THE DEVELOPMENT OF THE CONCEPT OF GOD IN CHILDREN

BY

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1977

Submitted to the Faculty of the Graduate College of the Oklahoma State University in Partial fulfillment of the requirements for the Degree of MASTER OF SCIENCE May, 1989

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ACKNOWLEDGMENTS

I am deeply indebted to a number of people whose help, guidance and encouragement have made this possible. I wish to thank my major advisor, Dr. John C. McCullers, for his invaluable assistance and guidance throughout this project. The many extra hours are deeply appreciated. Thanks also to the other committee members, Dr. John Rusco and Dr. James Moran III, for their input and support.

I am indebted to the pastors, school administrators, principals, teachers, and students of Winnetka Heights Christian School, Sapulpa Christian School, Evangelistic Temple Christian School and Victory Christian School for their cooperation in gathering the data. To the 210 children from these schools and the Christian Education program at Carbondale Assembly of God that drew pictures for me, thank you for drawing such wonderful pictures of God.

Special thanks go to Dr. Bill Kuert for his creative input, Randy Feller for his incredible assistance with SYSTAT, Billy Thresher for his work in reducing and copying the drawings, Dale Wilkerson for the use of the laser printer, and June LeBret for making the computer user friendly even to a stranger like me. Thanks also to Jo Ann Vaughn for holding everything together in the office while I was "unavailable."

I must thank the staff of Carbondale Assembly of God for their sacrifice in covering for me while I was busy with the research. And to the beautiful people of Carbondale Assembly of God for their patience, love and continual support and encouragement throughout this project: Thanks for letting me be obedient.

Thanks to my wife Paula and my daughters, Sarah and Rebekah for their sacrifice, love, presence, support, hugs and encouragement. You are always a part of all that I do.

Finally, to the One who said unless we become as a little child we would not enter the Kingdom, all credit and honor and glory.

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The Concept of God in Children
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This article is based on the Master's thesis research of the first author, conducted under the direction of the second author. The authors wish to thank the principals, teachers and students of Winnetka Heights Christian School, Sapulpa Christian School, Evangelistic Temple Christian School, Victory Christian School and the Christian Education Program of Carbondale Assembly of God Church for their ready participation in this research.

Abstract

The research involved 653 children kindergarten through sixth grade. One group drew pictures of their concept of God, the second chose the pictures that most looked like God from their grade level and the third group chose pictures that most looked like God from across grade levels. Results reflected a stage-like development of the concept of God, consistent with Harms'(1944) findings, and the influence of cognitive development. Movement through the stages occurred at significantly younger ages than reported by Harms. The concept of God was not found to be limited by the child's stage of development; the younger children tended to choose more advanced drawings with higher levels of abstraction and symbolism.

The Development of the Concept of God in Children

In the latter part of the last century and early part of this one, considerable attention was given to the role of religion in human affairs. Men of such note as William James (1958), Sigmund Freud (1964) and Gordon Allport (1960) studied and researched the influence of religion upon mental life. While the influence of religion was studied at length, a key developmental question was often ignored: What are the origins of religious faith and the concept of God and how do they develop?

According to Fowler (1981) and Erikson (1950) religious faith is a universal feature of humanity. Regardless of religious preference, everyone has some sense of the transcendent in their life and that recognition is represented or expressed in some fashion, whether as an individual private belief, or through participation in an organized religion or group. If indeed every human being has a sense of the transcendent in their life, then the representation and expression of that faith becomes an area of concern to the social scientist.

One of the earliest studies that specifically explored the development of the concept of God in children was conducted by Harms (1944). Working with children from both public and private schools and from a variety of religious backgrounds, Harms asked 4800 children to draw a picture of God. Harms found the drawings fell into three basic

categories representing three stages of development. The first stage was filled with fantasy-like images, the second with more literal and realistic images and the third stage was filled with more abstract images and symbols.

In recent years a number of other scholars have proposed a stage theory to explain the development of the concept of God and religious faith in children. Elkind (1971), Fowler (1981), Powers (1982), Wakefield (1975) and Westerhoff (1976) have all proposed a stage-like developmental process for faith development and the concept of God.

Among the faith development theorists, James Fowler is the most widely quoted and his theory has received the greatest attention and discussion. Building upon Piaget's (1967) cognitive developmental theory and Kohlberg's (1967) theory of moral development, Fowler constructed a six-stage theory of faith development. While Fowler views the stages as universal and hierarchical, he does not contend that everyone will advance through each of the six stages.

Fowler's first three stages have aspects comparable to those of Harms. Both Fowler and Harms begin with a stage that is filled with fantasy and relies upon the child's imagination. Each has a second stage that is filled with more literal and concrete aspects. The third stage of both theorists can be said to be influenced by the development of formal operational thinking, thus allowing for more abstract and contemplative thinking about the concept of God.

Of note is the difference in methodology between Harms and Fowler. Fowler used interview techniques, relying upon verbal skills, whereas Harms used a drawing technique.

While a number of researchers, for example, Heller (1986), Nye and Carlson (1984), Parker (1984), Peatling (1975), Pitts (1975), and Wakefield (1975) have investigated the development of a child's faith and concept of God, most, with the exception of Pitts (1975) and Heller (1986), utilized personal interviews of the children. were either asked questions about God or were asked to listen to bible stories and then interviewed about the nature of God. As a result of the methodology used, these studies were dependent upon the verbal skills of the children. Both Pitts and Heller, like Harms, asked children to draw a picture of God. According to Elkind (1971) using a less structured test that does not rely solely on verbal skills allows for marked differentiation between ages with regard to the developing concept of God in children. (1944) argues that the most important parts of religious meaning are often most difficult to verbalize and hence are more easily accessed through the use of drawings.

The use of children's art has long been accepted as a means of studying psychological processes in children (Goodenough, 1926; Griffiths, 1936; Harris, 1963; Klepsch & Logie, 1982; Koppitz, 1968) and is most appropriate to this present research.

While Harms' study was an important one, it must be noted that 45 years have passed since the research was done. A great number of cultural and sociological changes have occurred. The role of religion in society and certainly in the school system has changed radically in 45 years. Have there been accompanying changes in children's concept of God?

While the use of drawings may free the child from the limitation of verbal skills, it is possible that the child may be limited as well by artistic skills. It is possible that the child's concept of God is more advanced than he or she can verbally or artistically communicate. If that is the case, the child's drawing may reflect an early, immature stage of development while conceptualization of God may be more advanced.

The purpose of this study was to explore the development of the concept of God in children. Specifically, the aim was to look for possible stages in the development of a child's God concept and to examine the relationship between the child's concept of God and his or her level of cognitive development, as indicated by grade level in school.

Drawings of God by children in kindergarten through sixth grade were collected and analyzed for content and were compared to Harms' results obtained 45 years ago.

A selection process was used that afforded children the opportunity to choose pictures across stages of development (grade level). If children in all grades choose drawings by

the oldest children, this would suggest that the concept of God occurs in an all-or-none fashion in which all children share a common conception, but only the oldest can draw well enough to represent it. However, if children tend to choose mainly drawings from their own age level, this would argue for a stage-like development of the concept of God.

Method

The research method consisted of three specific phases. The first involved obtaining drawings of God from children in grades K (kindergarten) through sixth. The second phase involved having a different group of children choose the best four drawings from their specific grade. The third step involved asking a different group of children to choose the best drawings from a sample of drawings across six grade levels.

<u>Subjects</u>

Christian schools were used as a source of subjects in this study for several reasons. Considering the nature of the research topic, public schools might find it controversial, whereas Christian schools would not. Secondly, the development of the concept of God in children might be more readily seen in children who receive formal religious instruction. Thirdly, the use of children from private Christian schools allows comparisons to be made with previous research findings obtained with children from other sources.

The subjects were 653 kindergarten through sixth grade students from the Tulsa Metropolitan area. Based on the results of the pilot investigation (see Appendix B), a decision was made not to include children younger than five years of age in the study. All children were attending one of four Christian Schools, or were in the Christian Education program of an Assembly of God Church.

A total of 210 children were involved in the first phase of the research. A total of 113 children were involved in the second part and 309 students were involved in the third and final phase.

The 309 students participating in the third phase consisted of 158 females and 151 males. These were distributed across grades as follows: 34 children in kindergarten, 61 in first grade, 38 in second grade, 40 in third grade, 45 in fourth grade, 47 in fifth grade, and 44 in sixth grade.

In addition, 14 classroom teachers were asked to view the pictures and estimate the grade level of the artist.

The teachers were all females employed at the same school.

Finally, a panel of six "experts" were asked to rate each of the final 24 drawings on five different dimensions. This panel consisted of three men and three women: A professor of Christian Education, a psychologist specializing in pediatric and adolescent counseling, a theologian, an elementary art teacher, a developmental first grade teacher and a fourth grade teacher.

Materials

The pictures were drawn, for the most part, on standard (8.5 X 11 inches) white typing paper supplied either by the researcher or the classroom teacher, at the teacher's discretion. The children were allowed to use pencil, pen, crayon or felt-tip markers to draw their pictures and were told they could color the pictures if they chose.

For the second phase of the research, 12 pictures at each grade level were mounted on three 22 inch by 28 inch poster boards of various colors, four pictures to a board.

For the third phase, 24 pictures were mounted on four 28 inch by 44 inch dark red poster boards, six pictures to a board.

Procedure

Collection of Children's Drawings. For the first step in the research, 210 children ranging in grade level from kindergarten through sixth grade were asked to think about what they thought God looked like, if they pictured God in their mind. They were then asked to draw a picture of God that best illustrated their concept (see appendix D for the exact instructions to children). Children from two of the Christian schools and the church Christian Education program participated in this phase.

From the total sample of 210 pictures, 12 at each grade level were randomly chosen to be used in the next step.

These pictures were placed on poster boards, four pictures

to a board. The pictures were assigned to locations on the board in a random fashion.

A decision was made to omit the fourth grade drawings. There were fewer fourth grade pictures to select from than at any other grade level. In addition, by eliminating fourth grade drawings, it would be possible to determine whether fourth graders would choose drawings at a higher or lower grade level, given that they could not choose drawings from their own grade.

Identifying Best Pictures at Each Grade Level. second step, 113 students from a third school were shown the 12 pictures, four pictures at a time, drawn by students from their own grade level, i.e. kindergarten students saw 12 pictures drawn by kindergarten students, first graders saw 12 pictures drawn by first graders, etc. Any information given by the artists concerning their drawings was shared with the students as the drawings were presented. The students were then asked to choose the one picture from each group of four that most looked like God as they pictured God or as they would be apt to draw God. The top four drawings most frequently chosen from each of the six grades, a total of 24 pictures, were used in the third step. pictures were placed on four separate poster boards, six to a board. Each board had one picture from each grade (K, 1, 2, 3, 5, and 6). The locations of the pictures on the board were assigned in a random fashion. The boards were

designated Boards A, B, C, and D and the pictures on each board were numbered 1 through 6.

Evaluating the Pictures

Children's Choices. The third step involved 309 students from a fourth Christian School. They were shown the four boards, one board at a time and asked to choose the one picture from each board that most looked like God as they perceived God. (For exact instructions to students see appendix D). The artist's information concerning each picture was shared with these students. Each child was given a response sheet (see appendix E) and asked to circle the number on the page corresponding to the number of the picture they chose for each board.

The pictures were shown to the entire class, one board at a time. After the students had circled their response for Board A, that board was placed out of sight and Board B was then presented, etc. The only exception was for the kindergarten children (see Appendix B). These students came to a table and viewed the pictures, one board at a time. For 27 of the kindergarten students, they indicated their choice orally and by pointing and the investigator would record it on the response sheet. The remaining seven kindergartners, at the teacher's suggestion, were allowed to view the pictures as a group and mark their own response sheets as was the case for all children above kindergarten level.

A brief interview was conducted with a random sample of children from grades K through fourth grade. These students were asked the reason for their particular choices, and responses were recorded by the investigator. (See appendix F for a sample of responses.) The fifth and sixth grade students engaged in a class discussion concerning their choices.

Teacher Estimates of Grade Level of Drawings. The 14 teachers from the fourth school were asked to view the pictures and estimate the grade level of each of the drawings. They were given the same information concerning the pictures as was given to the children. The teachers were told that each board had one picture from each of grades K, 1, 2, 3, 5, and 6. They were shown the boards one board at a time and marked their answers on the same type of response sheet as used by the children.

Rating of Drawings by Panel. The members of the expert panel were asked to view the pictures and rate each picture on a scale of one to five (1=least, 5=greatest) as to creativity, cognitive maturity, artistic quality, level of abstraction and faith development (see Appendix E for response sheet). The panel members were shown one board at a time and were given the same information about the pictures as was given to the children and teachers but were not told the grade level of any of the drawings until after they had responded.

Results

Characteristics of Drawings

As expected, the drawings of the younger students showed little symbolism, reflected a lower level of cognitive development, and a simpler and more anthropomorphic view of God. Of the 68 kindergarten drawings in the original sample of 210 drawings, all portrayed God with a human body. The kindergarten drawings included examples of fantasy with drawings of God eating an ice cream cone, God with a reindeer and a monkey, etc. The use of symbolism in kindergarten drawings was limited to such things as a cross, light rays and the use of color to represent royalty, righteousness, etc.

First graders also produced a high percentage of anthropomorphic drawings with all but one portraying God in human fashion. As in the kindergarten drawings, the use of symbols was limited but the range of symbolic expression was greater. First graders included not only the cross and light rays but a cobblestone street to indicate the "path of a christian", the gates of heaven and a crucifixion drawing of Jesus with tears on his face and nails in his hands and feet.

The second and third grade drawings also pictured God in anthropomorphic terms with only two second graders (7%) and four third graders (20%) portraying God as other than a human figure. The third grade pictures showed a slight

increase (9%) in the use of symbolism compared to the second grade.

A noticeable change occurred in the fifth and sixth grade pictures. The use of symbolism increased dramatically. In 31 drawings by fifth graders there were at least 21 uses of symbolism (68%). The nature of the symbolism was more abstract than at the younger levels and suggested a higher level of cognitive development. Forty-five percent of the symbolism in the fifth grade drawings was other than the cross or light rays. Nine of the fifth grade pictures (29%) portrayed God as other than a human figure. These drawings included a lamb, a heart and a light and a lamp.

The drawings from the sixth grade revealed an even more frequent use of symbolism and with greater individual expression. Seventy percent of the symbolism used was other than the cross or the light rays. As the use of symbolism increased, the anthropomorphic drawings declined. Fifty-two percent of the sixth grade pictures portrayed God as other than a human figure. These drawings included a lion, a hand reaching to touch the world, a light and a throne.

Children's Evaluations of Drawings

The choices of the 309 students who evaluated the drawings were tallied and the average grade level of the drawings chosen was computed. (The raw data used and the averages for each student are presented in Appendix I.)

All of the statistical analysis and procedures were produced on Systat version 3.10 (Wilkinson, 1987).

A preliminary review of the data indicated that drawings at the upper grades were chosen more frequently. The frequencies of choices by grade of drawing for each board are tabulated in Table H-1 (see Appendix H).

When the drawings of younger children were chosen, they were more likely to be chosen by younger children. Table H-2 in Appendix H shows the average grade of drawing chosen by each specific grade, for each of the four boards.

Tables H-3 through H-6 (Appendix H) show the frequency with which each grade chose each grade level of drawing on Boards A through D, respectively. Chi-square analyses were significant for each board: Board A, χ^2 (30, N = 309) = 63.37, p<.001; Board B, χ^2 (30, N = 309) = 85.60, p<.001; Board C, χ^2 (30, N = 309) = 75.70, p<.001; Board D, χ^2 (30, N = 309) = 63.99, p<.001.

Table 1 summarizes these findings and shows the frequency and percentage of choices of drawings at each grade level for the four boards combined.

Insert Table 1 About Here

The average grade choices of the 309 students were computed and used as scores in a two-way analysis of variance. The variables were grade of child and sex. This analysis revealed a significant Grade of Student effect, \underline{F} (6, 295) = 5.67, p<.001. The older the artist, the more likely the drawing was to be chosen. While the overall

tendency of students was to choose the older grade drawings, younger drawings were chosen and predominately by younger children. The Sex effect was significant, $\underline{F}(1,295) = <1.00$. No interaction effects were found between grade and sex $\underline{F}(1,295) = 1.30$, $\underline{p}<.256$. Similar analyses of variance were also performed for each individual board. These analyses showed a significant Grade of Student effect for each board: Board A, $\underline{F}(6,302) = 2.92$, $\underline{p}<.009$; Board B, $\underline{F}(6,302) = 4.08$, $\underline{p}<.001$; Board C, $\underline{F}(6,302) = 4.35$, $\underline{p}<.001$; Board D, $\underline{F}(6,302) = 6.48$, $\underline{p}<.001$. The only analysis to show a significant Sex effect was Board C, $\underline{F}(1,302) = 6.22$, $\underline{p}<.013$.

Teacher Estimates of Grade Level

Fourteen teachers viewed the 24 final pictures and estimated the grade level of the artist. The teacher responses were tallied for each picture on each board. Table H-7 (Appendix H) shows the mean and standard deviation of the teachers' estimates for each picture. There was a significant correlation between the teachers' estimates and actual grade levels of the drawings, $\underline{r} = .739$, $\underline{p} < .01$.

Rater Evaluation of Drawings

A panel of experts was asked to rate each picture on five different dimensions, on a scale of one to five, where 1 = lowest and 5 = highest. The raters' responses on the individual dimensions are presented in Tables H-8 - H-12 (Appendix H).

Pearson correlations were computed to determine the relationship between the raters' evaluation on each dimension and frequency of choice of a particular drawing. Correlation coefficients are presented in Table 2. Every dimension was significant at the .01 level except for abstractness which was significant at the .05 level and creativity which was not significant.

Insert Table 2 About Here

The ratings of each of the panel of experts were tallied and an overall mean score was then determined for each picture by averaging across all raters, (see Table H-13; Appendix H).

There was a significant correlation between the grade of the artist and the raters overall mean rating score, $\underline{r} = .536$, $\underline{p} < .05$. The higher the overall mean, the higher the expected level of development of the artist. Of the ten highest means, seven (70%) were of pictures drawn by fifth or sixth graders.

Children's Evaluations of Artistic Quality of Drawings

An additional group of 21 second graders were asked to evaluate the 24 pictures on the basis of artistic quality alone. The students were instructed to choose the best drawing on each board. The choices of drawings of this class were compared to the choices made by second graders choosing the best picture of God. There was a significant

relationship between the choices of best art and the choices of most like God, $\underline{r} = .837$, p<.01.

Discussion

The characteristics of the drawings (drawings are presented in Appendix G) indicated agreement with a stagelike approach to cognitive development. A majority of the drawings were easily identifiable as to grade and cognitive level of the artist as shown by the accuracy of teachers' estimates of grade level. The pictures could have been grouped according to cognitive developmental levels with some degree of accuracy. There were, however, notable exceptions. Picture Al was drawn by a kindergarten girl. Her identification of parts of her picture included "streets of gold, a river of life that flows through heaven, crosses because Jesus died on a cross, the color purple because it stands for royalty." Picture C4 was drawn by a first grader. His explanation for the drawing was that God was a spirit, like fire. Picture B2 was drawn by a second grader showing a panorama of major Biblical themes and God was portrayed as a cloud overshadowing the events. These and similar pictures indicate a more advanced level of cognitive development, at least with regard to matters of faith and spiritual development.

One of the purposes of the research was to compare the present findings with the findings of Harms (1944).

Although a record of Harms drawings could not be found in order to compare actual drawings, the stages Harms suggests

were compatible with the present findings. The three stages Harms outlines: the fairy tale stage, the realistic stage and the individualistic stage were all clearly present in the drawings of this study. There is a significant difference in the findings however, with regard to age. Harms study involved children 3 to 18 years of age. range of ages within stages was roughly 3 to 7 years of age in stage one, 7 to 13 years of age in stage two and 13 to 18 years of age in stage three. The current findings show the presence of the three stages within kindergarten through sixth graders, approximately 5 to 13 years of age. While Harms' developmental stages are still appropriate and appear valid after 45 years, questions arise concerning the cognitive maturity level of the children and the age at which they pass from one stage to the next. The present research suggests children's concept of God may develop at an earlier age than 45 years ago. Further research is needed however, because of sampling children from church-run schools in this study.

The drawings were also found to be consistent with Fowler's (1981) theory of faith development. The younger children's drawings suggested a broader, more universal and less specific concept of God. While He is pictured as having a body, the pictures themselves suggested nothing as to how God related to the children. He was viewed as simply there, existent. Furthermore, the kindergarten and first grade drawings had more frequent images of heaven and

angels. This indicated concurrence with Fowler's first stage with emphasis on images and imagination. According to Fowler, these younger children rely heavily upon stories to provide them with images with which to deal with the feelings and ideas (faith) that are forming within them. The stories they have and hear are filled with images of Jesus on earth and God in heaven with streets of gold and gates of pearl, etc. While they seem able to choose drawings of a more abstract or developed God concept, they are unable to express those concepts verbally or artistically. Although the images and the stories of faith may be in their minds, they are unable to give much meaning to those images, apparently due to cognitive limitations.

According to Fowler's theory, the second stage involves a shift from mythic to literal concepts of God with the basis for the shift being the development of concrete operational thinking. Children can now create their own stories of faith and can compare stories and attribute meaning. These children will see God in concrete terms as a powerful being who is expected to deal with everyone in a just fashion (Fowler, 1981). These children are now beginning to see God in some relational fashion. A similar gradual shift was found in the second and third grade drawings of this study. While the drawings of God in the second and third grade were still largely anthropomorphic, there appeared an increased incidence of relational themes in the drawings. God as He related to the Bible story, God

as He related to the world by watching over it, God as He related to the child by expressing love, concern, healing when sick, teaching the people, etc.

The children at this stage were able to draw with greater artistic ability in some cases, and with greater range of creative expression as well. The pictures revealed an increase in independent thinking perhaps reflecting an involvement with the stories of faith they had heard.

The fifth and sixth grade drawings were also compatible with Fowler's third stage. The transition to this stage in Fowler's model is aided by the development of formal operational thought. There is the emergence of a mutual interpersonal perspective taking that allows for a new view of God. This is the older child or early adolescent who now can take God's perspective and look back at himself. God is now seen as one who knows and cares about individuals on a deeply personal level, on the order of a divine significant other (Fowler, 1981). The images of God are now centering around love, power, protection, personal involvement. With the transition to formal operations in some of the students at this age, the increase in the use of symbols and abstract images is to be expected.

Although younger children drew pictures consistent with their developmental level, and consistent with Harms' (1944) and Fowler's (1981) theories, they tended to choose pictures that were more cognitively advanced and more abstract. It should be noted that when kindergarten and first grade

pictures were chosen, they were more often chosen by kindergarten and first graders. Still, the findings indicated that even the younger children chose more advanced drawings. This result would challenge the findings of Goldman (1965) and Nye and Carlson (1984) that children under the age of 10 or 11 do not have the conceptual framework needed for an adequate concept of God.

As stated in the method, there were no fourth grade drawings on any of the boards. The fourth grade presented a mixture of concrete and abstract choices in contrast to the clearer choices of the fifth and sixth graders. It appears fourth graders (and some third graders as well) are in transition with regard to their stage of cognitive development. Consequently, some of their choices reflected a very abstract concept of God and other choices reflected a much more concrete concept of God. The fourth grade chose less kindergarten and first grade drawings than any other grade (one first grade drawing, Board B1).

One sex difference that was found on Board C centered around two specific pictures. The picture most chosen by the girls (C5) was a pencil sketch of the crucifixion. The picture most chosen by the boys was a pencil sketch of a muscular figure, presumed to be Jesus, with a lightning bolt descending (C6). The crucifixion picture was chosen by 81 girls and 34 boys. On the other hand, 31 girls and 82 boys chose the muscular figure.

The relationship between panel ratings of artistic quality and frequency of choice was found to be significant. However, the choices of the students were not entirely based upon artistic quality. The choices of the second grade students choosing best picture of God versus the best art work were not the same.

The teacher estimates and expert ratings combined to give an indication of which pictures were considered most advanced. The results indicated that a child's ability to express a concept of God is related to his or her cognitive developmental level, revealed by grade level. The older the child, the more advanced the expression of concept of God, the more advanced the drawing of God. At the same time, the results indicated that a child's ability to recognize and prefer a particular drawing of God was not strictly limited to a particular stage or cognitive level. Instead, even the youngest children chose drawings with abstract themes and symbolism.

<u>Implications</u>

The present study showed a young child's perception and conceptualization of God to be more comprehensive than many educators believe. Although unable to articulate adequately the concepts, the child is able to recognize the appropriate concepts when expressed artistically by others. Furthermore, the research indicated that children are moving through Harms stages of religious development at a younger age. Consequently, teachers and specifically Christian educators

must look for creative and fresh methods that reach beyond age specific boundaries and tap into the child's conceptual system. The children need to embrace more than just the form, the religious instruction, rather they can and must embrace the content and concept as well. The use of drawings of God by the children seems a good place to start to explore the individual child's concept of God and then build upon that concept in appropriate fashion.

Conclusion

The drawings of the children indicated a stage-like development of the concept of God. The development moved in clearly delineated and hierarchical stages and those stages were consistent with the three stages of Harms (1944). The stages were also consistent with Fowler's theory of faith development (1981). The passage through Harms' stages however, occurred over a similar but younger age range. These findings indicate that Harms' stages are still valid after 45 years.

It appears that pre-operational children can grasp the appropriateness of symbolism and abstractness but on the whole cannot articulate the concepts either verbally or artistically. This suggests the presence of faith in a more wholistic fashion and a more complete concept of God in younger children than can be expressed either verbally or by drawings. Additionally, this would indicate that a child's concept of God occurs in an all-or-none fashion and is refined based upon developing cognitive processes. The

child's expression of faith may indeed continue to develop in a stage like fashion, but his or her concept of God is in place and able to move across stages.

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Tables

Table 1

Frequency and Percentage of Choices of Drawings at Each

Grade Level

							Grad	de of	dra	wing		
			FREG	UENCY					PERCEI	NTAGE		
Grade	K	1	2	3	5	6	K	1	2	3	5	6
K	7	14	13	22	41	39	5.1	10.3	9.6	16.2	30.1	28.7
1	3	8	31	38	102	62	1.2	3.3	12.7	15.5	41.8	25.5
2	2	3	20	39	45	43	1.3	2.0	13.2	25.6	29.6	28.3
3	1	8	23	42	37	49	0.6	5.0	14.4	26.3	23.1	30.6
4	0	1	15	36	49	79	0.0	0.6	8.3	20.0	27.2	43.9
5	2	6	20	32	60	68	1.1	3.2	10.6	17.0	31.9	36.2
6	0	6	18	27	56	69	0.0	3.4	10.2	15.3	31.9	39.2
Total	15	46	140	236	390	409	1.2	3.7	11.3	19.1	31.6	33.1

Table 2

Pearson Correlation Matrix

	CREATIVE	COGNITIVE	ARTISTIC	ABSTRACT	FAITH	CHOSEN
CREATIVE	1.000					
COGNITIVE	0.867	1.000				
ARTISTIC	0.624	0.700	1.000			
ABSTRACT	0.929	0.871	0.553	1.000		
FAITH	0.903	0.896	0.677	0.929	1.000	
CHOSEN	0.364	0.638	0.713	0.446	0.510	1.000

Number of observations: 24

APPENDICES

APPENDIX A

LITERATURE REVIEW

The Development of the Concept of God in Children

According to James Fowler (1981) and Erik Erikson (1950) religious faith is a universal feature of humanity. Regardless of religious preference, everyone has some sense of the transcendent in their life and that recognition is represented or expressed in some fashion, whether as an individual private belief, or through participation in an organized religion or group. If indeed every human being has a sense of the transcendent in their life, then the representation of and expression of faith in the transcendent becomes an area of concern to the social scientist and an appropriate area for research.

Stage Theories

According to the theories of men such as Cobble (1985), Fowler (1981) and Westerhoff (1976), faith in the transcendent or in a supreme being is universal and actually develops in recognizable, hierarchical stages.

One of the first to utilize a stage like approach to explaining the development of faith in God was Ernest Harms (1944). Harms, investigating the development of religious experience in children, asked 4800 public and private school children to draw a picture of their image of God. The children ranged in age from three to eighteen years of age. The results of Harm's research led to his stage theory.

Harms first stage was applied to those three years to six years of age and was designated the fairy tale stage.

This stage was filled with fantasy images and a fairy tale like sense of "awe for the high and exalted which the child designates as the object of his religious experience" (Harms, 1944, p. 115). With few exceptions this was the most uniform of any of the stages.

The second stage was called the realistic stage. The children in this group were age seven to twelve. This stage seems influenced by organized religion, its teaching and its symbols.

The third stage involved those children thirteen to eighteen years of age and was designated the individualistic stage. The children in this stage seemed less bound by traditional religious symbols and imagery, more abstract in their design and more individualistic in their expression, hence the name of the stage.

While Harms was one of the earliest, he was not alone in his study of developing faith. John Westerhoff (1976) isolated four styles of faith in explaining his stage theory of faith development. Westerhoff speaks of experienced faith as the first stage. As the child experiences trust and love and acceptance from parents or significant others, the child puts meaning to those words and experiences. This then is the basis for the concept of God and the development of faith. The needs being met in the child at this stage are consistent with those of Erikson's first stage of trust versus mistrust (1950).

The second stage is affiliative faith. In this stage the child learns the stories of his faith and develops a sense of belonging within the community of believers. This stage finds support from Fowler's theory as the child begins to learn the stories and give them meaning.

The third stage is searching faith. In this stage, normally experienced during late adolescence, the individual begins to question and experience doubt that must be refined through critical thinking and evaluation.

The fourth and final stage is owned faith. This is perceived as a sense of enlightenment that is accompanied by a change in a persons behavior and a sense of personal identity. In most religions this stage would be likened to a conversion experience (Westerhoff, 1976, p. 98).

Another of those suggesting a stage theory of development with regard to a child's concept of God is David Elkind (1971). Elkind suggests there are four types of mental needs that are changing as the child matures and there is a corresponding aspect of faith and religion that meets that need.

Elkind's first stage is the search for conservation and begins in infancy. This is a search for permanence in a constantly changing world and the need can be met with the concept of an immortal, unchanging God.

The second stage is the search for representation and begins in the preschool years. The child at this age is attempting to find an appropriate image to attach to the

concept of God. Here biblical stories and images are important tools for the searching child.

The third stage is the search for relations and begins in middle childhood. The child at this stage is searching to find a way to relate to his or her concept of God. For Elkind, once the child has accepted the concept of God, it is inevitable that he will search for a way to relate to God.

The final stage is the search for comprehension and is reached during adolescence. At this stage the child is attempting to understand the why of life and his questions are answered by his theology.

Cognitive Development in Stage Theory

An analysis of each of these stage theories reveals the influence of cognitive developmental theory. Ronald Goldman (1964) also did research on religious development in children and was one of the first to apply Piaget's theory of cognitive development to religious education. Not surprising, Goldman found three stage of development that closely paralleled Piaget's stages of cognitive development. Goldman's first stage was called preoperational intuitive thought. The second stage was concrete operational thought and the third was formal (abstract) operational thought.

The significance of Goldman's stage theory is in his recommendations to religious educators. Based upon his assumption that most religious concepts are too abstract for a young child's conceptual system and cognitive

developmental level, Goldman (1965) recommends that children should not receive formal biblical instruction before the age of 10 to 12, when the child is moving into the formal operations stage of cognitive development.

Another of the theorist writing from a cognitive developmental standpoint is James Fowler (1981). Perhaps the leading spokesperson for faith development, Fowler acknowledges the influence of Erikson (1950), Kohlberg (1967), and Piaget (1967) upon his theory. Based upon research conducted while a colleague of Kohlberg's at Harvard, Fowler identified six stages of faith development. The first three are most relevant to the study of children's development of the concept of God.

Stage 1 is referred to as intuitive-projective faith.

There is an emphasis at this stage on images and imagination. These younger children rely heavily upon stories to provide them with images with which to deal with the feelings and ideas (faith) that are forming within them. According to Fowler, these children are unable to give much meaning to the images in their mind.

Stage 2 is the mythic-literal stage. The main factor producing the transition from stage 1 to stage 2 is the development of concrete operational thinking. These children can now create their own stories of faith and can compare stories and attribute meaning. These children will see God in concrete terms as a powerful being who is expected to deal with everyone in a just fashion.

Stage 3 is called the synthetic conventional faith and the transition to this stage is aided by the development of formal operational thought. There is the emergence of a mutual interpersonal perspective taking that allows for a new view of God. This is the older child or early adolescent who now can take God's perspective and look back at himself. God is now seen as one who knows and cares about individuals on a deeply personal level. Part of this stage of development can be explained by understanding the adolescent's need to be accepted and affirmed as they continue to discover themselves and gain confidence in themselves. The role of God at this stage could be described as a type of divinely significant other.

The stage theories of faith development tend to support Werner's "orthogenetic principle", i.e. the child is moving from a global, relatively undifferentiated state to a much more defined and well integrated state of conceptualization (Werner, cited in Thomas, 1985, p.157). From Werner's perspective, the child's God concept should move from a global, undifferentiated state to a relatively more concrete, literal state and then finally to a level of abstraction and cognitive sophistication consistent with Piaget's formal operations stage. This developmental pattern parallels the developmental stages outlined above.

These theories of faith development and studies of the development of the concept of God all have in common a reliance upon the cognitive development of the child. As

researchers began to give attention to the changes in God concept along age lines, Piaget's theory of hierarchical stages of development became increasingly important (Havighurst and Keating, 1971).

It became apparent that a child's developing concept of God was following a stage-like pattern that corresponded to emerging cognitive stages (Paloutzian, 1983). Though Piaget did not specifically study the development of God concept (he did study moral development), his contribution to this field cannot be underestimated.

Symbolic Function in Children

Piaget's contribution to this research is further reflected in the study of symbolic function in children (Piaget and Inhelder, 1971). The ability to represent objects or events by something other than the object or event is certainly integral to being able to draw a picture representation of God. The preoperational child is acquiring the level of sophistication needed to represent objects and events in a symbolic fashion through symbolic play, drawing and mental imagery (cited in Wadsworth, 1971, p.70).

It is not enough to merely be able to take a real event and be able to objectify it or think of it representationally. In order to express the concept of God the child must be able to take feelings and ideas and incarnate them in some form, either verbally or visually (Kaplan, 1979). Is the young child's conceptual system sophisticated enough

to think of and express the concept of God? While some, including Piaget, tend to describe the pre-schooler's conceptual system in negative terms (Wellman, 1982), other studies such as Gelman (1978) and Gelman and Gallistel (cited in Wellman, 1982) indicate a more comprehensive conceptual system than originally thought. Part of the explanation may lie in the distinct differences between the concepts Piaget worked with such as time, numbers, weight and distance versus concepts such as human thinking, people, and even the concept of God (Wellman, 1982).

While Piaget noted the limited ability of the preoperational child in terms of representation from a cognitive standpoint, there is reason to believe the young child can still grasp concepts as abstract as that of God and although unable to adequately express these concepts verbally, can express his mental perceptions through art and drawings.

Children's Art as Projective Technique

The use of children's art has long been accepted as a means of studying children (Goodenough, 1926; Griffiths, 1935; Harris, 1963; Klepsch and Logie, 1982; Koppitz, 1968). As early as 1885 articles appeared describing developmental stages revealed in children's drawings (Koppitz, 1968). Klepsch and Logie state "Of all the projective techniques, drawings dig deeper into the person, into his being (1982, p.36)."

While the validity of using the technique of drawing for children is unquestioned, there is a theoretical controversy over whether the child draws what he knows or what he sees, i.e. concepts or forms. The intellectualistic perspective is that children draw what they know rather than what they see and that only older children draw what they see (Pitts, 1976). The perceptual perspective is that children draw what they actually see and hence draw forms and not concepts. This perspective would hold that all children would pass through universal stages of artistic development. Pitts argues that proponents of both perspectives have based their findings on children's drawings of very concrete objects and have not considered children's drawings of abstract concepts like God. Pitts, arguing for a compromise position, has found that "children tend to draw forms to describe or represent concepts (Pitts, 1976, p. 18)."

Drawings done by children then are not only art but are in fact a means of expressing abstract concepts and deeply felt emotions and ideas (Harms, 1944; Pitts 1976).

While several recent studies have investigated the development of religious thinking and the concept of God in children (Heller, 1986; Nye & Carlson, 1984; Parker, 1984; Peatling, 1975; Pitts, 1975) only Pitts and Heller used the methodology of art and drawings. The other studies utilized personal interviews of the children. The children were either asked questions about God or were asked to listen to

Bible stories and then interviewed about the nature of God. As a result of the methodology used, these studies were again dependent upon the verbal skills of the children. According to Elkind (1971) using a less structured test that does not rely solely on verbal skills allows for a more marked differentiation between ages with regard to the developing concept of God in children. Harms (1944) argued that the most important parts of religious meaning lie in the areas of consciousness which are often most difficult to verbalize and hence are more easily accessed through the use of drawings.

As stated, both Pitts and Heller used drawings in their studies. Pitts asked a select sample of 125 children between six years and ten years of age from seven different religious denominations to draw a picture of God. Among the results of his study, Pitts concluded that differences among the pictures along age lines were compatible with Piaget's theory of cognitive development. (Pitts, 1976).

Heller's study was limited to 40 students aged 4 to 12. The students were selected by schoolteachers for the study and included children whose parents' religion was either Jewish, Catholic, Protestant or Hindu. Hellers findings were reported informally but did indicate differences in drawings and the concept of God along age lines (Heller, 1986).

Conclusion

The review of literature gives clear indications that the development of the concept of God moves along a heirarchical stage pattern. The child's verbal responses and drawings both confirm the stage concept of development. However, further research is needed to determine whether the child's concept of God is indeed more abstract and more advanced than he can communicate either verbally or non-verbally through drawings. Perhaps the child can recognize a more sophisticated God concept, one that more accurately expresses his own conceptualization and image of God but simply does not have the skills necessary to communicate that image. These questions are ripe for further investigation and would certainly make an impact upon both secular and religious educators.

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APPENDIX B

PILOT STUDY

Pilot Study

A pilot study was conducted using four-year-old kindergarten children (K-4) through sixth graders. The children were asked to draw a picture of what they thought God looked like. The children were then asked at a later date to look at a sample of pictures from their own grade level and choose the one that most looked like God to them.

The purpose of this pilot study was twofold. First, to ascertain whether the youngest children, the K-4 class, could adequately understand and perform the task. The results were not convincing and a decision was made to eliminate the K-4 age level from the final research design.

A second purpose was to compare group versus individual methodology. Half of the students were asked individually to choose the picture that most looked like God to them. The other half were asked as a class to choose and to mark their choice on a response sheet. There was no significant difference between the responses of the two groups. A decision was made to use the group format in the final design, but to allow the kindergarten children to respond orally and individually because of reading and writing limitations. The students in all other grades marked their own response sheet while viewing the pictures as a class.

APPENDIX C

HUMAN SUBJECTS AND RELATED CORRESPONDENCE

INSTITUTIONAL RESEARCH BOARD FOR HUMAN SUBJECTS OKLAHOMA STATE UNIVERSITY

Proposal Title: The Development of the Concept of God in Children	
Principle Investigator: John C. McCullers/Philip A. Taylor	
Date: November 18, 1988 IRB # HE-88-046	
This application has been reviewed by the IRB and	
Processed as: Exempt [] Expedite [X] Full Board Review []	
Renewal or Continuation []	
Approval Status: Approved [X]	
Disapproved []	
Conditional []	
Deferred []	
Comments, Modifications/Conditions for Approval or Reason for Disapproval:	
Signature: L.C. Faulk. Date: 2-1-39 Chair of University Board	

February 13, 1989

Dear Parents,

Our students (K-5 - 6) have been asked to participate in an educational research project dealing with religious concepts in children. The research is part of a masters thesis being completed by Phil Taylor and has been approved by our administrator and by OSU. Rev. Taylor is pastor of Carbondale Assembly of God here in Tulsa and a graduate student at OSU.

The research will involve an art project of a religious nature. It will be done on a strictly voluntary basis, and children's names will not be used in the written findings. The exercise itself will not involve anything that the child does not do on a daily class basis. Because the findings will be used in a research thesis, we felt you should be informed. If you have questions you may contact Rev. Taylor at 446-0795 or you may call me at 254-8626. Thank you.

Sincerely,

<u>Dave Ward</u> Elementary Principle

APPENDIX D

INSTRUCTIONS

Instructions to Teachers Step 1

Thank you for consenting to help with this research into the development of the concept of God in children. It could not be done without your help.

Please allow me to share some instructions. I will tell the members of your class "Today we are going to do something different. We are going to draw some very special pictures so I want everyone to take their time and do their very best work. I want each of you to think for a moment about God. I know you hear about God at your church and perhaps at home and here at school. Think about God and try to picture in your mind what God looks like to you. After you've thought about it, take your piece of paper and draw a picture of what you think God would look like if you could see Him. Remember to try and do your very best work."

If children argue it is impossible to draw a picture of God, encourage them to draw what they think of or picture in their mind when they think of God.

As the children are drawing you might encourage or commend them but please do not prompt their drawing concepts in anyway. If questions arise, just remind them to draw whatever they think God looks like. It might be well to remind them there are no right or wrong answers.

Please instruct the children not to write their names on the paper (this is in order to preserve confidentiality). If they have a comment about their drawing or if they would like to explain their drawing, please have them write on the back of the page. In the younger grades, teachers may help by writing children's comments or explanations on the back of the drawing.

Thank you again for your help and cooperation.

Sincerely,

Instructions to Teachers Step 2

I will be showing the students pictures of God drawn by children in their appropriate age category. The students will be asked to choose which picture most looks like his/her concept or image of God. They will be asked to choose one picture from a grouping of 4 pictures. This procedure will be repeated, showing the children a total of 12 different pictures.

Thank you for your willingness to help in this project. If you have questions, please contact me at home at 446-2596 or at Carbondale Assembly of God at 446-0795.

Instructions to Teachers Step 3

I will be showing the students pictures of God drawn by children K-5 through 6th grade. The student will be asked to choose which picture most looks like his/her concept or image of God. They will be asked to choose one picture from a board of 6 pictures. This procedure will be repeated, showing the children a total of 24 different pictures.

Thank you for your willingness to help in this project. If you have questions, please contact me at home at 446-2596 or at Carbondale Assembly of God at 446-0795.

APPENDIX E

Č.

RESPONSE FORMS

Student Response Sheet

GIRL__ BOY__ GRADE____

BOARD A:

1 2 3 4 5 6

BOARD B:

1 2 3 4 5 6

BOARD C:

1 2 3 4 5 6

BOARD D:

1 2 3 4 5 6

Rater's Response Sheet

SCORE EACH PICTURE FROM THE LEAST (1) TO THE GREATEST (5) IN EACH CATEGORY

BOARD A 1						BOARD A 2					
CREATIVITY	1	2	3	4	5	CREATIVITY	1	2	3	4	5
COGNITIVE MATURITY	1	2	3	4	5	COGNITIVE MATURITY	1	2	3	4	5
ARTISTIC QUALITY	1	2	3	4	5	ARTISTIC QUALITY	1	2	3	4	5
CONCRETE - ABSTRACT	1	2	3	4	5	CONCRETE - ABSTRACT	1	2	3	4	5
FAITH DEVELOPMENT		2	3	4	5	FAITH DEVELOPMENT		2	3	4	5
		_=				· -		=			
BOARD A 3						BOARD A 4					
CREATIVITY	1	2	3	4	5	CREATIVITY	1	2	3	4	5
COGNITIVE MATURITY	1	2	3	4	5	COGNITIVE MATURITY	1	2	3	4	5
ARTISTIC QUALITY	1	2	3	4	5	ARTISTIC QUALITY	1	2	3	4	5
CONCRETE - ABSTRACT		2	3	4	5	CONCRETE - ABSTRACT	1	2	3	4	5
FAITH DEVELOPMENT		2	3	4	5	FAITH DEVELOPMENT	1	2	3	4	5
=		<u>-</u> =				-		_==			
BOARD A 5						BOARD A 6					
CREATIVITY	1	2	3	4	5	CREATIVITY	1	2	3	4	5
COGNITIVE MATURITY	1	2	3	4	5	COGNITIVE MATURITY	1	2	3	4	5
ARTISTIC QUALITY	1	2	3	4	5	ARTISTIC QUALITY	1	2	3	4	5
CONCRETE - ABSTRACT 1			3	4	5	CONCRETE - ABSTRACT	1	2	3	4	5
FAITH DEVELOPMENT	1	2	3	4	5	FAITH DEVELOPMENT	1	2	3	4	5
=		_				=		=			

APPENDIX F

CHILDREN'S COMMENTS ABOUT DRAWINGS

SELECTED COMMENTS CONCERING CHOICES OF DRAWINGS

<u>Kindergarten</u>

Sex	Choice	Comment
F	C5	"Because the crosses are on it"
F	A 5	"Looks like He was nailed to the cross"
F	D3	"Because of the thing (sash) on his white
		robe"
F	A 5	"Because of robe and sash"
F	B5	"Because the people are small"
F	C6	"God is strong"
F	D3	"It's like his face"
F	B1	"Because of the beard"
F	D6	"More color"
F	C6	"Strong"
M	C6	"God is strong"
M	B5	"Because He is holding the world and the
		people"
M	C2	"He is in the air with the clouds"
M	C6	"Because He is strong"
М	B1	"Adam disobeyed God in the Garden of
		Eden"
M	D1	"Because God is the light of the world"
M	B5	"Because He is holding the people"
M	C2	"Because God is a spirit"
M	D6	"He looks like a bold man"
M	A2	"It's like God's hand"
M	B5	"Because He is holding the people"

<u>Firs</u>	st Grade	
F	A 5	"It's just the way He looks"
F	В3	"Because I know He is my shepherd"
F	D4	"Because God is the light of the world"
F	A 5	"Because He came to the world to take
		away sins"
F	C 5	"Because He died for our sins on the
		cross"
F	A 5	"Because he is happy and joyful"
F	B2	"Because of the crosses and the light
		from above"
M	A2	"Because He is reaching out to the world"
M	B2	"Because He died and was born"
M	C4	"Because of fire. He is like fire So
		Important"
M	D4	"He is light of the world and heart of
		the world"
M	B4	"Because of the streets of gold."
M	A 5	"Because it looks like Him"
M	B2	"Because he gave me life"
M	C5	"Because of the crosses you get to go to
		Heaven"
Seco	ond Grade	
F	A 5	"He appeared to me and that's what He
		looked like"

F	A2	"The whole world in His hands taking
		care of us because we are not taking care
		of ourselves"
F	В5	"He is our strength"
F	C 5	"If he didn't die on the cross we would
		have to"
F	D1	"He is the way, truth and the light. He
		really does shine like the light of the
		world and is a pretty sight"
F	C1	"Angels in heaven and God watching over
		us"
M	D3	"Because of the beard and I liked His
		face"
M	A 5	"It looked the most like Him"
M	C6	"Looked like him no muscles but same
		face"
M	A 5	"Looks like him in heaven blood and
		nails in hands"
Third	Grade	There were no unique third grade
		comments.
Fourt	<u>h Grade</u>	
F	D1	"As a man shining bright"
F	A 5	"looked like Him teaching people"
M	A2	"It's like what I would draw"
M	B5	"God is like a Father holding the world
		and the family"

M	D6	"Good drawing and Bible says God is like
		a lion"
M	B 5	"Looks like He cared for us"

APPENDIX G

THE DRAWINGS

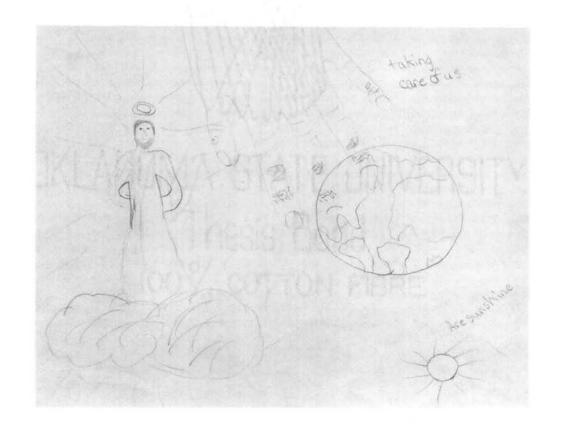
Author's Comment

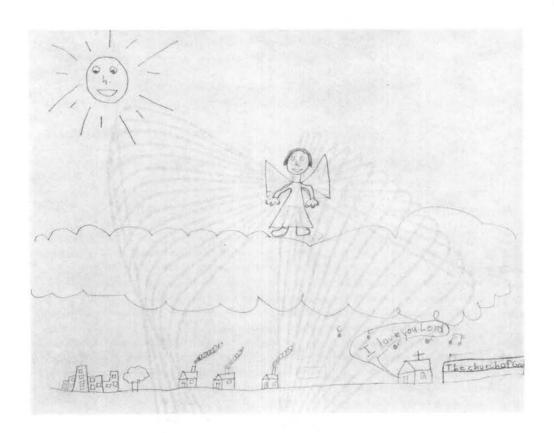
The drawings were done in pencil, pen, crayon, colored pencil and/or felt-tip markers, based upon the individual child's preference. The following drawings have been reduced in size and photocopied. They are presented sequentially by Board (Drawings 1 and 2 appear together, drawings 3 and 4, etc.). The actual drawings have been preserved by the author.

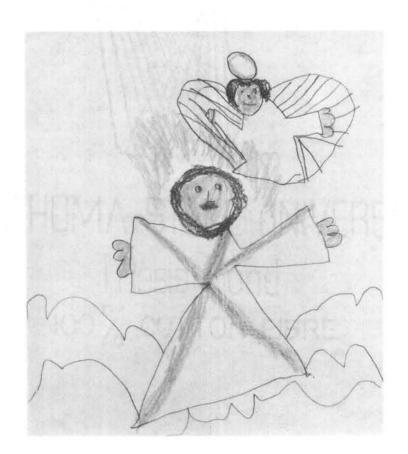
List of Drawings for Board A

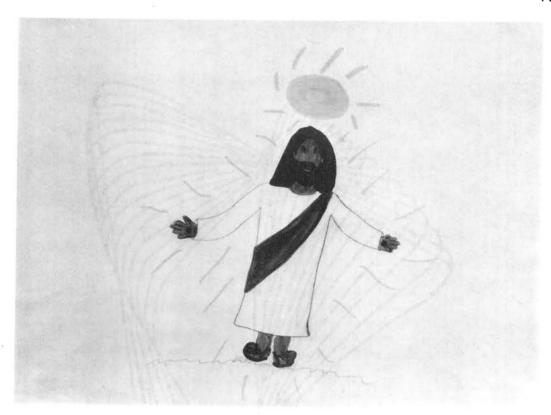
Position on Board A	Grade of Artist	Sex of Artist	Teacher's Estimate <u>M</u>
1	K	F	0.143
2	6	F	5.357
3	2	F	3.929
4	1	F	1.286
5	5	F	3.143
6	3	M	3.143

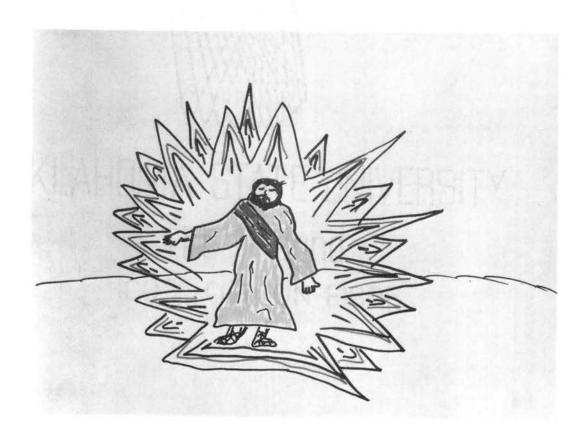






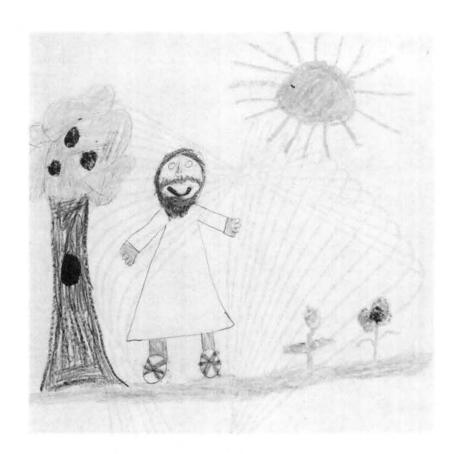


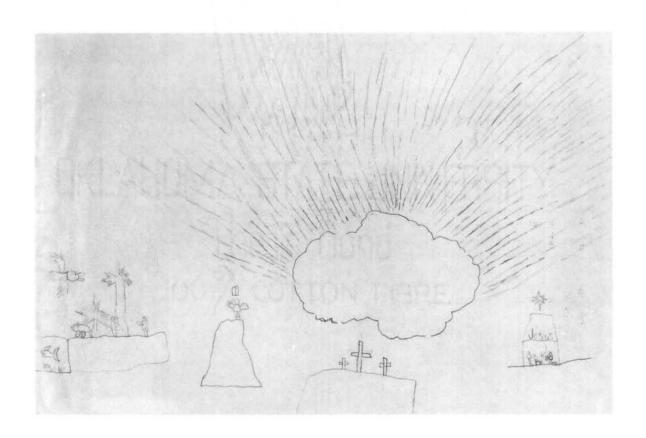


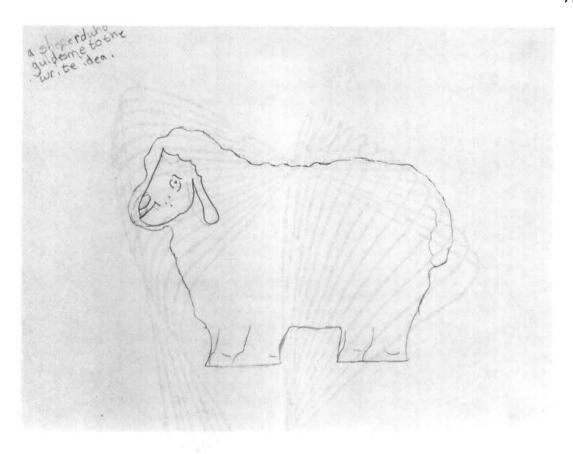


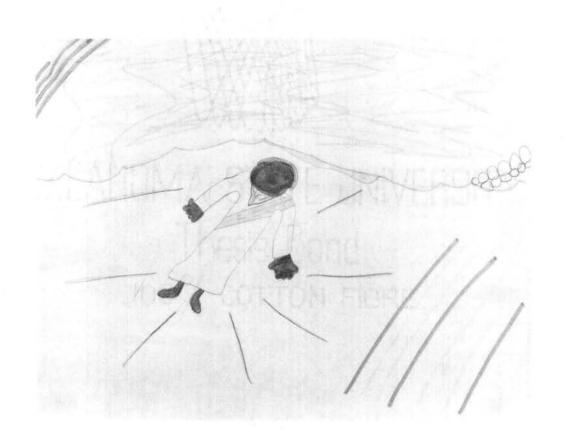
List of Drawings

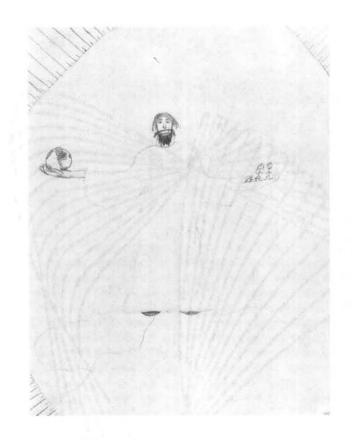
Position on Board B	Grade of Artist	Sex of Artist	Teacher's Estimate <u>M</u>
1	1	F	2.286
2	2	M	4.643
3	5	F	3.429
4	3	F	1.643
5	6	M	4.857
6	K	F	0.143

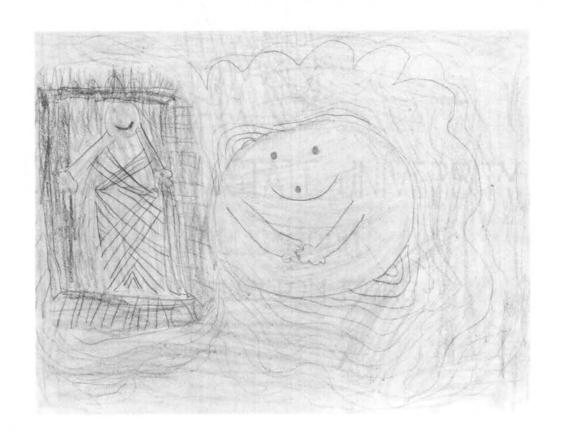






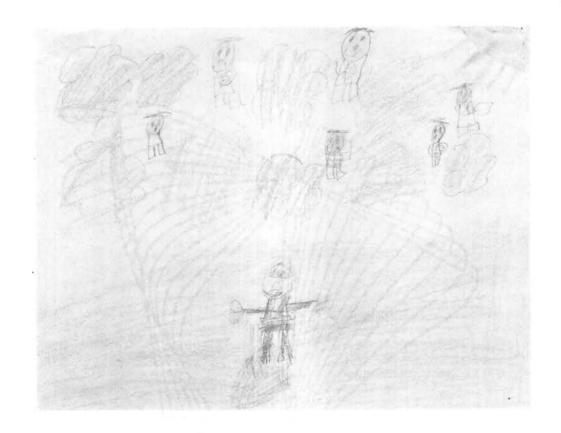






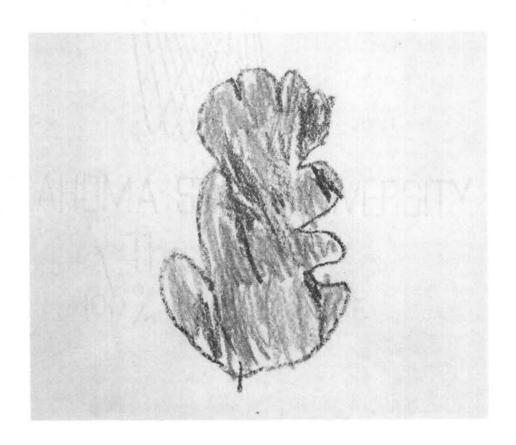
List of Drawings

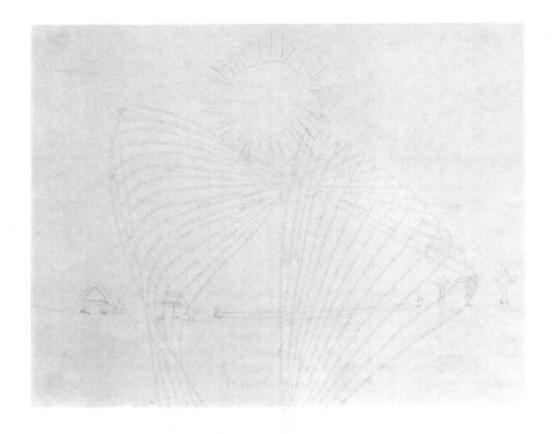
Position on Board C	Grade of Artist	Sex of Artist	Teacher's Estimate <u>M</u>
1	K	М	0.357
2	6	F	1.857
3	2	F	2.214
4	1	M	1.714
5	3	M	5.143
6	5	M	5.714

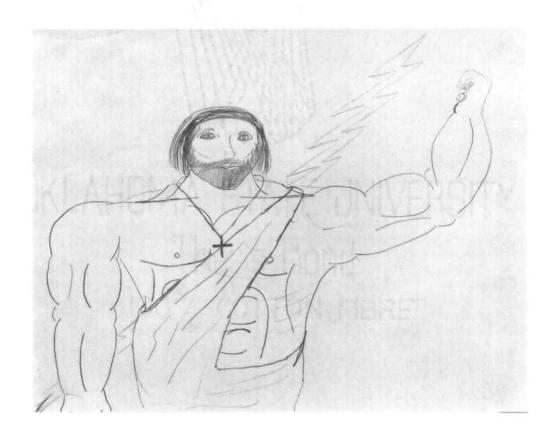






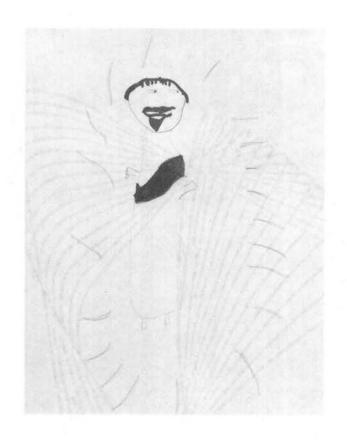


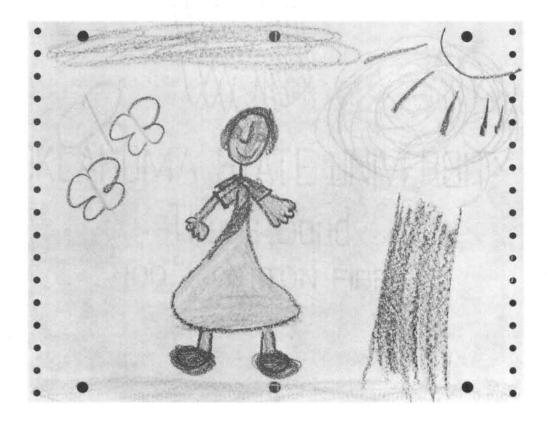




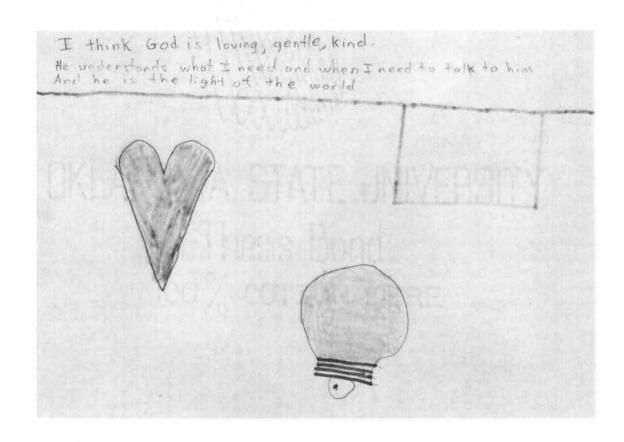
List of Drawings

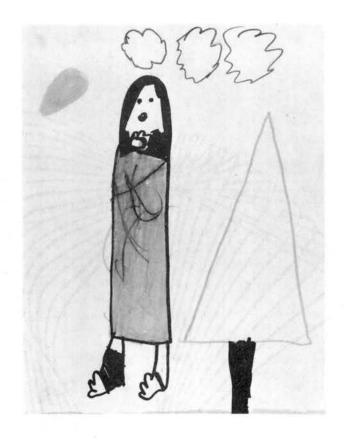
Position on Board D	Grade of Artist	Sex of Artist	Teacher's Estimate <u>M</u>
1	2	F	1.357
2	1	F	1.286
3	3	M	4.357
4	5	F	3.571
5	K	F	0.714
6	6	М	5.714













APPENDIX H

SELECTED TABLES

Table H-1

Frequency of Choice by Grade of Drawing for Boards

A,B,C,D,

	Grade of drawing							
Board	K	1	2	3	5	6		
A	3	1	5	40	202	58		
В	3	26	96	13	34	137		
С	4	16	9	115	113	52		
D	5	3	30	68	41	162		

Table H-2

Average Grade of Drawing Chosen by Grade of Student for

Boards A,B,C,D,

					Grade	e of Dra	awing	
Board	ì	K	1	2	3	4	5	6
A				-				
	M	4.53	4.92	4.76	4.65	5.27	4.53	4.95
	<u>SD</u>	1.50	0.64	0.10	1.03	0.69	1.23	1.16
В								
	<u>M</u>	3.44	3.44	3.79	3.65	4.87	4.51	4.57
	<u>SD</u>	2.33	7.97	1.95	2.03	1.82	1.89	1.82
С								
	<u>M</u>	4.91	4.34	3.84	3.30	4.00	4.11	3.93
	<u>SD</u>	1.40	1.43	1.55	1.36	1.17	1.65	1.45
D								
	<u>M</u>	3.15	4.77	4.53	4.87	4.93	4.94	5.11
	<u>SD</u>	1.89	1.52	1.59	1.67	1.50	1.51	1.40

Table H-3

Frequency of Choice of Drawings by Grade Level of Child

and Drawings for Board A

			Grade of drawing			
Grade	К	1	2	3	5	6
к	2	1	0	3	24	4
1	0	0	0	5	51	5
2	0	0	1	6	25	6
3	0	0	0	10	24	6
4	0	0	1	0	29	15
5	1	0	1	10	29	6
6	0	0	2	6	20	16
Totals	3	1	5	40	202	58

 $[\]chi^{2}(30, \underline{N} = 309) = 63.37 \underline{P} < .001; C = .4125$

Table H-4

Frequency of Choice of Drawings by Grade Level of Child

and Drawings for Board B

			Grade of drawing				
Grade	K	1	2	3	5	6	
ĸ	2	10	2	5	2	13	
1	0	7	26	4	5	19	
2	1	1	15	2	7	12	
3	0	3	19	0	3	15	
4	0	1	11	0	2	31	
5	0	3	11	1	8	24	
6	0	1	12	1	7	23	
Totals	3	26	96	13	34	137	

 $[\]chi^{2}(30, \underline{N} = 309) = 85.60, \underline{P} < .001; C = .4658$

Table H-5

Frequency of Choice of Drawings by Grade Level of Child

and Drawings for Board C

			Grade of drawing			
Grade	K	1	2	3	5	6
K	0	1	2	4	12	15
1	2	1	1	16	32	9
2	1	2	0	19	9	7
3	0	5	1	24	7	3
4	0	0	0	25	15	5
5	1	3	4	11	19	9
6	0	4	1	16	19	4
Totals	4	16	9	115	113	52

 $[\]chi^{2}(30, \underline{N} = 309) = 75.70, \underline{P} < .001; C = .4436$

Table H-6

Frequency of Choice of Drawings by Grade Level of Child

and Drawings for Board D

			Grade of drawing				
Grade	K	1	2	3	5	6	
К	3	2	9	10	3	7	
1	1	0	4	13	14	29	
2	0	0	4	12	4	18	
3	1	0	3	8	3	25	
4	0	0	3	11	3	28	
5	0	0	4	10	4	29	
6	0	1	3	4	10	26	
Totals	5	3	30	68	41	162	

 $[\]chi^{2}$ (30, N = 309) = 63.99, P <.001; C = .4142

Table H-7

<u>Teacher's Estimate of Grade Level for Boards A,B,C,D</u>

		Actual Grade of Drawing				
K	1	2	3	5	6	
*0.143	1.286	3.929	3.143	3.143	5.357	
0.363	0.726	1.685	1.351	1.748	1.336	
0.143	2.286	4.643	1.643	3.429	4.857	
0.535	1.326	1.692	0.745	1.785	1.512	
0.357	1.714	2.214	5.143	5.714	1.857	
0.633	1.326	1.122	0.770	0.469	0.770	
0.714	1.286	1.357	4.357	3.571	5.714	
0.994	0.611	1.216	1.447	1.399	0.469	
	*0.143 0.363 0.143 0.535 0.357 0.633	*0.143 1.286 0.363 0.726 0.143 2.286 0.535 1.326 0.357 1.714 0.633 1.326 0.714 1.286	*0.143 1.286 3.929 0.363 0.726 1.685 0.143 2.286 4.643 0.535 1.326 1.692 0.357 1.714 2.214 0.633 1.326 1.122 0.714 1.286 1.357	*0.143 1.286 3.929 3.143 0.363 0.726 1.685 1.351 0.143 2.286 4.643 1.643 0.535 1.326 1.692 0.745 0.357 1.714 2.214 5.143 0.633 1.326 1.122 0.770 0.714 1.286 1.357 4.357	K 1 2 3 5 *0.143 1.286 3.929 3.143 3.143 0.363 0.726 1.685 1.351 1.748 0.143 2.286 4.643 1.643 3.429 0.535 1.326 1.692 0.745 1.785 0.357 1.714 2.214 5.143 5.714 0.633 1.326 1.122 0.770 0.469 0.714 1.286 1.357 4.357 3.571	

 $\underline{\mathbf{M}}$ =mean; $\underline{\mathbf{SD}}$ =standard deviation; *0=kindergarten grade level

Table H-8

Rating by Panel on Creativity

			_		Grade	e of Drav	
Boar	rd.	К	1	2	3	5	6
A							
	<u>M</u>	3.833	3.000	3.000	3.333	2.833	4.833
	<u>SD</u>	0.753	0.894	0.632	1.033	0.983	0.408
В							
	<u>M</u>	3.667	2.667	4.833	3.500	3.167	4.333
	<u>SD</u>	1.366	1.033	0.408	0.548	0.983	0.516
С							
	<u>M</u>	2.500	4.167	2.333	4.667	4.000	3.000
	<u>SD</u>	0.837	1.169	1.033	0.516	1.265	1.265
D							
	M	2.333	2.333	1.667	2.000	3.833	3.833
	<u>SD</u>	0.516	1.033	0.816	0.632	0.753	1.169

Table H-9

Ratings by Panel on Cognitive Maturity

			Grade of Drawing					
Board	K	1	2	3	5	6		
A								
<u>M</u>	3.000	2.833	3.167	3.000	3.500	4.667		
<u>SD</u>	1.265	0.983	0.983	0.632	1.049	0.516		
В								
<u>M</u>	2.500	2.500	4.667	3.000	2.833	4.667		
SD	1.049	0.548	0.516	0.894	1.472	0.516		
С								
<u>M</u>	2.500	3.667	2.667	3.833	3.833	3.167		
SD	1.049	1.033	1.366	0.753	1.169	0.408		
D								
<u>M</u>	2.167	1.833	1.833	2.500	3.833	4.333		
<u>SD</u>	0.988	0.408	0.983	0.548	0.753	1.211		

Table H-10

Ratings by Panel on Artistic Quality

			_	Grade	e of Drav	wing
Board	К	1	2	3	5	6
A						
<u>M</u>	3.333	2.667	2.667	3.000	4.500	3.833
SD	1.366	1.211	1.211	0.632	0.548	0.983
В						
<u>M</u>	2.333	3.000	4.000	2.500	3.167	3.667
<u>SD</u>	0.816	0.632	0.894	0.837	0.983	1.506
С						
<u>M</u>	1.833	2.667	2.833	3.667	4.333	3.000
<u>SD</u>	0.753	1.366	0.753	0.816	0.516	0.632
D						
M	1.667	2.667	1.667	1.833	2.000	3.667
<u>SD</u>	0.516	0.816	0.816	0.753	0.894	0.516

Table H-11

Ratings by Panel on Abstraction of Drawings

			Grade of Drawing					
Board	K	1	2	3	5	6		
A								
M	3.667	2.333	2.667	3.167	2.833	4.500		
SD	1.033	1.366	1.366	1.329	0.983	0.837		
В								
<u>M</u>	3.333	1.833	4.833	3.167	3.500	4.500		
SD	1.366	0.753	0.408	0.753	0.837	0.837		
С								
<u>M</u>	2.667	4.167	1.833	4.167	3.333	2.667		
SD	1.033	1.169	0.753	0.753	1.033	1.366		
D								
<u>M</u>	1.677	1.833	2.167	2.000	3.833	3.833		
SD	0.816	0.408	0.753	0.632	0.753	1.169		

Table H-12

Ratings by Panel on Faith Development

	,	_	Grade of Drawing					
Board	К	1	2	3	5	6		
A								
<u>M</u>	4.000	3.000	2.833	3.167	3.500	4.167		
<u>SD</u>	1.095	1.265	0.983	0.753	1.049	0.753		
В								
<u>M</u>	3.000	2.167	4.333	3.000	3.500	4.500		
SD	0.894	0.753	0.516	0.894	0.837	0.837		
С								
<u>M</u>	2.333	3.500	2.000	3.667	3.500	3.000		
<u>SD</u>	0.516	1.517	0.632	0.516	1.049	0.632		
D								
<u>M</u>	1.833	1.833	1.667	2.000	4.000	3.833		
<u>SD</u>	0.753	1.833	0.816	0.632	0.632	0.983		

Table H-13

Overall Rating by Panel of Experts

				Grade	Level o	f Drawin	g
Boar	ď	K	1	2	3	5	6
A			·····				
	<u>M</u>	17.833	13.833	14.333	15.667	16.500	21.333
	SD	4.070	1.834	4.412	3.670	2.811	3.445
В							
	<u>M</u>	14.833	12.167	22.667	15.167	16.667	21.667
	<u>SD</u>	3.371	2.639	1.751	2.858	4.590	3.011
С							
	<u>M</u>	11.833	18.167	11.667	19.333	19.167	14.833
	<u>SD</u>	3.189	5.742	3.777	2.944	3.656	3.189
D							
	<u>M</u>	9.667	10.500	9.000	10.333	17.500	19.833
	<u>SD</u>	2.875	1.871	3.688	2.658	3.271	4.262

APPENDIX I

RAW DATA

		SEX	GRADE	Α	В	С	D	AVERAGE
CASE	1	1.000	1.000	5.000	6.000	6.000	2.000	4.750
CASE	2	1.000	1.000	5.000	5.000	5.000	6.000	5.250
CASE	3	1.000	1.000	6.000	3.000	5.000	6.000	5.000
CASE	4	1.000	1.000	5.000	3.000	6.000	2.000	4.000
CASE	5	1.000	1.000	5.000	1.000	6.000	1.000	3.250
CASE	6	1.000	1.000	0.000	6.000	6.000	0.000	3.000
CASE	7	1.000	1.000	5.000	3.000	6.000	2.000	4.000
CASE	8	1.000	1.000	1.000	5.000	6.000	2.000	3.500
CASE	9	1.000	1.000	5.000	6.000	5.000	3,000	4.750
CASE	10	1.000	1.000	5.000	1.000	6.000	3.000	3.750
CASE	11	1.000	1.000	5.000	6.000	2.000	0.000	3.250
CASE	12	1.000		5.000	3.000	3.000	3.000	3.500
CASE	13	2.000		5.000	6.000	6.000	6.000	5.750
CASE	14	2.000	1.000	5.000	1.000	5.000	2.000	3.250
CASE	15	2.000	1.000	5.000	6.000	6.000	3.000	5.000
CASE	16	2.000	1.000	6.000	6.000	6.000	3.000	5.250
CASE	17	2.000	1.000	5.000	6.000	6.000	1.000	4.500
CASE	18	2.000	1.000	0.000	1.000	5.000	3.000	2.250
CASE	19	2.000	1.000	3.000	6.000	5.000	0.000	3.500
case case	20 21	2.000	1.000	5.000	1.000	5.000	2.000	3.250
CASE	22	1.000 1.000	1.000 1.000	3.000 5.000	6.000 1.000	5.000 5.000	3.000 6.000	4.250 4.250
CASE	23	1.000	1.000	5.000	1.000	6.000	3.000	3.750
CASE	24	1.000	1.000	5.000	1.000	3.000	5.000	3.500
CASE	25	1.000	1.000	5.000	6.000	5.000	5.000	5.250
CASE	26	1.000	1.000	5.000	2.000	3.000	5.000	3.750
CASE	27	1.000	1.000	5.000	1.000	6.000	6.000	4.500
CASE	28	1,000	1.000	5.000	0.000	6.000	2.000	3.250
CASE	29	2.000	1.000	3.000	2.000	6.000	3.000	3.500
CASE	30	2.000	1.000	5.000	1.000	5.000	6.000	4.250
CASE	31	2.000	1 000	6.000	0.000	2.000	6.000	3.500
CASE	32	2.000	1.000	6.000	6.000	3.000	3.000	4.500
CASE	33	2.000	1.000	5.000	3.000	1.000	2.000	2.750
CASE	34	2.000	1.000	5.000	6.000	5.000	2.000	4.500
CASE	35	2.000	2.000	5.000	3.000	3.000	2.000	3.250
CASE	36	2.000	2.000	6.000	2.000	1.000	5.000	3.500
CASE	37	2.000	2.000	5.000	1.000	5.000	6.000	4.250
CASE	38	2.000	2.000	5.000	3.000	3.000	6.000	4.250
CASE	39	2,000		5.000	1.000	5.000	6.000	4.250
CASE	40	2.000	2.000	6.000	2.000	5.000	6.000	4.750
CASE	41	2.000	2.000	5.000	1.000	2.000	6.000	3.500
CASE	42	2.000	2.000	5.000	5.000	5.000	3.000	4.500
CASE	43	2.000	2.000	3.000	2.000	. 0.000	3.000	2.000
CASE	44	1.000	2.000	3.000	2.000	5.000	3.000	3.250
CASE	45	1.000	2.000	5.000	5.000	5.000	5.000	5,000
CASE	46	1.000		5.000	1.000	5.000	6.000	4.250
CASE	47	1.000	2.000	5.000	6.000	3.000	6.000	5.000
CASE CASE	48 49	1.000 1.000	2.000 2.000	6.000 5.000	2.000 1.000	3.000 6.000	0.000 5.000	2.750
CASE	50	1.000	2.000	6.000	5.000	3.000		4.250 5.000
CASE	51	1.000	2.000	3.000	1.000	6.000	6.000 2.000	3.000
CASE	52	1.000	2.000	5.000	6.000	3.000	5.000	4.750
CASE	53	1.000	2.000	5.000	2.000	6.000	6.000	4.750
CASE	54	1.000	2.000	5.000	2.000	5.000	6.000	4.500
CASE	55	1.000	2.000	5.000	2.000	3.000	6.000	4.000
CASE	56	1.000	2.000	3.000	2.000	0.000	6.000	2.750
CASE	57	1.000	2.000	5.000	2.000	3.000	6.000	4.000
CASE	58	1.000	2.000	6.000	2.000	3.000	6.000	4.250

CASE	59	1.000	2.000	5.000	2.000	3.000	3.000	3.250
CASE		1.000						
	60		2.000	5.000	2,000	3.000	6.000	4.000
CASE	61	1.000	2.000	5.000	2.000	3.000	3.000	3.250
CASE	62	2.000	2.000	5.000	5.000	5.000	6.000	5.250
CASE	63	2.000	2.000	5.000	2.000	5.000	6.000	4.500
CASE	64	2.000	2,000	5.000	3.000	6.000	5.000	4.750
CASE	65	2.000	2.000	5.000	2.000	5.000	6.000	4.500
CASE	66	2.000	2.000	5.000	2,000	5.000	2.000	3.500
CASE	67	2.000	2.000	5.000	6.000	5.000	5.000	5.250
CASE	68	2.000	2.000	5.000	2.000	5.000	3.000	3.750
CASE	69							
		2,000	2.000	5.000	2.000	5.000	6.000	4.500
CASE	70	2,000	2.000	5.000	2.000	5.000	6.000	4.500
CASE	71	2.000	2.000	5.000	6.000	5,000	6.000	5.500
CASE	72	2.000	2.000	5.000	6.000	5.000	6.000	5.500
CASE	73	1.000	2.000	5.000	6.000	5.000	5.000	5.250
CASE	74	1.000	2.000	5.000	5.000	6.000	3.000	4.750
CASE	75	1.000	2.000	5.000	6.000	5.000	6.000	5.500
CASE	76	1.000	2.000	5.000	6.000	5.000	2.000	4.500
CASE	77	1.000	2.000	5.000	6.000	6.000	3.000	5.000
CASE	78	1.000	2.000	5.000	2.000	3.000	5.000	3.750
CASE	79	1.000	2.000	5.000	6.000	6.000	5.000	5.500
CASE	80	1,000	2.000	5.000	6.000	6.000	5.000	5.500
CASE	81	1.000	2.000	5.000	2.000	3.000	5.000	3 <i>.</i> 750
CASE	82	1.000	2.000	5.000	2.000	3.000	5,000	3.750
CASE	83	2.000						
			2.000	5.000	6.000	5.000	6.000	5.500
CASE	84	2.000	2.000	5.000	6.000	6.000	5.000	5.500
CASE	85	2.000	2.000	5.000	6.000	5.000	6.000	5.500
CASE	86	2.000	2.000	5.000	2.000	5.000	5.000	4.250
CASE	87	2.000	2.000	5.000	1.000	5.000	6.000	4.250
CASE	88	2.000						
			2.000	5.000	6.000	5.000	6.000	5.500
CASE	89	2.000	2.000	5.000	2.000	5.000	3.000	3.750
CASE	90	2.000	2.000	5.000	3.000	5.000	6.000	4.750
CASE	91	2.000	2.000	5.000	6.000	5.000	3.000	4.750
CASE	92	2.000	2.000	3.000	6.000	5.000	3.000	4.250
CASE	93	2.000	2.000	5.000				
					6.000	5.000	3.000	4.750
CASE	94	2.000	2.000	5.000	6.000	5.000	3.000	4.750
CASE	95	2.000	2.000	5.000	2.000	3.000	6.000	4.000
CASE	96	2.000	3.000	5.000	2.000	6.000	3.000	4.000
CASE	97	2.000	3.000	3.000	2,000	1.000	6.000	3.000
CASE	. 98.	2.000	3.000					
				3.000	6.000	5.000	6.000	5.000
CASE	99	2.000	3.000	5.000	6.000	6.000	6.000	5.750
CASE	100	2.000	3.000	5.000	6.000	3.000	3.000	4.250
Case	101	2.000	3.000	3.000	6.000	3.000	5.000	4.250
CASE	102	2.000	3.000	3.000	5.000	5.000	6.000	4.750
CASE	103	2.000	3.000	6.000		5.000		4.750
					2.000		6.000	
CASE	104	2.000	3.000	5.000	6.000	6.000	2.000	4.750
CASE	105	2.000	3.000	6.000	2.000	3.000	3.000	3.500
CASE ·	106	2.000	3.000	5.000	3.000	6.000	2.000	4.000
CASE	107	1.000	3.000	5.000	2.000	3.000	6.000	4.000
CASE	108	1.000	3.000	5.000				3.750
					2.000	3.000	5.000	
CASE	109	1.000	3.000	5.000	2.000	3.000	6.000	4.000
CASE	110	1.000	3.000	6.000	2.000	3.000	6.000	4.250
CASE	111	1.000	3.000	5.000	6.000	5.000	6.000	5.500
CASE	112	1.000	3.000	5.000	2.000	3.000	3.000	3.250
CASE	113	1.000	3.000	3.000	5.000	5.000	6.000	4.750
CASE	114	1.000	3.000	5.000	5.000	3,000	3.000	4.000
CASE	115	1.000	3.000	5.000	2.000	3.000	6.000	4.000
CASE	116	1.000	3.000	5.000	2.000	3.000	6.000	4.000
CASE	117	2.000	3.000	5.000	5.000	6.000	3.000	4.750
CASE	118	2.000	3.000	5.000	6.000	5.000	3.000	4.750
	220	_ 1000	01000	0 1 0 0 0	J. 1000	0.000	-,,,,,	7.7.50

CASE	119	2.000	3.000	5 .0 00	3.000	5.000	3.000	4.000
CASE	120	2.000	3.000	5.000	0.000	5.000	6.000	4.000
CASE	121	2.000	3.000	6.000	2.000	3.000	6.000	4.250
CASE	122	2.000	3,000	5.000	5.000	3.000	6.000	4.750
CASE	123	2.000	3.000	5.000	2.000	3,000	6.000	4.000
CASE	124	2.000	3.000	5.000	6.000	5.000	6.000	5.500
CASE	125	2.000	3.000	5.000	1.000	3.000	3.000	3,000
CASE	126	1.000	3.000	5.000	2.000	0.000	3.000	2.500
CASE	127	1.000	3.000	6.000	6.000	3.000	2.000	4.250
CASE	128	1.000	3.000	6.000	6.000	3.000	5.000	5.000
CASE	129	1.000	3.000	3.000	2.000	3.000	5.000	3.250
CASE	130	1.000	3.000	5.000	5.000	6.000	3.000	4.750
Case	131	1.000	3.000	5.000	5.000	6.000	3.000	4.750
CASE	132	1.000	3.000	5.000	6.000	3,000	2.000	4.000
CASE	133	1.000	3.000	2.000	6.000	1.000	6.000	3.750
CASE	134	1.000	4.000	5.000	6.000	3.000	3.000	4.250
CASE	135	1.000	4.000	6.000	6.000	1.000	6.000	4.750
CASE	136	1.000	4.000	6.000	6.000	1.000	6.000	4.750
CASE	137	1.000	4.000	6.000	2.000	3.000	6.000	4.250
CASE	138	1.000	4.000	6.000	2.000	1.000	6.000	3.750
CASE	139	1.000	4.000	5.000	5.000	3.000	5.000	4.500
CASE	140	1.000	4.000	5.000	5.000	3.000	6.000	4.750
CASE	141	1.000	4.000		2.000	1.000		3.250
				5.000			5.000	
CASE	142	1.000	4.000	5,000	2.000	3,000	6,000	4.000
CASE	143	1.000	4.000	5,000	6.000	3.000	2.000	4.000
CASE	144	1.000	4.000	5.000	2.000	3.000	6.000	4.000
CASE	145	1,000	4.000	6.000	6.000	3.000	3.000	4.500
CASE	146	2.000	4.000	3,000	2.000	3,000	5,000	3,250
CASE	147	2.000	4.000	5.000	6.000	3.000	0.000	3.500
CASE	148	2.000	4.000	3.000	6.000	2.000	2,000	3.250
CASE	149	2.000	4000	5.000	2.000	3.000	6.000	4.000
CASE	150	2.000	4.000	6.000	2.000	1.000	2.000	2.750
CASE	151	2.000	4.000	3.000	2.000	5.000	3.000	3.250
Case	152	2.000	4.000	3.000	6.000	3.000	3.000	3.750
CASE	153	2.000						3.500
			4.000	3.000	2.000	3.000	6.000	
CASE	154	2.000	4.000	5.000	2.000	3.000	6.000	4.000
CASE	155	2.000	4.000	5.000	6.000	3.000	6.000	5.000
CASE	156	2.000	4,000	3.000	6.000	6.000	6.000	5.250
CASE	157		4.000					
		2.000		3.000	2.000	5.000	6.000	4.000
CASE	158	2.000	4.000	3.000	2.000	5.000	6.000	4.000
CASE	159							
		1.000	4.000	5.000	6.000	3.000	6.000	5.000
CASE	160	1.000	4.000	5.000	2.000	5.000	6.000	4.500
CASE	161	1.000	4.000	5.000	6.000	3.000	6.000	5.000
CASE	162	1.000	4.000	5.000	6.000	5,000	6.000	5.500
CASE	163	1.000	4.000	5.000	2.000	3.000	6.000	4.000
CASE	164	1.000	4.000	5.000	5.000	3,000	6.000	4.750
CASE	165	1.000	4.000	5.000	6.000	3.000	6.000	5.000
CASE	166	1.000	4.000	5.000	1.000	6.000	6,000	4.500
CASE	167	1.000	4.000	5.000	1.000	5.000	6.000	4.250
CASE	168	1.000	4.000	5.000	2.000	3.000	3.000	3.250
CASE	169	1.000		3.000	1.000	3.000	6.000	3.250
			4.000					
CASE	170	1.000	4.000	5.000	2.000	3.000	3.000	3.250
CASE	171	1.000		5.000	2.000	6.000	3.000	4.000
			4.000					
CASE	172	1.000	4.000	5.000	2.000	5.000	6.000	4.500
CASE	173	1.000	4.000	3.000	6.000	3.000	3.000	3.750
CASE	174	2.000	5.000	5.000	6,000	3.000	5.000	4.750
CASE	175	2.000	5.000	2.000	6.000	5.000	6.000	4.750
CASE	176	2.000	5.000	6.000	2,000	3.000	5.000	4.000
CASE	177	2,000	5.000	5.000	6.000	5.000	3.000	4.750
CASE	178	2,000	5.000	5.000	6.000	5.000	3.000	4.750

CASE	179	2.000	5.000	6.000	6,000	5.000	6.000	5.750
ÇASE	180	2,000	5.000	5.000	6.000	5.000	6.000	5.500
CASE	181	2.000	5.000	5.000	6.000	5.000	3.000	4.750
CASE	182	2.000	5.000	5.000	6.000	6.000	2.000	4.750
CASE	183	2.000	5.000	5.000	6.000	3.000	6.000	5.000
CASE	184	2.000	5,000	5.000	2.000	3.000	3.000	3.250
CASE	185	2.000	5.000	5.000	6.000	5.000	6.000	5.500
CASE	186		5.000		6.000	3.000		4.250
		1.000		6.000			2.000	
CASE	187	1.000	5.000	6.000	2.000	5.000	6.000	4.750
CASE	188	1.000	5.000	5.000	2.000	3.000	6.000	4.000
CASE	189	1.000	5.000	5.000	2.000	3.000	6.000	4.000
CASE	190	1000	5.000	5.000	6.000	6.000	6.000	5.750
CASE	191	1.000	5.000	5.000	2.000	6.000	3.000	4.000
CASE	192	1.000	5.000	5.000	2.000	3.000	3.000	3.250
CASE	193	1.000	5.000	5.000	2.000	3.000	6.000	4.000
CASE	194	1.000	5.000	5.000	2.000	3.000	3.000	3.250
CASE	195	1.000	5.000	5.000	1.000	000.6	5.000	4.250
CASE	196	1.000	5.000	5.000	6.000	3.000	6.000	5.000
CASE	197	1.000	5.000	5.000	6.000	5.000	3.000	4.750
CASE	198	1.000	5.000	5.000	5.000	6.000	3.000	4.750
CASE	199							
		1.000	5.000	5.000	6.000	5.000	3.000	4.750
CASE	200	1.000	5.000	6.000	6.000	3.000	6.000	5.250
CASE	201	1.000	5.000	6.000	6.000	3.000	6.000	5.250
CASE	202	1.000	5.000	6.000	6.000	3.000	6.000	5.250
CASE	203	1.000	5.000	5.000	6.000	3.000	6.000	5.000
CASE	204	1.000	5.000	5.000	6.000	3.000	3.000	4.250
CASE	205	1.000	5.000	6.000	6.000	3.000	2.000	4.250
CASE	206	1.000	5.000	5.000	6.000	3.000	6.000	5.000
CASE	207	1.000	5.000	5.000	6.000	3.000	6.000	5.000
CASE	208	2.000	5.000	5.000	6.000	3.000	6.000	5.000
CASE	209	2.000	5.000	5.000	6.000	5.000	6.000	5.500
CASE	210	2.000	5.000	6.000	2.000	3.000	6.000	4.250
CASE	211	2.000	5.000	5.000	5.000	5.000	6.000	5.250
CASE	212			6.000				
		2.000	5.000		6.000	3.000	6.000	5.250
CASE	213	2.000	5.000	6.000	6.000	5.000	6.000	5.750
CASE	214	2.000	5.000	6.000	6.000	3.000	6.000	5.250
CASE	215	2.000	5.000	5.000	6.000	5.000	6.000	5.500
CASE	216	2.000	5.000	6.000	6.000	5.000	6.000	5.750
CASE	217	2.000	5.000	6.000	2.000	3.000	6.000	4.250
CASE	218	2.000	5.000	6.000	6.000	3.000	6.000	5.250
CASE	219	1.000	6.000	5.000	5.000	3.000	6.000	4.750
CASE	220	1.000	6.000	3.000	5.000	5.000	6.000	4.750
CASE .	221	1.000	6.000	5.000	5.000	6.000	6.000	5.500
CASE	222	1.000	6.000	0.000	6.000	1.000	6.000	3.250
CASE	223	1.000	6.000	5.000	5.000	5.000	6.000	5.250
CASE	224	1.000	6.000	5.000	6.000	3.000	6.000	5.000
CASE	225	1.000	6.000	5.000	6.000	2.000	3.000	4.000
CASE	226	1.000	6.000	5.000	1.000	3.000	3.000	3.000
CASE	227	1.000	6.000	6.000	5.000	3.000	6.000	5.000
CASE	228	1.000	6.000	3.000	6.000	0.000	2.000	2.750
CASE	229	1.000	6.000	5.000	5.000	3.000	5.000	4.500
CASE	230	2.000	6.000	5.000	6.000	5.000	6.000	5.500
CASE	231	2.000	6.000	6.000	2.000	1.000	6.000	3.750
CASE	232	2.000	6.000	5.000	1.000	2.000	6,000	3.500
	233							
CASE		2.000	6.000	5.000	6.000	2.000	3.000	4.000
CASE	234	2,000	6.000	2.000	6.000	2.000	2.000	3.000
CASE	235	2.000	6.000	6.000	6.000	5.000	3.000	5.000
CASE	236	2.000	6.000	3.000	6.000	5.000	6.000	5.000
CASE	237	2.000	6.000	5.000	6.000	5.000	6.000	5.500
CASE	238	2.000	6.000	3.000	1.000	3.000	3.000	2.500
-, IVI.		1.000	SELVON	UNIVO	2 1 0 0 0	50 # SCS/ 57	C V COOK	L & C/C/C

CASE	239	2	.000	6.000	3,000	2.000	5.000	5.000	3.750
CASE	240		.000	6.000	5.000				
							3.000	6,000	4.750
CASE	241	2	.000	6.000	5.000	6.000	5.000	6.000	5.500
CASE	242	2	.000	6.000	5.000		5.000	6.000	5.500
CASE	243	1	.000	6.000	5.000	6.000	5.000	6.000	5.500
CASE	244	1	.000	6.000	5.000	6.000	6.000	3.000	5.000
CASE	245		.000	6.000	6.000		3.000	2.000	3.500
ÇASE	246	1	.000	6.000	3.000	6,000	5,000	6.000	5.000
CASE	247		.000	6.000	5.000				5.000
							6.000	3.000	
CASE	248	1	.000	6.000	5.000	2.000	3.000	6.000	4.000
CASE	249	1	.000	6.000	5.000	5.000	6.000	6.000	5.500
CASE	250		.000	6.000	5.000	6.000	3.000	5.000	4.750
CASE	251	1	.000	6.000	5.000	2.000	6.000	3.000	4.000
CASE	252		.000	6.000	5.000		5.000	6,000	4.500
CASE	253	2	.000	6.000	5.000	6.000	6.000	6.000	5.750
CASE	254	2	.000	6.000	3.000	6.000	5.000	6.000	5.000
CASE	255		.000	6.000	5.000		5.000	2.000	3.500
CASE	256	2	.000	6.000	3.000	2,000	5.000	3.000	3,250
CASE	257		.000	6.000	6.000		5.000	6.000	5.750
CASE	258	2	.000	6.000	6.000	2.000	5.000	6.000	4.750
CASE	259	2	.000	6.000	5.000	2,000	5.000	6.000	4.500
CASE	260		.000	6.000	5,000		6.000	3.000	5.000
CASE	261	2	.000	6.000	5.000	2.000	3.000	5.000	3.750
CASE	262	2	.000	6.000	5.000	6.000	1.000	6.000	4.500
CASE	263		.000	6.000	3.000		6.000	6.000	5.250
CASE	264	2	.000	6.000	5.000	6.000	6.000	6.000	5.750
CASE	265	2	.000	6.000	3,000		5.000	6.000	4.000
CASE	266		.000	7.000	5.000		6.000	5.000	5.500
CASE	267	1	.000	7.000	5.000	2.000	6.000	5.000	4.500
CASE	268		.000	7.000	5.000		3.000	5.000	4.750
CASE	269	1	.000	7.000	6.000	6.000	3.000	5.000	5.000
CASE	270	1	.000	7.000	2.000	5.000	3.000	6.000	4.000
CASE	271		.000	7.000	5.000				
							3.000	6.000	4.750
CASE	272	1	.000	7.000	6.000	2.000	3.000	5.000	4.000
CASE	273	1	.000	7.000	5.000	5.000	5.000	6.000	5.250
CASE	274		.000	7.000	3.000				
							3.000	6.000	4.500
CASE	275	1	.000	7.000	6.000	6.000	5.000	6,000	5.750
CASE	276	1	.000	7.000	5.000	2.000	5.000	6.000	4.500
CASE	277		.000						
				7.000	3.000		5.000	5.000	3.750
CASE	278	2	.000	7.000	6.000	6.000	3.000	5.000	5.000
CASE	279	2	.000	7.000	6.000	2.000	5,000	6.000	4.750
CASE									
	280		.000	7.000	6.000		5.000	6.000	5.750
CASE	281	2	.000	7.000	5.000	1.000	6.000	3.000	3.750
CASE	282	2	.000	7.000	3.000	6.000	2.000	3.000	3.500
CASE	283		.000	7.000	6.000		1.000	2.000	2.750
CASE	284	2	.000	7.000	6.000	6,000	5.000	6.000	5.750
CASE	285	2	.000	7.000	5.000		5.000	6.000	5.500
CASE	286	2	.000	7.000	5.000	2.000	5.000	5.000	4.250
CASE	287	2	.000	7.000	5.000	6.000	5.000	3.000	4.750
CASE	288		.000	7.000	5.000		5.000	6.000	5.500
CASE	289		.000	7.000	5.000	6.000	5.000	3.000	4.750
CASE	290	1	.000	7.000	3.000	2.000	3,000	6.000	3.500
CASE	291								
			.000	7.000	5.000		3.000	6.000	5.000
CASE	292	1	.000	7.000	5.000	5.000	3.000	6.000	4.750
CASE	293	1	.000	7.000	5,000		1.000	2.000	3.250
CASE	294								
			.000	7.000	6.000		3.000	5.000	4.750
CASE	295	1	.000	7.000	3.000	2.000	1.000	6.000	3.000
CASE	296		.000	7.000	5.000		6.000	2.000	4.750
CASE	297								
			.000	7.000	6.000		3.000	6.000	4.250
CASE	298	1	.000	7.000	6.000	6.000	3.000	6.000	5.250

CASE	299	1.000	7.000	6.000	5.000	5.000	6.000	5.500
CASE	300	1.000	7.000	6.000	6,000	3.000	1.000	4.000
CASE	301	2.000	7.000	3.000	2.000	5.000	6.000	4.000
CASE	302	2.000	7.000	2.000	6.000	5.000	6.000	4.750
CASE	303	2.000	7.000	6.000	6.000	3.000	6.000	5.250
CASE	304	2.000	7.000	6.000	6.000	5.000	6.000	5.750
CASE	305	2.000	7.000	5.000	6.000	5.000	6.000	5.500
CASE	306	2.000	7.000	5.000	6.000	5.000	6.000	5.500
CASE	307	2.000	7.000	5.000	6.000	5.000	6.000	5.500
CASE	308	2.000	7.000	5.000	2.000	3.000	6.000	4.000
CASE	309	2.000	7.000	6.000	3.000	1.000	5.000	3.750

VITA

Philip A. Taylor

Candidate for the Degree of

Master of Science

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Major Field: Family Relations and Child Development

Biographical:

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Carbondale Assembly of God, Tulsa, Oklahoma;
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