CHAPTER ONE INTRODUCING PSYCHOLOGY

A few years ago a small town newspaper printed a letter by a local pastor in which he stated that all Christians should avoid psychologists. He felt that sin was the source of every problem, and thus repentance was the only solution. Reading the Bible, not talking to a psychologist, was the counsel needed. The pastor continued that psychology teaches people to be human-centered, thus following the "vain deceits that are after the traditions of man" (Col. 2:8). The pastor felt people should turn from psychology and turn to God. How would you answer the pastor?

WHY IS PSYCHOLOGY IMPORTANT?

The pastor in the opening illustration is not alone in his questioning the value of psychology. Students in Christian colleges sometimes ask, "Why should I take psychology? I plan to be a pastor, so why study anything but the Bible?" I have heard this comment repeatedly over the years, and not just from future pastors. Missionaries, Christian educators, and others preparing for some type of ministry ask the same question. Is psychology relevant for Christian work?

Perhaps it would help to consider several experiences that have happened to those in such ministries. These events occur to any person in the ministry, and some occur much more than you might expect.

1. A respected layman in the congregation discovered that his daughter had been taken away from his home by a child welfare agency. The child has obvious scars on her legs. The caseworker asks you, their pastor, to teach the parents how to discipline their child without losing control. Where could you find the most likely results of certain methods of parenting?

Take a moment and look at the table of contents in this booklet (or a psychology textbook). What chapter would you suspect might help answer this question?

Compare your response to that on page 6.

2. Consider another situation. As a missionary, you notice that another missionary has begun to withdraw. She says very little, and you hear her muttering "the flies are in

the eyes" repeatedly. Look again at the table of contents of the book. What section would be helpful in describing the person's problem? What chapter would give possible solutions?

Compare your response to that on page 6.

3. I once met a young man who found the topic of sanctification in every Bible verse he read. In one way or another, he could relate anything to this favorite topic. You may have met a similar person, perhaps even a preacher or Sunday school teacher, who had one or two favorite subjects, and everything the person saw in the Bible was understood as relating to those subjects. In what chapter would you expect to find information related to this problem?

Compare your response to that on page 6.

4. You probably have found that some people in your church like Christian rock and roll while others may not enjoy it at all. Perhaps some even say "it's of the devil." As a pastor, or perhaps as a musician, you are dismayed at the intolerance you find by people on both sides of the issue. What chapter would aid you in helping both groups listen to each other? What chapter would help them change their attitudes and perhaps even get them to listen to one another's music?

Compare your response to that on page 6.

5. As a teacher of children, you may have wondered what children can learn at different ages. It may surprise you that many publishers of Sunday school materials are apparently unaware of research in this area by psychologists. Where would you be most likely to find information on children's abilities in your book?

Compare your response to that on page 7.

USE PSYCHOLOGY WITH CAUTION

Other ways of using psychology will be considered in later chapters. Actually, the purpose of this book is to help you learn to apply psychology in the ministry. (You may have noted that we use the term "minister" to include anyone who works in a church-related function.)

While psychology has a great deal to offer the Christian, we should also exercise caution in using psychology. Making psychology one's god is just as misguided as dismissing it as the devil's work. Not every idea psychologists have suggested can coexist with Christianity. Freud, for example, considered religion to be an illusion that kept people from accepting reality. B. F. Skinner has little or no place for ideas such as "mind" or "soul". Yet while mistaken in some areas, both Freud and Skinner have given us other ideas and research to back them up which validly reflect a part of human nature.

6. Consider the analogy of building a house compared to a Christian building a ministry. From the above thoughts, would psychology be: (A) the foundation; or (B) a tool used in building?

Compare your response to that on page 7.

USE THEOLOGY WITH CAUTION

It is possible for us as Christians to place too much confidence in what theologians and others tell us. Most of us agree the Bible is our ultimate guideline for truth, but those who attempt to interpret it for us are not perfect. The great theologian Martin Luther was mistaken about some things he felt were essential. For example, he believed the sun revolved around the earth (the Catholics he generally disagreed with also held to this idea). Thus, while psychologists can be mistaken about their understanding of the world, Christian leaders can also be mistaken about their understanding of the Bible.

7. The Christian who studies psychology, as you are now, may find that certain ideas about the Bible that have been heard contradict what psychologists hold to. Can this difference be due to: (A) wrong understanding by Bible scholars; or (B) wrong understanding by psychologists; or (C) both?

Compare your response to that on page 7.

CHRISTIAN PSYCHOLOGY

While there are psychologists and Christians who have no use for one another, it would be misleading to leave the impression that most in each category distrust those in the other category. Many Christians have begun to look to psychology for insight. Two journals are entirely devoted to the relationship between psychology and Christianity from an evangelical viewpoint: *The Journal of Psychology and Theology* and *The Journal of Psychology and Christianity*. A number of other journals include occasional articles on this subject. Dozens of books have been published in the last ten years by Christians who look upon psychology favorably. Two Christian graduate schools have

doctoral programs in psychology that have the prestigious approval of the American Psychological Association: Fuller and Rosemead, both in the Los Angeles area. Many other graduate schools and seminaries have developed programs in Christian counseling and pastoral counseling.

Today the term, **Christian psychologist**, is not a contradiction. For example, James Dobson was for many years a professor at the University of Southern California and an editor of a major graduate textbook on retardation. In recent years, this clinical psychologist has hosted a daily radio program and sold millions of books written for laymen in which he uses psychology within a Christian framework.

8. It can thus be concluded that Christians should: (A) exercise care in studying psychology; or (B) trust psychology to answer their questions.

Compare your response to that on page 7.

PSYCHOLOGY HELPING CHRISTIANS

A helpful model for learning psychology is that of Lawrence Crabb in *Effective Biblical Counseling*. He suggests that Christians should **spoil the Egyptians**, a reflection of the Old Testament account of the Israelites "borrowing" from the Egyptians prior to leaving Egypt. Crabb says we should borrow from psychology what is worthy and leave the rest.

Just because a psychologist is not personally a Christian does not mean that person is blind to all truth. Non-Christians may be able to use assumptions that are correct and make helpful conclusions on the basis of good research. The Christian understands this is because of the image of God found in every person, Christian or not. Ultimately, because God is creator, he is the source of all truth. "All truth is God's truth."

9. Name at least one area, other than psychology, in which Christians already "spoil the Egyptians" by using the products of those who may not personally be Christians.

Compare your response with that on page 7.

CHRISTIANS HELPING PSYCHOLOGY

While Christians are increasingly looking to psychology, some of the leaders in psychology have also looked to Christianity for ideas. Karl Menninger wrote *Whatever Became of Sin?* Several years ago, although he was more concerned with social as opposed to personal sin. A past president of the American Psychological Association

(APA), O. Hobert Mowrer, wrote positively of the contributions of Christianity in the 1950's. The APA created a division titled "Psychologists Interested in Religious Issues" not long ago.

Even Freud was apparently more open to certain Christian ideas than we might think. Nearly one hundred years before Freud, **Johann Heinroth** suggested a theory of personality based upon Romans 7 in the Bible. Heinroth said the personality was comprised of the

*basic drives,

*the ego,

*and the conscience.

These three areas he believed were in conflict, producing a tension that could only be relieved by yielding to the Holy Spirit. Apparently Freud adapted Heinroth's theory and developed his famous notions of id, ego, and superego (see Chapter Nine).

10. As a result, we can safely conclude that psychologists today are more open to Christianity than ever before. True or False?

Compare your response with that on page 7.

APPLICATIONS

In a sense, all of the previous section is a background to help prepare you for applying psychology as you continue to read the rest of this book. You have seen a number of ways that psychology can be applied by Christians. But before we move on, it may be helpful to consider further how these principles can be used.

1. A layman comes to you complaining that his faith was attacked by a psychologist who counseled him (this does occur now and then). The psychologist told the layman that he must stop leaning on his religion and using it as a crutch and begin developing his own inner strength. To accomplish this, the therapist recommended the individual stop reading the Bible and begin reading certain "self-help" literature. He also suggested that the layman stop attending church and, of course, get more counseling. The layman concludes that Christians have no business dabbling in psychology because it is obviously anti-God and anti-Christian. How do you respond?

Compare your response to that on page 7.

2.	A pastor is counseling a young lady and discovers she has a phobia (an unrealistic
	and troublesome fear). He finds nothing in the Bible that relates to the problem.
	Where might he go for further information on the subject?

Compare your response to that on page 7.

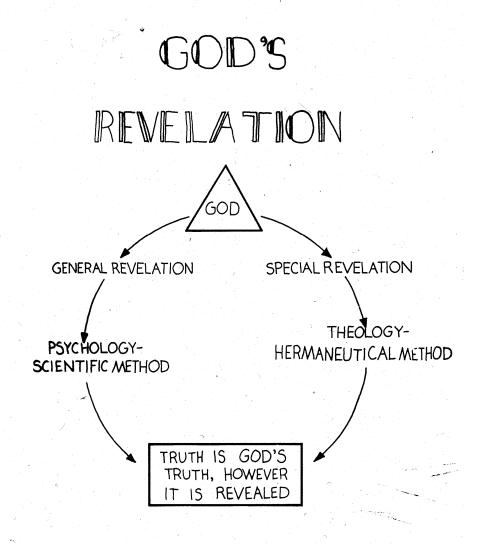
3. Refer back to the story with which we began this chapter. Compose an answer to the pastor using some of the ideas in this chapter.

Compare your response to that on page 7.

FEEDBACK

- 1. If you answered that the chapter or chapters on development would help, you are correct. However, it is likely that other sections could also help, such as motivation or conditioning. It is also possible that chapters on personality, abnormality, and counseling would help.
- 2. Probably the most helpful chapter for describing the problem would be one on abnormal psychology. Solutions would most likely come from a chapter on counseling or therapies. But again, some ideas from chapters on biological psychology, motivation, personality, and perhaps other chapters might help in finding the causes and solutions for the problem.
- 3. If you guessed abnormal psychology, that is a good guess, but you probably would find little on this problem there. Instead you will be likely to discover more in a chapter on perception.
- 4. The chapter on counseling or therapy is probably what you answered for both questions. You are probably right that such a chapter would help them learn to listen to one another, but changing attitudes and behavior is most likely found in chapters related to conditioning or social psychology.

- 5. If you indicated the chapter on development, you are right. But again, other chapters could also help such as chapters on cognition and memory. General ability of an individual child would be considered in chapters on intelligence and testing.
- 6. While some might believe psychology should be part of one's foundation, those familiar with the Bible will recall that Christ is our only foundation. Thus psychology becomes a helpful tool in building a ministry.
- 7. Error by Christians could be due to poor skills in interpreting the Bible (hermeneutics) or not being adequately receptive to what the Bible actually states. On the other hand, psychologists can use inadequate methods of research or interpret the results of research inadequately. It should also be noted that both groups sometimes make conclusions that lack support by their source of information. (Psychologists make conclusions without adequate research results. Christians make conclusions without adequate Biblical support.)



- 8. Trusting psychology to answer all of one's questions is to give Christianity second place in life and make psychology one's god. Christians must look not only to psychology but also to the Bible for guidance. As evangelical Christians, we begin with the Bible as our authority and exercise care as we study and use psychology.
- 9. This concept is found in many areas of life. For example, we drive cars that were probably designed and built by non-Christians. Many mechanical and electronic devices we use all the time are produced by non-Christians. Yet we can still see these as based upon God's truth because they conform to the laws of physics which God built into our world.
- 10. While it is tempting to agree, we can't actually conclude that this is the case. Actually, Mowrer wrote several decades ago while Heinroth lived about 150 years ago! While we must be cautious about making the above conclusion, it is also possible that psychologists are more open now. Regardless, it is clear that many psychologists are talking about religion in a positive manner today and that a good number are Christians.

FEEDBACK ON APPLICATIONS

- 1. You might cite evidence (from this chapter) that not all psychologists would agree with his psychologist's advice. You might suggest that either a Christian counselor or a sympathetic non-Christian psychologist be considered.
- 2. More recent psychology texts deal with this subject to some extent in chapters on abnormality and counseling. It should be noted that referral for certain psychological problems is desirable, a phobia being a good example.
- 3. Many answers are possible. I answered a pastor in this real situation via a letter to the editor. (See "A Response to 'Counseling and the Bible", *Gallipolis Tribune*, January 31, 1980.)

CHAPTER TWO BIOLOGICAL PSYCHOLOGY

Several years ago I met a man who had a great deal of difficulty in churches he attended. After a few weeks of association with a particular church, he would find some flaw which would cause him to become very angry. While he never became violent, he eventually became so angry that he would curse and swear about the church's problems. Afterward he would realize this response was inappropriate for a Christian and would apologize, but by this time the damage was done and he was usually asked to leave the church.

I am sure many believed his problem was either a bad habit or a spiritual problem. Yet, as one who knew him well, I saw him attempting to live as consistent a life as possible. Many of the problems he pointed out were genuine. One day I heard that he had a brain tumor that could not be surgically removed.

Assuming the brain tumor accounted for his lack of control, in what part of the brain would it probably be located? To what extent was he responsible for his behavior?

Before going further, try answering the following questions.

- 1. If someone has a problem, what possible reason for the problem should be considered first? (A) spiritual causes (B) physical causes (C) psychological causes
- 2. If a child is hyperactive, what part of the brain is probably involved?
- 3. If a person cannot read because of brain damage, what part of the brain is probably involved?
- 4. If a person becomes apathetic during adolescence due to brain damage, what part of the brain is probably involved?

Compare your responses with those on page 14. If all are correct, you may go to the Applications section.

BIOLOGICAL PSYCHOLOGY AND JAY ADAMS

The human body is an important factor in studying the psychology of the human being. **Biological** psychology generally concentrates upon one system of the body—the

nervous system including the brain—but other systems, such as various glands, can also affect the individual's feelings and emotions.

Jay Adams, a Christian counselor, has stated that people's problems can be divided into two categories:

- 1. The physical
- 2. The spiritual

While I dislike his ruling out the possibility of a separate category for psychological problems, he is right that biological problems should be considered before going further in counseling. Unfortunately, doctors and even specialists are not able to locate every physical problem that may exist, particularly if the problem relates to the brain.

5. When counseling someone, the possible problem to be ruled out before any other is a problem. (A) Spiritual (B) Physical (C) Psychological

Compare your response with that on page 14.

AROUSAL AND THE RAS

Three areas of the brain are especially important for Christians to understand. The first we will consider is the **reticular activating system** (the RAS), located at the top of the spinal cord and the lower part of the brain. This band of fibers controls how aroused the brain will be. Low arousal corresponds with sleepiness (extreme low arousal produces a coma), while high arousal exists when a person panics. The average state of arousal is between these two extremes when the RAS sorts relevant from irrelevant sense data, allowing only the relevant information from the senses to pass on to the rest of the brain.

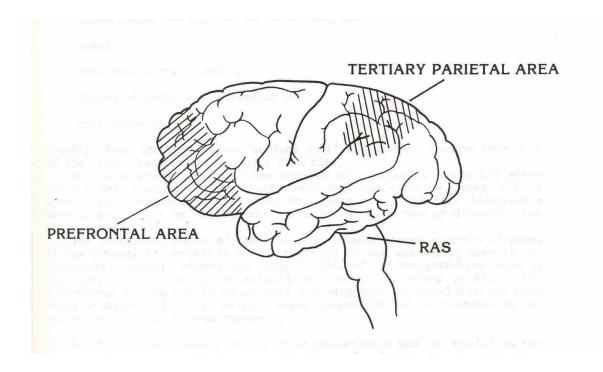
Sometimes the RAS is overly aroused in children for an extended amount of time, a condition that produces **hyperactivity**. The odd thing is that many hyperactive children become relatively well controlled when given certain stimulants such as Ritalin. Neuropsychologist Charles Golden (who developed the Luria-Nebraska test) has stated that this may in fact be because the RAS is under-aroused, producing a "stimulation hunger" in the brain. Thus the child becomes overactive in trying to get more sense data through the RAS to the brain. When the child receives the right dosage of Ritalin, the RAS is aroused and the brain receives adequate stimulation without the hyperactive behavior.

6.	Hyperactivity is due to the RAS being	(A) Over-aroused
	(B) Under-aroused (C) Either of these	

Compare your response to that on page 14.

READING, IQ, AND THE BRAIN

Golden has identified one area of the cerebral cortex which is also very important. The **tertiary parietal** area, located in the back part of the parietal lobe nearest the occipital and temporal lobes, is involved in reading, writing, and spelling. This area usually matures when a child is about six years old, but may mature as early as three or four and as late as eight or nine.



While the age at which this area matures has no relationship to the child's eventual intelligence, it does affect IQ scores during the early elementary years and it also affects whether the child can read or write. If this area matures late, the child will probably score low on an IQ test and be unable to read, yet can be of normal intelligence as an adult. The unfortunate thing is that a naïve parent or teacher can assume a non-reader is a "slow learner" and help make the child that way because of the adult expectations (and peer expectations).

7. If an eight year old child is unable to read or write and gets a low IQ score, he or she is a: (A) slow learner (B) retarded (C) normal (D) any of these.

Compare your response to that on page 14.

THE PREFRONTAL AREA

Another area of the cerebral cortex that Golden has emphasized is the **prefrontal** area, located just behind the forehead. This area generally matures during adolescence. If damaged, this area of the brain can result in one or more of the following problems:

- Uncontrolled obscenities and other language
- Apathy
- Impulsive decision-making
- Cycles of mania and depression, or
- Schizophrenia

Usually these problems do not surface until adolescence because this area of the brain does not mature until that time.

Children who are hyperactive because of a malfunctioning RAS often become self-controlled in adolescence and can even be taken off of medication because the prefrontal area can control the RAS. Likewise, a normal adult may be kept awake at night because the prefrontal area activates the RAS.

The prefrontal region of the brain can deteriorate as a person advances in age (though it certainly does not always do so), producing some of the symptoms commonly associated with "senility." If the prefrontal area is damaged, either due to deterioration, tumor, or other problem, the individual may be unable to control his language, be impulsive and have other problems. Thus, the brain-damaged person may not be responsible for his or her actions in some respects.

8. If a person cannot control their obscenities and is impulsive, the problem is due to brain damage. (A) True (B) False (C) Insufficient information.

Compare your response to that on page 14.

APPLICATIONS

1. A teenager in your church is moody, impulsive, and appears to have no control over the use of obscene language. His parents say he became that way as he entered adolescence. They also recall an automobile accident in which he received a serious head injury and was hospitalized. They claim that he needs "more religion" to overcome his problems, but as you talk to him you are impressed with his sincerity and desire to serve God. Assuming he has brain damage, what area is involved? What counsel should the parents and teenager receive?

Compare your response to that on page 14.

2. A child in your Sunday school class has been diagnosed hyperactive and is receiving Ritalin for the problem. After class one day, your assistant teacher complains about the child having to take medicine and wonders if the child shouldn't have had a few good spankings instead of being "blasted with downers." Should you: (A) Agree (B) Disagree (C) Ignore the comment?

Compare your response to that on page 14.

3. James Dobson tells an amusing story of a man who had been a rather sedate preacher but, as he grew older, would start to yell "Amen," "Praise God," or "Hallelujah" at very inappropriate times. Assuming this is due to deterioration of brain tissue, what area of the brain is probably involved?

Compare your response to that on page 14.

4. A Sunday school teacher comes to you wondering if an active child might be hyperactive. What action should you take? (A) Observe the class (B) Immediately refer the parents to a doctor (C) Encourage stricter discipline.

Compare your response to that on page 15.

5. As an active person in the ministry, you find yourself having difficulty getting to sleep at night. Much of your time is spent planning activities as you lay sleepless in bed. What is the problem?

Compare your response to that on page 15.

6. Read the account of the man at the opening of this chapter. What part of the brain was involved? Was he responsible for his swearing?

Compare your response to that on page 15.

7. A youth worker in the church finds that two children are having problems reading the materials for class. She wonders if the children, ages seven and eight, might be slow learners because of their reading difficulty. Your best response would be to: (A) Agree (B) Disagree (C) Say "We can't be sure."

Compare your response to that on page 15.

FEEDBACK

- 1. Physical
- 2. Reticular activating system
- 3. Tertiary parietal area
- 4. Prefrontal area
- 5. Jay Adams states that physical problems should be considered first.
- 6. While overarousal is an obvious cause of hyperactivity, Golden makes a case for underarousal. Thus, either of these is the correct response.
- 7. While in a sense the child is slow in acquiring the skills, this does not mean the child is necessarily slow in learning other things. If the problem is the delayed development of the tertiary parietal area, the child is certainly not retarded and not really a slow learner as the term is normally used. On the other hand, if this area of the brain is damaged, the child may never acquire skills in reading. Thus, without further information, we must conclude that "any of these" is the best answer.
- 8. While the person described certainly *may* be brain damaged, it is also possible that these actions are habits that have been learned and the brain is entirely normal. It is important not to automatically assume brain damage because of casual observation. Proper diagnosis of brain damage often requires medical tests such as the PET scan, a CAT scan, or a neuro-psychological examination.

FEEDBACK ON APPLICATIONS

- 1. If there is brain damage, it is probably in the prefrontal area. You should suggest that the teenager be seen by a doctor, preferably a neurologist, for a diagnostic workup and perhaps by a neuropsychologist for testing. You might advise the parents and teen that you are not a doctor and thus can't diagnose, but that there could *possibly* be brain damage. You could tell them that if there is such damage, the teen may not be able to control his language and therefore would not be responsible for it. The problem would thus not be a spiritual problem but a physical problem.
- 2. You should point out that true hyperactivity is a biological, not a discipline problem. Children are not always helped by Ritalin because finding the right dosage can take weeks of adjusting the amount given. Some children are not helped by Ritalin because the RAS is over-aroused rather than under-aroused.
- 3. While this is a most unusual situation, probably it is linked with the prefrontal region since this resembles the lack of control of obscenities mentioned earlier.

- 4. While it is tempting to consider the discipline problem first, or perhaps take the teacher's statement at face value and refer the parents, certain adults call normal levels of children's activity "hyperactive." It would be best to observe the child to see if he or she is actually out of control, and if not, a change of class for the child might help. Note that not all hyperactivity is due to brain problems. It can also be due to poor discipline methods.
- 5. While a number of difficulties could cause this problem, it is quite possible that the prefrontal area is stimulating the RAS, thus arousing the brain and keeping you awake. Planning is one of the normal functions of the prefrontal area, so this is quite possible. The best solution may be in turning your thoughts to mundane things that do not involve planning. Systematic relaxation can also help you relax (see the appendix), as can occasional use of sleeping pills to decrease the arousal of the RAS.
- 6. The prefrontal area. Probably he was not responsible for his actions.
- 7. Probably uncertainty is the best response. The tertiary parietal area might be delayed in its development, but this is not certain at this point: it may just be that they are unfamiliar with the religious terms. A good case could be made for ability grouping rather than grade or age grouping, especially in Sunday school where the amount of background in Bible knowledge can be so varied. It might be noted at this point that different sections of the Bible require different mental abilities and thus the use of different sections of the brain. If a needed part of the brain is not mature, the child will fail to understand the material to be learned. We need to be *selective* regarding what we teach kids from the Bible, reserving content that requires adult thinking ability for adults. Golden has stated that brain development generally corresponds with Piaget's stages and abilities, thus we will consider this issue further in Chapter Eight.

CHAPTER THREE DEVELOPMENT

Several years ago, I was invited to observe a second grade Sunday school class at a rather large, prestigious church. As the elderly teacher desperately tried to cover the lesson, the children talked loudly and threw objects.

I noted the fact that the teacher used three- and four-syllable words and rather detailed theological language to make her points. While she was convinced the problem was one of discipline methods, I was equally convinced a more basic problem existed. What would you have suggested to this teacher?

Before going further, try answering the following questions.

- 1. At what stage is a person able to think about thinking? (A) Preoperational (B) Concrete operations (C) Formal operations
- 2. At what stage does the child begin to form the first concepts of space, causation, and time? (A) Infancy (B) Preschool years (C) At school age
- 3. According to Erikson, what long-term trait in personality is largely developed in infancy?
- 4. The average child can first begin to classify concepts at about what age? (A) 2 (B) 4 (C) 7

Compare your responses with those on page 22. If all of the answers are correct, you may skip to the section on applications.

WHAT IS DEVELOPMENT PSYCHOLOGY?

Developmental psychology concerns itself with how people grow and develop socially, intellectually, and physically. While many ideas about child rearing can be gleaned from this area and applied in sermons and Sunday school lessons, in this book we will center our attention on the one area most applicable in church: cognitive (mental) development.

Cognitive development is concerned with how the child's thinking changes as he or she grows. Perhaps the best-known theorist in this area is Jean **Piaget**, who many years ago formulated his theory of cognitive development. Piaget saw development occurring in four stages. In his short booklet, *Six Psychological Studies*, Piaget summarizes the characteristics of these four stages.

The first stage, the **sensorimotor** stage (up to 2 years of age), is characterized by the refinement of reflexes as well as development of basic ideas of space, causation, and time

Erik **Erikson** added to Piaget's ideas by emphasizing that a baby develops its basic notions of **trust** during infancy. If an adult is present to regularly meet the child's needs at this time, the youngster begins to develop a trusting attitude toward the world that may well remain for the rest of life. On the other hand, if these needs are not met, the child may become generally distrustful throughout life.

5. Mr. Jones seems to trust no one. He spies on his wife to be sure she is faithful and is suspicious of the hidden motives of anyone who does favors for him. Using Erikson's theory, when would you suppose that his problem began?

Compare your response with that on page 22.

THE PREOPERATIONAL STAGE

At about 1-1/2 to 2 years, the average child moves into Piaget's **preoperational** stage. During this second stage, the child begins to talk and use other symbols such as play. Piaget saw play not as a means of acquiring new knowledge but as a means of more fully understanding past learning. In play the preschooler pays little attention to rules.

The child at this age believes there must be a reason for everything and that the world is magical and alive. ("When I walk the moon follows me.") The child does not try to support ideas with proof since the preschooler is unable to separate his or her ideas from those of other people. Physical activity, rather than words, is the primary method of expressing ideas. Rather than using logic, the child depends upon the appearance of things. The youngster at this age is unable to check his or her thinking by going back over previous thinking (the child lacks **reversibility**). Cause and purpose are more clearly understood as indicated by the persistent "why" of children at this age.

6. A young girl states "The wall of the room can grab you and eat you up." The parent responds "How did you come up with that idea?" How is the preschooler likely to respond?

Compare your response with that on page 22.

THE CONCRETE OPERATIONS STAGE

Most children move on to the **concrete operations** stage at about 6 or 7, although it can occur two or three years earlier or later. At this stage the youngster can compare his or her own point of view with that of others and attempts to prove statements. The child begins to think before acting and is able to use rules in a game. Logic related to concrete objects begins, but broad generalizations and systems of thought (such as philosophy) are still missing.

The youngster is less likely to be swayed in conclusions made by the physical appearances of things and more likely to see that things can change in appearance and yet remain essentially the same in some respects. The child is able to use reverse thinking. For example, a boy will correctly answer the question "Does your brother have a brother?"

During the concrete operations stage, the child is able to classify and understand the relationship of a whole to its parts, but again, this occurs only in relationship to concrete objects.

7. Two young children sat at the family table for supper. One had a tall, thin glass filled with milk, while the other had a short, fat glass of milk (both had the same amount of milk). The older child, who had the shorter and wider glass, asked "Why don't I get the glass with more milk in it?". According to Piaget's theory, what stage is the child probably in?

Compare your response with that on page 22.

FORMAL OPERATIONS STAGE

During adolescence, the child begins a new kind of thinking with the **formal operations** stage. The construction of systems and theories is now possible; no longer must specific problems be dealt with in isolation from general principles. The child is able to reflect upon things that are not directly related to external reality, such as politics, the future of the world, and philosophy. The young person is able to consider things that have never been seen and propositions about possible relationships. They are able to think about thinking.

Early in adolescence, Piaget believed there is **egocentric** (self-centered) thinking in which idealistic concepts are substituted for concepts that are based upon reality. Eventually, as he or she gets older, the young person is able to realize that predicting and interpreting reality is more useful than holding to idealistic views that contradict the real world. Yet Piaget felt that the most productive people are able to hold on to some of their dreams of reforming the world as they adapted their thinking to reality.

Piaget also described the transformation of religious feelings. The following summarizes his views of religious development:

The preoperational child sees parents as having divine qualities in keeping with the "magical" tendencies at this age.

The concrete operational child begins to see the parents' weaknesses and thus begins to transfer divine qualities to a supernatural being.

The formal operational person begins to integrate the positive or negative orientation to religion into his or her life system. This often involves making a pact with God.

8.	The early adolescent is likely to perceive a feeling of love for the opposite sex in a(n)
	manner. (A) Idealistic (B) Realistic

Compare your response with that on page 22.

APPLICATIONS

1. The ability to trust God is considered by most Christians to be an important aspect of living the Christian life. Using Erikson's conclusions in this area, what should the church be doing to encourage trust in children?

Compare your response with that on page 23.

2. As we have seen, Piaget seems to suggest that the concept of God is at least partially related to experiences in the preoperational stage. The relationship with parents, particularly the father, may play an important part in later concepts of God. James Dobson recounts his son's first prayer, "I love you, Daddy." What would this suggest about how parents, and especially fathers, should treat children at this age?

Compare your response with that on page 23.

3. Since the young child is described as living in a magical world, how is the child likely to perceive church teachings on miracles and the resurrection?

Compare your response with that on page 23.

4. Some of those who have studied play in the preschooler have concluded that play can be used to teach roles in life. Thus, the child learns the roles of mommy and daddy by playing house, the roles of doctor and nurse by playing doctor, and so on. If this is a natural mode of learning in the preoperational stage, how might the church use this to teach the child?

Compare your response with that on page 23.

5. Some would suggest that the preoperational child is unable to commit his or her life to Christ because of the inability to make global decisions and the lack of "reversibility." They would suggest that confessing a life of sin is unlikely due to the child's limited scope and immaturity. Others would cite Christ's command to "forbid not the children to come unto me" as evidence that children can commit their lives to Christ. Can the preoperational child become a Christian? Support your opinion.

Compare your response with that on page 24.

6. Churches and Christian parents are often anxious that their children have a broad knowledge of the content of the Bible. Yet it should be clear from the discussion of brain development in Chapter Three and Piaget's stages that everything is not understandable to small children. The church needs to be selective regarding what it teaches children at different ages. At present, most churches tend to teach children without much consideration of cognitive abilities. What do you think the likely result would be of trying to teach ideas to kids that they are mentally incapable of understanding?

Compare your response with that on page 24.

7. Assuming that throughout life a child has been exposed to many confusing concepts in the church, how is the child likely to react when he or she reaches adolescence and acquires formal operational abilities?

Compare your response with that on page 24.

8. Can the concrete operational child commit his or her life to Christ? Those children who apparently do so, often "recommit" their lives in adolescence. Can only adolescents genuinely give themselves to Christ?

Compare your response with that on page 24.

9. Cross-cultural research using Piaget's theory apparently indicates that people in some cultures are less likely to achieve formal operations than in Western cultures. Some researchers have even suggested that in some cultures there are people who have never acquired formal operations abilities. How should this affect the missionary efforts in such cultures?

Compare your response with that on page 25.

10. At adolescence most young people begin to change their basic orientation in life from their parents' values and concerns to that of their peers. This is especially a concern for those who have children on the mission field. Should children be schooled in distant boarding schools on the field, or is there another alternative? This is especially a problem for parents who are engaged in missionary work "in the bush." What do you think?

Compare your response with that on page 25.

11.	Considering Piaget's stages, what kinds of things could we use to challenge teenagers in the church?			
Co	Compare your response with that on page 25.			
12.	Review the opening illustration of this chapter. What was the <u>main</u> problem the teacher had?			
Compare your response with that on page 26.				
	FEEDBACK			
1.	C			
2.	A			
3.	Trust			
4.	C			
5.	From Erikson's theory, we would suspect that the obvious problem of trust stems from difficulties in the infancy stage. It is possible that the parents were not readily available to meet the child's physical and emotional needs at that time, resulting in the lifelong characteristic of distrust.			
6.	The child might restate the previous statement, say nothing, or make another statement, but she is very unlikely to answer the question because the preoperational child cannot reverse her thinking.			
7.	The preoperational child estimates the amount of milk by depending upon the <i>appearance</i> of the milk in the glass. The concrete operational child is able to separate mere appearances from the actual qualities of the materials. (This observation, cited by a student, is very similar to an experiment Piaget used to determine the child's stage.)			
8.	Using Piaget's description of early formal operations thinking, the adolescent is likely to understand love in an ideal manner rather than realistically. The concept of boygirl love will tend not to be based upon the real world but on the imagination. Clearly			

this is the case in adolescent infatuation, as is reflected by much of the teen music. (Even punk rock reflects idealization, although those ideals are represented as destroyed or perverted.) What is amazing is that the idealizations of love are perpetuated for so long in adolescence and early adulthood, perhaps an indication of the high value placed upon youth (and associated immaturity) in our culture.

FEEDBACK ON APPLICATIONS

- 1. The church can encourage trust by having the right kind of nursery experiences for children. The nursery should be well staffed and have interesting toys so that babies will have their emotional, social, and physical needs readily met. Likewise, special child-rearing classes in Sunday school would be helpful so that parents will learn the importance of meeting the infant's needs and long-term trust will be more likely to develop. While Erikson would suggest that less can be done to encourage trust at later ages, a Christian perspective would emphasize that the *object* of trust for the adult is as important as the *amount* of trust. Growth of trust may occur as it is exercised ("to him that has will more be given").
- 2. This fact would suggest that parents need to give careful attention to how they relate to their children at this age. What the child experiences may carry over into later concepts of God, to some extent, even into adulthood (although fortunately adults are sometimes better at distinguishing the attributes of God from undesirable parental attributes). The permissive, indulgent parent is likely to raise a child who perceives God as not being just, while the harsh punitive parent is likely to have a child who sees God as being harsh and unloving. Parents should try to manifest both justice and love without going to the undesirable extremes of either. As adults, we may need to overcome our limited concepts of God instilled through early experiences with our parents, by careful study of God as He is described in the Bible.
- 3. The child is likely to accept these as just a part of reality without much question. If all of reality is magical, miracles fit into that world. Children do not usually see death as permanent at this age, so the resurrection is seen as pretty ordinary. The danger is that the child, if taught these ideas at this age, may discount the reality of miracles and the resurrection when he or she comes to realize that all of the world is not magical. It may be easier to discount the supernatural in the Bible if it is associated with an earlier immature stage of life.
- 4. The child might learn church roles through play. In this way, the child may learn the roles of pastor, layman, usher, and so on through playing these roles and refining them with the help of peers and teachers. While this is a relatively unexplored area, I have done some research which suggests this is possible. (See "The Use of Play in Christian Education" in the *Christian Education Journal*, vol. 6 [1985].) Another possibility is to teach some of the roles found in Bible stories, so that children begin to understand (through play) how a Pharisee acted, what a Pharaoh was, and so on. Simple Bible stories might also be role-played by the children. (See "Stories, Enactment, and Play" in *Handbook of Preschool Religious Education* [D. Ratcliff, Ed., 1998].) This would have the distinct advantage of emphasizing actions rather than words (you

will recall that Piaget said that children at this age express ideas primarily through action).

At the preoperational stage, I believe the most important thing a child can learn is that church is an interesting and accepting place. Positive (or negative) feelings about the church learned at this age will probably carry over for a lifetime. Theological abstractions and standard church services should be waived in favor of children's church with singing and activities such as crafts rather than cognitive learning.

- 5. While Piaget does not specifically address this question, there is good reason to question the preschooler's ability to make such an encompassing decision. Few children make decisions for Christ before age six or seven, and the few exceptions to this rule that seem to exist may be due to their achieving the concrete operations stage earlier than their peers (perhaps as young as three or four). Regardless of age, however, I believe that any child that comes seeking salvation should be encouraged and helped to the extent that he or she is cognitively able.
- 6. If you guessed that the child would be confused, I suspect you are right. This confusion might result in the child distorting concepts being taught such as the one that reported she heard the congregation singing about "Gladly, the cross-eyed bear"! Ronald Goldman has also suggested that the child might learn religious terms without fully comprehending them and thus be less likely to transfer the concepts to real life. Perhaps some of the tendency to separate religion from everyday life comes from being taught religious ideas too early. Most of us have been caught ourselves singing in church without really thinking of the words, something we learned to do in childhood when we *couldn't* understand the words we used. Does the habit carry over? Perhaps.
- 7. A good guess would be that the adolescent would be better *able* to understand the concepts. Some, such as Goldman, fear that the damage done by teaching them too soon, however, will keep the child from using the newly developed abilities with the previously distorted concepts. The distortions produced by trying to learn advanced concepts may be rejected in adolescence, and with the concepts perhaps the church will also be rejected. *Moody Monthly* (October 1982) states that 70 percent of high schoolers leave the church, never to return. The Bible is basically an adult book, and we must be careful as Christian educators to sort what can and can't be understood by children at different ages so that confusion is minimal. Most parables and a great deal of theology should probably be reserved for those who have formal operational abilities.
- 8. Since concrete operational children have reversibility as well as some advancement in their moral reasoning (see Chapter Two), a good case can be made for children at this age being able to make such a commitment. Yet, even though such a decision may be made, the child is still unable to give everything to God in the same manner as the adolescent—for example, they cannot give their thoughts to God because they can't think about thinking. Thus the adolescent recommitment may be a fuller and more

complete giving of the self to Christ because of the new cognitive abilities which make this possible.

- 9. While at first this might seem to indicate an insurmountable problem, such is clearly not the case. In Chapter Three, we stated that brain development is needed for the individual to enter the formal operations stage. Piaget emphasized that brain maturation and certain relevant experiences are needed for the person to arrive at formal operations. The relevant experiences are probably related to formal education with which missionaries often are involved. Thus, missionaries will temporarily want to use those stories and events from the Bible that are consistent with concrete operational abilities and introduce more formal operational content (such as abstract theology) at a later time. Yet it should be noted that while some cultures do not achieve some of the highest Piagetian tasks, it may be that the fault is in the measurement techniques and not in lack of development. In other words, the cultures studied may have the skills, but the tests used to measure them were insufficient to find them. Perhaps the best solution, then, is for the missionary to understand the specific kinds of thinking that the culture uses before attempting to transmit the Bible, then beginning one's outreach with the levels of thought to which the people are accustomed, and gradually introducing other kinds of thinking abilities.
- 10. This is a difficult question, especially considering the fact that some mission boards insist upon parents placing their children in boarding schools. For those who have a choice, I believe the importance of the parents in the child's development far outweighs any other consideration, at least until adolescence. Problems with self esteem, feelings of desertion, and a poor God-concept are possible side effects of lengthy separation.

Since missionaries may be in areas where schools are not available for children, home schooling might be considered. Research conducted by Dr. Raymond Moore at Stanford University indicates that children schooled at home until age eight or later (even up to high school) adjust well to school when they do enter it, and a high percentage excel and become leaders in the school. Home schooling can take only two or three hours a day, say the Moores, and many fine materials are available. Home schooling would have the added advantage of exposing nationals to Christian methods of child-rearing. I'm also convinced that there are many benefits in one's children being exposed to a second culture.

My observations of missionary children schooled at home suggest that this works well up to high school age, but a good case can be made for sending adolescents to a boarding school. The few children I have seen kept home on the mission field during the high school years tend to be excessively dependent upon their parents and make poor adjustments to college state-side.

11. Challenge teens with their new formal operational abilities. Warmed-over Sunday school stories are hardly adequate. Students should be exposed to the high ideals of Scripture, such as can be found in the Sermon on the Mount. Anthony Campolo has

emphasized the need to get adolescents involved in social concerns both in their communities and overseas. Not only can they begin to put their ideals to work in this way, but it can also help them mature in their "egocentric" idealism by finding practical ways to change the world for the better. Several weeks of short-term missionary work is clearly superior to lengthy discussion about reaching the unfortunate.

12. The main problem was that the teacher was not aware of the cognitive limitations of the children as described in their chapter. While lack of discipline was certainly a problem, solving that problem by itself would not take care of the more basic difficulty of the children misunderstanding the material.