A study was conducted to see if there was a developmental progression in the type of persuasive appeals selected by children; that is, whether the appeals could be ordered in terms of the degree to which the children accommodated the views of others. The subjects, 211 kindergarten through twelfth grade students, selected one of four messages they were likely to use in persuading their parents to do something, then provided a rationale for the message choice. Analysis of variance indicated that older children did not differ from younger ones in the persuasive appeals selected, but a significant developmental trend was found in rationales: older children were more likely to display greater understanding of the listener in their rationales. (RL)
In our studies of the development of persuasive skills in children, our methodological approach has been to place children in hypothetical but realistic situations and ask them to indicate what they would say to accomplish a particular persuasive goal. We then code their appeals for the extent to which they are adapted to the message recipient.

Consistent evidence for the validity of this approach is two-fold. First, there appears to be a clear developmental trend in the degree to which children adapt to the views of others. As children grow older, their messages focus less on their own needs for making the request and more on anticipating and responding to reservations held by the other and on anticipating and indicating direct benefits to the message recipient (Clark & Delia, 1976; Delia, Rline, & Burleson, 1979).

Secondly, results obtained from coding these spontaneously generated messages correlate with social cognitive abilities presumed requisite to the development of listener adaptation. It seems reasonable that individuals with more differentiated and abstract construct systems for representing other people might be better able to adapt to the views of these people. And, in fact, moderate to strong positive correlations have been found between measures of cognitive differentiation and abstractness and the level of listener adaptation of appeals in spontaneously generated messages.
The present report extends this line of work in an attempt to assess the utility of two other methodological approaches: the selection of pre-formulated appeals and the elicitation of rationales for the appeals selected. Our interest in the use of strategy checklists or preformulated appeals is self-serving in that these have the obvious advantage of ease of administration and scoring.

A number of researchers interested in the effects of situational and relational constraints on persuasive messages have had adults select from among preformulated appeals or strategies. For example, Hazen and Kiesler (1975) had subjects select from specific arguments those which they would use under circumstances varying along the dimensions of degree of opposition from the target, likelihood of feedback, and anticipated difficulty of gaining agreement. Miller, Boster, Roloff, and Seibold (1977) provided subjects with seventeen general strategies identified by Marwell and Schmitt (1967) to determine differences in the selection of strategies under conditions where the outcome had short or long-term consequences and where the situations were interpersonal or impersonal.

Work undertaken to compare the selection of preformulated appeals and spontaneously generated appeals found that the two methods yielded different data. For example, in repeated measures designs using different strategy checklists both Burke (1979) and Pelose (1980, 1981) found little agreement between strategies used in spontaneous messages and strategies checked on a strategy checklist. Additionally, Clark (1979) compared strategy selections to appeals in spontaneously generated messages under conditions which varied in terms of the degree of self interest of the persuader in the outcome and
the persuader's desire to be liked by the message recipient. She found that spontaneously generated messages revealed differences in strategies used among the varying conditions which were not revealed when subjects were allowed to choose from preformulated appeals. When presented with an array from which to choose, subjects tended to select appeals which reflected greater accommodation to the views of the persuadee than many subjects were able to spontaneously generate, thereby obscuring differences among conditions.

In general then, individuals may choose appeals consistently better adapted to message recipients than they are capable of constructing spontaneously. It is possible however that this selection process might reveal a developmental progression. That is, children may choose more adaptive strategies than they can generate themselves but the best adapted strategies will be selected only by the oldest children. Howie-Day (1979) found no differences in messages selected by first-graders, seventh-graders and undergraduates. However, she allowed subjects only two options—either asking without any justification or asking with a specific justification. Although three forms of justification were studied, they were never compared with each other; each was always compared only with an unjustified request.

Hence the present study represents a more direct attempt to discern whether there is a developmental progression in the type of persuasive appeals selected by children where the appeals are ordered in terms of the degree to which they accommodate to the views of others. The first research question was directed to this issue:

Q1: Is there a positive relationship between the grade level of the child and the level of adaptation in the preformulated persuasive appeal chosen?
As already noted, our work with spontaneously generated messages has revealed a consistent pattern of positive correlations with social cognitive measures (e.g., differentiation and abstractness of the interpersonal construct system) thought to be requisite to the development of listener adaptation in persuasive messages. It seems reasonable to assess whether results obtained through message selection procedures would yield similar results. The second research question focuses on this issue:

Q2: Is there a positive correlation between level of adaptation of the preformulated persuasive appeals chosen and measures of cognitive differentiation and abstractness?

The second methodological approach investigated in this study was that of eliciting a rationale for the message strategy chosen. Eliciting a rationale appears to be important because the rationale provides more direct insight into the child's reliance on varying bases of message adaptation. Coding appeals in spontaneously generated messages will not overestimate the level of development of the child, but at times might result in an underestimate of the extent of development. The child might use a seemingly low level of adaptation (e.g., focusing on personal needs and wants) when in reality he or she had very good reasons for doing so. For instance, if the child realized that a grandparent enjoyed indulging the child, a simple plea might be the most effective form of persuasion. We, as researchers, would need the rationale to recognize the understanding of the other displayed in this message choice.

O'Keefe and Delia's (1979) study with adults suggests the utility of eliciting the rationale and coding it for the degree to which it reflects understanding of the views of the message recipient. Using such an approach, they found that the level of understanding in the rationale correlated positively with the number of arguments and appeals used in the message as well.
as with measures of cognitive differentiation and comprehensiveness. In the study of Howie-Day (1979) cited earlier, in which no difference was found in the appeals selected by children of different ages, she did find that the rationale given for message choices showed increasing understanding of the views of the message recipient among older children.

The present study, then, represents an attempt to further investigate the utility of eliciting and coding rationales for message choices as a means of assessing the level of development of children. Once again, the same two criteria for utility that were used in assessing message selection were applied to questions concerning rationales for message selection:

Q3: Is there a positive relationship between the grade of the child and the level of understanding of the message recipient revealed in the rationale offered for the choice of a persuasive appeal?

Q4: Is there a positive relationship between cognitive differentiation and abstractness and the level of understanding of the views of the message recipient revealed in the rationale offered for the choice of a persuasive appeal?

Methods

Subjects

Subjects were 211 kindergarten through 12th grade students attending a parochial school in a midwestern community. All subjects were from working, middle and upper-middle class backgrounds.

Procedures

Each child was interviewed individually by the second author. Interviews were conducted in a quiet room in the school and lasted approximately 20 minutes. All interviews were recorded on audiotape. Prior to the administration of the experimental tasks, the interviewer ascertained that all children were
familiar with tape recorders. After supplying demographic information, the child completed a number of tasks, three of which are relevant to our questions. The nature of these tasks is described below in the order of presentation.

Tasks:

Peer Description Task. Subjects were asked to describe two peers, one liked and one disliked. On those few occasions where the subjects could not name a disliked peer, they were asked to describe a peer who was not a "good friend". The subjects were asked to tell the experimenter everything they knew about each peer in turn so that the interviewer might know what kind of person each was. The spontaneous descriptions were followed by two probes. For each peer the subjects were asked if there was anything else they could add. Finally, after the description of the liked peer the interviewer asked the child if there was anything he/she disliked about the other; after the disliked peer, the interviewer asked if there was anything he/she liked about the other.

Appeal Selection. Subjects were presented with two situations. In one situation the subjects were told to imagine that they wanted their father to buy them a new bike. In the other situation the subjects were asked to imagine that they wanted their parents to donate food to a poor family for a Christmas dinner. For each situation the interviewer supplied four appeals and asked the subjects to select the message they would be most likely to use. Each message was explicitly constructed to represent differing levels of listener-adaptation. For example, one message focusing on the needs and wants of the persuader indicated how much fun the child could have with a new bike. One message focused on a potential objection that the persuadee might use as the basis for refusing the request. For example, in the
situation in which the child attempted to persuade their father to buy them a new bike, the appeal focused on how careful the child would be. Two messages focused on the needs and wants of the persuadee. So, for example, the appeal indicated that a new bike would enable the child to run errands for his/her parents.

Elicitation of Rationales. After the subjects identified the message they would be most likely to use, they were asked a series of questions designed to elicit their rationale for message choice. First they were asked why they selected the message they did. Then they were asked how they knew that the message they had selected would work best. Finally, they were asked why the message they had chosen would make more difference to the persuadee than any of the alternatives.

Coding Systems

Peer Description Task. The peer description task yielded two measures of social cognitive development: (1) differentiation and (2) abstractness of the interpersonal construct system. Differentiation is assessed by counting the number of attributes mentioned in each description and summing across the two descriptions. Abstractness is assessed by dividing attributes mentioned in the description into two categories: concrete (physical characteristics, behavioral descriptions, and demographic characteristics) and abstract constructs (general attitudes, beliefs, values, psychological states, dispositions, and motivations) and then counting the number of abstract constructs.

Appeal Selection. Each child received a score for the appeal they selected for each situation. Since the preformulated messages were designed to reflect the three levels of listener adapted appeals with justification identified by Clark and Delia (1976), we used their scoring system to assign scores. The lowest level appeal focused on the needs and wants of the
persuader. The next level of appeal focused on potential counterarguments. The highest level focused on the needs and wants of the persuadee.

Rationales. Rationales were scored using an eight level scoring system developed for this study. The scoring system is designed to tap the level of understanding of the listener displayed in the rationale for message selection. Following are descriptions of the levels with examples. All examples are drawn from the rationales for selecting the message indicating that the child could run errands for the parents when trying to persuade his/her father to buy him/her a new bicycle.

Level 1—No rationale. When the child was asked why he selected the message he did, he was unable to supply any reason for his choice.

Level 2—Simple restatement of the message selected. "Because I'd be able to run errands for him."

Level 3—Personal preference of the persuader. "Because I like run errands..." or "Because I like bikes and I like to do things for people."

Level 4—Implicit norms or consequences as the basis for adaptation. "That would be the best because he likes me to go places for him that are close and I'd be able to get there and back without having him wait a lot time and he hates to wait."

Level 5—Generalized norms or social knowledge of the generalized other as the basis for adaptation. "Because lots of people like to have someone else run errands for them."

Level 6—External conditions of the persuadee that don't explicitly display understanding of the internal states or motivations of the persuadee as the basis of adaptation. "Because my mom can't always run errands because I have a little sister."

Level 7—Preferences of the persuadee as the basis for adaptation. "Because he's a very practical man. Like when he sees me sitting in front of the TV he'll say why
don't you get up and help your mom or why don't you go out and rake up the leaves or something. So I think he'd like me to run errands."

Results

Appeal Selection

To assess the relationship between grade and the level of listener adaptation in the message selected in both situations a 13 (grade) by 2 (buy bike vs donate food situation) unweighted means analysis of variance with repeated measures on the second factor was calculated. The between group factor was grade while the within group factor was the situation. The dependent measures were the level of listener adaptation in the message selected for each situation. The main effect for grade was not significant (F=1.07, df=12,180, p<.39). Although there was a significant effect for situation (F=3.79, df=1,180, p<.05), there was not a significant situation by grade interaction (F=1.41, df=12,180, p<.16). In short, then, older children did not differ from younger ones in the persuasive appeals selected. The mean level of listener adaptation in selected messages for each situation for each grade are presented in Table 1.

To assess the relationship between social cognitive development and the level of listener adaptation of selected messages, correlations were computed (See Table 3). Nonsignificant correlations were obtained between the level of listener adaptation in the message selected for the buy bike situation and cognitive differentiation and abstractness of the interpersonal construct system. In other words, there was no relationship observed between social cognitive development and the level of listener adaptation in the particular message selected in the buy bike situation. Significant but small correlations in the wrong direction were found between the level of
listener adaptation in the messages selected for the donate food situation and cognitive differentiation \((r = -0.24)\) and abstractness \((r = -0.12)\). In other words, the more listener adapted messages were selected by subjects lower in social cognitive development.

Rationales

To assess the relationship between grade and the level of understanding of the listener reflected in the rationale for message selection a 13 (grade) by 2 (buy bike vs donate food situation) unweighted means analysis of variance with repeated measures on the second factor was calculated. The between group factor was grade, while the within group factor was the situation. The dependent measures were the level of understanding of the listener displayed in the rationale provided for each situation. The main effect for grade was significant \((F=9.96, df=12,178, p<.001)\) while the effect for situation \((F=.29, df=1,178, p<.63)\) and the grade by situation interaction \((F=.74, df=12,178, p<.71)\) were not significant. In other words, there was a significant developmental trend such that older children were more likely to display greater understanding of the listener in their rationales. The mean levels of understanding of the listener displayed in the rationale for each situation for each grade are presented in Table 2.

To assess the relationship between social cognitive development and the level of understanding of the listener displayed in the rationales correlations were computed. (See Table 3.) Since no significant differences were observed between the two situations, the scores for each situation were averaged. So, the correlations were computed on the average level of understanding of the listener displayed in the two rationales and cognitive differentiation and abstractness. The level of understanding of the listener
displayed in the rationale (averaged across both situations) was significantly correlated with both cognitive differentiation ($r = .41$) and abstractness ($r = .44$) of the interpersonal construct system.

**Discussion**

The purpose of this study was to determine the utility of two methodological approaches for assessing the level of development of persuasive skills. In general, the selection of preformulated appeals appears to have no utility, whereas the coding of the rationale underlying the selection seems very useful.

The level of appeal reflected in choices from preformulated messages showed no advancement with the age of the child and failed to correlate positively with social cognitive measures which relate to the level of appeal used in spontaneously generated messages. Further doubt is cast on the utility of the selection of appeals by their negative correlation (buy bike situation: $r = -.24$; donate food situation: $r = -.03$) with the rationale for making the choice. Thus we see no justification for using selection of preformulated appeals in studying the level of development of persuasive abilities.

In contrast, the degree to which the rationale displayed understanding of the views of the message recipient increased with age and was positively correlated with measures of cognitive differentiation and abstractness.

In fact, the coding of the rationale correlated positively ($r = .49$) with the level of listener adaptation of appeal in spontaneously generated messages on different topics analyzed in a study reported elsewhere (see Delia, Kline, & Burleson, 1979). This suggests that the level of ability reflected in the rationale is a generalized one, not bound to factors...
involved in the specific situation.

There is, then, considerable evidence that the degree of understanding of the views of others reflected in the rationale does measure an underlying level of ability to construct persuasive messages. Thus when the researcher wishes to rely primarily on an analysis of spontaneously generated messages, analysis of the rationale for selection of the approach taken is a useful supplement. The researcher can use the rationale to distinguish between cases where low-level appeals are used because the persuader has little understanding of the views of the message recipient and instances where the views of the other are understood well and suggest the appropriateness of a seemingly low-level strategy.

The researcher might even use the method of having subjects choose from preformulated appeals and then supply a rationale for the choice. The index of development, then, would not be the option selected, but rather the level of understanding of the views of the other reflected in the rationale.
Table 1. Means by Grade for the Level of Adaptation in Appeals Selected

<table>
<thead>
<tr>
<th>Grade</th>
<th>Buy Bike Situation</th>
<th>Donate Food Situation</th>
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<tbody>
<tr>
<td>K</td>
<td>3.25</td>
<td>3.50</td>
</tr>
<tr>
<td>1</td>
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</tr>
<tr>
<td>12</td>
<td>3.15</td>
<td>2.92</td>
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</table>
Table 2. Means by Grade for the Level of Understanding of the Listener Displayed in the Rationale

<table>
<thead>
<tr>
<th>Grade</th>
<th>Buy Bike Situation</th>
<th>Donate Food Situation</th>
<th>Average of Both Situations</th>
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</thead>
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<tr>
<td>K</td>
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<td>6</td>
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Table 3. Intercorrelations

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</thead>
<tbody>
<tr>
<td>1. grade</td>
<td></td>
<td></td>
<td></td>
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<td></td>
</tr>
<tr>
<td>2. cognitive differentiation</td>
<td>.55**</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. cognitive abstractness</td>
<td>.70**</td>
<td>.77**</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. listener adaptedness of message selected in buy bike situation</td>
<td>.02</td>
<td>.00</td>
<td>.00</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. listener adaptedness of message selected in donate food situation</td>
<td>-.23**</td>
<td>-.24**</td>
<td>-.12*</td>
<td>.02</td>
<td></td>
</tr>
<tr>
<td>6. X level of understanding of the other in the rationale</td>
<td>.54</td>
<td>.41**</td>
<td>.44**</td>
<td>-.03</td>
<td>-.24**</td>
</tr>
</tbody>
</table>

*p < .05

**p < .001
References

Asher, S. R. Children's ability to appraise their own and another person's communication performance. *Developmental Psychology*, 1976, 12, 24-32.


Footnotes

1 The number of subjects varies from analysis to analysis because of incomplete data on some subjects. We have data on all 211 for the peer description task. We have data on only 195 subjects for selecting appeals in the bicycle situation and 193 subjects for selecting appeals in the food donation situation. We have rationales for both situations from only 191 subjects.

2 Analyses on other tasks in this data set are reported in Delia, Kline, and Burleson (1979) and Delia, Burleson, & Kline (in press).

An appeal at the lowest level of listener adaptation—a simple request with no justification was not represented in the message choices. Although many children produce this level of appeal spontaneously, when they are allowed to select messages, Howie-Day (1979) found that first graders, seventh graders, and undergraduates all preferred messages with justification to messages with no justification.

Multiple instantiations of all levels of appeal were not provided. When faced with the unfortunate need to balance the obvious advantage of having multiple instantiations with constraints imposed on us by the age of our subjects, we felt that multiple instantiations of appeals within situations would not be feasible because of the difficulties this would present the child in terms of the increased number of comparisons. A good deal of research indicates that children have difficulty with a task as the number of comparisons increases (Asher, 1976; Asher & Oden, 1976; Asher & Parke, 1975; Rosenberg & Cohen, 1966; Whitehurst, 1976; Whitehurst & Sonmenschen, 1978).

4 For a more elaborate explanation of this coding system with examples see Clark & Delia (1976).


Pelose, G. The relationship between characteristics of interpersonal construct systems and reflectiveness about communication. Unpublished manuscript, University of Illinois, 1981.

