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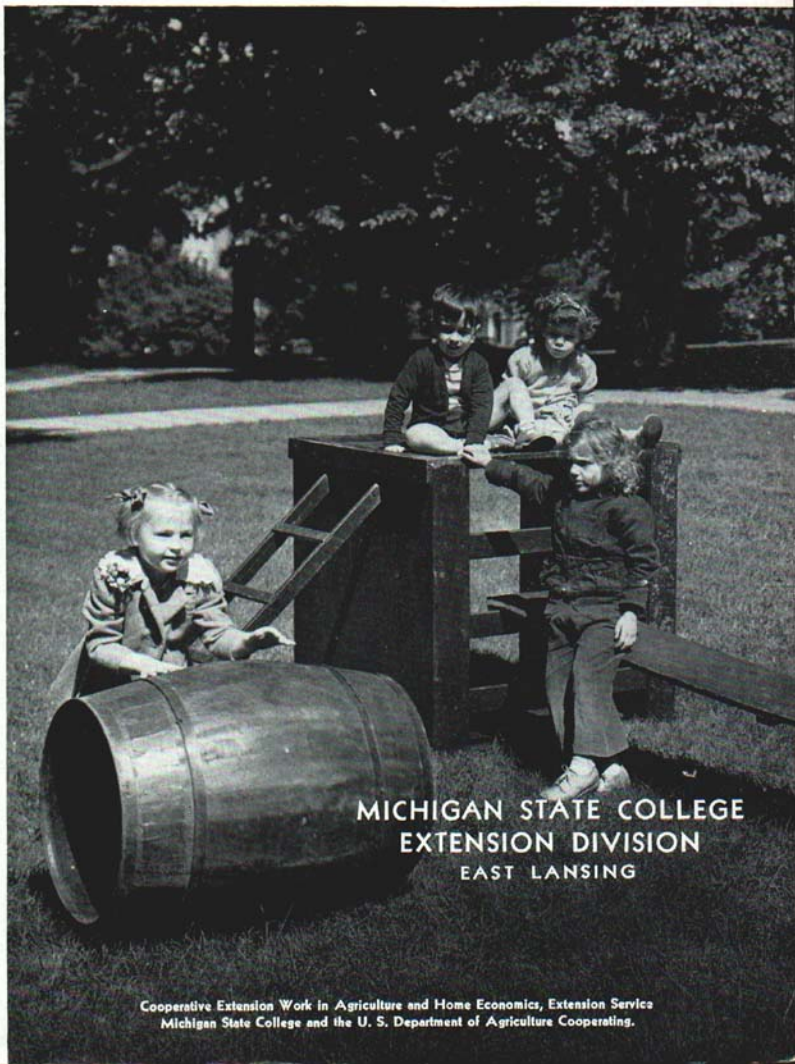
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The Growing Child
Michigan State University Extension Service
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Issued October 1940
24 pages

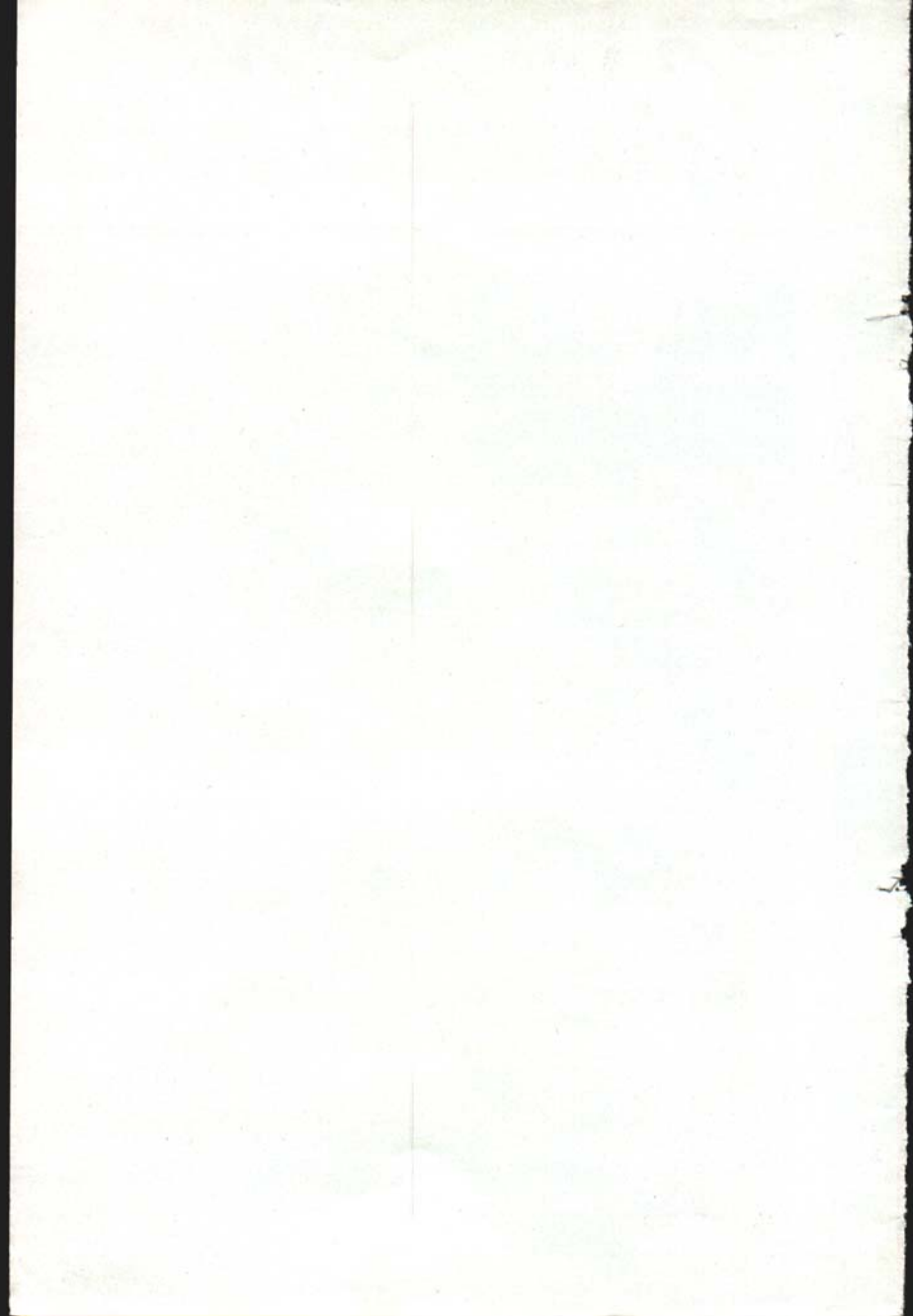
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the Growing Child



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THE GROWING CHILD

ALICE HUTCHINSON

Successful family life is a challenge to modern parents. However, adult classes, books, and magazines provide them with opportunities for study and discussion of family life problems as never before.

Through study and observation one finds that children are individuals each differing in needs, abilities and interests, yet all three-year-olds or ten-year-olds have many things in common. To understand a special period, one needs to know both the experiences in the past and to anticipate the future. Growth takes place at an uneven rate so that characteristics of several different ages may be found at one time. By studying children in general, one is better able to understand a particular child.

Parents are the child's first teachers. The school and community aid parents in guiding and educating their children. The long years of childhood provide many opportunities to help children develop their various abilities. A willingness on the part of the parent to have the child become a self-reliant person is needed. In the home, parents can give their children many opportunities to develop skills and also valuable experiences that prepare them to take their place in the adult world.

Affection and security, basic needs of all children, are provided by home and family life. In helping children grow and become happy well-adjusted individuals, parents find that praise of work well done does much to encourage children. Most individuals never reach the limits of their abilities.

Frequently people remark upon the rapidity of the child's growth. Nature provides a period of approximately 20 years for the helpless infant to develop into a self-reliant, independent active adult. This growing process takes place rapidly at some periods and slowly at others. The infant becomes the child; the child becomes the youth, the youth the adult during these years with the family. Physical and mental growth are closely related. Social and emotional growth are dependent upon the child's physical and mental growth as well as his family life experience.

The growing period is continuous, and we cannot say, "Now that my child is six he is able to do this and this,"—neither before nor after that date. In some phase one may find him well advanced, in others he may be retarded. Thus the child uses language, but because he has not learned to walk he is considered an infant rather than a toddler. It is desirable that we divide the developmental periods into infancy, the period between birth and the second birthday; pre-school age between 2 and 4 years; the period of early childhood from 5 to 7 years; the period of childhood from 7 to 11 years; early adolescence from

10 to 14 years or at the beginning of puberty; adolescent or youth period from puberty until growth is complete.

THE CHILD AT BIRTH

At birth, according to statistics from the Children's Bureau,* the baby weighs about 7 pounds and measures 20 to 21 inches. Some babies weigh more, some less, than this amount. The healthy infant has a pink color, squirms, wiggles, and cries lustily. The functions necessary to sustain life are present and functioning. The new born child shows spontaneous and uncoordinated movements most of which are called reflexes. At birth the baby's ability to suck and swallow are well developed, but very soon other behavior is associated with the feeding process. The infant learns that being picked up and held in a certain position means food. He learns to grope for the lost nipple, opens his mouth at the sight of his bottle or spoon, later learning to grasp and tip his bottle just at the right angle to obtain nourishment. These simple steps are often unobserved or taken as a matter of course but they are indicative of growth.

A reaction to light may be noticed during the first days of the child's life. The infant's head turns toward the light. Later the eyes follow objects and at about two months' age the child is able to follow a horizontal movement. Soon, vertical movements are followed by the eyes. The child is nearsighted at first but his ability to perceive objects at greater distance increases rapidly. Focusing and learning to recognize objects are some of the things that the infant has to learn, before sight, as we know it, is developed. Growth in visual ability is rapid. The infant stares at bright objects. Later the eyes follow a moving object and very soon he observes his hands or grasps a toy held before him.

Emotional behavior plays an important part in the child's adjustment. At birth the emotional development of the child is extremely crude. The baby responds with pleasure to warm, dry clothing, and to being fed or picked up gently. If the movements of the adult lifting the child are sudden and jerky or there is a loud, sudden noise he frequently cries and indicates fear. The baby who is restrained either by having his hands and feet held or his movements interfered with shows anger. Thus early in life one sees differences in emotional response.

AT FOUR MONTHS

During this period of early infancy, the baby grows rapidly so that at four months he is round and chubby, has nearly doubled his weight, and has increased his length by $2\frac{1}{2}$ to $3\frac{1}{2}$ inches.

Often growth is thought of only in relation to height and weight, but there are also changes in the proportions of other parts of the body. The size of the infant's head is large in proportion to his body. During the first four months the head will increase about 2 inches in circumference and the baby will be less doll-like in size.

*Infant Care—Children's Bureau, U. S. Dept. of Labor.

During the first month, as the infant gains in motor control, he lifts his head from time to time while held to the shoulder; or, while in a prone position he makes crawling movements and his head is raised momentarily, though unsteadily, while in this position. By four months the infant has shown a definite gain in motor control, particularly in control of the head movements. The head is held steadily while the infant is being carried, and the head and chest are raised when he is laid in a prone position. The gain in muscular control is such that sitting with support is possible.

The sensory development has its beginning during early infancy. The sense of touch is first noticed when the infant grasps an object placed in his hands. The fingers curl tightly about an extended finger or toy. Later he shakes a rattle, or he may be observed scratching or pulling at covers or clothing. During the early months, coordination of hand and eye movements are undeveloped. By four months most babies will reach for objects using the entire hand to grasp an object showing the coordination of hand and eye.

During the first four months of life the baby shows some social development. At first this consists of ceasing to cry when picked up by an adult and having his wants cared for. By the end of the second month he smiles in response to appearance of a person. At four months he watches with interest a disappearing person and will laugh and coo in response to attention.

EIGHT MONTHS

At eight months the baby weighs between 16 and 19 pounds and measures between 25 and 27 inches, depending upon whether he comes from a family of the tall, thin type or has parents who tend to be short and stocky. The infant's head continues to grow but not so rapidly as during the first months of life. Probably by this time one or more teeth have made their appearance.

His muscular strength has continued to increase so that he is able to sit alone, and often protests against being laid down. His body has developed to the point where he can roll from back to stomach and stomach to back. At this time the child makes attempts to use both the arms and feet in a creeping movement. Creeping is encouraged by giving the child firm, clean places to roll and play while making his first attempts. Some children can pull themselves to a standing position with the help of furniture and stand with support. Stepping movements are usually made when the feet touch the floor. The child should not be encouraged to walk at this age as poor posture may result if muscles are used before they are ready to bear his weight.

The improvement in hand control is marked. He reaches for and grasps objects offered to him while lying down, sitting up, or when held in a standing position. He pounds a table surface with his hands or a rattle, crumbles stiff paper or splashes water. His hand movements show more coordination and the thumb and fingers are beginning to be used to pick up objects. Play is more complex so that the baby is no longer content to shake or wave a toy but puts his fingers in openings, and pushes and pulls toys about. Soft stuffed toys, and

small animals which can be pushed or pulled about appeal to the baby at this age.

Memory is beginning to appear. The child looks for the rattle dropped out of his carriage and pulls or reaches for a desired object. He shows signs of recognizing familiar faces and is often shy of strangers. Imitations of many simple gestures or sounds are made and the baby is from this time on more conscious of those about him.

Language development is considered one of the indications of the child's mental growth. The earliest indications are the crying during the early weeks. By three months the mother recognizes variations in the cry, while other vocalizations besides crying are beginning to be used. The coo of contentment and the whimper of discomfort have appeared. Gradually these become more distinct so that the infant "crows" with delight when his wraps or bottle appear and laughs in recognition of the familiar face of father, mother or brother. During this period there is a great deal of vocal play consisting of coos and gurgles. This is known as the "babble stage".

THE BABY AT ONE YEAR

The first birthday marks the end of a year of rapid growth. One has only to compare a new born infant with a year-old baby to realize the change. Physically the change is most noticeable. Most babies triple their birth weight during the first year, although the gain in weight during the last quarter is usually less than during the earlier periods. He has grown in height so that he is 25 to 35 inches tall, has less baby roundness, and is taking on the more child-like build. This change depends upon the family type, and also upon whether he is walking. Usually at least six teeth have appeared—the upper and lower central incisors, and the lower lateral incisors.

The gain in motor control is marked. At one year the average child stands with support and may stand momentarily alone. He walks, holding on to the furniture or an adult's hand. Some children walk a few steps alone and are able to climb up a low step. Walking depends upon the physical development of the baby and the opportunities he has had to develop his muscular control. If he gets about well by other means, such as a kiddie-car, walking may be delayed.

Hand coordination is one of the outstanding developments of this period. The baby picks up and puts down voluntarily his toys, using not only the entire hand to grasp with, but the thumb and fingers as well. To hold small objects for long periods causes fatigue so that toys should all be of the large variety. At this time the baby begins to be interested in holding his glass to drink from and wants to try to feed himself. Opportunities of this kind should be given but not prolonged to cause fatigue. With his increased skill in picking up objects or grasping desired objects extra caution as to safety must be exercised in the home to prevent the baby from being injured through tipping pans or pails or putting pins or nails in his mouth.

Using Language

The language development of the baby at a year usually consists of one or more simple words which may be recognized but most of it is

vocal play. Syllables are likely to be repeated over and over and most of the vocal play is a means of attracting attention through imitating the adults or children. Recognition of simple words is apparent as the child brings the doll or ball to the adult upon request.

The year-old baby is becoming more conscious and interested in those about him. He usually responds to attention from adults or children with a smile. If playing with a toy he may offer it to another child or use babbling or gestures to attract the other's attention. He imitates an adult and may attempt such play as "peak a boo", or "pat a cake". The infant indicates his wants by pointing, crying or pulling the adults arm to reach the object desired.

The Need for Play Space

The year-old baby has special needs differing from those of the younger or older child. Opportunities for play where he may safely experiment with his new means of locomotion need to be provided. A comfortable room in which breakable objects have been removed, which has a clean, well finished floor where he can move about and play freely helps the child to develop and frees his mother of many worries.

During the first 12 months of life, the infant has changed from the helpless babe whose movements were undirected, to the active baby who is able to get about and has some understanding of language, and may be using one or two words.



Fig. 1. The toddler is intrigued with the walking process.

THE TODDLER

The child between one and two years is often referred to as the "toddler" because of his characteristic walk and interest in getting about. The period between 12 and 18 months is usually the period when walking is perfected. The process is often so intriguing that language is neglected for a time. As soon as the ability to walk is established the child begins to run and climb and delights in his ability to get about. Stairs usually are fascinating to him and if accidents are to be avoided, he needs to be taught to turn around and come down backwards. As the ability to walk progresses, he holds on to the railing for help and walks up or down. Many children of this age operate a kiddie-car with a good deal of skill. They also enjoy pull-toys or push a doll carriage. Some children climb on a chair or davenport.

The hand coordination is also showing improvement. Fingers as well as hands are being used. Ball throwing is a popular activity and it can usually be thrown in the general direction of a person. The number of blocks piled in a tower is increased. Attempts on the part of the child to overcome obstacles such as opening drawers, gates, cupboards or boxes show both a gain in the use of the hands as well as the mental ability of the child to solve a simple problem.

Growth of Language

During the second year one indication of his developing mind is his growing vocabulary. Language ability differs greatly in children, owing to the speech they hear at home, background experiences, and whether the adults or older children in the home anticipate their wants. The number of words in the vocabulary shows little change in the period between 12-18 months. After 18 months it has been found to increase rapidly in number and change in form from the single word to express his wants such as "Go" or "Water" to a simple sentence. During the early years it is worth while to list the words used by the child while at play during frequent intervals. Nouns and verbs are used by the child first, later pronouns and prepositions enter his speech. His growth in language is rapid if questions are answered carefully and accurately. Give the correct name for familiar objects slowly and in a distinct manner. This helps him to enunciate more clearly. The use of "baby talk" should be avoided by the adults.

With improved hand coordination, the child enjoys turning the pages of books and magazines. Looking at pictures acts as a stimulus to conversation. Simple action pictures about which a short story can be told stimulate interest in books and stories, as well as language. Books made of heavy, stiff paper or of cloth make page turning easier for the child and help to avoid destructiveness.

Personality characteristics and emotional behavior trends are more clearly seen by the parent. Characteristic types of behavior other than crying are shown by the child when he suffers pain, hunger, fatigue or anger. His reaction to strangers, traits of independence, and quietness or activity are a few of those easily recognized.

THE TWO-YEAR-OLD

Physically the child continues to grow both in height and weight. His weight may vary from 22-32 pounds and his height from 30-37 inches at 2 years. His weight depends upon his height and body build. Boys are likely to be slightly taller and heavier than girls. Bodily proportions continue to change so that the head now seems smaller and the arms and legs longer in proportion to the rest of the body. The body is sturdy and well developed, lacking the baby roundness and is more child-like in build. The number of teeth continues to increase during the second year until 16 are present.

Muscular Coordination

Walking is now well established so that there is more grace in movement. The child runs as well as walks and shows increased skill in climbing and general body coordination. Although leg coordination is well established hands continue to be awkward.

Hand and arm control develops more slowly than leg control. The child uses the thumb and fingers but if used for more than a very short period fatigue is produced. In order to help the child develop the hand and arm muscles large blocks, beads, pegs and crayons are given to the child. With these the child develops hand and eye coordination without undue strain.

Most two-year-olds show a good deal of interest in the feeding and dressing processes. The two-year-old child can feed himself with a spoon and is able to drink from a glass without help. His dressing ability consists of the removal of clothing and the skill to put on loose slippers or shoes. These are interests which should be encouraged and are responsibilities suitable for a two-year-old.

His Relation to Others

During the second year as well as the first the social life of the two-year-old is characterized as solitary. He will follow another child about without actually participating in his play. Thus we may see several two-year-olds playing with blocks, each building individually, with none of the cooperation seen among older children. The two-year-old enjoys being in the sand box in the presence of others, but his short interest span causes him to wander frequently from one bit of play to another. One might characterize his play as being beside the group, rather than with it. Opportunities for contacts with other two-year-olds should be provided occasionally. Individual personality characteristics and emotional behavior trends are more easily recognized at this period by the parent. The child is beginning to recognize himself as a person who is able to make choices. This period is often a negative one because the child asserts himself as saying "no" frequently. At this time the child is learning to conform to the demands of society and is experiencing many pressures. Too much pressure may cause the negative tendencies to become set. Temper tantrums are frequently used by two-year-old children and are continued if they are found to work. In order that a negative attitude may be avoided care must be exercised in habit training.

Lack of emotional control is typical during this period. As the child grows older personality traits change for better or worse, depending upon the guidance given the child.

During the second year and on into the pre-school years much of the habit training takes place that is basic during the child's life. Responsibilities which center on the child's interest in dressing and washing and care of self should begin at this time. Toilet training has probably started earlier but by the second birthday the child takes some responsibility and is usually dry during the day time. Easily managed clothing helps the child to take responsibility for himself. Care of clothing and care of toys are also responsibilities possible for the two-year-old.

Two-year-olds continue to be babyish and dependent upon the parents although their desire to be independent is frequently a cause for friction. The parents' using the child's interests to develop responsibility and recognizing his need for activity help to make this period of development a happy one.

PRE-SCHOOL CHILDREN—THREE-, FOUR- AND FIVE-YEAR-OLDS

The three-year-old has changed a great deal from the helpless infant. The three-year-old varies in weight from 26 to 36 pounds, depending upon his height, and measures 31 to 44 inches. During his third year he has cut his second molar so that he now has 20 teeth, or all his so-called first or "milk" teeth. His growth during the fourth and fifth years is continuous so that he adds about five pounds in weight each year and grows about three inches in height. The fifth birthday brings the child to the close of the pre-school period.

During these early years of childhood the brain and nervous system have been growing and developing. Ninety per cent of the growth of the brain has been accomplished by the age of five or six, since at birth it is only one-half its normal size. Mental development is apparent as one observes the child's interest in the world about him and his conversational ability.

Language Development

He learns many things such as his name, where he lives, recognizes a penny and a nickel, and may recognize his name in print or writing. He enjoys repetition, so that a story frequently is requested to be read and re-read. Rimes and songs are enjoyed and learned readily during this time. Some children learn very early to carry a tune and to keep time to music through body motion or clapping.

Increased ability in carrying out directions is noted. At first only a simple direction can be carried through. Later errands involving as many as three or four separate instructions can be remembered correctly. Memory is also noticed in his ability to repeat after a single hearing a fairly long sentence.

As the period of early childhood closes, the child's language development is one of his most noticeable advances. His increased ability to comprehend is shown by his questions. These are no longer of the what, where, and why type, but now he wants to know what makes it go, or how it is made. Thus he learns about his world.

Sensory Development

Before three, the sensory development of the child is centered on touch. The child handles materials, shaking them to discover if they make a noise, pounding and handling them to find their hardness or softness. Sand is poured, patted and dribbled through his fingers and water is treated in much the same way. The sense of smell is not so accurate as it is later, but the familiar odors of orange, bacon or toast are recognized through odor alone. The sense of taste is becoming more acute. Some children distinguish between things that are sweet and sour, bitter or salty.

Powers of observation are also more acute, the child notices small details in color and design. He can distinguish between such opposites as large and small, light and heavy, hard and soft, rough and smooth, long and short, loud and soft, and right and left. Interest in color is usually apparent at this time. Familiar colors are more readily learned if named as he plays with the red ball, puts on the blue sweater, or paints green grass in his picture. The child's perception of distance and time are beginning to develop although these are more difficult for him to comprehend and are not accurate until much later.

Muscular Development

The motor skill of the pre-school child continues to advance. The child's movements show better coordination, greater skill in body control, and more grace and rhythm in movement. Many children learn



Fig. 2. Climbing helps the pre-school child to develop balance.

to walk on tip-toe, run, jump, hop and some learn to skip. All types of playground equipment are enjoyed by the pre-school child. He climbs a ladder, uses a swing, slide or seesaw with skill and walks up and down an inclined plank or steps alone. A home yard equipped with boards, boxes, barrels, ladders and saw horses on which the child may climb and play safely will help him to develop strong muscles and solve the problem of where the active child may play safely.* Wheel toys such as wagons, wheel barrows, and pedal kiddie-cars are used with skill, while the five-year-old is often seen propelling the wagon with one foot.

Motor coordination at the close of this period has developed to a point where the pre-school child is able to carry out most of the things he attempts. The results of his efforts are crude when compared with those of adults but they satisfy his needs.

Dressing Habits

The three-year-old can remove all his clothing, buttoning and unbuttoning large front buttons. He is able to put on shoes and outer clothing if it is of the loose, self-help variety.** With each succeeding year the child's ability to dress himself improves until by five he is washing and dressing himself with very little help from adults with the exception of tying shoes. Low hooks on which to hang his clothes, easy to open drawers, and a box or steps to stand on to help him reach the sink provide him with an opportunity to carry out personal responsibilities well suited to his ability.

Using His Hands

With improved hand coordination the child becomes interested in doing a variety of simple tasks and activities. Pouring milk from a pitcher, using a fork as well as a spoon to eat with, helping to set the table are tasks interesting to the pre-school child. Using a child's broom and pounding nails into soft wood show his progress in hand coordination. Painting, drawing with crayons, pasting and following a line while cutting with scissors are quiet creative activities which he enjoys and through which he may gain satisfaction in achievement. A pair of blunt scissors, a supply of crayons, paints and large sheets of paper help the child to occupy himself for long periods of time.

Finding One's Place in the Group

After the third birthday one notices a change in the child's group adjustment. He begins to seek playmates, who share with him his materials and activities. From now on his social relationships are more organized in form. The child enjoys playing with several children in the group. Children should have frequent opportunities to play with boys and girls of similar age. These may be obtained through a nursery school or play group if there is one in the community, inviting other children into the home or visiting homes where there are children. Through experience with other children he learns to share and co-

*Home Play and Play Equipment. U. S. Dept. of Labor, Children's Bureau, Bulletin 238.

**Fabrics and Designs for Children's Clothes. U. S. Dept. of Agr. Bulletin 1778.

operate. He is still very much of an individual, so that we find controversy and disagreement in the group, owing to his age and lack of experience.

When a child first enters a group he has little respect for the rights and privileges of others, unless this quality has been emphasized at home. The child attempts to take the desired object by the "grab or pull" method. Very quickly he learns that with some children this is successful, while with others he must use a different method. It is at this time that adult guidance may help to avoid the more serious quarrels. The adult may teach the child to use such terms as "That is mine", "I had it first" or "It is my turn now" as a method of defending his possessions and avoiding attacks. Through experience he may also learn to use strategy, such as offering the use of the cart, to the child having a desired tricycle. If the use of language is encouraged, and rules of behavior given, group adjustment goes on more smoothly.

EARLY CHILDHOOD—FIVE, SIX AND SEVEN

During this period most children have their first school experience. This may be either in kindergarten or first grade giving him an opportunity to be in a group having directed activity. They find themselves one among a group having similar ability and interests. Here they learn to share materials, equipment and attention and have their first experiences in organized groups and games. Simple songs, and stories are learned as well as foundation habits of health, hygiene and social adjustment.

School entrance is frequently a time for a physical check. Health plays an important part in successful school life. Each parent needs to question whether his child has any remedial defect such as defective vision or impaired hearing which affects school progress. Schools today are prepared to give special help to children handicapped in any way.

Physically the child of five, six or seven differs from his younger brother or sister in body build. Children during this period are usually slightly taller and more lanky than the younger child. Growth is slower; a gain of 2 or 3 inches in height is made annually and 3 to 6 pounds in weight is added. The amount of gain is not so important as the general health condition of the child. Eyes are bright and alert, muscles firm, posture good and the body functions normal so that the child radiates vitality and health. During this period the 6-year molar appears and the child begins to lose his first teeth. Both boys and girls during early childhood are extremely active. The control of large muscles is still superior to those of the smaller ones. They continue to enjoy using playground equipment and are more daring in its use. While running, jumping or skipping they show greater skill and bodily control.

Hand Skill

Their hand skill is improved and they are interested in using paints, drawing materials or clay for creative work. Many begin during this period to write, but it is a labored process and the child lacks the joy in the activity which one sees during the more active types of play.

Intellectual Development

The child's intellectual development is apparent as one observes the child's interest in the world about him and his conversational ability. Children of these ages are capable of using long sentences which may be used to tell a story or simply express an idea. Questions still continue to hold an important place in the child's conversation.

Most children learn to read during this period. This will depend on the child's intellectual ability, the physical development of the eyes and his experiences. Less importance is now attached to the child's ability to read early in life than that he has the right kind of help when reading readiness appears.

Interest in numbers and time is more apparent at these ages than earlier. Children continue to be confused by such terms as "yesterday", "tomorrow" or "in an hour". Most children count successfully but are confused by quantity terms using "100 children" when they mean 20 were present. Using definite figures with the object helps the child to keep numbers more clearly in mind. Simple subtraction and addition are possible for most seven-year-olds.

Dramatic Plays

Group play during this period shows greater cooperation among the group members. Another characteristic is interest in the dramatic. Children of these ages imitate the household activities of their mothers,



Fig. 3. Dramatization of household activities is enjoyed by this age group.

the work of their fathers, the doctor, nurse, grocer, fireman or postman with whom they are familiar. They enjoy playing materials which will help them to carry through the dramatization although their vivid imaginations are used to transform the piece of cheese cloth into the wedding dress, or several carts and tricycles into a train.

The child during this period is very much of a person who has ideas of his own and needs to feel himself an important part of the family. At the close of this period he is able to dress and care for himself including the tying of his shoes. Simple tasks about the home give him a feeling of shared responsibility for family life.

The period of early childhood has brought to the child his first experience with formal education. Physically, his large muscles are well developed and the coordination of the smaller muscles has shown marked improvement. Dramatic play occupies much of his time, because of his interest in people and activities. Conversation and language ability have grown to the point where they are in constant use during group activity.

CHILDHOOD—EIGHT-, NINE-, TEN- AND ELEVEN-YEAR-OLDS

During the period of late childhood both the boy and girl grow more slowly than during the earlier years. Usually they are healthy, sturdy individuals who are seldom ill. Accidents are their particular hazard, probably owing in part to their daring and activity. They continue to be rather lanky with wide variation in size within the same age range. Although outward appearance shows little change, many internal changes are taking place. The muscular, digestive, and circulatory systems are developing preparatory to the adolescent period.

Intellectual Growth

Childhood is frequently called the school age period, when the child is learning to read, write, do arithmetic, and acquiring a foundation of education. The stories at first are very simple, but later those with more plot are enjoyed. Interest in rimes, riddles, and simple conundrums is one of the indications of the child's growing language ability. As his language development increases he may attempt stories, letters, or rimes of his own composition. By saving examples of children's compositions from time to time the parent is able to follow this development.

Many concepts such as names of days of the week, months of the year, and seasons of the year are learned. Interest in number concepts appear. These include the number of days in the week or month, pennies in a nickel or quarter. Thus, he learns the value of the various coins and is able to make change. Ability to tell time is developing, as time influences his activities.

After the child enters school, the parents find that the child's school record gives them an indication of the child's intellectual progress. It is well to record both his favorite subject, and the most difficult subject.

Children show wide differences in their intellectual ability. Some children seem to have special abilities or characteristics differing from

other children. One child is gifted in a particular way, such as memory for pictures, stories, rimes or music, memory for persons, places or objects, or in the use and understanding of language. Some have a wide range of information that they have acquired; others show unusual ability in the use of reasoning and judgment, still others in dealing with people or situations.

Interest and Activities

The child during this period is likely to be a sturdy, noisy, active individual. He is more daring in his climbing, jumping, and acrobatics, made possible by the child's improved motor coordination. Swimming, skating, bicycling, skiing, and baseball games are likely to occupy their free time. The coordination of the large muscles is well established but the finer coordination of the hands are still developing. Boys at this time enjoy using tools and drawing materials. Their creations are likely to be crude owing to their lack of skill. At times their desires out-do their skill, and unless guidance, direction, and encouragement are given by the adult, they become discouraged and quickly lose interest. A bit of praise and encouragement may mean the gaining of a valuable skill if this period of interest in tools is utilized. Girls enjoy making doll clothes and attempting simple cooking. These interests are worth cultivating. The girl, like the boy, needs encouragement and guidance so that she may develop skill while the interest is present. Responsibilities based on interests in her own room, helping to prepare



Fig. 4. Sand-lot baseball appeals to the boys of the family.

meals, and similar tasks are more interesting to daughter than dish-washing, or the routine type of chore. The boy of the family enjoys using tools to make simple repairs, help care for the garden, and care for his room. Children of this age need a share in home responsibilities as well as home pleasures.

Group Associations

Children, during the first of this period, play in loosely organized groups. They are interested in excelling and thus gain attention rather than in group welfare. Their play is likely to be rough and noisy. Boys and girls tend to gather in groups of their own sex, the boys playing the typically boy games, while girls stay closer to home, being more woman-like in their activity.

The games, sports and activities of the 11-year-old continue to become more complex and highly organized as he approaches the adolescent period. The increased body skill, manual dexterity, and ability to work or strive toward a definite goal are readily recognized. One finds the child a member of a group which recognizes the need for specialization in games and sports. Individualism is beginning to be replaced by group loyalty, but the conflict between the desire for individual superiority and team success, will continue for a time.

During the years between the children's eighth and eleventh birthdays they show a growth in maturity and self-sufficiency. They are healthy, active children with ideas of their own. In their play the boys and girls are drawing apart with fewer common interests. Their school placement and mastery of subject matter gives us an idea of their intellectual progress.

EARLY ADOLESCENCE—TWELVE-, THIRTEEN- AND FOURTEEN-YEAR-OLDS

The term "adolescence" is used to designate the years between childhood and adulthood or the second 10-year period in the child's life. Adolescence is often confused with puberty or the time the child matures physically. It is, rather, a period in the child's life when physical growth and development is completed and the child becomes an adult.

Physical Development

During the twelfth, thirteenth, and fourteenth years children begin to assume a more mature appearance. This is due to physical changes which are taking place. Research has shown that girls mature earlier than boys, or some time between 11½ and 15½ years. Boys mature between 13½ and 17½ years. Because of this one frequently finds the girl taller and showing feminine characteristics before the boy begins to have a growth spurt and develop the masculine characteristics. Owing to the girl's rapid growth during these years of early adolescence, she is likely to be irritable, tire easily, and tax her parents' patience. There are wide variations among both boys and girls as to the time of maturity.

Growth is taking place in all parts of the body during the adolescent period so that every portion of the body is being altered. The facial expression is changing, owing to the growth of the nose and jaws. Arms and legs are growing in length, the boy's shoulders broaden and the body thickens, while the girl who has lacked hips is developing them. Internally the vital organs are developing and adjusting to care for the child's maturing body. The secondary sex characteristics in the boy and girl precede evidences of sexual maturity.

Young adolescents frequently astound their parents with their tremendous appetites. Food is needed for growth, their strenuous activity program, and for repair. A well balanced diet is the need of these boys and girls although one frequently finds girls dieting because they worry over their increased weight. As the period progresses, body proportions become adjusted if the child is physically healthy.

Poor posture and awkwardness are problems common to this period. The rapidity and unevenness of development and the comments of adults about size and awkwardness of boys and girls are often contributing factors to self-consciousness about their growth. Suitable clothing, wholesome exercise and an understanding attitude on the parents' part is found to help the child.

School Placement

At approximately 14 years there is a change in school placement. The child enters high school, meeting children from a number of communities if he comes from a rural school, or from several sections of the city if he comes from a city school. Here he is given greater responsibility and is required to adapt himself to the larger group having similar ability. These children are interested in many and various subjects. They are keen to learn—some are interested in classical subjects while others enjoy the more practical.

Young adolescents show wide variations in mental ability for the same chronological age although research shows neither sex to be superior or different from the other. Where differences occur, they are due to guidance and experience rather than innate ability. Children of this age are beginning to show more judgment and can be allowed to make some of their own decisions.

Group Adjustment

The earlier maturity of the girl influences her social development. She is interested in doing the socially mature things, such as going to parties, dances and other activities often considered suitable for the older girl.

At this time one finds girls and boys interested in separate group activities. The desire for clubs and gangs with their secret rituals, and special meeting places, is characteristic of this period. One finds that boys are likely to be shy and awkward in the presence of girls, the same is true of girls in the presence of boys but not to so great a degree. The girls social development corresponds to her physical development.

During early adolescence both boys and girls show marked physical changes. It is a time when one day the child want to play the games

and have the care of a young child. The next, they want the freedom and independence of an older child. Because this is a cycle which ties these two periods of life together characteristics of both ages are found in children of this age. Parental patience, sympathy and understanding will help the child to make the transition more smoothly.

ADOLESCENCE—FIFTEEN-, SIXTEEN- AND SEVENTEEN-YEAR-OLDS

The last stage of childhood is usually called the adolescent or youth period. These are the years just before the law recognizes the girl legally as an adult at 18, and the boy at 21.

Physical Development

Increase in height continues although it is slower than during earlier years. The boy continues to grow, sometimes as late as the twenties, but a girl attains her mature height earlier. Boys and girls have a more mature appearance. Body proportions have become those typical of young adulthood. Since much energy is used in growing, parents frequently complain of the adolescent's so-called laziness. Rest and adequate diet help provide the body with energy. Tuberculosis, a disease frequently found among young people, is one to be guarded against during adolescence.

Intellectual Development

As the child enters late childhood and early adolescence it is difficult to separate his mental growth from experience and interests. Psychologists agree that the ability to learn increases with age. The gain is the result of two things: (a) increased capacity, due to being a more mature individual, and (b) the ability to profit from experiences of his own and of others. The older child or adult, when faced with a problem or situation to solve, stops to think it through, while the child with less experience, attacks the problems using a trial and error method. The adolescent is more willing to accept the experience of others and profit by their mistakes, to make his own decisions, use judgment, and adapt himself to the situations.

With the increase in age such character traits as self-reliance and dependability are apparent, while originality and ingenuity are shown in a variety of ways. These may involve experiments with materials of all types.

The adolescent is interested in doing things which require coordination of mind and body and offer intellectual challenges to develop skill. He may learn to row or sail a boat or paddle a canoe. Playing tennis, golf, baseball, football, driving a car, using a gun or a typewriter are all motor skills which appeal to this age. The use of the sewing machine or other mechanical household devices appeals particularly to the girl, while the boy enjoys the challenge of machinery of various kinds.

Responsibilities which involve judgment, cooperation, and initiative have greater interest. They wish to be considered grown up and challenging responsibilities help them to feel important. Interest in money

is more pronounced as their wants increase and many boys and girls earn all or part of their spending money.

At this age one finds the boy and girl differing in their social adjustment. The girl at first associates with girls her own age. She is much more likely to attach herself to a particular girl or chum with whom she shares her confidences, than to be a member of a group. Frequently the chum is a bit older, and is one from whom she acquires much information as to dress, social events and the like. Girls appear to be at this time more socially mature than boys of similar age. Boys, to the girl of 14-16, are no longer merely convenient playmates, but are interesting boys, and they prefer them to be a bit older than they are themselves.

The girl enjoys parties, dances, entertainments, and all types of social contacts at which both boys and girls are present. During these latter years opportunities for contact with the opposite sex under wholesome conditions are necessary, if the girl is to develop into a well-adjusted woman. In the case of the boy, although he too is making his adjustment to the more varied high school group, his change is slight compared to that of the girl. Club, team and gang continue to engage his interest, although clubs are more organized in form. One finds the boy tending toward hero worship. Interested in the activities and abilities of the current sports or national hero, he is likely to imitate him in dress, and behavior. His shyness of girls continues until approxi-

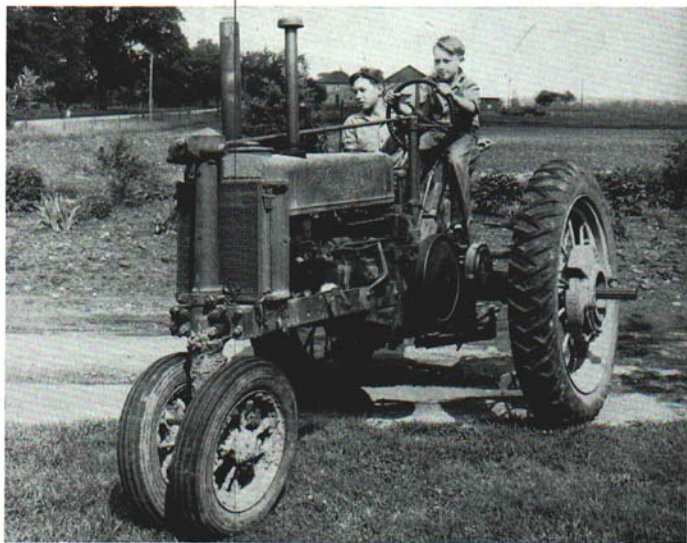


Fig. 5. Responsibilities involving the use of machinery appeal to the older boy.

mately 16, when he begins to be conscious of the girl. At first there are many friendships; later he finds the special girl who will become his wife.

Social dancing, folk dancing, sports, dramatics and music are enjoyed. These all serve as a wholesome means of social contact for boys and girls. The wise parent will encourage them to bring into the home their friends and companions. Space where they may entertain their friends will be a worthwhile investment. This can be the dining room converted into a second living room, or a basement playroom that can be used to entertain the crowd. The boy or girl will enjoy helping to make these changes if given an opportunity.

The growth of the child is an orderly process. Physical growth is continuous from birth through adolescence, while emotional, mental and social growth have their beginning in childhood but continue through life. Each child is an individual growing at his own rate sometimes showing characteristics of several periods. Parents and communities have the responsibility of seeing that each child develops to the fullest those potentialities with which he is born.

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Children's Bureau, U. S. Dept. of Labor:

Prenatal Care, Pub. 4. 1935. 10 cents.

Infant Care, Pub. 8. 1939. 10 cents.

Baby's Daily Time Cards. 10 cents for set.

The Child from One to Six, Pub. 30. 1937. 15 cents.

Child Management, Pub. 143. 1937. 10 cents.

Are You Training Your Child to be Happy, Pub. 202. 1938. 10 cents.

Home Play and Play Equipment, Pub. 238. 1937. 10 cents.

Guiding the Adolescent, Pub. 225. 1933. 10 cents.

Bureau of Home Economics, U. S. Dept. of Agriculture:

Fabrics and Design for Children's Clothes, No. 1778F. 5 cents.

Food for Children, Farmers Bulletin No. 1674F. 5 cents.

Good Food Habits for Children, Leaflet No. 42. 5 cents.

The above-mentioned bulletins may be purchased from the Superintendent of Documents for a small fee.

Michigan State College of Agriculture and Applied Science and U. S. Dept. of Agriculture co-operating. R. J. Baldwin, Director Extension Division. Printed and distributed under act of Congress, May 8, 1914.

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