13. How often do you usually talk with other people about national politics? (A lot, sometimes, rarely, never)

14. How often do you make an effort to learn more about something you heard in the news? (A lot, sometimes, rarely, never)

15. About how often do you watch news programs like 60 Minutes or news specials? (A lot, sometimes, rarely, never)

16. How often do you find yourself talking with people whose ideas about politics are different from yours? (A lot, sometimes, rarely, never)
Appendix B:
Correlation Matrix For
Scales Constructed for This Study

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<th>(2)</th>
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