COMPARISON OF EVANGELICAL CHRISTIAN CHILDREN'S GOD-CONCEPTS

AND LOGICAL THINKING ABILITY

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God-concepts of 24 third to sixth grade evangelical Christian children were compared with the children's logical thinking abilities in a mixed-method study. Measurements included the Children's Interview and the Group Assessment of Logical Thinking (GALT). God-concepts among the children were Biblical, comforter, communicates, creator, empowering, protector, provider, purposeful, human characteristics, lives in heaven, male, counselor, God is Jesus, all-knowing, loving, perfect, powerful, real, and parental. The majority of concrete thinkers conceptualized God as a gracious guide. The majority of transitional thinkers viewed God also as a gracious guide as well as a distant divinity. Implications were given for religious educators to develop a model for age-appropriate instruction and curriculum and to equip parents to promote spiritual development with children at home.

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CHAPTER I

INTRODUCTION

Through maturation of logical thinking, children's understanding and development of faith and morality will likewise develop (Kohlberg, 1976; Fowler, 1981). For professionals to write children's evangelical curriculum and instructors to effectively teach a Christian education, they must first understand how children will cognitively process the information. When the information presented concerns morality and faith, children will develop the ability to comprehend these topics as they simultaneously advance in logical thinking of subjects such as math and science (Fowler, 1981).

Though past research has not given considerable weight to matters of spirituality among children, it has been shown that children as young as preschool age seem to have the ability to discriminate between divine and human properties (Barrett & Richert, 2003). It is also believed a person's moral foundation is typically set in place by age 9, and spiritual beliefs are permanently formed by age 13. Childhood is considered, therefore, a sensitive period for forming conceptions about God and a valuable stage of life for researchers to examine spiritual matters ("Research Shows," 2003).

Research has not explored children's abilities to think logically about spiritual matters. A particular motivation in discovering children's concepts of God as well as their logical thinking level is that research has been done to explore God-concepts and the

demographic factors that contribute to them. Yet there is a lack of research that examines children's mental representations of God in comparison with their individual cognitive development.

Purpose of this Study

The purpose of this study was to identify God-concepts among a sample of third to sixth grade evangelical Christian children and analyze how each child's God-concepts compare with his or her logical thinking ability. In examining children's logical thinking ability and their God-concepts, several research questions were asked, including (a) Are there common themes among the children in their conceptions of God? (b) Are there God-concepts that children have in common at different cognitive levels?

Limitations

A limitation for this proposed study was the lack of previous research that explored the Group Assessment of Logical Thinking (GALT) as an instrument to assess children's logical thinking styles. The GALT was reviewed in its context of research performed predominately in adolescent students' mastery of science concepts. In addition, there was a lack of evidence that the GALT has been used with children of the ages in this study. In studies about God-concepts, researchers have looked at the differences within children's conceptions, age and gender differences in regards to their interview responses, and denominational differences. The relationship between God-concepts and developmental reasoning of children has not been the focus of past research endeavors.

A possible weakness in the interview process with children was their natural inclination as Sunday school students to answer questions based on what they perceive

the researcher will want to hear. To guard against this tendency, the interviews were not held in a Sunday school classroom to reduce the likelihood of the children assuming the Sunday school student role.

One element that is important to remember in this study and may be an inevitable confounding variable is children's internalization of parental religious values and behavior. Flor and Knapp (2001) investigated parent-child transactions in regards to faith, such as dyadic discussions of faith, and found them to significantly impact the child's internalization of his or her parents' religious values. Since the sample criteria for the children chosen for this study was evangelical Christian children, these children may have described the views of their parents or teachers from a private religious school when being interviewed. Piaget described this behavior of children as imitation, the utilization of accommodation over assimilation in which the child's "schemas of action are modified by the external world without his utilizing this external world…" (Piaget, 1962, p. 5). It was assumed children have internalized their parents' values and may not express their independent beliefs. I only analyzed the statements given and provided a nonjudgmental environment in which each child could feel the freedom to express his or her true opinions and beliefs.

<center>Delimitations and Potential Implications</center>

A delimitation in this study was the criteria for children chosen for the study with the purpose of eliminating possible confounding variables. Three boys and 3 girls from each grade level, third to sixth, were interviewed. Therefore, results represented both genders and children ages 8 to 12. All children were from a Christian evangelical background so that denominational differences were minimized. Two churches were

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used to recruit children, which may have caused minor interdenominational differences to exist.

Definitions

Several definitions will be helpful for the reader to know at the onset of this study.

1. *Evangelical Christian.* Participants selected are considered "evangelical Christians," defined by Grudem (1994, p. 17) as "…seven broad theological traditions (Anglican/Episcopalian, Arminian/Wesleyan/Methodist, Baptist, Dispensational, Lutheran, Reformed/Presbyterian, and Renewal/Charismatic/Pentecostal)…" that "…all would hold to the inerrancy of the Bible and would belong to what would be called a conservative evangelical position today.

2. *God-concept.* God-concepts in children are said to be the inner imaginations, thoughts, and feelings that a child has about his or her special God or deity (Heller, 1986). They have also been referred to as a child's mental representation of God— assigned characteristics that can be positive or negative (De Roos, Miedema, & Iedema, 2001).

3. *Psychosocial stages.* According to Erikson's (1968) theory, physical maturation has personal and social ramifications. As an individual matures and gains new skills, new possibilities arise for him or her, but society also increases demands on the individual. Through maturation, children move through a set of crises, most evident at particular stages in life. Each stage builds on the previous stage and influences the next stage.

Results of this study of connections between children's logical thinking abilities and particular themes in God-concepts has implications for incorporating

developmentally appropriate teaching into Christian education, Christian parenting, and evangelical church curriculum. Roadrangka, Yeany, and Padilla (1983) based their development of the GALT on the assumption that "concepts matched to the developmental level of students are more easily learned" (p. 1). Instructors could use the GALT to choose instruction and curriculum at the cognitive developmental level of their students, based on the assessment of the students' logical thinking abilities. In addition to matching curriculum and instruction, educators and parents can better understand the cognitive development of their students and children.

CHAPTER II

REVIEW OF THE LITERATURE

Theories have aided in understanding children's God-concepts, cognitive

development, and faith development. More recently, researchers have conducted

structured interviews with children to deliver more insight. In this chapter, God-

concepts, the children's interview, faith development, cognitive developmental theory,

and the Group Assessment of Logical Thinking (GALT) assessment will be reviewed.

God-Concepts

Previous research in exploration of the spiritual inner world of children has led to

interesting results that reveal contributing factors to mental representations of God.

Central to these studies have been the influence of age, parenting, attachment,

denomination, and gender on children's God-concepts (De Roos, Iedema, & Miedema,

2001, 2003, 2004).

Age

The possibility children can experience mental representations and an affinity for

God and spiritual meaning must first be examined. Children tend to overestimate the

mind's capacity. They attribute God-like characteristics to both humans and God from a

young age, which makes them infer poorly about adults (in that adults have divine

abilities and powers when they really do not), but at the same time children may innately

have assumptions about God (Barrett & Richert, 2003). Research suggests direct

training may not be essential for children to have theological conceptions (Barrett & Richert). In an article in the *Harvard Law Review* (2002), the question of the capability of children's religious maturity was examined. An attempt was made to identify belief-based religiosity as a product of age or as an arrived state of adulthood, but it was ultimately suggested children do have significant and individual spiritual lives. From a cognitive developmental perspective, children may have religious beliefs more similar to adults than once thought; children may naturally form earlier conceptions about God based on an infusion of the supernatural and reality and create a mental category for the unordinary. Researchers of toddlers' spiritual formation suggest even toddlers are religiously aware. By the time they are two years of age and have begun pretend play, toddlers can develop basic images of God. However, even spiritual awareness must be activated lest it remain undeveloped (Yust, 2003).

Invariably, children may have the innate capacity to acquire God-concepts that are then actualized by cultural inputs as in a child who possesses the natural ability to dance but without exposure to the art the ability may never be realized.   The environment also provides information and models which may influence children's developing God-concepts. Caregivers and parents provide the toddler with information about God, such as God is good and God loves you. Toddlers may not understand who God is, but their concept of him may impersonate their understanding of those adult figures in the context that they are given information about God. In helping children at this young age to develop spiritual awareness, religious information is important to their development as they associate the information with their developing concept of God (Yust, 2003).

If young children can begin forming mental representations of God, then school-aged children are likely to have preconceived ideas and form conceptions about their particular deity, especially with the likelihood that culture and influences have inputted various information and biases into their minds. Lovecky (1998) claimed many gifted children develop an awareness of God and his nature as it relates to the world and to themselves, and this awareness develops through experience. Interviews with Heller (1986) reveal children do not have to be gifted to possess personal theories of God.

Heller (1986) has provided considerable evidence of age differences in children's God-concepts. He was able to identify universal images of God across various ages as well as ethnic and religious differences in analyzing results from the children's interview he developed. The 40 boys and girls in his study ranged in age from 4 to 12 years and represented religious backgrounds of Jewish, Catholic, Protestant, and Hindu. The children ages 4 to 6 in his study had a more literal, rather than abstract, and self-focused view of God. In one interview, a child explained evidence for God's existence simply and solely by the fact that God created him. A 4-year-old told about the castle in which God lives in Heaven.

From ages 7 to 9, children in Heller's (1986) study were more curious about mysterious and abstract notions of God and spirituality and God's role in human life. At this age, they seemed more concerned with parental attention, which transferred to their God-concept. Heller testified children in this middle age bracket base much of their curiosity on their own experiences and worries. In one of Heller's interviews with a boy whose parents were about to divorce, the boy pondered God in the context of the future

and what the future will be like for him. Heller made the connection between the boy's fears of his future and God's role in knowing it.

The most developed concepts of God were in the oldest age group, 10- to 12-year-olds. These children presented more capability to doubt and to have an awareness of their own doubt. Injury was a prominent concern in this age group, and God was still being considered as to his role as protector, comforter, and healer. An awareness of the media's portrayal of suffering in the world gives cause for these children to question God's role in the world's unhappiness. These children were also uncertain about but had a consciousness of other religious views. As evidenced in the analysis on age differences alone from Heller's (1986) interviews, age has been a predominate factor in children's religious and conceptual differences. Given the variable of age, even formal religious influences are filtered and deduced to aid in the understanding of children's basic God conceptions.

The goal of one study was to determine if age differences exist in Christian God-descriptions among young to older adults. Very few differences existed, and it was suggested age-related cognitive change may no longer be the influence in adults' God-concepts but rather denomination and personality. These concepts in adulthood may have remained defined by the perception of the adults' parents from childhood and remain as resistant to change as the parental perception (Noffke & McFadden, 2001). Therefore, God-concepts may be stable cognitive structures of adults that were developed within their childhood and adolescence. In one study, 4-year-olds' perceptions of God matched that of their parents more than did the perceptions of 5- and 6-year-olds (De Roos et al., 2003, 2004). A similar study was conducted by the same team one year later that

explored influence of child rearing practices on young children's God-concepts. What these researchers had previously attributed to age seemed further influenced by children's parents. Parental influence on children's God-concept as well as the factor of attachment must also be examined.

Parental Influence and Attachment

Parents play a role, often unconsciously, in the development of their children's God-concepts. Children often view God similarly to the way their parents view God (Nierenberg & Sheldon, 2001). Parental behaviors and beliefs are influential in children's beliefs and behaviors. Peck (1978) identifies culture as the determining force in a person's worldview, as shaped in his or her formative years. He narrows the most important part of culture to one's particular family, and further, the most significant aspect of the family is not what parents tell their children about God but rather how they behave toward their children. According to Peck, a child's first and sometimes only notion of God's nature is an excerpt of a combination of his or her parents' natures. Peck claims what follows is children have a loving and forgiving view of God or a harsh and punitive view of a monster-god, determined by their own unique experiences in the family.

Not only might children see God as their parents see God, children may also see God as having certain attributes their parents possess. In a De Roos et al. (2004) study, the punishing God-concept was explained by more strict child-rearing practices. This gave evidence to projection theory, which explains that children project onto their image of God different characteristics of maternal child-rearing habits. Yust (2003) found

younger preschool children personified God in their adult caregivers more than older preschool children.

Attachment, or trust, is also suggested to be necessary in early relationships, especially the mother/child relationship, as a prerequisite to faith in God (Heller, 1986). De Roos et al. (2001, 2003, 2004) hypothesized several factors that might contribute to the formation of a young child's God-concept, giving particular attention to attachment theory. These researchers first hypothesized the quality of the parent-child and teacher-child relationship is related to the quality of the child's God-concept. Ultimately, positive child-teacher relationships were connected to the child's loving God-concept and positively affected the child's emotions, self-esteem, and peer involvement. Adversely, less positive child-teacher relationships were shown to affect the child negatively, resulting in the child having a less loving God-concept. The mother-child relationship, however, was related to the teacher-child relationship but did not influence the child's God-concept. This could be explained by the evidence that only about 30% of the children were raised in Christian homes and almost 80% of the children received religious education at their religious school (De Roos et al., 2001). It is probable the children in this study adopted the God-concept given to them, predominately through their religious school. This study highlighted the impact of religious teachers in children's God-concepts, not simply by giving instruction to each child but by the quality of relationship built with each child. Dickie et al. (1997) interviewed children ages 4 to 10 from Protestant families and found the children's perceptions of God as nurturing and powerful were related to perceptions of both parents, especially among the older children.

This supported the attachment theory that God would be perceived as more nurturing and powerful as children get older.

Another aspect of attachment explored in research is the importance of a secure enough attachment for children to gain independence and explore their own religious beliefs. When children experience their own efficacy and freedom to explore and discover God, they may begin to perceive themselves as no longer passive recipients of life but as active participants in impacting a world with an appetite for meaning and purpose. Adults can help children securely separate from themselves as parents and go through the process of individuation, even in regard to religious exploration. The sooner children experience the freedom to challenge the beliefs of their church culture, the closer they are to internalizing and owning their beliefs, values, and commitments (Gibson, 2004). Though it could take place at any age, Gibson suggests this internalization "grows out of a personal commitment to Christ" (p. 301).

Denomination

As differences in denomination, age, and gender were examined in their relation to preschool children's God-concepts, De Roos et al. (2003) found maternal religious denomination independently affected the children's God-concepts. As in their previous study, the schools' religious denomination influenced the children's God concepts, even significantly more than maternal religious denomination. Extended research is needed regarding the influence of public schools on children's God-concepts, as studies (De Roos et al., 2001, 2002, 2003; Dickie et al., 1997) have focused on children who were primarily educated in religious schools. Noffke and McFadden (2001) explained denominational comparisons of God-concepts within Christian denominations:

Methodist, Roman Catholic, and Baptist. Because of the evangelical Baptist church's

view of the inerrancy of the Bible, scripture was more literally interpreted among

Baptists, and their predominate concept of God was sovereign and omniscient. Higher

denominational commitment appeared to be related to the perceptions of God as close, or

less distant.

Heller (1986) described identifiable themes of God that emerged from interviews

with children ages 4 to 12 from four religious backgrounds. The Jewish children held a

more historical or Biblical perspective of God, meaning the Jewish people are like

players in an unfolding drama. The Bible offers stories they could relate to as if relating

with their ancestors. The Jewish children also portrayed a "them and us" mentality when

referring to themselves as Jewish and all others being Gentiles or Christian. They

expressed a chosen orientation, as a group selected by God for a purpose. God was seen

as their supreme therapist, one who alleviates suffering and troubles and who has a

purpose for their suffering.

For the Catholic children, God is seen as intimately involved in family life.

Especially in references to divorce, which is strongly opposed in the Catholic faith, the

children perceived God to intervene in their parents' communication, helping them to sort

out their differences. Thus "God emerges in a 'Pope-like' role, as the holy arbiter and as

a symbol of family cohesion" (Heller, 1986, p. 27). Guilt and purity were prominent

themes among the Catholic children. They felt unconscious and conscious guilt as a

result of sin, or imposed by God, and then they felt an urge to eradicate the guilt in a

concern for purity. While talking about their sinfulness, the Catholic children talked also

about forgiveness and the role of Jesus, God's son, coming to earth to provide divine forgiveness.

Baptist children in Heller's (1986) interviews placed great emphasis on a nurturing God, one who provides for material needs. Heller explained that according to Baptist doctrine, those who are baptized enter into the family of God, with God as Father, and likewise Baptist children were found to lean on God as they do the parents in their biological family to provide for their daily needs. Beyond providing for their basic needs, Baptist children seemed to rely on God to order and structure their lives. They believed God created the world and them as well, knowing beforehand what he wished to accomplish through empowering them in the world. Baptist children also displayed emotional reserve in talking about God by avoiding expression of sentiment, as if afraid to invest emotionally in God.

Hindu children, as studied by Heller (1986), through an expressed intense devotion to their religious beliefs, shared the common thread of community. Being united with others through events, such as meditation, were important to these children as expressed in their interview responses. God was described as "close enough to be a real person," (p. 35) especially through gurus who were spiritually enlightened, but God was also to all of the Hindu children an invisible abstract force or energy.

Gender

Males and females have reportedly been shown to have varying concepts of God. Such differences in one study included boys identifying more with Jesus than did girls, but there were no other significant differences in boys' and girls' God-concepts, like God as punishing and God as loving (De Roos et al., 2003). Heller (1986) qualitatively

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analyzed his children's interviews in depth and found definitive differences in boys' and girls' God-concepts. Though male and female children overall described God as being male in gender, the female children in Heller's study were more likely to be sensitive toward a more androgynous side of God, acknowledging both feminine and masculine characteristics of God. Other common God-concepts for the girls were a passive, close, and intimate God, combined in one being. Males talked of God as distant, and common God-concepts for them were God as action-oriented and rational.

The Children's Interview

Many quantitative measures are available that have given a reliable analysis of participant's responses to selected items; however, it is unknown whether these measurements completely capture God-concepts (Kunkel, Cook, Meshel, Daughtry, & Hauenstein, 1999). Johnson (1994) used Heller's (1986) interviews, omitting the sections on role-playing and story-telling, with a convenient sample of 5 inner city youth who were Catechumens preparing for the sacrament of Christian initiation in St. Francis Preparatory School in the Bronx. Johnson began this project interested in the spirituality of young people. She replicated Heller's methodology in semi-structured audio taped interviews, commenting, "Heller's questions were effective in collecting the students' imagery without influencing or distorting it, while avoiding the tendency toward overstructuring" (Johnson, 1994, p. 504). These children were in one denomination and all lived in the inner city, so though their responses were not reproductions of the interview responses in Heller's interview, the inner city children's responses were very similar to each other's as well as indicative of their particular circumstances, supporting the interview's validity.

Possible Implications

Understanding the central themes and contributing factors to children's God-concepts may have implications for religious educators and caregivers. With inner thoughts and feelings of children revealed, educators and caregivers could gain insight into effective ways to help children learn about God, being more aware of the biases and influences involved in the formation of children's God-concepts. Just as important, however, is those who seek to educate children in a Christian setting should be aware of ways children cognitively process information and, thus, logically think about faith and God.

Theoretical Perspectives

Cognitive Development

In a study in which adults were asked to think in retrospect about adolescence and childhood, Reich, Oser, and Valentin (1994) explored why people had changed their religious beliefs. It was presumed a structural component influenced this change. "Structural component refers to internal transformations that may advance more slowly or more quickly on account of the interaction with the environment, but where the direction is determined by an intrinsic developmental logic (as opposed to sociocultural influences)" (p. 168). It was suggested intellectual style or epistemic cognition be the next research step to presuppose why individuals change their beliefs.

In Piaget's cognitive developmental theory, an individual moves to the next cognitive level when presented with challenges in the environment that cause him or her to change, to alter his or her mental structures in order to meet those challenges (Fowler, 1981). Even for infants, mental structures, or *schemas,* are ways interaction with the

environment takes place. Piaget used the word schema to refer to anything that is generalizable and repeatable in an action (Piaget & Inhelder, 1969). As children grow and mature, these mental structures are described as organized abstract mental operations actively constructed by the children.

Miller (2002) explains Piaget's view of these cognitive structures as precursors to the way children think and behave in situations. As their cognitive structures change, so do their adaptation techniques, and these periods of time in a child's life are referred to as stages. Piaget believed these stages are universal, they are derived from a previous stage and invariably prepare an individual for the next stage, and the description of each stage describes the final outcome of an individual having achieved that particular stage. These levels of cognitive development are commonly referred to as stages, but Piaget describes them as periods of time and development. The first period is further divided into 6 sub-stages. The first two periods are summarized because they must be understood as a precursor to understanding the periods in which the children sampled in this study are characterized, which are concrete operational and the transition to formal operational, discussed hereafter in further detail.

The sensorimotor period of the children 2 years of age and younger is considered by Piaget & Inhelder (1969) an important period of time when the child is constructing all of the necessary cognitive substructures for later periods of development. These constructions, without representation or thought, are developed through movement and perceptions. The movements and reflexes of the child in this period form habits that later form intelligence. This happens through 6 successive sub-stages: modification of reflexes, primary circular reactions, secondary circular reactions, coordination of

secondary schemas, tertiary circular reactions, and invention of new means through

mental combinations (Miller, 2002). Three important concepts acquired during the

sensorimotor period are (a) object permanence, when the child understands the object did

not cease to exist just because it is hidden from view; (b) space and time, important to

solving 'detour' problems; (c) causality, which is when the child begins to realize cause

and effect by his or her own actions and in various other objects (Piaget & Inhelder,

1969).

The preoperational period of 2- to 7-year-old children, transitions from the

sensorimotor period with the development of mental representations through *semiotic*

function, where one object stands for another (Miller, 2002). Signs and symbols are

learned as similar objects and events that signify real ones. Though mental representation

has advanced from its previous stage, children in this period cannot think in reversible

terms (Piaget & Inhelder, 1969). Fowler (1981) compared his first stage of faith with this

level of cognitive development based on the egocentrism shown in these children.

Egocentrism, according to Piaget, is the inability to differentiate self from others,

including not being able to take on the perception of others. Miller helps to describe

other characteristics of this level, including rigidity of thought, semilogical reasoning,

and limited social cognition. Rigidity of thought is best described with the example of

two identical containers that have equal amounts of liquid. When the contents of a

container are poured into a thinner and taller container or shorter and wider container,

children at this level freeze their thought on the height and assume the volume is more or

less, depending on the height of the container. The height becomes their only focus,

rather than the transition of volume. If the liquid is poured from one container into

another, children focus on the states of the containers rather than the process of pouring the same amount of liquid. Cognitively, children are unable to reverse direction of the poured liquid and imagine it being poured back into the original container and containing the same amount. They can, however, understand the identity of the liquid, that it may be poured from one container to another and still be the same kind of liquid. In this level, causal relationships are better understood outside of self, as pulling the cord more makes the curtain open more, though they may not be able to explain how it happened.

Rather than thinking logically, children in this level reason semi-logically, often explaining natural events by human behavior or as tied to human activities (Miller, 2002). Piaget also looked at moral judgments and concluded preoperational children judge the wrongness of an act by the transmission of punishment or amount of damage done (Piaget, 1932). Personal intentions are not yet considered, i.e., breaking a vase accidentally or while rebelliously throwing a ball in the house. The children's social understanding is understood only according to personal experiences (Piaget & Inhelder, 1969).

Most children in this study, ages 8 to 12, will be categorized in the next successive level in Piaget's theory of cognitive development. According to Miller (2002, p. 52) the mental representations of children in this concrete operational period come alive with the ability to use *operations*, "an internalized mental action that is part of an organized structure." In the example of the liquid in containers, children now understand the process and can reason the liquid is the same amount though in different sized containers. This ability to use operations may come at different times during this period. Concrete children begin to better understand reversibility and conservation.

Classifications based on the understanding of sizes of an included class to the entire class are achieved (Piaget & Inhelder, 1969). Relations and temporal-spatial representations are additional operations evident in concrete operational children (e.g., children can understand differences in height and length and include the earth's surface in drawing their perception of things). All of these operations strengthen gradually over time. Stated plainly by Miller (2002, p. 56), "Thought now is decentered rather than centered, dynamic rather than static, and reversible rather than irreversible." Miller concludes that to transition to the next period, children apply their operations from what is to what could be.

Children in this study may transition into the formal operational period by advanced cognitive ability while still in the age bracket of the previous developmental period. "This final fundamental decentering, which occurs at the end of childhood, prepares for adolescence, whose principal characteristic is a similar liberation from the concrete in favor of interest oriented toward the non-present and the future" (Piaget & Inhelder, 1969, p. 130). This period of preadolescence is includes 11- to 15-year-olds. These preadolescents advance from their current concrete operations. Rather than simply acknowledging the results of concrete operations, individuals in this final period can provide hypotheses about their relations, based on logic and abstract thought. This abstract thought looks more like the scientific method than did thought in previous periods. In the concrete operational period, children could observe operations and lack the ability to explain the process. In the formal operational period, they are able to problem-solve and imagine multiple outcomes. One of Piaget's common tasks in determining if a child has reached formal operational thought is the pendulum problem.

The formal operational thinker demonstrates hypothetico-deductive thought by imagining all of the possible rates that the pendulum may oscillate, observing and keeping track of possible results, and ultimately arriving at possible conclusions (Piaget & Inhelder, 1969).

Piaget found 16 underlying mental operations that form an organization of logical relations. Two examples important in understanding the formal operational period are summarized by Miller (2002): conjunction, two objects occurring at the same time, and disjunction, three possible outcomes. In addition to imagining possible outcomes, preadolescents can begin imagining their own future, complete with abstract ideas and possibilities. Moral and political issues may no longer be accepted as they are but as debatable points with various possible perspectives. According to Miller, Piaget claims these formal operational thinkers still carry egocentrism from the previous stages, causing them to overestimate their own logic and "underestimate the practical problems involved in achieving an ideal future for themselves or for society…Piaget notes that this starry-eyed egocentrism is squelched when adolescents undertake their first real job!" (p. 59) Formal operations are still developing in this period. Abstract thought is applied to more situations as these adolescents grow into adulthood and throughout adulthood. Miller contends Piaget ended his periods of developmental logical thought with formal operations. Beyond this point, individuals' thought only change in content and stability of rather than in structure.

Moral Development

Fowler (1981) also contended moralization develops in a similar pattern as cognitive development. Kohlberg (1976) presumed this also, "since moral reasoning

clearly is reasoning, advanced moral reasoning depends upon advanced logical reasoning. There is a parallelism between an individual's logical stage and his moral stage" (p. 32). Kohlberg writes individuals first reaches a level of cognitive development, then through their level of social perception are able to attain a level of moral judgment. Beyond attaining moral judgment, one has the capacity to exhibit moral behavior. This process, according to Kohlberg, takes place in a horizontal sequence of steps, and an individual's moral stage is a significant predicting factor in behavior.

Kohlberg (1976) identifies each of the 6 moral stages by moral reasoning. These stages are grouped into three levels--preconventional, conventional, and postconventional. Most children under the age of 9 are classified into the preconventional level, but some adolescents and adult offenders may be grouped here. Societal rules and expectations are external to the self and not quite understood. The conventional level is comprised primarily of adolescents and adults. These persons internalize and conform to rules and expectations because those are the rules of authority and society. Only a minority of adults older than 20 reach the postconventional level. For these adults, the rules of society are understood and accepted based on their foundational moral principles of motivation by principle rather than rules (Kohlberg, 1976).

As children develop in logical reasoning, they may move through the first level of moral reasoning. In the preconventional level, two stages are present: heteronomous morality and individualism, and instrumental purpose and exchange. At this preconventional level, morality is external. For hope of reward or fear of punishment, children adhere to authority figures' rules. In Stage 1, egocentric children deem morality

based on its consequences. In Stage 2, children look for reward in conforming to rules and consider conformity a way to satisfy personal needs (Kohlberg, 1976).

If children reach the conventional level, they will progress through Stage 3, mutual interpersonal expectations, relationships, and interpersonal conformity, which means moral behavior is the means to which they might be thought of as a nice person. In Stage 3, it is important in one's reasoning that behavior pleases, helps, and is approved of by other people. Should a child reach Stage 4, the stage of social system and conscience, he or she would morally consider behaving in such a way as to fulfill what has been agreed upon by laws and obligations to society (Kohlberg, 1976).

Faith Development

Eaude's (2003) search for meaning of spiritual experience led him to believe children are innately active participants in finding meaning in life by understanding and problem-solving rather than by others imposing answers on them, mainly helping them to find meaning, identity, and significance. Fowler (1981) distinguished an individual's search for meaning and purpose from religious commitment or belief with what he identified as faith. The development of this faith, coined faith development by Fowler and his contemporaries, may suggest faith, religion, and spirituality that explain personal change (Streib, 2004). Faith, in Fowler's perspective, enables one to see dreams, goals, relationships, and responses in light of his or her inner image of what signifies power, value, and meaning in life. Fowler conducted in-depth interviews with a variety of people, capturing their stage of faith. The primary assumption in people of all kinds and cultures is that "…we look for something to love that loves us, something to value that

gives us value, something to honor and respect that has the power to sustain our being"
(Fowler, 1981, p. 5).

Necessary for faith development, according to Fowler (1981), is the combination of nurture, challenge, time, and experience, which inherently keep an individual's faith development current with his or her psychosocial development. Fowler believed faith development paralleled Erikson's eras of psychosocial development. He developed 6 stages of faith that categorize individuals in his interviews by age and suggested stages in which people progress through personal faith.

Stage 1, intuitive-projective faith, occurs in children ages 2 or 3 to 6 or 7, where sensory experience is organized into meaningful units through the children's newly formed devices of speech and symbolic representation. Inexperienced perceptions dominate these children's understanding of life. This egocentrism causes them to assume their perceptions give the only accurate perspective. Fowler (1981) parallels this stage with the Piagetian cognitive preoperational period when children think fluidly and magically. Imagination is birthed in this stage, helping children to grasp meaning and feelings of the world through stories and powerful images.

Mythic-literal faith, Stage 2, according to Fowler (1981), involves school-age children and some adolescents. Fowler claimed children in this stage reason according to Piaget's period of concrete operational thinking. In this faith stage, children develop the ability to incorporate other perspectives with their own. From an interview with a fourth grade girl, Millie, Fowler takes note of Millie's ability to separate God's perspective from her own. The interviewer asks if God cares when she does something wrong. Millie

responds, "Sure he—he cares. And he knows that you're—he knows that you are sorry about it. And he always tries—he always forgives you, usually" (Fowler, 1981, p. 139).

In addition to taking on new perspectives, children in Stage 2 can offer cause-effect relations, enabling them to retell stories they have been told. Understanding of life comes from the children's experiences lived through stories—real or fictional. However, children in Stage 2 have not yet developed the ability to reflect upon the stories told and "communicate their meanings by way of more abstract and general statements" (Fowler, 1981, p. 137). According to Fowler, in terms of morality and justice, Stage 2 individuals can also be categorized in Kohlberg's (1976) preconventional level, typified by fairness and a natural lawfulness to which even God is bound. Moral rules, beliefs, and symbols, according to Fowler, are literally interpreted. Fowler contends even some adults in his interviews could be categorized into the stage of mythic-literal faith.

In the transition from Stage 2 to Stage 3, contradictions arise within stories that are told, and as a result, individuals reflect on the meanings of the stories. Called synthetic-conventional faith, individuals in Stage 3 have also transitioned to Piaget's formal operational thought. Adolescents progress through Stage 3, and some adults never develop beyond it. Faith now gives both an identity and an outlook that is personal, extending beyond that of the family (Fowler, 1981).

In studying children, Fowler's (1981) remaining stages of faith are not relevant because Stage 4 and beyond typify more developed formal operational thinkers. The respective stages are: Stage 4—individuative-reflective faith, Stage 5—conjunctive faith, and Stage 6—universalizing faith. The significance of exploring Fowler's stages of faith

is to understand the theory children develop in their faith simultaneously as they develop reasoning ability, as articulated and categorized into stages by Piaget (1969).

<center>Measurement of Cognitive Development</center>

Piaget used multiple problems to test a child's operations of thought (Piaget & Inhelder, 1969). Miller (2002) defined Piaget's methodology as the "*clinical method*, which involves a chainlike verbal interaction between the experimenter and the child" (p. 36). In this interaction, the experimenter asks a question or poses a problem, and the subsequent questions are then asked based on the response the child gave to the previous question. Piaget developed this interaction in order to understand the reasoning behind the children's answers.

Cook and Cook (2005) noted that through Piagetian tasks, Piaget could better understand preoperational children's thinking. He found these children showed centration, focusing on only one thing at a time rather than thinking of several aspects. This means they were centered on the static endpoints, the before and after, rather than the process. The next aspect of logical thinking that Cook noticed in Piaget's finding was preoperational children's lack of a sense of reversibility. The task of liquid conservation is simple to the logical thinking child. Water from a short and wide container is poured into a tall and skinny container. A preoperational thinker would focus only on the height of the liquid and the fact that the water was first low, then it was at a higher level in the second container; therefore, there must be more water in the second container. With a lack of a grasp for reversibility, the preoperational child does not have true operational thought to allow him or her to imagine the pour reversed and realize the same amount of water is in both containers. The other two conservation tasks are similar to the liquid

task. They each show a beginning state, a transformation, and an ending state where something has changed. The importance of children's operational and newer logical thought "is not so much that children are no longer deceived by the problem, but rather that they have now learned some basic logical rules that become evident in much of their thinking" (Lefrancois, 2001, p. 383).

Roadrangka, Yeany, and Padilla (1983) compiled reliable and valid test items for the Group Assessment of Logical Thinking (GALT), including Lawson's Classroom Test of Formal Operations, and items from Burney, Ankney and Joyce, and Longeot. In the pilot testing, Piagetian interview tasks were administered to a sub-sample of students for purposes of validation. The 21-item GALT test can be found in the public domain and administered in large groups or to individuals, and the authors suggest a shorter 12-item altered test for time sensitivity. The first 18 items present multiple-choice problems to be answered by the individual as well as a selection of reasoning choices to support his or her answer. The final three items are scored upon the child's inclusion of all possible answers and patterns to classify these answers.

Researchers, predominantly in the field of science education have utilized the GALT to assess cognitive development, not for comparison with God-concepts, but to determine a developmental level to gauge student performance, phases in the learning cycle, and cognitive/motivational characteristics. In addition, researchers have administered the GALT to determine the best method of teaching a particular subject based on the students' logical thinking ability (Niaz & Robinson, 1992; Allard & Barman, 1994; Kang, Scharmann, Noh, & Koh, 2005). Through use of the GALT test, Allard and Barman assessed the reasoning of 48 college biology students and found 54%

of these students would benefit from concrete methods of instruction. Sampling 101 more science students in a basic science course showed these researchers that 72% of these students would benefit from concrete methods rather than a traditional lecture approach in the classroom.

Summary and Conclusions

Palmer (1987) observes about Heller's (1986) study on God-concepts, "Heller's study helps us…to reaffirm the continuity between childhood and adulthood" (p. 90). Beginning early in childhood and continuing through adulthood, an individual develops in moral reasoning and faith. Heller's interviews portrayed children's concepts of God, dissected by contributing factors to the children's faith, according to Heller's qualitative analysis. Kohlberg (1976) and Fowler (1981) assert there is first a developing logical reasoning ability before moral reasoning and faith can develop. In order to determine a child's level of logical reasoning, a reliable and valid measurement, such as the GALT, may be used (Roadrangka et al., 1983). The GALT incorporates Piaget's periods of cognitive development for children, preadolescents, and adults.

This study identifies God-concepts in third to sixth grade evangelical Christian children and compares them with the children's logical thinking ability. Two primary questions guiding qualitative analysis were asked in this study. Are there common themes among the children in their conceptions of God? Are there God-concepts that children have in common at different cognitive levels?

CHAPTER III

METHODOLOGY

The previous chapter reviewed God-concepts and an interview method for researching them, cognitive development and its underlying structure as seen in moral and faith development, and an effective test to assess logical thinking. The Group Assessment of Logical Thinking (GALT) and the children's interview was administered to a group of children to compare common God-concepts children have with their logical thinking ability, classified as concrete, transitional, and abstract thinking.

Participants

Participants in this study included 24 evangelical Caucasian and Hispanic Christian children from two Southern Baptist churches in the Dallas/Fort Worth metroplex. This sample was composed of 6, third grade children (3 male, 3 female), 6, fourth grade children (3 male, 3 female), 6, fifth grade children (3 male, 3 female), and 6, sixth grade children (3 male, 3 female). This particular age range was chosen because of its assumed ability to generate participation and adequate verbalization of answers to questions. The selection criteria included in this purposive sampling were: active church attendance (attend at least two Bible study/worship gatherings a month), membership in an evangelical denomination for at least 2 years, and residence within 30 miles of me.

The participating children and parents were told the purpose of this research study was to explore children's God-concepts, or mental representations of God, and to compare how these conceptions related to their logical thinking ability. I briefly described the interview and audio taping process as well as the length of time the interview was expected to last. The participant was told that his or her involvement in this research study was voluntary and if at any time during the study one wished to withdraw participation, he or she was free to do so without penalty and would still receive a bookmark as a thank-you gift.

Measures

The Children's Interview

The children's interview (Heller, 1986) is a 6-part qualitative interview that provides necessary data for assessing meaningful themes in God-concepts among children from religious backgrounds (see Appendix A).

In Part 1 of Heller's (1986) interview, children were asked to name their particular deity, and this given name was used throughout the interview process to refer to their specific deity. In Part 2, children were asked to draw their deity as they picture him/her. With the help of probing questions in Part 3, I asked the children to tell a story about their picture. Role-playing was used in Part 4 as children use a family of dolls that interacted with their deity in three given scenarios. Part 5 had 22 questions about the children's deity, and in Part 6, children were asked to write a letter to their deity. These questions and interactions were designed to collect religious imagery from the children, outstanding themes in relation to their representation of God, and cognitive themes as described in Piaget's (1969) theory of cognitive development.

The following elements were included in this study to support internal validity. I transcribed verbatim the children's responses from audio tapes. Some examples are given in the results chapter of exact quotes from children that support or reject the research questions. To avoid the possibility of children responding with *church-speak,* or terms they may use in church to attempt to answer questions Biblically and intelligently, the interviews were held in the children's home rather than in a Sunday school classroom. Heller (1986) developed the first part of the interview, giving each child the opportunity to name his or her deity first so as to not influence each child's idea about God with his own. He also summed the interview with a letter to God, giving children an opportunity to say anything he may not have asked them. These sections were replicated as in Heller's interviews.

External validity was protected by the following precautions. The characteristics of the sample were chosen and described in such a way that samples in future studies could be adequately compared. Southern Baptist was the denomination chosen in this study but can be altered to study other denominations as well as replicated to continue research for evangelical Christians.

Group Assessment of Logical Thinking (GALT)

The GALT test has successfully been used to clearly assess logical thinking ability in previous research (Bunce & Hutchinson, 1993; McConnell, 2005). To account for limitations found in other logical thinking tests, Roadrangka et al. (1983) developed the GALT to measure 6 logical operations, including conservation, correlational reasoning, proportional reasoning, controlling variables, probabilistic reasoning, and combinatorial reasoning. They also used a multiple-choice style to present answers and

possible reasoning behind those answers. Pictures were included for each item to visualize the problem; sentence length and word complexity were adjusted so that the GALT could be read by students ages 12 and older. Instead of asking the children to read the items, I further simplified the test for appropriateness of third to sixth grade children by reading each question and answer selections to them as they looked at the pictures.

The GALT is also sufficiently reliable and valid in its ability to distinguish between students at Piagetian stages of development. Reliability was tested by administering the GALT to students and administering Piagetian Interview Tasks to a sub-sample of those students. They found a strong correlation, $r = .80$ (Roadrangka et al., 1983). The question selection derived from other reliable and valid instruments helped make this a reliable and valid assessment. The Cronbach's reliability coefficient for internal consistency of the GALT was reported as $\alpha = .62-.70$ (Bunce & Hutchinson, 1993).

Roadrangka et al. (1983) suggested the 21 items in the GALT be considered an item pool. Time constraints may require shorter tests, and two items from each of the six modes of thinking may be used to construct a reasonable test. Their suggestion, which was utilized in this project, includes the following recommended 12 items: conservation, items 1 and 4; proportions, items 8 and 9; control variables, items 11 and 13; probability, items 15 and 16; correlations, items 17 and 18; and combinations, items 19 and 20 (see Appendix B). One of the six modes measures concrete operations and the other five measure formal operations (Bunce et al., 1993).

The answers to the GALT items 1 to 18 were considered correct only if the best answer and reason were both correct. For item 19, children "must (1) show a pattern and

(2) have no more than one error or omission," and for item 20, children must also show a pattern in answers given, having no more than two errors or omissions. To be labeled as concrete operational thinkers, the children had to score 0 to 4. Transitional thinkers was indicative of the score 5 to 7, and abstract operational thinkers would have been those children who scored 8 to 12 (Roadrangka et al., 1983).

Because the GALT does not include items to measure preoperational abilities, three Piagetian conservation tasks of liquid, number, and length were also compiled with pictures on paper and administered to each child after the GALT assessment (see Appendix C). These three well-known conservation tasks are derived from the conservation problems Piaget gave to children to observe if the children understood the amount of liquid, number, or length of something would conserve, or remain the same, despite the transformation that changed its physical appearance. For number conservation, 10 candy-coated chocolate candies were divided into two equal rows. One row was stretched out, and the child was asked if the rows still contained the same number of candies. For length conservation, two equal pieces of string were placed in two rows, one above the other. One piece was moved to the right and the child was asked if the two strings were still the same length.

The Demographic and Parental Perception of Children's Religiosity Questionnaire was given to each parent or guardian (see Appendix D). Answers to these 9 questions were requested to report each child's religious activity from the parent's perspective. This questionnaire was also given to collect demographic information, age and gender, of each child. Demographic data included the child's religious activity from

the parent's perspective and was strictly descriptive and not used in analysis of research questions as it did not pertain to the purpose of the research questions.

Procedures

I designed and printed flyers to recruit parents of participants in two Baptist churches. In the entrance to the children's building, I stopped parents with children who appeared to be in the proper age demographic, handed them a flyer, briefly described the study and asked for participation. When parents agreed to participate with their child, I validated they met the selection criteria. If parents met the selection criteria, I arranged a meeting with each parent and child at their home and gathered their name, phone number and address. When calling to confirm each interview, two mothers declined their original agreement because of time constraints, and one couple said they had agreed in front of their child so as to not hurt her feelings, but later stated their child has a severe learning deficiency that might not make her an appropriate candidate for this study. She was not included in this study.

Upon meeting with each child and parent at their home, I again described the study and ensured the child understood confidentiality, no penalty for withdrawing, and length of time for the interviews. Consent forms were then presented, and at least one parent or guardian of each participant signed consent on his or her child's behalf (see Appendix E). I introduced each child to the audiocassette recorder and began recording as each child participant was asked for assent. I paused the recorder and asked the parent to go outside the room where the interview was being held and complete The Demographic and Parental Perception of Children's Religiosity Questionnaire (see Appendix D). An audiocassette-taped interview was then resumed with each child for 1 hour in a quiet

room. Two mothers requested to remain in the room, one of which joined the child and

me at the same table. One copy of the consent and assent form was offered for the parent

to keep, and only three mothers desired to retain a copy.

Children's Interview

The interview was a query of the participant's God-concepts. This was

investigated by The Children's Interview--a 6-part questionnaire (see Appendix A). I

read the questions from the interview script. First, I prompted the child to name his or

her deity. This name was used throughout the remainder of the interview to refer to that

specific child's God. Next, I asked the child to draw his/her deity, providing the child

with crayons, colored pencils, and white paper. The child was then asked to tell me a

story about his or her drawing. Then the child was prompted through a series of role-

playing scenarios, using a small family of five dolls purchased in the toy department of a

local store. In this role-playing section, children were asked to provide scenarios with the

dolls and assume God's perspective in each situation. For example, each child was given

the entire family of dolls and asked to imagine a family situation. In the imaginary

family situation, the child was asked to play God and show what God would do or say

with such a family.

Continuing with the interview script, I then asked 22 questions, some offering

multiple answer choices and some open-ended. Finally, the child was asked to write a

letter to his or her deity, giving him or her the chance in about 5 minutes to write

anything he or she may have left out of this part of the interview.   Two debriefing

questions were asked, allowing each child to tell his or her thoughts about the children's

interview questions and process. "Tell me what you thought about being interviewed?" "What did you think of the questions?"

Answers to all of the questions and activities from the children's interview were recorded on audiocassette tapes. I combined each child's audiocassette tape of the interview with his or her drawing and written letter and placed them in a file labeled with a pseudonym created for that child. Only the assisting professor and I had complete access to audiocassette tapes, interview transcriptions, letters, drawings, and theoretical notes from the interview. As promised in the consent form, parents were mailed a final overview of the data collected without knowledge of specific participants and their responses.

Administering the GALT

After completing the qualitative data collection from the children's interview with each child, I stopped the audiocassette player and administered the 12-item GALT test. I read each question aloud as the child looked on and then asked him or her to circle the correct answer. Upon completing the GALT test, I administered the Piagetian tasks. Each child then received a bookmark, and I thanked him or her for participating and returned the child to the parent in the other room. I collected the Demographic and Parental Perception of Children's Religiosity Questionnaire from the parent. After each interview, I labeled the parental questionnaire with the child's pseudonym and placed the questionnaire, the GALT test, and the Piagetian tasks in the child's file containing tape(s) and notes from the children's interview.

Potential Risks

The questions asked of the participant in the children's interview directly related to his or her descriptions of God. Neither the questions or scenarios were designed to provoke an emotional response; however, it was possible a participant could have recalled a painful memory that he or she associated with his or her spiritual journey, or the topic discussed may have addressed a common fear among children. For example, in asking about God's activities in relation to death, the participant was asked, "When someone like a grandma or grandpa dies, is God involved? If so, how?" If a participant would have become uncomfortable or upset at any time during the interview, the interview would have been stopped, and the participant could have withdrawn, if desired.

Method of Analysis

Both quantitative and qualitative methods of analysis were used in this study. The qualitative analysis was a grounded theory approach in which I presented related research but searched for a new theory to emerge based on a comparison of analyzed data from the interviews of children's God-concepts and the children's stages of logical thinking, as determined by the GALT.

Quantitative Analysis of the GALT

I developed descriptive statistics, including GALT scores, Piagetian tasks, demographics, and parental perceptions of children's religiosity from the collected data of 24 children and 24 parents or guardians. Also included in descriptive statistics were comparative data from the current study and the original GALT data, including "a frequency distribution of the proportions of students who answered each test item correctly in each grade level as well as the sample size for each grade level" (Roadrangka

et al., 1983, p. 9) (see Appendix F). Reliability in internal consistency, $\alpha = .60$, was assessed with Cronbach's alpha. The GALT was analyzed as the determinant of each child's logical thinking stage. Each correct answer was added to attain the child's final GALT score. To guard against bias, quantitative data was not entered into the SPSS program until qualitative data had been analyzed. To check for accuracy, data was entered twice.

Qualitative Analysis of the Children's Interview

I transcribed all interviews from the original audiocassette tapes, and the tapes were then destroyed by pulling the tapes from the cases, placing them in a bag and throwing them into the dumpster. The transcripts from the interviews were downloaded into the NUDIST software program. Through latent content analysis, I used constant comparative method to find patterns of God-concepts in the data, moving back and forth from data collection to data analysis. Sociological constructs were formed and some existing ones used from The Children's Interview (Heller, 1986). I developed a list of existing God-concepts from the reviewed literature. In addition, I reviewed each interview for characteristics related to Piaget's concrete operational and formal operational cognitive levels.

The assisting professor and I compiled the new and existing patterns and themes in order to code each interview. One interview was coded together, whereas a pattern or theme was recorded at each appropriate mention of it. The assisting professor and I each took five more of the same interviews and coded them separately. Reviewing them together, the professor and I found an interrater agreement percentage of .80, so I alone coded the remaining 18 interviews. All 18 interviews were initially examined once. As

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new patterns and themes were found through the coding process, I explored all interviews again for that particular pattern or theme.

Through the NUDIST software, I created a filing system, tree nodes, to sort and categorize codes of the God-concepts and cognitive themes from the children's responses. A cognitive theme was a pattern that emerged, such as perspective-taking, coded when a child showed that ability in his or her interview response. The categories formed under God-concepts were historical human, distant divinity, and gracious guide. Each category had multiple codes that were recorded at each appropriate place in the interviews. For instance, when a fourth grade male was asked how he felt about God, he said, "I feel that he is perfect." The quote was coded as perfect, under the category of distant divinity, because perfection is a divine quality.

I produced a template index card that listed name, gender, grade and each category with all codes. On each card, I wrote a child's pseudonym, grade, and gender, and recorded next to each code the frequency of that code in his or her interview. This was repeated for each of the 24 children.

To minimize the weakness of analyzing already-recorded interviews, I made theoretical notes as necessary during the interviews. To establish interrater-reliability, the assisting professor and I together analyzed one child's results from the children's interview, and they analyzed five different children's interview transcripts separately. They were then able to compare analyses to ensure the results were interpreted the same. For confidentiality, each participant was assigned a pseudonym, unknown to the participant and parent, and each participant was discussed and reported only by his or her

false name. The master list of participants/false names was contained in a locked safe in my home and destroyed by fire after all data was collected.

In the qualitative analysis, common God-concepts for each child and among the children became evident. These were compared with Heller's (1986) results as classified by age, gender, and apparent themes. Cognitive themes were explored next as found in the interviews. I completed the quantitative analysis of the GALT, following the qualitative analysis to avoid bias. The index card of each child was placed into one of three categories declared by the GALT--concrete, transitional, or abstract. Once all children were placed into the three logical thinking categories, I searched for and discussed apparent themes of God-concepts within each logical thinking stage. Careful attention was given to whether or not the cognitive themes found in each interview accurately depicted the actual cognitive stage of each child as determined by the GALT.

CHAPTER IV

RESULTS

The purpose of this study was to identify God-concepts in third to sixth grade

evangelical Christian children and compare them with the children's logical thinking

ability. Two research questions guided the qualitative analysis of this study. Are there

common themes among the children in their conceptions of God? Are there God-concepts

that children have in common at different cognitive levels?

Considered a mixed method study, qualitative and quantitative data were

collected and analyzed. Twenty-four children from two Southern Baptist churches were

interviewed with the children's interview (Heller, 1986) to collect their conceptions of

God, and the Group Assessment of Logical Thinking (GALT) was administered to assess

their stage of logical thinking. For descriptive data, three Piagetian tasks were

administered to the children, and the parents were asked to complete a demographic and

parental perception of children's religiosity questionnaire.

Parental perceptions of children's religiosity and demographic data of children

were collected by a parental questionnaire to be used for discussion purposes only. Of

the 24 parental questionnaires, 23 parents claimed that their children had professed a

personal relationship with Jesus Christ through a prayer of salvation. Twenty-three

parents said that their children read the Bible at home, and one parent did not answer the

question. In the children's interview, when children were asked how much they believe

in God, (a) a whole lot, (b) pretty much believe, (c) sometimes or kind of believe, or (d) don't really believe, 19 children said they believed a whole lot, and 5 children said they pretty much believed.

The children's interview required children to determine a name for their God, draw a picture of God, tell about the picture, role-play God's involvement in family life, answer questions about God, and write a letter to God. Through each means of describing God, I found concepts of God that were commonly used across interviews. I first asked the children to describe the most important thing in their beliefs. Twenty-three children said "God," and one girl said "Jesus." She still used the name "God" throughout the interview. In the children's pictures of God, two children drew a bright light, several children simply drew a face, and the majority of children drew a male in human clothing. These drawings and responses helped me coin the God-concepts of Light and Human Characteristics. Nine children drew an Anglo God with peach-colored skin, which determined the God-concept of Anglo. Though asked to draw a picture of God, many drew and described Jesus. God as Jesus was a God-concept to describe this. Lives in Heaven was a theme that emerged throughout the interview, particularly in the drawings as God was sometimes drawn as seated on a throne in Heaven.

After naming their deity and drawing and describing a picture of him, children were given three family scenarios in which to play God and describe his involvement in those situations. As God, the children often communicated directly with the family members and did so frequently in a parental or counselor role. From these scenarios, many God-concepts emerged, including Communicates, Parental, Counselor,

Empowering, and Punisher. The remaining God-concepts were found in the children's responses to questions about God and in their written letter to God.

I formed categories after analyzing the God-concepts, relating the concepts for more meaningful analyses. Historical human was a category that grouped God-concepts related to God as a man. This category also grouped concepts, such as Savior, that children specifically attributed to Jesus, the man. God-concepts that provided a theme of God as similar to the Wizard of Oz were placed into the category of distant divinity. These concepts portrayed a powerful, surreal and mysterious God who judges, heals, and provides from a distance. The more intimate and coaching God-concepts were placed in a category of gracious guide. The children spoke of parental, nurturing and guiding roles of God as if God were present with them at all times, communicating with them and empowering them on their behalf.

<div align="center">Common God-Concepts</div>

The first research question asked, Are there common themes among children in their conceptions of God? I discovered 42 common concepts about God and after analyzing the patterns formed by them assigned them to the following categories: historical human, distant divinity, and gracious guide (see Table 1). The concepts of God at least half of all children expressed were God is Biblical, Comforter, Communicates, Creator, Empowering, Protector, Purposeful, God has human characteristics, Lives in Heaven, God is male, Counselor, God is Jesus, All-knowing, Loving, Perfect, Real, and Parental. According to these most prevalent God-concepts, all 24 children in general viewed God more as a gracious guide, closely followed by distant divinity.

Table 1

God-concepts by Category

God-concept	Definition[a]	Example[b]
Biblical	Historical human God is the God spoken of in the Bible	"[I feel love for God] every time I read my Bible because it's letters from him."
Christian	God believes in himself and the teachings of Jesus	(Is God more, as, or less real than President Bush?) "I know he's a Christian so probably as real."
Protestant	God is the god of the Protestant faith only	"I think God's different from Mohammed; one, because Mohammed doesn't really believe in God; he worships Allah and that religion."
Savior	God saves people from the death penalty of their sins	"I feel happy that he died on the cross for our sins."
Anglo	God is a Caucasian being	(Drawing God, pulls out peach pencil) "They never have a flesh color!"

(table continues)

Table 1 *(continued).*

God-concept	Definition[a]	Example[b]
Human Characteristics	God possesses human characteristics	"He has a beard."
Male	God's gender is male only	"He's a boy…"
God is Jesus	God and Jesus are the same being	"I think he's the same [as Jesus] 'cause they're the same person."
Servant	God came to earth to serve man	"…which I see him as a servant and everything."
Distant divinity		
Biblical	God is the God spoken of in the Bible	"[I feel love for God] every time I read my Bible because it's letters from him."
Creator	God made the universe and all that live within it	"He's the one who creates the person who will be in the mother's belly."
Forgiving	God's sense of understanding, acceptance, and tolerance of others	"He was just forgiving and wouldn't really care if you messed up or said something stupid."

(table continues)

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Table 1 *(continued)*.

God-concept	Definition[a]	Example[b]
Healer	God cures illnesses and injuries	"…he can make people well when they're sick and no one else can really do that."
Provider	God provides for mankind	"If you want to go somewhere fun, like the beach, he provides the money."
Punisher	God inflicts consequences for wrong actions	"They [siblings] are fighting over who gets the remote. God makes their TV start to not work."
Purposeful	God asserts himself through humans to achieve a desired end	"He can start the concern and then you can learn a lesson out of it."
Rewarding	God gives good things	"I'll make it to where now that you've said that…I'll make it to where you have the most funnest ball game you've ever had."
Lives in Heaven	God lives in a place called Heaven	"They go to heaven with God, well, some people do if they ask Jesus to come into their heart…"
One and Only	God is the one and only true God	"To tell other people about God, that he's the only God."

(table continues)

Table 1 *(continued).*

God-concept	Definition[a]	Example[b]
Judge	God is a righteous arbiter who determines who will go to heaven and who will go to hell	"If they're a Christian, they'll come into heaven and if they're not they'll come into hell."
All-knowing	God's knowledge exceeds all constraints	"He knows if they will or won't become a Christian."
Awesome	God inspires awe	"He is…awesome…"
Good	God is virtuous and benevolent	"…like when something good happens and it's all up to him and he did it."
Holy	God has a divine quality	"He is holy…"
Light	A symbol of God's presence	"[God is like a] shining light."
Miraculous	God is able where man is powerless	"I'm not sure how, but I know God does miracles."
Mysterious	God is real but confusing, reliable but ambiguous	"Even though lots of times you're thinking, 'why did he do this?'"
Perfect	God is entirely without fault	"He's never sinned and is always happy."
Powerful	God has a more-than-human impact on the world	"[God is] mighty, powerful, amazing…"

Table 1 *(continued)*.

God-concept	Definition[a]	Example[b]
Real	God exists today	"I feel that he's real and some people don't really believe in him."
Strong	God possesses great might	"[God is] great, strong, mighty…"
	Gracious guide	
Comforter	God alleviates pain	"He would be there to give you comfort."
Communicates	God is relational and engaging in conversation	"God helped him and told him what to do."
Empowering	God improves the people's lives through actions	"Like if you want your family to be healthier, he might give them the power to gain strength."
Nurturing	God is a caretaker	"God takes very good care of my brother and my mom."
Protector	God is deliverer of injury and pain	"Please watch over me and keep me safe."
Counselor	God rights the wrongs of the family and the world	"He helps other people with their problems and listens to their prayers."

(table continues)

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Table 1 *(continued).*

God-concept	Definition[a]	Example[b]
Father	God is a surrogate paternal figure	"…there's God the son, God the Father, and God the Holy Spirit."
Leader	God is the boss in charge of people	"God is the head-hauncho and lives in Heaven."
Parental	God scolds, disciplines, and guides children	"You should not fight with a friend, talk it out with words, and you should get along with one another."
Teacher	God gives life lessons	"…maybe he was just trying to teach someone a lesson…"
Invisible	God is omnipresent and consists in all time and space	"He's in the room watching."
Loving	God loves people	"Then I picture him smiling and he's saying I love you…"
Reliable	God is dependable	"You can rely on God."

[a]Note. God-concepts are defined by literature reviewed and as discovered in the interviews of this study.

[b]Note. Each example is from an interview response in the present study.

God-Concepts at Cognitive Levels

The second research question asked, are there God-concepts that children have in common at different cognitive levels? The GALT was used to determine a logical

thinking level for each child. Once children were classified as concrete, transitional, or abstract thinkers, God-concepts were further explored for common themes at each level.

Logical Thinking Levels

In the construction and validation of the GALT, Roadrangka et al. (1983) reported the proportion of students in each grade level who answered each item correctly by the specific reasoning categories of the GALT (see Appendix F). They noted that the "GALT measured a general increase in cognitive ability across age or grade levels" (p. 9). The results for this study of third to sixth grade children show a similar increase of cognitive growth (see Table 2). Twenty children were classified as concrete thinkers by scoring 0-4 points on the GALT. Four children scored 5-8 points in the transitional level. No child scored more than 8 points on the GALT, meaning no children were classified as abstract thinkers in this study. The GALT scores ranged from 0 to 7, and averaged 3.04, with a standard deviation of 1.78.

Table 2

Proportion of Students in Each Grade Level Answering Each Item Correctly (N = 24)[a]

Reasoning skill	Item no.	Grade 3 (%)	Grade 4 (%)	Grade 5 (%)	Grade 6 (%)
Conservation	1	83	50	67	100
	4	33	17	0	50
Proportional reasoning	8	0	0	0	0
	9	17	0	0	33

(table continues)

Table 2 *(continued).*

Reasoning skill	Item No.	Grade 3 (%)	Grade 4 (%)	Grade 5 (%)	Grade 6 (%)
Controlling variables	11	17	17	33	33
	13	0	17	0	33
Probabilistic reasoning	15	0	0	17	50
	16	0	0	17	50
Correlational reasoning	17	0	0	17	17
	18	0	0	0	0
Combinational reasoning	19	83	83	100	100
	20	0	0	50	33

[a]n = 6 children for each grade level.

Males scored higher on the GALT than did females, $M = 3.33$ for males and $M = 2.75$ for females (see Table 3). Males also answered more Piagetian tasks correctly than did females, $M = 2.83$ for males and $M = 2.50$ for females.

Third grade children in general excelled above fourth grade children on the GALT, $M = 2.33$ for third grade children and $M = 1.83$ for fourth grade children. Scores increased from fifth grade children, $M = 3.00$, to sixth grade children, $M = 5.00$ (see Table 4). Third and fourth grade children averaged 2.67 Piagetian tasks answered correctly, the fifth grade average declined to 2.33, and the sixth grade children answered all Piagetian tasks correctly.

Table 3

GALT Scores and Piagetian Tasks Answered Correctly by Gender (N = 24)

Gender[a]		GALT score	No. tasks correct
Male	*M*	3.3333	2.8333
	SD	1.92275	.38925
Female	*M*	2.7500	2.5000
	SD	1.65831	.90453
Total	*M*	3.0417	2.6667
	SD	1.78104	.70196

Note. Maximum GALT score is 12. Possible number of tasks correct is 3.

[a]*n* = 12 children for each gender.

Table 4

GALT Scores and Piagetian Tasks Answered Correctly by Grade (N = 24)

Grade[a]		GALT score	No. tasks correct	Age
3	*M*	2.3333	2.6667	8.5000
	SD	1.03280	.51640	.54772
4	*M*	1.8333	2.6667	9.8333
	SD	1.16905	.51640	.40825
5	*M*	3.0000	2.3333	10.5000
	SD	1.67332	1.21106	.54772
6	*M*	5.0000	3.0000	11.5000
	SD	1.54919	.00000	.54772

(table continues)

Table 4 *(continued)*.

Grade[a]		GALT score	No. tasks correct	Age
Total	*M*	3.0417	2.6667	10.0833
	SD	1.78104	.70196	1.21285

[a]*n* = 6 children for each grade level.

Because children in this study were younger than the sample in the original GALT data and because the GALT does not test for preoperational thought, three Piagetian tasks of conservation were administered to each child after the interview and GALT. The number of tasks answered correctly ranged from 0 to 3. The average number of tasks correctly answered was 2.67, with a standard deviation of 0.70. Children who answered at least one of the Piagetian tasks incorrectly also scored between 0 and 4 on the GALT, the level of concrete thinkers. One child scored a 0 on the GALT and answered two out of three Piagetian tasks correctly. Another child scored a 1 on the GALT and answered all Piagetian tasks incorrectly. The four transitional thinkers answered the Piagetian tasks correctly. Because the GALT classified individuals with scores 0 to 4 as concrete, these two children were classified as concrete thinkers.

God-Concepts at the Concrete Level

God-concepts were examined for common themes at each logical thinking level (see Table 5). Concrete thinkers specifically viewed God more as a gracious guide than a historical human or distant divinity. Less than half of the concrete children viewed God as a historical human, and even less conceptualized God as a distant divinity. Specifically, all 20 children classified as concrete by their scores on the GALT viewed God as one who Communicates, Lives in Heaven, and is Real. Out of the 20 concrete

thinkers who had the concept of God as one who Communicates, 18 of those children expressed that concept more than twice in their interviews.

Table 5

God-concepts of Concrete Thinkers (N = 20)

God-concept	No. of children who expressed God-concept	No. of children who expressed God-concept 2 or more times
Historical Human		
Biblical	14	7
Christian	3	1
Protestant	1	1
Savior	7	3
Anglo	8	2
Human characteristics	17	10
Male	18	5
God is Jesus	15	5
Servant	2	1
Distant divinity		
Biblical	14	7
Creator	16	9
Forgiving	7	3

(table continues)

Table 5 *(continued).*

God-concept	No. of children who expressed God-concept	No. of children who expressed God-concept 2 or more times
Healer	9	5
Provider	10	2
Punisher	7	1
Purposeful	13	8
Rewarding	2	1
Lives in Heaven	20	15
One and only	3	0
Judge	8	3
All-knowing	13	8
Awesome	5	2
Good	6	4
Holy	7	2
Light	3	2
Miraculous	10	4
Mysterious	5	1
Perfect	11	4
Powerful	11	8
Real	20	8

(table continues)

Table 5 *(continued)*.

God-concept	No. of children who expressed God-concept	No. of children who expressed God-concept 2 or more times
Strong	5	1
Gracious guide		
Comforter	10	4
Communicates	20	18
Empowering	18	10
Nurturing	4	2
Protector	12	5
Counselor	14	6
Father	9	2
Leader	5	1
Parental	14	8
Teacher	4	2
Invisible	10	5
Loving	12	3
Reliable	4	1

God-Concepts at the Transitional Level

In comparison with the children at the concrete level, transitional thinkers viewed God predominately as a gracious guide and a distant divinity. Less than half of the

transitional children viewed God as a historical human. Specifically, 4 out of 4

transitional thinkers viewed God as one who Communicates, Creator, Punisher,

Purposeful, one who Lives in Heaven, Male, Counselor, Parental, and Real (see Table 6).

Three out of the 4 transitional thinkers expressed God-concepts of Biblical, Forgiving,

has Human Characteristics, the same as Jesus, Judge, All-knowing, Loving, Mysterious,

and Reliable.

Table 6

God-concepts of Transitional Thinkers (N = 4)

God-concept	No. of children who expressed God-concept	No. of children who expressed God-concept 2 or more times
Historical Human		
Biblical	3	2
Christian	0	0
Protestant	1	0
Savior	1	1
Anglo	1	0
Human characteristics	3	1
Male	4	0
God is Jesus	3	3
Servant	0	0
Distant divinity		

(table continues)

Table 6 *(continued)*.

God-concept	No. of children who expressed God-concept	No. of children who expressed God-concept 2 or more times
Biblical	3	2
Creator	4	1
Forgiving	3	2
Healer	2	0
Provider	1	0
Punisher	4	1
Purposeful	4	3
Rewarding	0	0
Lives in Heaven	4	4
One and only	2	0
Judge	3	0
All-knowing	3	1
Awesome	1	1
Good	2	1
Holy	0	0
Light	2	1
Miraculous	1	0
Mysterious	3	1

Table 6 *(continued)*.

God-concept	No. of children who expressed God-concept	No. of children who expressed God-concept 2 or more times
Perfect	2	1
Powerful	1	0
Real	4	1
Strong	0	0
Gracious guide		
Comforter	2	0
Communicates	4	4
Empowering	2	1
Nurturing	0	0
Protector	2	1
Counselor	4	3
Father	2	2
Leader	2	0
Parental	4	2
Teacher	1	0
Invisible	1	0
Loving	3	2
Reliable	3	1

Many unique and notable responses were given in the children's interviews that did not directly answer the research questions of this study or necessarily pertain to the review of literature. Additional quotes by children are included to allow the reader to read thoughts from the children unwarranted by research questions but deserving of appreciation (see Appendix G).

Cognitive Themes at the Concrete Level

Cognitive themes found in at least 10 of the 20 concrete thinkers were abstract thinking, a consciousness of others' religious views, doubt and awareness of doubt, hypothetical thinking, an inability to take another's perspective, and perspective-taking (see Table 7). Hypothetical thinking and perspective-taking were the two most predominate cognitive themes found among the children at the concrete level.

Table 7

Cognitive Themes for Concrete Thinkers

Cognitive theme	No. of concrete thinkers[a] who showed cognitive theme	No. of concrete thinkers who showed cognitive theme 2 or more times
Abstract thinking	10	2
Analytical thinking	4	2
Concrete thinking	7	4
Consciousness of other's religious views	13	6

(table continues)

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Table 7 *(continued).*

Cognitive theme	No. of concrete thinkers[a] who showed cognitive theme	No. of concrete thinkers who showed cognitive theme 2 or more times
Doubt and awareness of Doubt	13	2
Hypothetical thinking	14	9
Inability to take another's perspective	13	3
Metacognitive awareness	1	0
Perspective-taking	17	11
Projection	7	1

[a]$n = 20$.

Cognitive Themes at the Transitional Level

At least 3 of the 4 transitional thinkers showed cognitive themes of abstract thinking, consciousness of others' religious views, and perspective-taking (see Table 8). At least 2 of the transitional thinkers showed cognitive themes of analytical thinking, hypothetical thinking, and the inability to take another's perspective. Perspective-taking and abstract thinking were the two predominate cognitive themes for the transitional thinkers.

Table 8

Cognitive Themes for Transitional Thinkers

Cognitive Theme	No. of Transitional Thinkers[a] Who Showed Cognitive Theme	No. of Transitional Thinkers Who Showed Cognitive Theme 2 or More Times
Abstract thinking	3	2
Analytical thinking	2	1
Concrete thinking	1	1
Consciousness of other's religious views	3	0
Doubt and awareness of Doubt	1	0
Hypothetical thinking	2	2
Inability to take another's Perspective	2	0
Metacognitive awareness	0	0
Perspective-taking	4	3
Projection	0	0

[a]$n = 4$.

Summary

The results indicated that third to sixth grade children do share common

conceptions about God. These God-concepts could be grouped into three meaningful

categories. Twenty children were categorized as concrete thinkers and 4 children were categorized as transitional thinkers by their logical thinking ability. Concrete thinkers viewed God more as a gracious guide, and transitional thinkers viewed God as a gracious guide and distant divinity, giving evidence to developing concepts of God that is simultaneous with cognitive development. In this study, concrete and transitional thinkers shared many God-concepts, but the concepts unique mostly to the majority of concrete thinkers were Comforter, Provider, Empowering, Protector, Invisible, Miraculous, Perfect, and Powerful. The God-concepts of the majority of transitional thinkers and not of the concrete thinkers were Punisher, Forgiving, Judge, Mysterious, and Reliable.

CHAPTER V

DISCUSSION

This final chapter restates research questions and briefly reviews methodology. Following are a summary and discussion of results, comparison of data collected with the literature on development and God-concepts, implications, and recommendations for future studies.

The purpose of this study was to compare 24, third to sixth grade evangelical Christian children's God-concepts with their logical thinking ability. Two questions guided this research study. Are there common themes in God-concepts shared by the children in this study? Are there God-concepts that children have in common at different cognitive levels?

Qualitative and quantitative data were collected and analyzed to answer these research questions. The children's interview (Heller, 1986) was used to explore children's God-concepts. The Group Assessment of Logical Thinking (GALT) was administered to children to determine their logical thinking level as concrete, transitional, or abstract. Three Piagetian tasks of conservation were given to the children because the GALT did not provide a score for preoperational thinkers.

Summary of Major Findings

Forty-two common God-concepts were found among the children and placed into three meaningful categories according to the evolved patterns. The God-concepts of at

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least half of the entire sample of children were God is Biblical, Comforter, Communicates, Creator, Empowering, Protector, Purposeful, God has human characteristics, Lives in Heaven, God is male, Counselor, God is Jesus, All-knowing, Loving, Perfect, Real, and Parental, most of which characterized a gracious guide God-concept category, closely followed by distant divinity.

Concrete thinkers predominately held a gracious guide pattern of God-concepts. Among and in addition to these prevalent concepts of God, concrete thinkers viewed God more frequently than transitional thinkers as Provider, Empowering, Protector, Invisible, Miraculous, and Powerful. Transitional thinkers also held a gracious guide view of God, which was closely followed by a distant divinity view of God. The additional God-concepts of the majority of transitional thinkers but not a majority of the concrete thinkers were Punisher, Forgiving, Judge, Mysterious, and Reliable.

God-concepts were also reviewed by gender. Boys were more likely to see God as a distant divinity with God-concepts such as Punisher, Male, Miraculous, Purposeful, Mysterious, and Judge. Girls viewed God more as a gracious guide with the God-concepts of Comforter, Nurturing, Protector, Provider, Good, Holy, Perfect, Counselor, Leader, and Parental.

Cognitive themes were also explored from the responses to the children's interview. I notated each response that displayed a cognitive action as described in literature and previous findings. The cognitive themes occurred slightly more frequently in the interviews with the boys, but in general the boys and girls did not show significant differences in cognitive themes through their responses. Ten of the 20 concrete thinkers showed abstract thinking. Thirteen of the concrete thinkers expressed a consciousness of

others' religious views, doubt and awareness of doubt, and an inability to take another's perspective. Fourteen concrete thinking children displayed hypothetical thinking, which occurred more than once during the interview for 9 of those children. Eighteen of the children took the perspective of others, and 11 of those children did so more than once during their interview.

Three out of 4 of the transitional thinkers also showed abstract thought, consciousness of others' religious views and the ability to take others' perspectives. Two out of the 4 children showed ability to think analytically and hypothetically and also showed an inability to take another's perspective.

Discussion of Major Findings

God-concepts

Parents expressed how excited and special their children felt to have been interviewed. Moreover, children were challenged to think of God in a manner possibly more abstract than their normal activities and influences have caused them to think, and many took advantage of the opportunity to articulate their thoughts. Many of the children remarked after several different questions that they had never before thought of that question. In one question, they were encouraged to draw their response, which provided a fun activity in which they could express an artistic side, although every single child prefaced his or her drawing with "I'm not a very good artist…." The semistandardized interview process was organized but flexible enough that the participants could enjoy the specific attention given to their thoughts.

However attained, children have the capacity to develop conceptions of God. Among this sample of evangelical Christian children, common God-concepts emerged

and could be grouped into three meaningful categories: historical human, gracious guide, and distant divinity. Nine God-concepts were categorized as historical human. One frequent historical human concept of God was that he is the God of the Bible. This concept only was also categorized as distant divinity because the children described the distant divine and human qualities of God as they had discovered in the Bible. This implies that the God and Jesus they referred to is the one spoken of in the Scriptures. Though asked about God, many children interchanged the name 'God' with 'Jesus,' spoke of God's time on earth, and drew God as Jesus with his disciples. When asked how God is similar or different from Jesus, many children expressed they are the same. Most of the children drew a picture of God with human characteristics—a clothed man often wearing a smile. A fifth grade boy, Brad, talked of God's many arms answering many telephones that each hold a different prayer from earth. Nine of the children reached for a peach-colored pencil or crayon to draw an Anglo God. Two fourth grade girls, Hilary and Danielle, believed God is both male and female, but the other children adamantly insisted God is male.

The children also conceptualized God as a gracious guide--close, intimate, and active in their lives, one who comforts those who mourn or hurt, and as protector over them. In situations with friends and family, the children talked of God's role as a counselor, offering guidance. This was true especially when divorce or marital conflict was mentioned. God always tried to mend the marriage, according to the children's role-playing. When providing hypothetical situations with siblings and friends, the children role-played God as giving common parental scolding or instructions to children. For example, Brynn, a third grade girl, said (playing God), "You should not fight with a

friend, talk it out with words, and you should get along with one another." Empowering was another common God-concept that emphasized God's ever-present help in the children's lives to accomplish something. For a fourth grade boy, Bjourn, God helped his family bring another family to church. A third grade girl, Kirlee, spoke often of God empowering people to act nicely and to get along. Common to all of the children was the concept that God communicates with people. He listens, he talks, and he is available through prayer. According to a fourth grade boy, Guy, God speaks to him through his dreams. A fourth grade girl, Bright, told of how she opened her Bible when in need of comfort and God spoke to her conscience through a verse on that opened page.

God was also considered by many children to be a distant divinity—a God who sets the world in motion and rules from afar. He was described as purposeful, or having reason for his actions. This was expressed most often in discussion of death, that God has a reason for a person to die. The children also believed that God is purposeful with their lives; they were created for a purpose, although they never talked about what that purpose might be. Danielle, a fourth grade girl, said that if she could ask God a question, she would ask him "what's the point?" God was also described as the provider for the children's needs and wants such as "happy birthdays and merry Christmases," as confidently stated by Eddy, a sixth grade boy. Two children drew a picture of a bright light, explaining that God is as bright as the sun. The distant and divine holy God was perceived to judge actions and perform miracles, but he his ways were also mysterious to the children.

All but three of these God-concepts were offered by the children through their drawings, story-telling, answers, and letters. Three pointed questions were asked that

explained three concepts of God--male, real, and lives in heaven. One question pertained to where God lives; another, if the child thought God was a boy or girl, if he had a gender; and another question allowed children to say whether God is as real, more real, or less real for them than Santa Claus, Superman, father, grandfather, and great-grandfather. This last question almost assumed that the children initially believed God to be real and proved to be a bit confusing for the children. These three God-concepts were almost unanimous because they were direct questions.

Several of these God-concepts compare to those of the Baptist children in Heller's (1986) study. Heller noted Baptist children introduced an imagery of nurturance, where children look to God to provide for their needs. That was true in the present study as well. Heller claimed Baptist children were emotionally reserved toward God, which is not completely consistent with this study because several children were saddened by the crucifixion of Christ. Others expressed a deep love for God. Like Heller's study, though, most children seemed very excited about God when he blessed them with material things or game wins but did not expound on feelings of love for God elsewhere. The last theme Heller found among Baptist children was a God of order and organization. In other religions, God may be a universal uniting principle, but to Baptist children, God is involved in the more intimate details of life, knowing ahead of time what he wishes to accomplish and how he will order people's lives. This was true with the children in this study as they often conceptualized God as all-knowing, purposeful, and empowering.

Boys and girls also viewed God differently in this study. Boys viewed God more as a distant divinity, evident in God-concepts such as male, miraculous, purposeful, and judge. This is confirmed by Heller's (1986) finding that boys perceived a more action-

oriented and rational God. Girls emphasized the more androgynous qualities of God and viewed him as a gracious guide through concepts such as comforter, provider, nurturing, and protector, and it was two girls had suggested that God is both male and female.

Beyond these shared God-concepts, there were additional concepts for concrete and transitional thinkers. Concrete thinkers were more likely to see God as a gracious guide. For these concrete thinkers and as compared with 7- to 9-year-old children in Heller's (1986) study, an increase in knowledge combined with a growing curiosity is closely tied to their own worries. A third grade boy, Justin, was filled with questions for God, all pertaining to his curiosity and worry of his own future. He wanted to ask God what he would be when he grew up, and one of his explanations for how God might be involved in a young person's death by accident or disease was that maybe God was protecting them from not being able to find a wife later or something. Aloneness was a common motif for children in this age group in Heller's study, which is similar to the concrete thinkers in the present study. God as invisible is a concept that comforts those children afraid of loneliness because God is there with them even though not seen. Another concept mentioned by Heller that related to this study was the association of God with dreams. The troubled fourth grade boy, Guy, believed God spoke to him in his dreams. It is evident that this sample of concrete children viewed God as a gracious guide, almost as if he is an imaginary friend. A third grade girl, Kirlee, talked of how she and her friends liked to pretend God was playing with them on the playground. When afraid, the girls would quickly consult him for guidance. Less than half of the concrete thinkers viewed God as a historical human, and even less conceptualized God as distant divinity. Beyond the belief in God as a close, imaginary friend, some concrete thinkers

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could conceptualize God through concrete means—male, Anglo, a God with human characteristics.

Transitional thinkers also viewed God mostly as a gracious guide. Just as much did they view God as a distant divinity, emphasized through roles and qualities of God such as punisher, forgiving, a judge, and mysterious. Though similar to concrete thinkers in their God-concepts of gracious guide, transitional thinkers were also able to embrace more distant and mysterious qualities of God—as distant divinity. According to Heller's (1986) analysis of God-concepts in children ages 10 to 12, as adolescence ensues, children could have become more aware of the displeasures and unfairness of life, and they were caught in a battle between God's involvement and self-control. Also, being more aware of self as one capable of sinning might have made these children fear the punishment of God, the judge, and rely on him to forgive them at each discrepancy. As in Heller's interviews, older children were more aware of the finality of life and the awareness of an afterlife. God as judge was a common theme to these transitional children because they viewed God as one who sends some to heaven and others to hell. Though they viewed God as punisher more often, it was evident they very much respected the punishment as consequences for their actions, rather than viewing God as a mean or harsh parent. Transitional thinker, Tristen, portrayed God as such through one statement, "He gives us second chances when we sin. He reveals stuff to us. And he just talks to us through certain situations in whatever we do. If he has to, he'll judge us; he will if we sin—he'll give us a consequence since we messed up."

Cognitive Themes

I found several of the children's descriptions of God and Heaven to be very abstract. For example, in describing Heaven, Sid said there are "many mansions, towers and towers of mansions that God dwells in, maybe he has a big throne." Though Heaven alone can be an abstract thought, most children trust that there is a place called Heaven because they have been told that it is so. To think that God could dwell in many mansions at one time displayed a level of abstract thinking that defies concrete thinking. Similarly, Eddy was asked where God lives, and he clearly expressed that God lives above the Heavens even though most people think he lives in Heaven. Sid also thought abstractly about God and time, "He was never created, he's just always been…He was made before time began."

Another cognitive theme found was a consciousness of others' religious views. Heller (1986) found this more frequently in 10- to 12-year-old children. Though the children may not have understood other religious views, they were more cognizant of them than before. In the present study, depending on personal experiences, a greater percentage of transitional thinkers than concrete thinkers were aware of other religious views, and transitional thinkers were at least 10 years old. When asked how God is similar or different from Mohammed, most children did not answer because they were unfamiliar with Mohammed. Tristen, however, said, "[Mohammed is] different because God is alive and Mohammed is dead and he's just some false god that people worship." Even within his own church, Caleb admitted that other people might have different beliefs. I asked Caleb how he thinks the way he sees God might be different from other people's ideas at his church. He responded, "I think he [God] is caring and loving. They

might think he doesn't exist." Several children made specific references to friends of other religious affiliations and how those friends believed differently despite trying to persuade those friends toward their own religious beliefs.

Just as Caleb took a possible perspective of others in his church, many children were capable of taking others' perspectives. This is a marked achievement of concrete thinking in Piaget's cognitive development. Sometimes, the children took the perspective of God, such as when Tai said, "I think that he's [God] thinking how to work things out, that he's trying really hard to do good things in people's lives." Similarly, many children could readily explain from the perspective of others when asked how they think the way they see God might be different from other people's ideas at their churches. A few children did not think they would think differently about God than others. Tai responded, "I think some people may think he's [God] not super super powerful."

More personal was the question of how children think the way they see God might be different from their parents' ideas. Almost as if afraid to answer, most of the children were unable to take the perspective of their parents. Adam, age 8, expressed in detail how others might see God differently, but when asked about his parents said, "I don't want to answer that one." Tai, age 9, said, "I think we see him [God] the exact same way; me, my mom, and my dad see God all the same way." Canaan, age 8, responded, "I don't really know because pretty much our family pretty much think the same about God." Because all of the children interviewed attend church services with their families, they have probably learned most of what they know about God through church and from their parents. Therefore, they could be assuming they are learning the same ideas from

church as their parents and that their parents do not have any unique thoughts outside of what they have been taught.

Sixteen of the 24 children devised hypothetical situations to express their thoughts. The hypothetical situations seemed truly hypothetical but still involved some personal truths. For instance, Bright, a fifth grade girl, gave many hypothetical situations in which she described the activities of God. In one role-playing scenario, she was asked to create a situation. Her situation involved a girl asking her mom and dad when she will get a cell phone. She pleaded her case with them, including being able to talk to her friends, and then as the voice of God, Bright responded to the girl, "It is not all about friends in life, you need time to read your Bible and to pray." Clearly, this hypothetical situation was probably a reenactment of an earlier family debate in her household. Hilary, a very expressive fourth grade girl, gave several hypothetical situations that each involved a family who was moving to another town. Though her details were bizarre, it was noted that Hilary's family had recently moved to the area. Guy, who had witnessed a divorce in his family, gave the following hypothetical situation between a boy and God, "Let's say that his parents say he needs to read the Bible and start learning about God. He doesn't like God and the parents are really good Christians. He says he doesn't want to learn about God and he lies to his parents and says he reads the Bible every night. I [as God] would tell him that he needs to not lie to his parents…" I then asked Guy why he thinks the boy does not like God. Guy responded, "Because he may not believe in him. Of course, I do though!" Almost as a window into this boy's mind, his hypothetical situation probably gave a realistic view of his own inner struggles.

Doubt and the awareness of doubt were apparent cognitive themes displayed by the children. Heller (1986) found considerable doubt in the 10- to 12-year old children. One reason for this age difference might be the older children could have already had peer conversations about God that would influence their conception of him or may have caused them to doubt or internalize their faith more. However, Heller's findings were comparable across all ages in the present study. Adam, a third grade boy, was asked whether God is as real, more real, or less real to him than President Bush. He said, "I asked Dad one day, 'Hey dad, how do we know that God is real?' Because some people believe in other gods, so I don't know, and it's confusing. So it's hard to answer that one because I don't know if he's real. And probably he is, because I've been in some situations where I've needed him, so I'd have to say God's more real. Way more real."

Cognitive Levels

Interviewing 24 children left the possibility for several outliers to affect the overall means in the GALT scores and Piagetian task responses. Onyx, a fourth grade girl, scored a 0 on the GALT and correctly answered two of the three Piagetian tasks. It might seem that she has not yet reached a level of concrete thinking, but the range of scores on the GALT for concrete thinkers is 0 to 4, so I classified her as a concrete thinker. Onyx, age 10, held a very detached sentiment for God, referring to him as the "head hauncho." An 11-year-old fifth grade girl, Ava, scored a 1 on the GALT and did not answer any Piagetian tasks correctly. Though she might have a timid personality, she did not elaborate on answers in the children's interview and had trouble communicating ideas to questions in which she was unsure. Sid, who scored the highest on the GALT, a

7, readily embraced the mysteriousness and many facets of God. He verbally analyzed Biblical paradoxes. In Sid's letter to God, he wrote

Dear God,

There are many things I would like to tell you, but the most important things are as follows. If you are just one being, how are you God the father, the Son, and the Holy Spirit. How were you alive before the beginning of time.

Because these children were not required to complete the GALT in an educational setting and for a grade, it seemed they hurriedly answered the last question, which would normally involve focused attention. Aside from the last question, the children appeared ready for the challenge of the preceding difficult but shorter questions. The scores from the GALT were consistent with the children's ages. The 12-item modified GALT was used because of time limitations, but the original 21-item test might have yielded even more accurate logical classifications.

Implications

As discovered by Heller (1986) after he interviewed children with the children's interview, "…there seems to be a conflict between institutional imagery and spontaneous imagery for the children…" (p. 130). Heller then addressed the parental role in children's socialization by institution and family. I will address both the institution and the parents because parents no longer seem to assume the sole responsibility for their children's spiritual development but rather appropriate that responsibility to their church (Barna, 2003). George Barna, the directing leader of a marketing research company that specializes in research for Christian ministries, found this to be true. "Our national surveys have shown that while more than 4 out of 5 parents (85 percent) believe they

have the primary responsibility for the moral and spiritual development of their children, more than two out of three of them abdicate that responsibility to their church" (p. 77). The implications of these findings should apply to religious educators and parents as both are attempting to together help children develop morally and spiritually.

Religious Educators

Important for religious educators to imagine is that the children interviewed enjoy church. Bright explained that she sometimes does not want to go, but she is always glad that she went. She told of a time when she was not in a good mood at church, and the Bible teacher engaged her in the class activity, and Bright felt that God led her teacher to include her so that she would have a good time. Children as these interviewed are sometimes struggling with divorce, cross-country relocations, bullying, physical pain, and even friends' or families' deaths. They may not be eager initially to socialize in a church setting, so important for religious educators is to include each child in activities and discussion and to provide a loving atmosphere for learning. It has often been said that people do not care how much you know until they know how much you care. Provide a welcoming environment before teaching about God. Also, providing a genuine and caring atmosphere may give children the freedom to verbally conceptualize God, which would allow religious instructors to discuss those images, which may have been distorted or are in contradiction with the belief system of the church.

Secondly, religious educators and clergy must seek age-appropriate curriculums that are offered to churches. Learning about the Holy Spirit is a completely different concept for a child in Kindergarten than a child in fifth grade. No special tool can be implemented to make the 5-year-old child understand such an abstract concept, but the

church must adapt its own methods for age-based development. Religious educators could compare the Holy Spirit to the qualities of a gracious guide God-concept to help concrete thinking children better understand this aspect of God. Fowler (1981) said that individuals thinking with concrete operations have reached the mythic-literal faith stage where moral rules, beliefs, and symbols are taken literal in meaning. Narrative stories, as those told in the Bible, are often used to teach truths. Children may quote the entire narrative but according to Fowler, the truth is captured within the narrative, and children cannot reflect on the story to understand its conceptual meaning. Religious educators must not only tell the stories but should continuously relate their meanings to practical applications. Observing churches that forgo ill-equipping curriculum and design their own, Barna (2003) said, "The lessons developed focus less on story lines and memorizing content than on the central principles of a story and the personal application of those principles." Though crafts are abundant for the narrative of Daniel in the lion's den, the children will remember fuzzy pom-pom lions on construction paper rather than courageous faith and a reliable God if full attention is given only to that which is most entertaining.

Children who have reached Piaget's concrete operational level in this study have begun to shed the egocentrism found in the preceding level and are capable of taking the perspective of others. They can also attempt to take the perspective of God, and having Biblical concepts of God will help children seek to rely on God's words and actions. In one of Fowler's (1981) interviews with a concrete operational thinker, he noted that one girl's God-concepts take forms offered to her by her culture, particularly her family. "But the forms are filled with the contents of Millie's perspective-taking with her parents

as decision makers" (p. 141). Later in the interview, Fowler and Millie discussed parents' ability to make mistakes, and this challenged her God-concepts. Helping children to base their God-concepts on Biblical principles rather than experiences and relationships should be a focus in each Biblical lesson. Religious educators should then provide examples of personal reliance on those principles. In doing so, children will begin to form a Biblical worldview.

Transitional thinkers will, as in the present study, be the children who are near adolescence. Children in this phase of life are forming an identity, though not aware of it. According to Fowler (1981), these individuals are entering the synthetic-conventional faith, and their God-concepts may also be derived from personal relationships. Personal relationships define much of the identity of these individuals because they are very sensitive to the judgments and expectations from those relationships. The God-concepts of transitional thinkers in this study are perhaps an ideology, not completely owned with awareness, as one who has beliefs and convictions. Religious educators could use the God-concepts that the transitional thinkers have to the advantage of the children, offering stability in an unstable time of identity formation. For example, transitional thinkers were discovering God to be reliable, loving, and purposeful. These concepts of God should be woven into Biblical narratives where applicable so that these children form an identity in one who they can trust, who is loving, and has a purpose for their lives. Other frequent God-concepts for transitional thinkers were God as punisher, judge, and forgiving. These are concepts that provide healthy boundaries to the children's actions. As they seek to please and meet expectations of significant relationships as well as test

their boundaries, it is important that they understand God's boundaries, and to be aware of God's forgiveness and love for them even in the midst of discipline.

According to categories of God-concepts found in this study, gracious guide, historical human, and distant divinity, churches can have an understanding of children's concepts of the trinity as taught in Baptist doctrine—father, son, and holy spirit. The Holy Spirit acts much like an ever-present and gracious guide, the father can be viewed the divine God in Heaven, and the son can be compared to the historical human that came to earth as man and also embodied the qualities of God. If children at the concrete and transitional levels view God most often as a gracious guide, then religious educators could continue to teach children more about the other aspects of the father and son in the trinity.

Religious educators are most often lay volunteers within a church. Churches should offer training to these individuals that gives them a basic framework for understanding children's development, learning styles, general concepts of God, and Biblical principles. Trained instructors can better understand the importance of age-appropriate activities and how to engage children in the learning process.

Paramount to a church's success in helping children to grow spiritually is their ability to equip parents to continue helping their children to develop spiritually in the home. Parents should feel equipped by the church to interpret the teachings and God-concepts children bring home from church. Sending children home with something that outlines the learning objectives from each church lesson and including questions that parents can use for a discussion tool with their children would give parents a realistic goal to begin interacting with their children on a spiritual level. Offering or requiring

parenting classes could help equip parents with knowledge about cognitive and spiritual child development and give them the confidence to take a lead at home in helping their children develop.

Parents

"Not only does the family act as the ultimate interpreter of most institutional teachings and popular conceptions, but it profoundly shapes the child's interpersonal view of the world" (Heller, 1986, p. 141). Several qualities should be important in parental caretaking where spiritual development is concerned: tolerance, optimism, limit-setting, a zest for originality and novelty, and, most importantly, trust. As in the literature reviewed, trust and a secure attachment are essential in the spiritual development of children because they sense the freedom to independently explore and thus internalize their own values. Ava, a fourth grade girl, answered questions with her mother by her side. Her mother had requested to remain in the room during the interview, and in response to several questions, her mother prodded Ava for certain expected answers and even corrected her after one response. Without freedom to individuate from her mother, Ava may continue to think in such a way that always meets parental expectations, never allowing her to own her beliefs. Heller identified this action as a parental shadow, which does not grant tolerance to the child's time alone to think and form conceptions independently.

Heller mentioned but did not expound on optimism. In the present study, optimism was a blatant parental influence in Adam's formations of God-concepts. Adam, the third grade boy who asked his dad if God was even real, expressed much doubt, concern, belief, and imaginative thoughts to his father. When asked what God is

like, Adam said he's optimistic. I asked Adam what it would be like if God were a girl, and he said that she [God] may be less reliable and probably wouldn't be as optimistic. The optimism Adam senses in God may be the same optimism of his father that gives him the freedom to explore his curiosities about God with his father.

In addition to individuation, possessing trust gives allowance in children for the emergence of faith. In the present study as well as in Heller's study, children struggled with distorted God-concepts and difficulty believing in God when family turmoil was apparent through role-playing, responses, or in the home. A sixth grade girl, Kendra, from a divorced home said that she did not believe that God was involved in everyday hurts and troubles that people have.

Barna (2003) says that parents have a natural response to the awareness that children need religious instruction and experiences to develop undistorted God-concepts through age-appropriate means—they seek help from a children's ministry and get out of the way. Biblical parenting requires that parents be aware of the following tools they possess: behavior modeling, formal instruction, reading, creative applications, and discipline.

Parents who wish for their children to internalize their values should concentrate on not only talking the talk, but on walking the walk (Flor & Knapp, 2001). Parents' attitudes, values, and beliefs are subconsciously integrated with their actions, and children easily detect inconsistencies. Parents must examine their own concepts of God in relation to Biblical principles and examine how they may be influencing their children's God-concepts.

Rather than leaning solely on formal instruction, i.e. lectures and talks, parents should consider spontaneously utilizing situations by asking questions about children's concepts that involve them in the learning process, thus allowing them to draw conclusions and internalize their decisions. Children could learn valuable concepts of God based on stories that parents tell about how they had learned that same concept. The parental vulnerability could produce trust and impart truth without having to lecture.

Parents should also continue to instill the value of reading in their children. The Bible and thousands of religious books published may influence children's God-concepts rather than solely hearing about God from media and other influential sources that may be more distorted than instructional with principles of their desired religion.

Barna (2003) also suggests that parents use creative applications, such as reflective essays to spark spiritual discussions in families. Parents could encourage children to record their perspective of how God is working in their lives and use it to start family discussions or devotions regarding faith. Rather than critiquing children's thoughts, the content should be considered steps of faith and topics to be further explored. As in the present study, letters to God prove to be useful tools in gaining insight to a child's concepts of God.

The parental area of discipline could highly influence children's God-concepts. Children in the concrete operational level may see God as very parental since both give commands and set limits, but children's responses to God in the future may depend on the responses they were allowed in the home. Identifying parameters and expectations and assisting children in knowing how to behave correctly with friendly reminders is an expression of love. If children understand the love that drives parental discipline, they

may better understand a Godly love, contributing more Biblical principles to their Biblical worldview.

<div align="center">Recommendations for Future Study</div>

God-concepts should be a continued study, especially within denominations like Baptists in this study, as opposed to between denominations so that specific denominations can focus on their learner objectives and determine if the church is helping children to acquire concepts of God that are consistent with the core belief system of the church. Church leaders may then be able to guide parents in the way they encourage their children to build a Biblical worldview as well as how they influence their children's God-concepts. Interview responses from the children's interview on God-concepts could be evaluated and reanalyzed for future studies. The study can also be easily reproduced with participants in any and/or all denominations or religions, as proved by Heller's (1986) sample of children from four different religious backgrounds.

It would also be beneficial to the development of research, using the children's interview and the GALT, to replicate this study with another sample of children and even adult participants. As in Gorsuch and Venable's (1983) study, which tested whether or not the Religious Orientation scale could be used with fifth grade children and older, researchers could revise and replicate the children's interview (Heller, 1986) in research studies with children, adolescents, and adults to test the ability of the measure to generalize across age differences. Because concrete and transitional thinkers are still much alike and not yet abstract in their thinking, much of the findings were very similar between concrete and transitional thinkers. A more thorough study could sample a wider

variety of ages to include preoperational and abstract thinkers for a better comparison and contrast of God-concepts.

For this particular study, engaging in a qualitative longitudinal study with these 24 children could provide additional insight into the formation and development of God-concepts. Through growth in cognitive development and life experiences, interviewing the same children in 5 to 10 years with the children's interview would prove informative and profoundly interesting.

APPENDIX A

THE CHILDREN'S INTERVIEW

Used with permission from the University of Chicago Press (Heller, 1986)

Written by: David Heller (1986)

A few adaptations were made but do not change the meaning of the questions in this interview, including saying President Bush instead of President Reagan, Gender instead of Sex, and Superman instead of E.T.

Directions: I will read each script that gives directions to each part of the interview. I will present materials when needed as in Part 2: Drawing the Deity and Part 4: Playing the Deity.

Opening Script: Now I am going to ask you some questions about your God. Please answer each question based on how you *really* think, rather than what you think you should say as a good church answer.

Part 1: Naming God

Directions: When you think of what best represents your own beliefs about life, what word or words would you use to describe the most important thing in your beliefs?

Part 2: Drawing God

Directions: Now I want you to imagine what (child's name for God) would look like if you pictured _____ in your mind. If this is hard to do, or you don't usually picture _____ in this way, please let me know.

Additional Directions, I added: Now take any colors of crayons and/or colored pencils that you would like and draw _____, as you have imagined _____ in your mind.

Part 3: Storytelling about God

Directions: Now, could you tell me a story about your picture? Just make one up and answer these questions: What is going on in the picture? What are the characters thinking and feeling? What led up to this? What will happen?

Part 4: Playing God (Family Scenarios)

Directions: Next, I have here a small family of dolls and I want you to imagine a family situation—any family situation. But with this family, I want you to play _____. I want you to show me what, if anything, _____ would do or say with such a family. You can act how you like.

Scenario 1: The entire family and _____

Directions: Here is the first situation. There will be two others (child is given all five dolls).

Scenario 2: The parents and _____ alone

Directions: Here is the second scene (child is given two adult dolls).

Scenario 3: The child and _____ alone

Directions: Here is the last scene. I want you to choose one of these three dolls (points toward three child dolls) to be alone with _____.

Part 5: Questions and Answers about God

    A. Description of God

        1. Description

            Directions: Could you describe in words, using one word or many, what _____ is like?

        2. Home of God

Directions: How, could you tell me, where do you think _____ lives? Is _____ alone there? What is _____'s home like?

3. Gender of God

4. Directions: Now, could you tell me if _____ is a boy or girl, if you think _____ has a gender? How would things be different if _____ had a gender (or was the other gender)?

B. Activities of God

1. Activities

Directions: First, can you tell me what _____ does, if anything, that involves the everyday activities and concerns of people like you and me? How is _____ involved?

2. Hurt and Troubles

Directions: Does _____ have something to do with things that hurt or with troubles that people have? If so, describe one. How is _____ involved?

3. Fun

Directions: Does _____ have something to do with things that are fun, enjoyable, or make you feel good? If so, describe one. How is _____ involved?

4. Birth

Directions: Now I want to ask you about some special kinds of events. When someone like you is born, is _____ involved? If so, how?

5. Death: Older Person

Directions: When someone like a grandma or grandpa dies, is
_____ involved? If so, how?

6. Death: Younger Person

Directions: When someone young dies, like from an accident or
from a disease, is _____ involved? If so, how?

C. Belief in God

1. Belief

Directions: First, I'd like to know how much you believe in the
_____ you just described. I'm interested in how much you believe
in general, even if you aren't sure of a few things:

a. a whole lot

b. pretty much believe

c. sometimes or kind of believe

d. don't really believe

2. Strong Belief

Directions: Can you remember a time or period of your life that
you believed very strongly, perhaps when something important
happened?

3. Strong Doubt

Directions: Can you remember a time when you were strongly
doubtful or unsure about your belief, perhaps when some other
significant thing was happening?

D. Feelings about God

    1. General Feelings

        Directions: Can you tell me how you feel about _____ most of the time?

    2. Specific Feelings

        Directions: Now, I'm curious about some specific feelings. Ever feel surprised or amazed about _____? Sorry or guilty toward _____? Happy about _____? Sad about _____? Scared of _____? Angry at _____? Ever feel love for _____?

E. Communication with God

    1. Conversations

        Directions: Is it possible to have a conversation with _____? How is it possible to let _____ know about something?

    2. Questions

        Directions: Are there questions that you would like to ask _____ if you could? Is there something that you're particularly curious about?

    3. Changes

        Directions: Are there things you would like to change about _____ if you could? Make believe that you are a special kind of helper and that you can give _____ advice.

    4. Learning

Directions: Where did you learn about _____ from? From anyone in particular? From any ways that don't involve other people?

5. Versus Other Group Members

Directions: How do you think the way you see _____ might be different from other people's ideas at (<u>name of religious site</u>)?

6. Versus Parents

Directions: How do you think the way you see _____ might be different from your parents' ideas?

F. God and Famous Figures

1. God and Familiarity

Directions: I'd like you to tell me whether _____ is as real, more real, or less real for you than:

a. Santa Claus

b. Superman*

c. President Bush

d. Your daddy

e. Your granddaddy

f. Your great-granddaddy

2. God and Similarity

Directions: Now, I'm going to say some other names. This time I want you to tell me in what ways _____ is similar or different from the following. Please choose any three of these names:

a. Jesus

b. Mary

c. Ghandi

d. Moses

e. Mohammed

Part 6: Letter to God

Directions: Last, I would like you to do a little writing. I'd like you to try to write a letter or note to _____. Perhaps you've done something like this before? Well, just include anything you'd like to say and anything that you think is important that we did not talk about.

Debriefing questions, I added:

Tell me what you thought about being interviewed?

What did you think of the questions?

*I changed E.T. to Superman by counsel because E.T. was of an era only appropriate to the time period in which this interview was initially written.

APPENDIX B

GALT

GROUP ASSESSMENT OF LOGICAL THINKING

Item 1. Piece of Clay

   Tom has two balls of clay. They are the same size and shape. When he places them on the balance, they weigh the same.
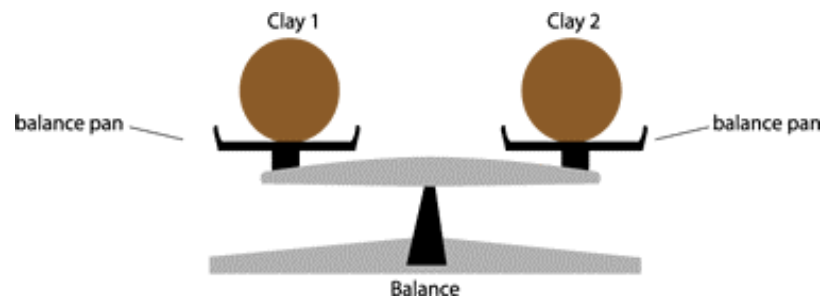
   The balls of clay are removed from the balance pans. Clay 2 is flattened like a pancake.
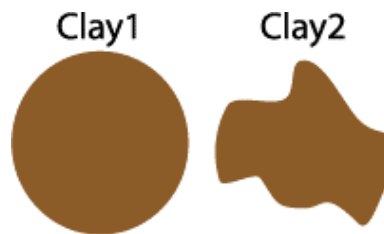
WHICH OF THESE STATEMENTS IS TRUE?
a. The pancake-shaped clay weighs more.
b. The two pieces weigh the same.
c. The ball weighs more.

REASON
1. You did not add or take away any clay.
2. When clay 2 was flattened like a pancake, it had a greater area.
3. When something is flattened, it loses weight.
4. Because of its density, the round ball had more clay in it.

Item 4. Metal Weights

Linn has two jars. They are the same size and shape. Each is filled with the same amount of water.
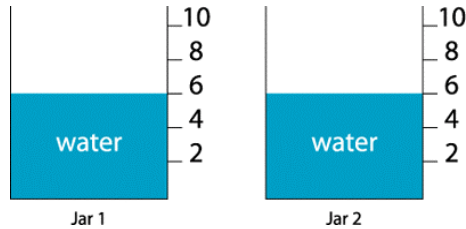
She also has two metal weights of the same volume. One weight is light. The other is heavy.

light metal weight   heavy metal weight

She lowers the light weight into jar 1. The water level in the jar rises and looks like this:
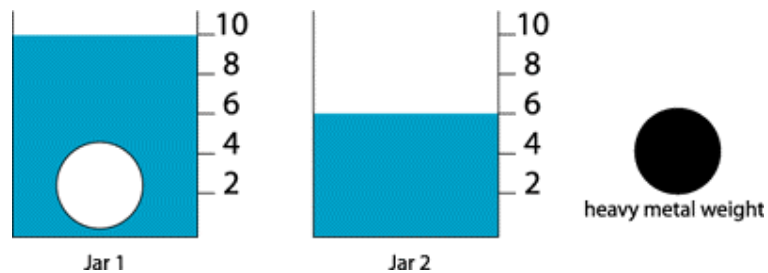
IF THE HEAVY WEIGHT IS LOWERED INTO JAR 2, WHAT WILL HAPPEN?
a.   The water will rise to a higher level than in jar 1.
b.   The water will rise to a lower level than in jar 1.
c.   The water will rise to the same level as in jar 1.

REASON
1. The weights are the same size so they will take up equal amounts of space.
2. The heavier the metal weight, the higher the water will rise.
3. The heavy metal weight has more pressure, therefore the water will rise lower.
4. The heavier the metal weight, the lower the water will rise.

Item 8. Glass Size #2

The drawing shows two glasses, a small one and a large one. It also shows two jars, a small one and a large one.

small glass

large glass
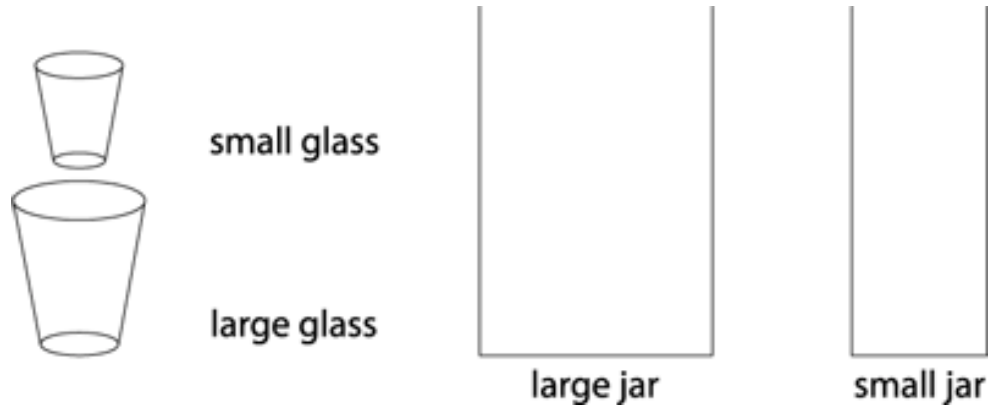
large jar

small jar

It takes 15 small glasses of water or 9 large glasses of water to fill the large jar. It takes 10 small glasses of water to fill the small jar.

HOW MANY LARGE GLASSES OF WATER DOES IT TAKE TO FILL THE SAME SMALL JAR?
a. 4
b. 5
c. 6
d. other

REASON
1. It takes five less small glasses of water to fill the small jar.
   So it will take five less large glasses of water to fill the same jar.
2. The ratio of small to large glasses will always be 5 to 3.
3. The small glass is half size of the large glass. So it will take about half the
   number of small glasses of water to fill up the same small jar.
4. There is no way of predicting.

Item 9. Scale #1

Joe has a scale like the one below.

When he hangs a 10-unit weight at point D, the scale looks like this:
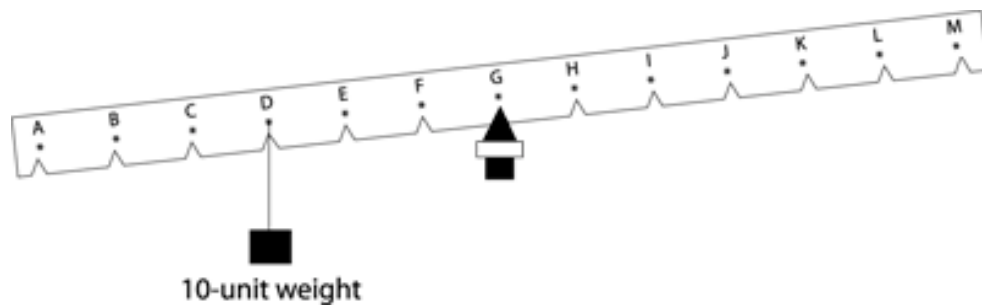
10-unit weight

WHERE WOULD HE HANG A 5-UNIT WEIGHT TO MAKE THE SCALE
BALANCE AGAIN?
a. at point J
b. between K and L
c. at point L
d. between L and M
e. at point M

REASON
1. It is half the weight so it should be put at twice the distance.
2. The same distance as 10-unit weight, but in the opposite direction.
3. Hang the 5-unit weight further out, to make up its being smaller.
4. All the way at the end gives more power to make the scale balance.
5. The lighter the weight, the further out it should be hung.

Item 11. Pendulum Length

Three strings are hung from a bar. String #1 and #3 are of equal length. String #2 is longer. Charlie attaches a 5-unit weight at the end of string #2 and at the end of #3. A 10-unit weight is attached at the end of string #1. Each string with a weight can be swung.
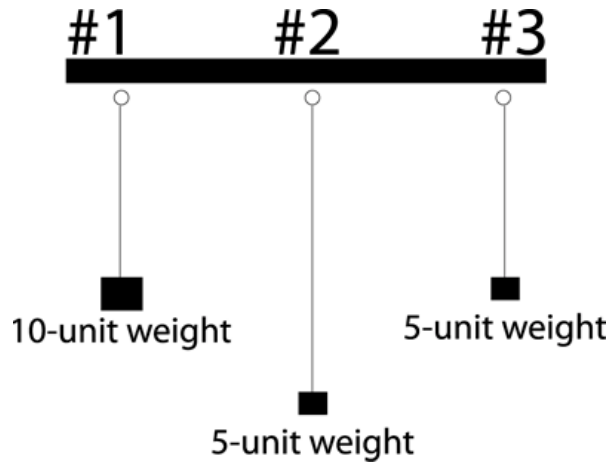
Charlie wants to find out if the length of the string has an effect on the amount of time it takes the string to swing back and forth.

WHICH STRING AND WEIGHT WOULD HE USE FOR HIS EXPERIMENT?
a. string #1 and #2
b. string #1 and #3
c. string #2 and #3
d. string #1, #2, and #3
e. string #2 only

REASON
1. The length of the strings should be the same. The weights should be different.
2. Different lengths with different weights should be tested.
3. All strings and their weights should be tested against all others.
4. Only the longest string should be tested. The experiment is concerned with length not weight.
5. Everything needs to be the same except the length so you can tell if length makes a difference.

Item 13. Ball #1

Eddie has a curved ramp. At the bottom of the ramp there is one ball called the target ball.
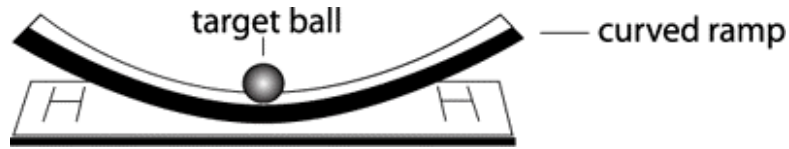
There are two other balls, a heavy and a light one. He can roll one ball down the ramp and hit the target ball. This causes the target ball to move up the other side of the ramp. He can roll the balls from two different points, a low point and a high point.
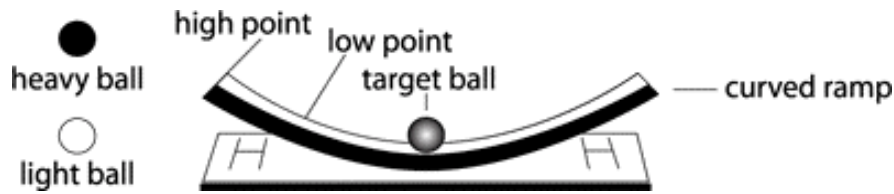
Eddie released the light ball from the low point. It rolled down the ramp. It hit and pushed the target ball up the other side of the ramp.

He wants to find out if the point a ball is released from makes a difference in how far the target goes.

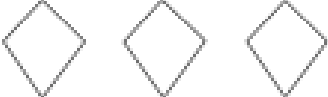TO TEST THIS WHICH BALL WOULD HE NOW RELEASE FROM THE HIGH POINT?
a. the heavy ball
b. the light ball

REASON
1. He started with the light ball he should finish with it.
2. He used the light ball the first time. The next time he should use the heavy ball.
3. The heavy ball would have more force to hit the target ball farther.
4. The light ball would have to be released from the high point in order to make a fair comparison.
5. The same ball must be used as the weight of the ball does not count.

Item 15. Square and Diamonds #1

In a cloth sack, there are

3 spotted wooden squares

4 black wooden squares

5 white wooden squares

4 spotted wooden diamonds

2 black wooden diamonds

3 white wooden diamonds

All of the square pieces are the same size and shape. The diamond pieces are also the same size and shape. One piece is pulled out of the sack.

WHAT ARE THE CHANCES THAT IT IS A SPOTTED PIECE?
a. 1 out of 3
b. 1 out of 4
c. 1 out of 7
d. 1 out of 21
e. Other

REASON
1. There are twenty-one pieces in the cloth sack. One spotted piece must be chosen from these.
2. One spotted piece needs to be selected from a total of seven spotted pieces.
3. Seven of the twenty-one pieces are spotted pieces.
4. There are three sets in the cloth sack. One of them is spotted.
5. ¼ of the square pieces and 4/9 of the diamond pieces are spotted.

Item 16. Square and Diamonds #2

In a cloth sack, there are
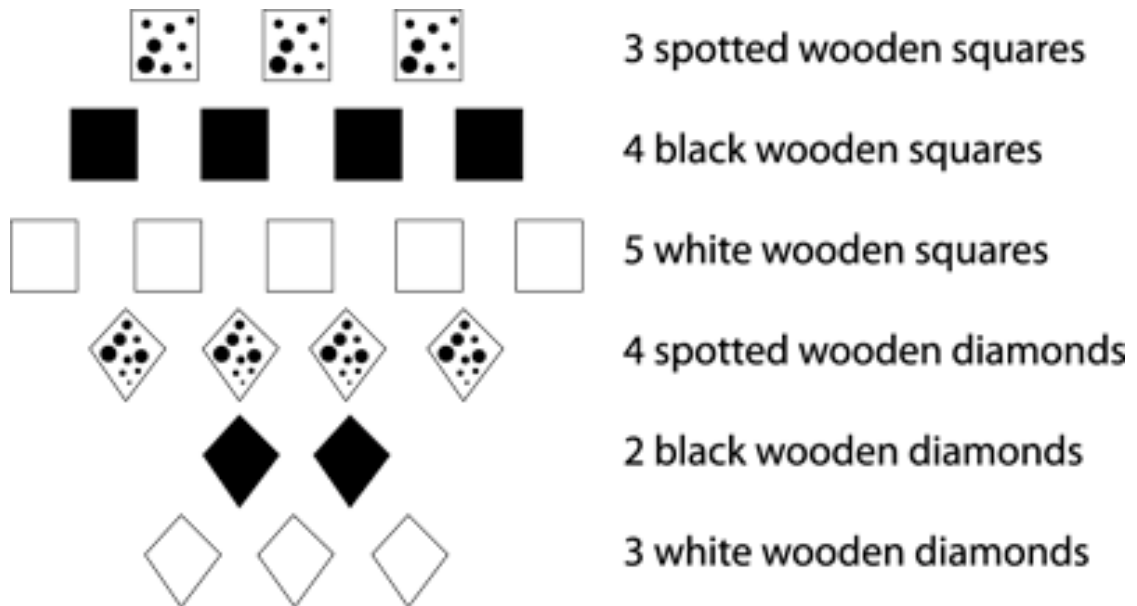
3 spotted wooden squares

4 black wooden squares

5 white wooden squares

4 spotted wooden diamonds

2 black wooden diamonds

3 white wooden diamonds

All of the square pieces are the same size and shape. The diamond pieces are also the same size and shape. Reach in and take the first piece you touch.

WHAT ARE THE CHANCES OF PULLING OUT A SPOTTED DIAMOND OR A WHITE DIAMOND?
a. 1 out of 3
b. 1 out of 9
c. 1 out of 21
d. 9 out of 21
e. Other

REASON
1. Seven of the twenty-one pieces are spotted or white diamonds.
2. 4/7 of the spotted and 3/8 of the white are diamonds.
3. Nine of the twenty-one pieces are diamonds.
4. One diamond piece needs to be selected from a total of twenty-one pieces in the cloth sack.
5. There are 9 diamond pieces in the cloth sack. One piece must be chosen from these.

Item 17. The Mice

A farmer observed the mice that live in his field. He found that the mice were either fat or thin. Also, the mice had either black tails or white tails.

This made him wonder if there might be a relation between the size of a mouse and the color of its tail. So he decided to capture all of the mice in one part of his field and observe them. The mice that he captured are shown below.

DO YOU THINK THERE IS A RELATION BETWEEN THE SIZE OF THE MICE AND THE COLOR OF THEIR TAILS (THAT IS, IS ONE SIZE OF MOUSE MORE LIKELY TO HAVE A CERTAIN COLOR TAIL AND VICE VERSA)?
a. Yes
b. No

REASON
1. 8/11 of the fat mice have black tails and ¾ of the thin mice have white tails.
2. Fat and thin mice can have either a black or a white tail.
3. Not all fat mice have black tails. Not all thin mice have white tails.
4. 18 mice have black tails and 12 have white tails.
5. 22 mice are fat and 8 mice are thin.
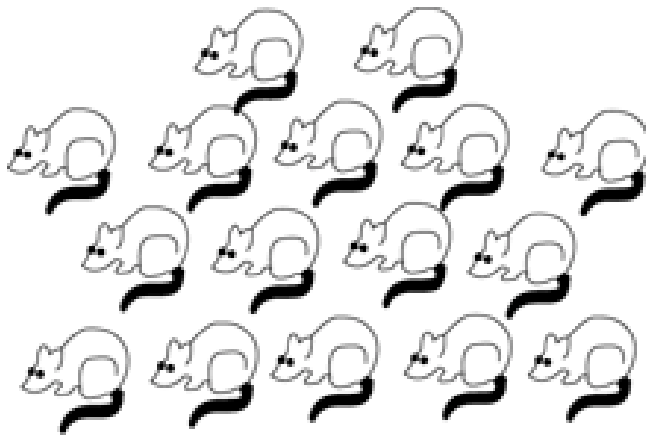
Item 18. The Fish

Some of the fish below are big and some are small. Also some of the fish have wide stripes on their sides. Others have narrow stripes.

IS THERE A RELATIONSHIP BETWEEN THE SIZE OF THE FISH AND THE KIND OF STRIPES IT HAS (THAT IS, IS ONE SIZE OF FISH MORE LIKELY TO HAVE A CERTAIN TYPE OF STRIPES AND VICE VERSA)?
a. Yes
b. No

REASON
1. Big and small fish can have either wide or narrow stripes.
2. 3/7 of the big fish and 9/21 of the small fish have wide stripes.
3. 7 fish are big and 21 are small.
4. Not all big fish have wide stripes and not all small fish have narrow stripes.
5. 12/28 of fish have wide stripes and 16/28 of fish have narrow stripes.
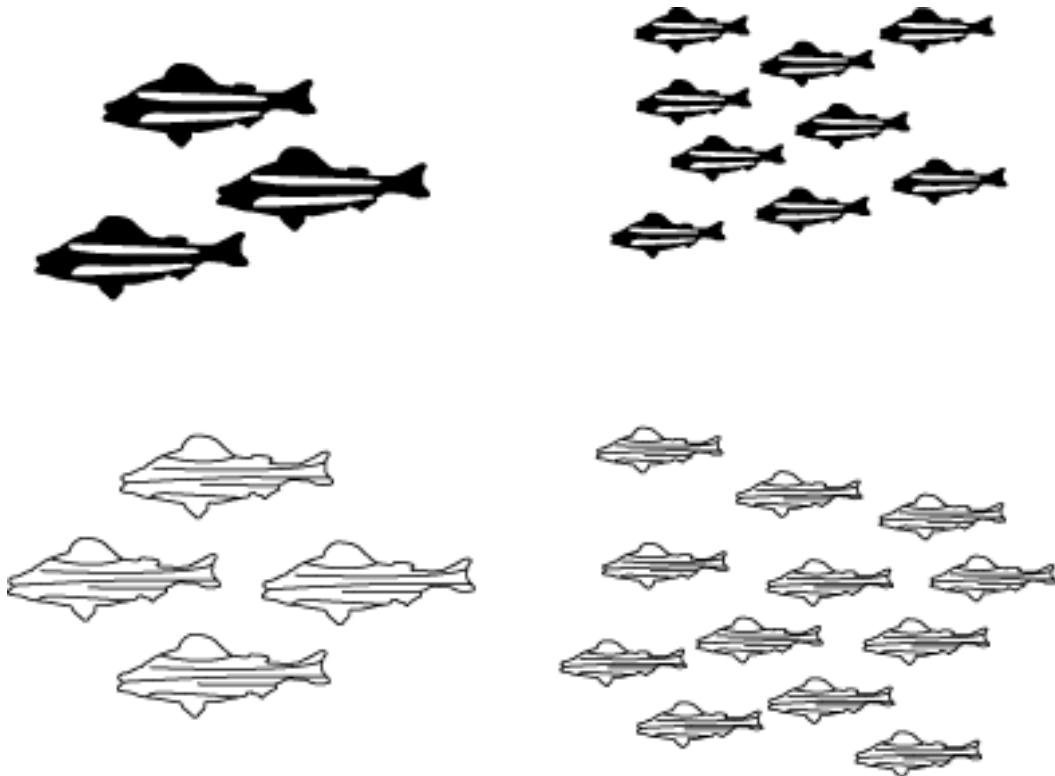
Item 19. The Dance

After supper, some students decide to go dancing. There are three boys: ALBERT (A), BOB (B), and CHARLES (C), and three girls: LOUISE, (L), MARY (M), and NANCY (N).

Albert (A)   Bob (B)   Charles (C)   Louise (L)   Mary (M)   Nancy (N)
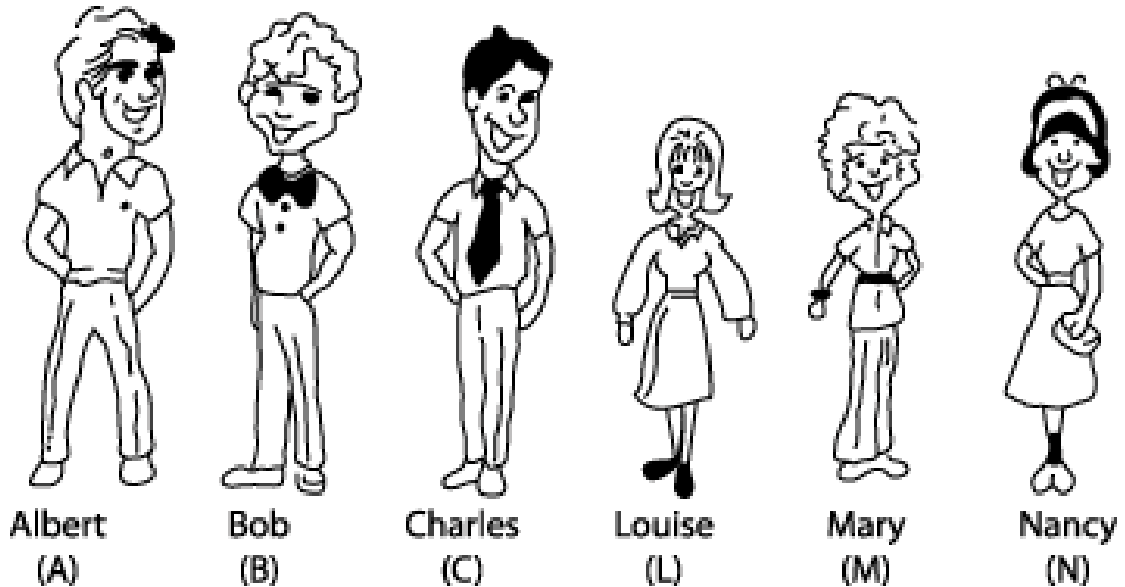
One possible pair of dance partners is A-L, which means ALBERT and LOUISE.

LIST ALL OTHER POSSIBLE COUPLES OF DANCERS. BOYS DO NOT DANCE WITH BOYS, AND GIRLS DO NOT DANCE WITH GIRLS.

Item 20. The Shopping Center

In a new shopping center, 4 stores are going to be placed on the ground floor. A BARBER SHOP (B), a DISCOUNT STORE (D), a GROCERY STORE (G), and a COFFEE SHOP (C) want to locate there.
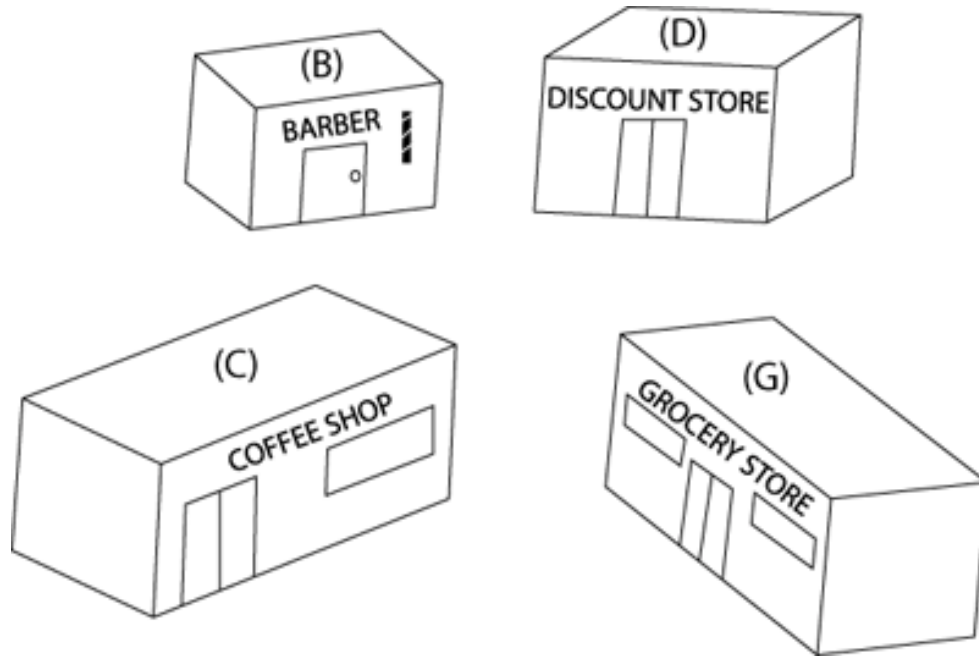
One possible way that the stores could be arranged in the 4 locations is BDGC. Which means the BARBER SHOP first, the DISCOUNT STORE next, then the GROCERY STORE and the COFFEE SHOP last.

LIST ALL OTHER POSSIBLE WAYS THAT THE STORES CAN BE LINED UP IN THE FOUR LOCATIONS.

Answer Sheet

Pseudonym: _____

Instructions: For each item you are to choose the best answer and reason for selecting that answer. Record your answer in the space provided according to the test item.

ITEM	BEST ANSWER	REASON
1. Piece of Clay	_____	_____
4. Metal Weights	_____	_____
8. Glass Size #2	_____	_____
9. Scale #1	_____	_____
11. Pendulum Length	_____	_____
13. Ball #1	_____	_____
15. Square and Diamonds #1	_____	_____
16. Square and Diamonds #2	_____	_____
17. The Mice	_____	_____
18. The Fish	_____	_____

Item 19. "The Dance"

    Place your answers below:

  A-L   ____   ____   ____   ____   ____

____   ____   ____   ____   ____   ____

____   ____   ____   ____   ____   ____

____   ____   ____   ____   ____   ____

____   ____   ____   ____   ____   ____

Item 20. "The Shopping Center"

Place your answers below:

BDGC   _____   _____   _____   _____   _____

_____   _____   _____   _____   _____   _____

_____   _____   _____   _____   _____   _____

_____   _____   _____   _____   _____   _____

_____   _____   _____   _____   _____   _____

Answer Key

Below are the correct responses for the best answer and reason. For items 1-18, the item is considered correct only if the best answer and reason are both correct.

ITEM	BEST ANSWER	REASON
1. Piece of Clay	(B)	(1)
4. Metal Weights	(C)	(1)
8. Glass Size #2	(C)	(2)
9. Scale #1	(E)	(1)
11. Pendulum Length	(C)	(5)
13. Ball #1	(B)	(4)
15. Squares and Diamonds #1	(A)	(3)
16. Squares and Diamonds #2	(A)	(1)
17. The Mice	(A)	(1)
18. The Fish	(B)	(2)

For "The Dance" and "The Shopping Center" students must (1) show a pattern and (2) have no more than one error or omission for "The Dance" and no more than two errors or omissions for "The Shopping Center." Below are sample of possible patterns students may exhibit.

Item 19: "The Dance"

Place your answers below:

__A-L__   __B-L__   __C-L__   _____   _____   _____

__A-M__   __B-M__   __C-M__   _____   _____   _____

__A-N__   __B-N__   __C-N__   _____   _____   _____

Item 20: "The Shopping Center"

      Place your answer below:

BDGC   _DBGC_   _GDCB_   _CGBD_   _____

BDCG   _DBCG_   _GDBC_   _CGDB_   _____

BGDC   _DCBG_   _GCBD_   _CDBG_   _____

BGCD   _DCGB_   _GCDB_   _CDGB_   _____

BCGD   _DGBC_   _GBDC_   _CBDG_   _____

BCDG   _DGCB_   _GBCD_   _CBGD_   _____

APPENDIX C

PIAGETIAN TASKS OF CONSERVATION

PIAGETIAN TASKS OF CONSERVATION

LENGTH, NUMBER, AND LIQUID

Please watch the demonstrations and listen as each question is read to you; circle Yes or No.

1.   A   B

Notice that the yarn strings are the same length.

Now, are the yarn strings still the same length?

(1) Yes or (2) No

2.   A   B
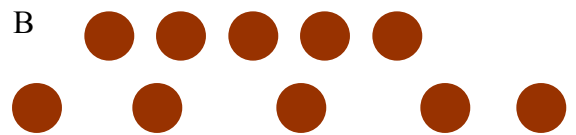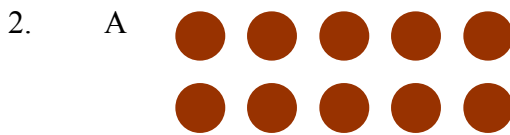
Notice that each row has the same number of candies.

Now, does each row still have the same number of candies?

(1) Yes or (2) No

3.   A   B
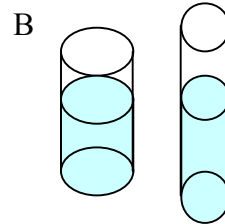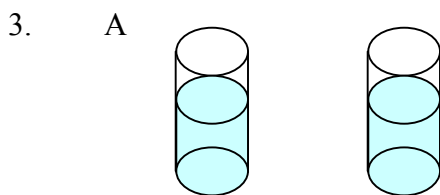
Notice that each jar has the same amount of water.

Now, does each jar still have the same amount of water?

(1) Yes or (2) No

APPENDIX D

DEMOGRAPHIC AND PARENTAL PERCEPTION

OF CHILDREN'S RELIGIOSITY QUESTIONNAIRE

APPENDIX D

DEMOGRAPHIC AND PARENTAL PERCEPTION

OF CHILDREN'S RELIGIOSITY QUESTIONNAIRE

Please answer each question to the best of your knowledge.

1. Your relationship to child _____

2. Age of child _____

3. Your child's gender: Circle One: Male or Female

4. Has your child professed a personal relationship with Jesus Christ, through a prayer

   of salvation?   Circle one: Yes   No   I don't know

5. If Yes, at what age? _____

6. What church do you attend? _____

7. How often does your child attend religious services, at church and/or in a children's

   class, like Sunday School in this particular denomination? _____   or I don't know

8. Does your child read his or her Bible at home?

                          Circle one: Yes   No   I don't know

9. If Yes, how often? _____

Investigator Use Only:

Child's Pseudonym (for confidentiality): _____

APPENDIX E

CONSENT LETTERS

Informed Consent Form for Parents or Guardians

Dear Parent:

I would like to request your permission for your child's participation in a research study entitled "Comparison of Christian Children's God-Concepts and Logical Thinking Ability."

Purpose of the study and how long it will last:

The purpose of this research study will be to explore children's God-concepts, or mental representations of God, and to explore common God-concepts that children have at different cognitive levels.

The interview and assessment should last no more than 1 hour, depending on your child's openness and the length of his or her interview answers.

Description of the study including the procedures to be used:

If you agree to allow your child to participate in this study and upon completion of the consent form, an audiocassette taped interview will be held with your child in a quiet room in your home.

PROCEDURES. The study will include a two-part interview. The first part of the interview will be a query of your child's God-concepts, using a six-part interview that includes questions, drawing, writing, and story-telling. In the second part of the interview, the Group Assessment of Logical Thinking (GALT) measure and 3 Piagetian conservation tasks will be utilized to determine your child's level of developmental logical reasoning. I will also ask you, the parent, to complete a confidential survey about your child while your child is being interviewed.

At the conclusion of the interviews, I will debrief with the children by briefly summarizing their answers, hand them a bookmark, and return to parents or guardians with their children.

Participation is voluntary for each child. During the interview and test, if your child becomes uncomfortable and wishes to stop participating, he or she is free to do so without penalty and will still receive a bookmark.

Description of the foreseeable risks

Your child might feel emotion about content discussed. For example, in asking about God's activities in relation to death, each child is asked, "When someone like a grandma or grandpa dies, is God involved? If so, how?" Should your child become uncomfortable or upset at any time during the interview, I will sympathize with him or her, and he or she will have the option to continue with the interview and test or return to a parent or guardian without penalty.

Benefits to the participants or others

Your child might be encouraged to think of God in a more candid way than ever before, and he or she will be able to articulate his or her thoughts. It is probable that the interview process will be organized but unstructured enough that each child will enjoy the specific attention given to his or her thoughts. The possible implications from this study may support religious educators in development of instruction techniques and curriculum for children that are age-appropriate.

Procedures for maintaining confidentiality of research records

Only the thesis committee and I will have complete access to audiocassette tapes and my notes from the interview. For confidentiality, each child will be assigned a pseudonym,

unknown to the child, and reports of each child will be according to his or her pseudonym rather than real name. The master list of names/pseudonyms will be contained in a locked safe in the my home and destroyed by fire after all data are collected. Audiocassette tapes will also be destroyed; I will pull the tapes from the cases, place them in a bag and throw them in a dumpster after interviews are transcribed. You will be given a summary of the data collected without knowledge of the identity of participants.

Review for the Protection of Participants

This research project has been reviewed and approved by the UNT Institutional Review Board at (940) 565-3940. Contact the UNT IRB with any questions regarding your child's rights as a research subject.

If you would like more information or if you have any questions, you may contact me, the UNT graduate student investigator for this research project. The principal UNT faculty sponsor, Dr. Arminta Jacobson, Department of Technology and Cognition, may also be contacted.

Thank you,

Starrla R. Penick
University of North Texas Student
Department of Technology & Cognition

I have read or have had read to me all of the above, informing me of potential risks and/or discomforts in this study as well as possible benefits. Starrla R. Penick has answered all of my questions and has clearly explained the purpose of this research study. She also advised me that my child's participation can be terminated at any time. I understand the purpose of this study, how it will be conducted, and why it is being

performed as well as participant rights. I understand that I may contact the IRB with any

questions or concerns. Based upon this understanding, I give permission for my child to

participate in this study. I have also been told that I will receive a copy of this consent

form.

_____   _____

Signature of Parent or Guardian   Date

_____

Printed Name of Parent or Guardian

Script for Child Assent

Researcher reads script: Hi, my name is Starrla. I would like to ask you some questions about your God and about the way you think because I am very interested in what you think. There are no right or wrong answers. For instance, I may ask you, "Where do you think God lives?" You can choose not to answer any of my questions if you don't want to. If you want to go back to your parent and not finish any of the questions at any time, you will not be in trouble and nobody will be mad at you. I will not tell your parents or church what you say in this room or let them know what you, specifically, think about God and the things we talk about. What I will do is give them a summary (without saying any names) after my study about what children your age seem to think about God. I cannot write fast enough, so I will be using this mini recorder to record what we are saying so that I can write it all down later. It will probably take about 1 hour to answer all of my questions.

Assent of Child

I would like for you to place a check mark on the line if you agree to each statement.

I understand that:

_____ I can go back to my parent at any time.

_____ I will not get in trouble and nobody will be mad at me if I go back to my parent.

_____ I do not have to answer a question if I don't want to.

_____ I will be answering questions about God that do not have a right or wrong answer.

_____ It will take about 1 hour to answer all of these questions.

_____ Starrla will not tell my parents or church what I said today, but she will give them

a summary of how children my age think about God.

If you would like to continue and participate in this interview, repeat after me:

I, _____ (name of child) have agreed to participate in the research

study entitled, "Comparison of Christian Children's God-Concepts and Developmental

Reasoning Capabilities."

_____   _____

Signature of Subject   Date

APPENDIX F

PROPORTION OF STUDENTS IN EACH GRADE LEVEL ANSWERING EACH
ITEM CORRECTLY ($N = 456$)

APPENDIX F

PROPORTION OF STUDENTS IN EACH GRADE LEVEL
ANSWERING EACH ITEM CORRECTLY ($N = 456$)

Table F1

Reasoning skill	Item no.	Grade 6 (%)	Grade 7 (%)	Grade 8 (%)	Grade 9 (%)
Conservation	1	76	71	81	83
	4	38	36	42	49
Proportional reasoning	8	4	10	11	9
	9	20	17	23	21
Controlling variables	11	14	15	24	30
	13	16	19	19	36
Probabilistic reasoning	15	1	8	18	23
	16	3	8	18	26
Correlational reasoning	17	13	10	8	19
	18	1	4	1	0
Combinational reasoning	19	58	53	64	60
	20	9	14	15	13
N		80	222	107	47

Note. From "The Construction and Validation of Group Assessment of Logical Thinking (GALT)," by V. Roadrangka, R. H. Yeany, and M. J. Padilla, *Paper presented at the annual meeting of the National Association for Research in Science Teaching, Dallas, Texas, April 1983*, Table 3. Adapted with permission of the author.

APPENDIX G

ADDITIONAL QUOTES FROM THE CHILDREN'S INTERVIEW

Storytelling about God

On a description of God:

"He's a star that you can't really see and he's brighter than the universe." -Eddy

Questions and Answers about God

On Heaven:

"It's a big house, like three times the size of this. He has his own private bedroom, and then he'd have a kitchen, of course. A bathroom. He'd have this big room, and then he'll have…that's it." -Adam

"Well, God is the head-hauncho and lives in Heaven. And what he touches turns to gold, or was that that myth? And Heaven's gold. And usually he's up there in Heaven looking at everybody." -Onyx

On God, if he were a female:

"She wouldn't have to carry the cross. She probably wouldn't have to get nailed to the cross."   -Tai

"If he was a girl, they wouldn't have whipped him when God was hung from a cross." -Caleb

"He would be as powerful, but I don't think as many people would believe in him because it [the Bible] says the leaders are supposed to be men. Maybe he wouldn't be such a leader, but *she* would just help and encourage people instead of leading people and encouraging them to be right. She might not be as much of a leader." -Bright

"Well, he would probably like, if he was a girl, she probably would like only play with the girls. He might think the boys are gross and stuff." -Ava

"It [earth] might be girly, with lots of brighter colors." -Hazel

"He might, she might not try to…I've never thought about it that way! Um, I don't know if the people would have tried to be that obstinate against a girl, if the people would have crucified a girl. Maybe God had a plan to make him a boy so he'd wash away our sins."
-Sid

"Well, he wouldn't be called Jesus, because that's a boy's name. [He'd be called] Mary. Well, he'd wear lots of makeup and look pretty!" -Onyx

"I really think…cause we're all made in the image of God…of the same gender…that he is both [male and female]. That he does more than both of us could ever do…he probably looks like a man but really he's more of both of them. If he was like a girl…you know how girls are like fighting for rights and stuff? Maybe…it would be men fighting for rights…and women may have more roles in the Bible…I bet there would be a little bit of conflict with girls with God. I think it's kind of better that people know him as a boy because boys don't really care how they look unless they're trying to impress someone…And if God was a woman then probably a lot of girls would be jealous and they would just be really mad at God, saying, 'you know, why'd you make yourself the beautifulest? Why couldn't we be beautifulest…?' Really, boys just don't care if they're beautifulest…" -Hilary

On God's involvement in birth:

"Well, when you're born, he's the one that made you, so that when you come out you're actually a person." -Ava

On God's involvement in a young person's death by accident or disease:

"Yes [he's involved], cause maybe when they grew up they couldn't find a wife or something."

-Justin

On God's involvement in fun and enjoyable things:

"He can help you have fun by letting you get a big house and a big backyard." -Canaan

"If you want to go somewhere fun, like the beach, he provides the money." -Bailee

"Yes, he plays with his angels. My family, he blesses us and gives us nice things."

-Brynn

On giving advice to God

"I wish that God sometimes he could not have made the people who are bad, people who steal and stuff, that he wouldn't have made them. But he probably didn't know they'd end up like that, but he probably just made them, and they decided to be like that."

-Kirlee

On the reality of God compared to Santa Claus, Superman, President Bush, a dad, a granddad, and a great-grandad

"[God is] more [real] because Bush doesn't have unearthly power and he can't change water into wine unless he has a bottle of wine!" -Canaan

On love for God

"I love him with all of my heart. If he were to die, I don't know what I would do." -Tai

On happiness about God

"Yeah. Whenever I did something really good, maybe I'm rewarded or not. But I know he knows." -Tristen

On feelings of surprise or amazement toward God

"Yes, when God helps us bring a family to church, like our neighbors across the street. They don't go to church and aren't Christians. We brought them to church on Christmas Eve and usually, they say 'we have stuff to do.'" -Bjourn

On the way the child may view God differently than other people

"Well, some people like catholic church people believe in a different god, and don't believe in our God. They might think that our God looks different and isn't the same and isn't very perfect at all." -Guy

"Other people may think he's a really old person or some people may think he's African American, and I think he's not African American. Some people would picture him as a fisher because he's always holding nets. Or was that his disciples?" -Brad

On feeling sorry or guilty toward God

"I feel sorry when I think about Bible times…like when you see the dried fruit they picked off the tree. They don't look very washed or anything. I feel sorry because I think, 'that's not washed'…I mean, like if I'm eating Harry and David pears, they're like the best pairs in the world. I think sometimes, 'God never got to taste one of these.' They're like from California. God knew about them, but no one knew about California pears."
-Hilary

REFERENCES

Allard, D. W., & Barman, C. R. (1994). The learning cycle as an alternative method for college science teaching. *Bioscience, 44*(2), 99.

Barna, G. (2003). *Transforming children into spiritual champions.* Ventura: Regal Books.

Barrett, J. L., & Richert, R. A. (2003). Anthropomorphism or preparedness? Exploring children's God concepts. *Review of Religious Research, 44*(3), 300-312.

Bunce, D. M,. & Hutchinson, K. D. (1993). The use of the GALT (Group Assessment of Logical Thinking) as a predictor of academic success in college chemistry. *Journal of Chemical Education, 70*(3), 183-187.

Children as believers: Minors' free exercise rights and the psychology of religious development. (2002). [Notes]. *Harvard Law Review, 115*, 2205-2227.

Cook, J. L., & Cook, G. (2005). *Child development principles and perspectives.* Boston: Pearson.

De Roos, S. A., Iedema, J., & Miedema, S. (2001). Attachment, working models of self and others, and God concept in kindergarten. *Journal for the Scientific Study of Religion, 40*(4), 607-618.

De Roos, S. A., Iedema, J., & Miedema, S. (2003). Effects of mothers' and schools' religious denomination on preschool children's God concepts. *Journal of Beliefs & Values, 24*(2), 165-181.

De Roos, S. A., Iedema, J., & Miedema, S. (2004). Influence of maternal denomination, God concepts, and child-rearing practice on young children's God concepts. *Journal for the Scientific Study of Religion, 43*(4), 519-535.

Dickie, J. R., Eshleman, A. K., Merasco, D. M., Shepard, A., Vander Wilt, M., & Johnson, M. (1997). Parent-child relationships and children's images of God. *Journal for the Scientific Study of Religion, 36*(1), 25-43.

Eaude, T. (2003). Shining lights in unexpected corners: New angles on young children's spiritual development. *International Journal of Children's Spirituality, 8*(2), 151-162.

Erikson, E. H. (1968). *Identity: Youth and crisis*. New York: Norton.

Flor, D. L., & Knapp, N. F. (2001). Transmission and transaction: Predicting adolescents' internalization of parental religious values. *Journal of Family Psychology, 15*(4), 627-645.

Fowler, J. W. (1981). *Stages of faith*. San Francisco: HarperCollins Publishers.

Gibson, T. S. (2004). Proposed levels of Christian spiritual maturity. *Journal of Psychology and Theology, 32*(4), 295-304.

Gorsuch, R. L. & Venable, G. D. (1983). Development of an "age universal" I-E scale. *Journal for the Scientific Study of Religion, 22*(2), 181-187.

Grudem, W. (1994). *Systematic theology*. Leicester: Inter-Varsity Press.

Heller, D. (1986). *The children's God*. Chicago: The University of Chicago Press.

Johnson, C. (1994). God in the inner city. *Religious Education, 89*(4), 502-514.

Kang, S., Scharmann, L. C., Noh, T., & Koh, H. (2005). The influence of students' cognitive and motivational variables in respect of cognitive conflict and conceptual change. *International Journal of Science Education, 27*(9), 1037-1058.

Kohlberg, L. (1976). Moral stages and moralization: The cognitive-developmental

approach. In T. Lickona (Ed.), *Moral development and behavior* (pp. 31-53). Holt, Rinehart, Winston.

Kunkel, M. A., Cook, S., Meshel, D. S., Daughtry, D., & Hauenstein, A. (1999). God images: A concept map. *Journal for the Scientific Study of Religion, 38*(2), 193-202.

Lefrancois, G. R. (2001). *Of children: An introduction to child and adolescent development* (9th ed.). Australia: Wadsworth.

Lovecky, D. V. (1998). Spiritual sensitivity in gifted children. *Roeper Review, 20*(3), 178-184.

McConnell, D. A. (2005). *How students think: Implications for learning in introductory geoscience courses.* Retrieved August 21, 2006, from http://www.findarticles.com/p/articles/mi qa4089/is 200509/ai n15668109/print

Miller, P. H. (2002). *Theories of developmental psychology* (4th ed.). New York: Worth Publishers.

Niaz, M., & Robinson, W. R. (1992). From 'algorithmic mode' to 'conceptual Gestalt' in understanding the behavior of gases: An epistemological perspective. *Research in Science & Technological Education, 10*(1) 53-65.

Nierenberg, B., & Sheldon, A. (2001). Psychospirituality and pediatric rehabilitation. *Journal of Rehabilitation, 67*(1), 15-19.

Noffke, J. L., & McFadden, S. H. (2001). Denominational and age comparisons of God concepts. *Journal for the Scientific Study of Religion, 40*(4), 747-756.

Palmer, M. D. (1987). David Heller. The children's God. Chicago: University of Chicago Press, 1986. X + 162 pages. *Review of Religious Research, 29*(1), 89-90.

Peck, M. S. (1978). *The road less traveled.* New York: Simon & Schuster Inc.

Piaget, J. (1932). *The moral judgment of the child.* London: Kegan Paul.

Piaget, J. (1962). *Play, dreams and imitation in childhood.* New York: W. W. Norton & Company, Inc.

Piaget, J., & Inhelder, B. (1969). *The psychology of the child.* New York: Basic Books. (Original work published 1968)

Reich, K. H., Oser, F. K., & Valentin, P. (1994). Knowing why I now know better: Children's and youth's explanations of their worldview changes. *Journal of Research on Adolescence, 4*(1), 151-173.

Research shows that spiritual maturity process should start at a young age. (2003, November 17). Retrieved April 20, 2006, from http://www.barna.org/FlexPage.aspx?Page=BarnaUpdate&BarnaUpdateID=153

Roadrangka, V., Yeany, R. H., & Padilla, M. J. (1983, April). *The construction and validation of group assessment of logical thinking (GALT).* Paper presented at the annual meeting of the National Association for Research in Science Teaching, Dallas, TX.

Streib, H. (2004). Extending our vision of developmental growth and engaging in empirical scrutiny: Proposals for the future of faith development theory. *Religious Education, 99*(4), 427-434.

Yust, K. M. (2003). Toddler spiritual formation and the faith community. *International Journal of Children's Spirituality, 8*(2), 133-149.