

## CHAPTER FOUR

### DATA AND INTERPRETATION

#### 4.0 Introduction to the Chapter

The findings of the study are discussed under seven sections. The first section gives a description of each drawing done by institutionalized and non-institutionalized children while the next six sections present the findings related to each of the hypotheses in Chapter One.

#### 4.1 Description of the Drawings

Each subject was required first to draw a picture of his/her family and then a scene at the playground. The drawings of the eight subjects are discussed below.

##### 4.1.1 Drawings of institutionalized children

The institutionalized children depicted their figures in the conventional schema and they included the main body parts such as the head, torso, arms and legs but the drawings displayed poor integration and asymmetry of the various body parts. Each of the body parts, especially the torso and the limbs, were drawn as a line instead of a region which could be denoted by double lines. Where double lines were used for the limbs or torso, the human figures were not proportional and they showed asymmetry. Furthermore, the figures were not complete and items such as the

facial features, hair, neck and extremities were partially or completely omitted.

The colour schemes used by this group of children were unconventional, making the figures look unnatural and frightening.

#### CASE 1

The drawings, by Case 1, a five-year-old institutionalized boy, are shown as Figure 4.1 and Figure 4.2.

##### a) Drawing of the Family (Figure 4.1)

In the drawing of the family, Case 1 drew a human figure, a house and three suns. A large house complete with two windows, a door and even a chimney was drawn in the middle of the page. The right side of the house is surrounded by a human form drawn as a stick-figure and three suns, two in the sky and one on the ground. The subject drew a self-portrait and did not include the mother in the drawing. The human figure has a large head but no hair while the limbs and the torso are drawn as lines. The head coloured pink includes the facial features but the mouth is over-emphasized and coloured orange. The human form has the left arm significantly longer than the right and the extremities are totally absent. The whole imposing house is coloured orange except for the chimney which is pink. The windows of the house are rather small compared to the size of the house and the door and windows are latticed. The two suns in the sky are pink and green while the one on the ground is pink.

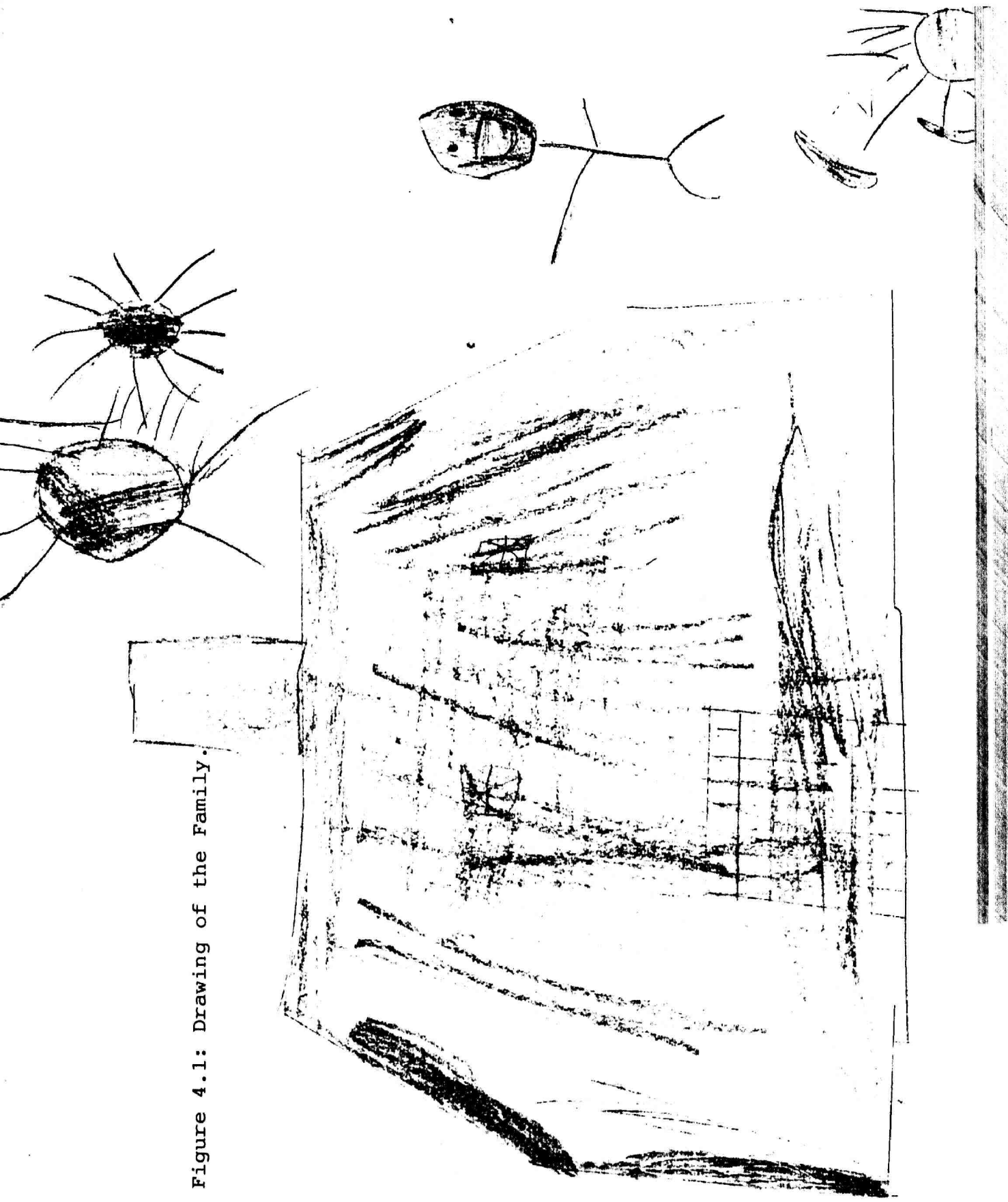


Figure 4.1: Drawing of the Family.

b) A scene at the playground (Figure 4.2)

The playground scene consists of one human figure and several elements such as two suns, two trees, a hammer, a triangle, some black patches and a pool of water. The human figure is drawn on the left side of the page while all the other elements are placed on the right. The human figure, a self-portrait, also has a large head without hair while the limbs and torso are drawn as lines. The right arm is significantly longer than the other. The whole figure coloured black, displays a huge circular mouth. The other facial features and the extremities are totally absent.

The two orange suns drawn next to each other in the sky have facial features and look queer. While one sun has a smiling face, the other has teeth which makes it look fierce. The two trees in the drawing are well-drawn and placed on the extreme right of the page. One of the trees is an apple tree with falling fruits but is drawn in line with the suns. The tree and fruits are outlined in black but coloured green. However, the trunk is left uncoloured. The other tree, drawn below this fruit tree is smaller and outlined in brown but coloured green. Between these two trees is a pool of green water. When interviewed, the subject revealed that the black patches consist of pools of water and a snake. The hammer depicted as long stick with a short iron at the end was used to kill a snake in the playground.



## CASE 2

The drawings by Case 2, a seven-year-old institutionalized boy, are shown as Figure 4.3 and Figure 4.4.

### a) Drawing of the Family (Figure 4.3)

The drawing of the family by Case 2 is baselined. The drawing consists of three figures placed in the middle of the page with one figure at the extreme right. The figures in the middle are drawn close to each other and probably represent the members of the family. The fourth figure is drawn smaller and further away. The drawing of the parents is very colourful. The father has a hairless head with green facial features and no neck. He wears a magenta outfit with a black tie. The legs are yellow while the arms are dark pink. But there are two sets of extra "limbs", one yellow and another pink, attached on either side of the torso. Like the father, the mother also has a hairless head with green facial features and no neck. The torso, represented as a single line, is left uncoloured. This figure also includes two extra blue "limbs" attached to the torso. The arms are magenta while the legs are blue. This figure, with outstretched legs, appears to be flying. The figures are drawn using double lines to represent the head, torso and limbs. The father and mother have "extra" colourful club-like limbs attached to them which appeared odd and uncomfortable.

An extremely small figure is tucked between the two adult figures. This whole figure, consisting of a broad torso and two arms and legs, is black. The head, displaying the facial

Figure 4.3: Drawing of the Family.



features clearly in black, is hairless and neckless. The fourth figure at a distance seems to have a beard suggesting it is a male. When interviewed, the subject was reluctant to reveal the identity of this figure. However, this figure had the arms tucked at the sides and legs pressed together. This figure was left uncoloured.

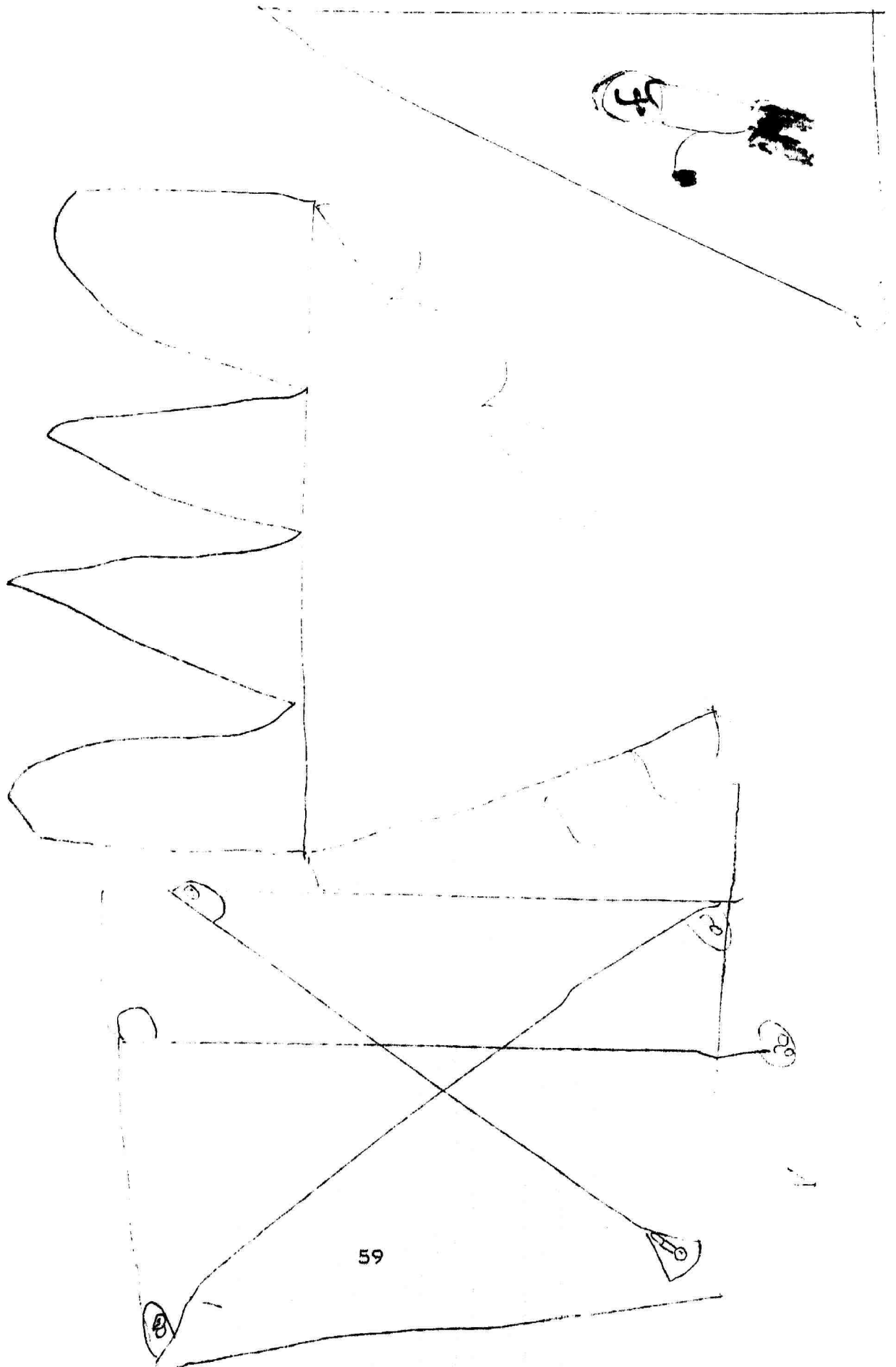
) A scene at the playground (Figure 4.4)

In the playground, this subject drew a monkey bar, two slides and a figure. The park equipment covers the whole page and the figure is drawn, on a slide, on the extreme right side of the page. The human form consists of a round head on a cylindrical torso attached by two legs and a right arm. The arm is represented as a line with a red clenched fist to represent the hand. No other extremities are shown on the figure. The hairless head has no neck but includes a pair of red eyes and nose, and a yellow turned down mouth. The legs are drawn as two short cylindrical tubes and includes the genitals. The legs are coloured red but the genitals are of a darker red colour. The subject left the rest of the drawing uncoloured.

The monkey bar is a large square with straight and diagonal lines drawn to form an iron frame. The slide in the middle of the page is a large triangle with big loops drawn all round the three sides. Both these equipments are colourless. The second slide on the extreme right of the page is also a triangle.



Figure 4.4: A scene at the playground.



### CASE 3

The drawings by Case 3, an eight-year-old institutionalized girl, are shown as Figure 4.5 and Figure 4.6

#### a) Drawing of the Family (Figure 4.5)

In drawing the family, Case 3 drew a house and five human figures. The enormous house covered the whole page and the five figures were floating on the left side of the house just below the roof. All the human figures, having faceless *pin-*heads, are drawn with a single line to show the long torsos and short arms and legs. The extremities and facial features are totally absent in all the figures. Only one figure has some hair. Two of the five figures are smaller than average. Four of the figures are blue while one is green. The faces of all the figures are completely blank and black.

The house has a yellow roof consisting of colourful lines evenly spaced out. The two windows are large and coloured red and purple, with a purple and blue outline respectively. The brown door outlined in green is exceedingly small, suggesting a trapped environment. When asked to describe the figures, the subject said the figures represented her parents, sister, little brother and herself. However, according to Mr Lim, the manager of the Shelter Home, the subject is the only child.

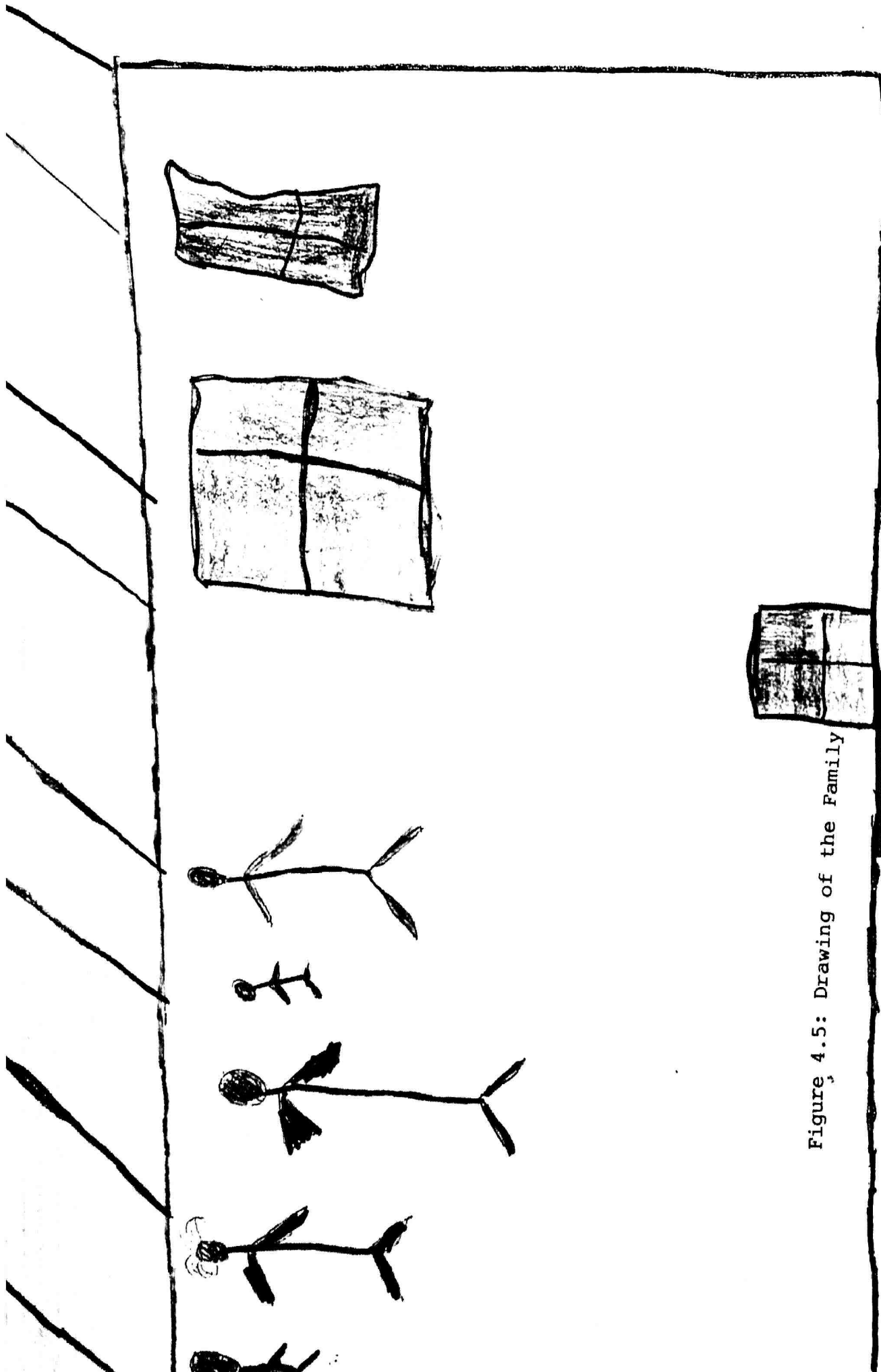


Figure 4.5: Drawing of the Family

**b) A scene at the playground (Figure 4.6)**

In the playground, this subject drew three figures in the middle of the page with some straight lines and loops around the figures. The figure on the top of the drawing is upside down and clearly visible while another figure on the left side of the page is upright but extremely small. A third figure, drawn between the two figures, has two heads attached to the two ends of the torso. As in the first drawing, the human figures are again faceless and hairless. The torsos and the limbs are also drawn as a single line with the hands and feet totally omitted.

The whole picture is scribbled with some circular and dark straight lines in pencil, then coloured haphazardly in blue. When asked to explain the drawing, the subject revealed that the picture showed her sister, little brother and herself climbing on an iron frame.

**CASE 4**

The drawings by Case 4, an eight-year-old institutionalized girl, are shown as Figure 4.7 and Figure 4.8.

**a) Drawing of the Family (Figure 4.7)**

In drawing the family, Case 4 presented only two human figures. Both the figures were large, grotesque and colourful. The larger figure on the right has pink hair on a large brown face. Only the eyes, in black, are visible and outstanding. The

Figure 4.6: A scene at the playground.



other features, coloured over in brown, are unclear. The blue torso has all the limbs attached to it but the limbs are colourful and asymmetrical. The left arm is black but extremely short with short fingers while the right arm is brown but slightly longer and slimmer with a circle to denote the hand. The figure also has two asymmetrical purple legs, the left leg broader than the right. All the body parts are drawn as double lines.

The smaller figure is slanting and more colourful. This figure with dark pink hair on a big blue face contains only the eyes and prominent teeth. The limbs drawn as double lines are attached to the torso. Like the larger figure, this figure also shows asymmetry. The two arms are green. While the left arm is shorter with a hand showing numerous fingers, the right one is thin and long ending with a clenched fist. The two green legs are also of different sizes; the right broader than the left. This figure has on a yellow blouse and a pair of dark pink shorts. When asked to explain her drawing, she revealed that the figures are her friends, Indra and Kong.

**b) A scene at the playground (Figure 4.8)**

In the playground, this subject drew a large oval shape on a broad green rectangle. A face, consisting of eyes and thick eyebrows, is drawn on this oval shape. The face is green but it shows a purple frame all around it. There is a green yam plant with a brown stem on the left of the page. When interviewed by the Chinese tutor (who is the interpreter for Case 4), the subject said, she had drawn a baby wrapped up in a blanket placed on



Figure 4.7: Drawing of the Family.



Figure 4.8: A scene at the playground.



a river. Upon further prompting, she said that the baby represented Jesus and her drawing was related to a story she had recently heard in the Shelter Home.

#### 4.1.2 Drawings of Non-institutionalized Children

The drawings produced by non-institutionalized children had esthetically well-balanced forms and some of the drawings showed quite developmentally advanced features. The human figure drawings had good structures, details and symmetry with the correct ordinal size scaling of figures (house bigger than man, man bigger than sun).

The figure produced by this group of children were also in the conventional schema which included the main body parts such as the head, torso, arms and legs. They represented integrated body parts with all the facial features and limbs present. The figures had the torso and the head as a region while the limbs were drawn as double lines finishing off with hands/fingers and shoes/toes. Whilst all the non-institutionalized children drew their human figures in the canonical view, that is, they faced the viewer with legs apart and arms held away from the torso. Case 6, aged 7 years, presented all the figures in a profile schema.

The colours used by these children were well-coordinated, natural and pleasant. These children also used conventional colouring schemes.

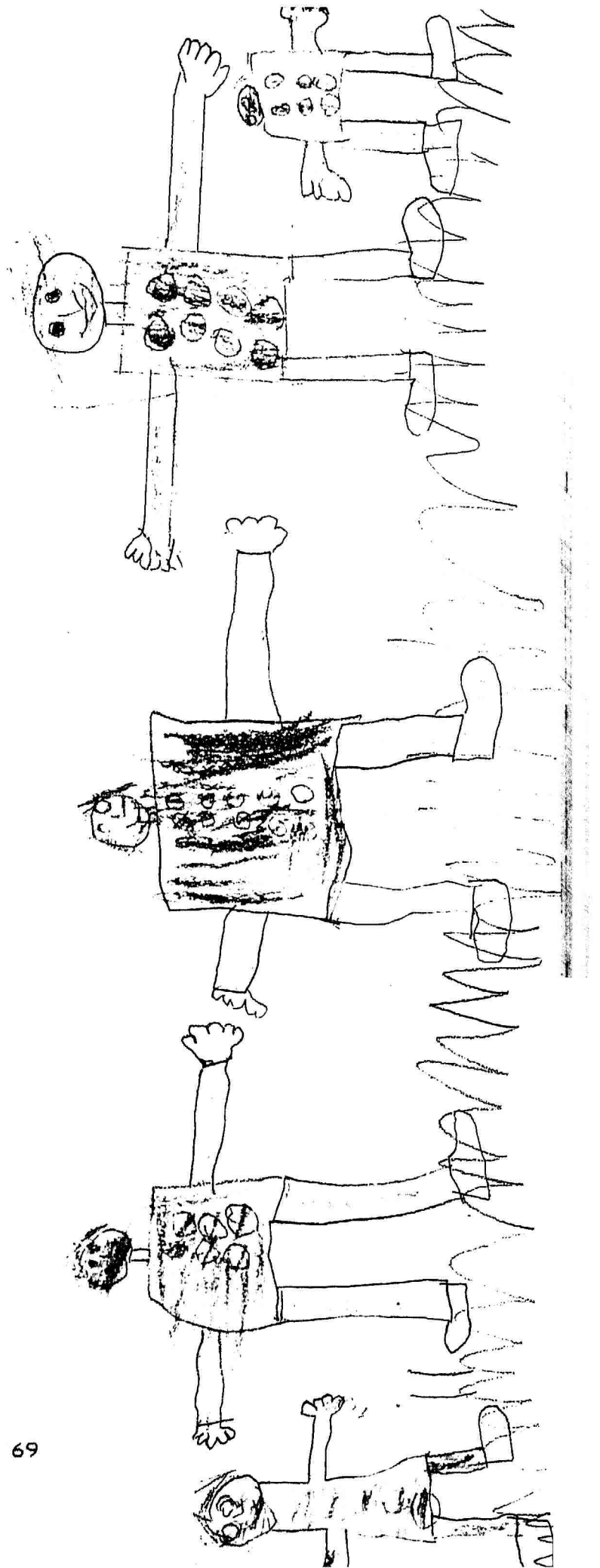
## CASE 5

The drawings of Case 5, a five-year-old non-institutionalized boy, are shown as Figure 4.9 and Figure 4.10.

### a) Drawing of the Family (Figure 4.9)

The drawing of the family by Case 5 is baselined. It consists of five figures, evenly spread out across the page. The family is complete in the picture comprising of the parents, an older brother, a younger brother and himself. All the figures are constructed out of simple shapes, in a segmented way. For example, each figure has a round head sitting on a rectangle/square torso with limbs drawn as double lines and attached to the torso. The figures also have hair, facial features and extremities. The figures are coloured with some basic colours to make distinctions between the various body parts and the clothes. For example, the two figures on the extreme right and left sides of the page have on yellow tops and blue pants. The three figures in the centre are in red tops and blue pants. All the faces and arms are coloured brown while the hair is black. The family is drawn outdoors with colourless grass and a skyline, consisting of a yellow sun and some colourless clouds.

Figure 4.9: Drawing of the Family.



b) A scene at the playground (Figure 4.10)

In the playground, Case 5 drew a human figure in the foreground and two castles attached by a bridge in the background. In the sky, he draws a yellow sun and some colourless clouds. The human figure is drawn in a segmented way and represents the subject. The self-portrait has a yellow hairless head attached to a brown torso by a neck. The facial features are clearly depicted and shows a smiling face. The limbs are drawn as double lines and attached to the torso. The yellow arms have hands and fingers while the brown legs end in a pair of purple shoes. The figure has a red outfit. The two castles in the background, coloured brown and dark pink, are joined by a purple bridge.

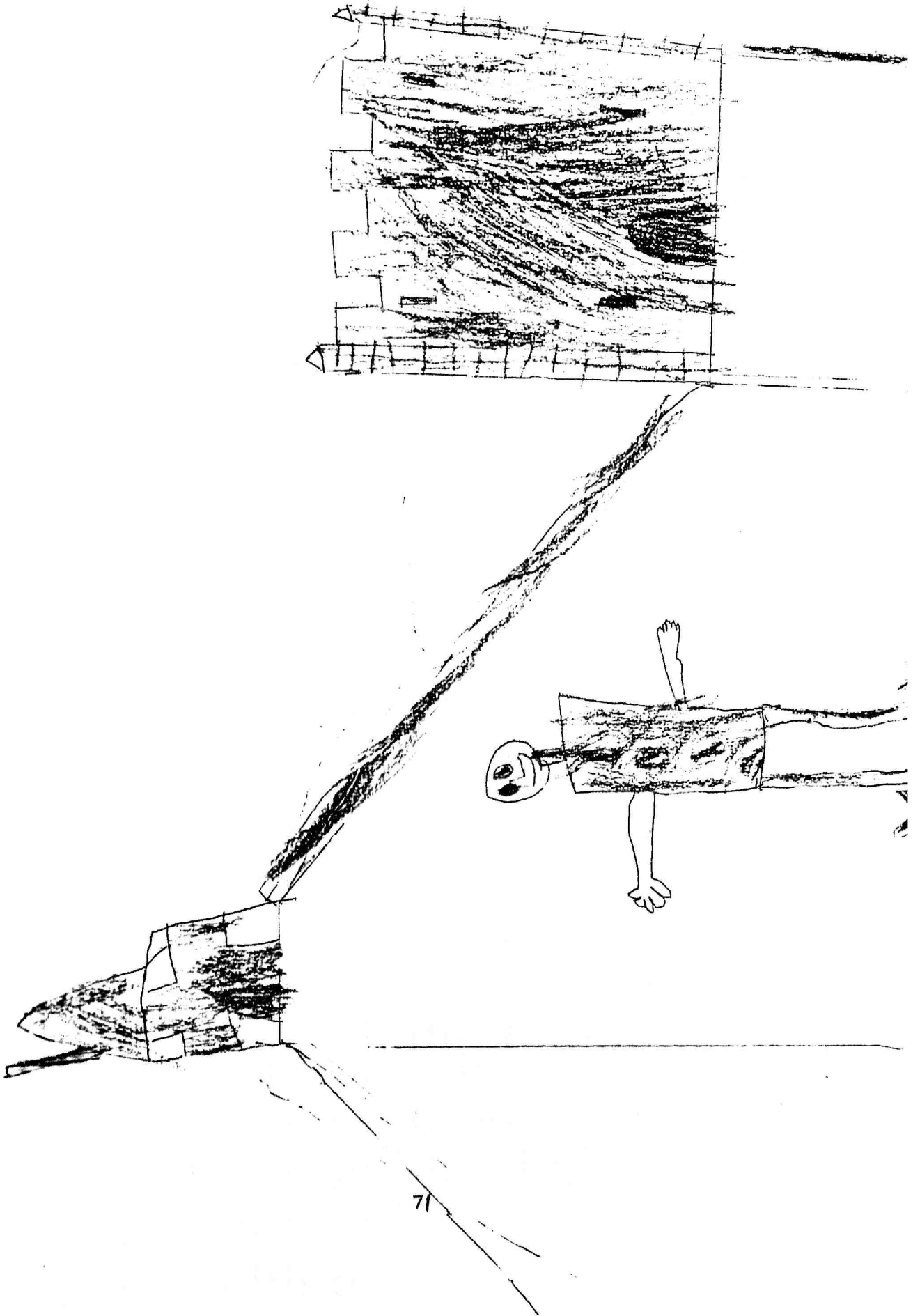
CASE 6

The drawings by Case 6, a seven-year-old non-institutionalized boy, are shown as Figure 4.11 and Figure 4.12.

a) Drawing of the Family (Figure 4.11)

The drawing of the family by Case 6 is baselined. The drawing consists of four figures drawn on the left side of the page. All the members of this family have a profile schema, thereby the body parts are drawn in a side view. These figures are drawn in ascending order, namely the subject, his older brother, the mother and the father. All the figures display a head, torso and limbs as well as facial features and extremities. The self-portrait has a big head with large eyes and black hair.

Figure 4.10: A scene at the playground.



He is dressed in a purple shirt and has a pair of black pants. The brother, having a large and prominent nose, is dressed in an orange shirt and black pants. The mother, with short curly hair, has pink lips and a long neck. She is dressed in a black blouse and blue pants. The father, depicted as a tall man with a big nose and a long neck, is dressed in a blue shirt and a pair of black pants. The face and the arms of all the figures are coloured brown while the hair is coloured black. The profile figures also display transparency whereby the right arms of all the figures and the torso of all the male figures show occlusion. All the members of the family appear happy and smiling.

b) A scene at the playground (Figure 4.12)

In the playground, Case 6 drew a seesaw in the middle of the page with eight children. Two children are sitting on the seesaw while the rest are on either side. Like the first drawing, all the figures are again in the profile/side schema. Most of the figures are also very small in size. However, all the human figures have heads, torsos and limbs. The head is a region but the torso and the limbs are drawn as a single line. The facial features, extremities and hair are present and clearly depicted. The tiny figures on the right side of the page are lined in black but they all have pale yellow faces and black hair. The other figures on the left have brown or yellow faces and black hair. The torsos and limbs are lined in brown, purple and yellow. The hands and feet/shoes of all the figures are also coloured. This scene has a green grassline.

Figure 4.11: Drawing of the Family.

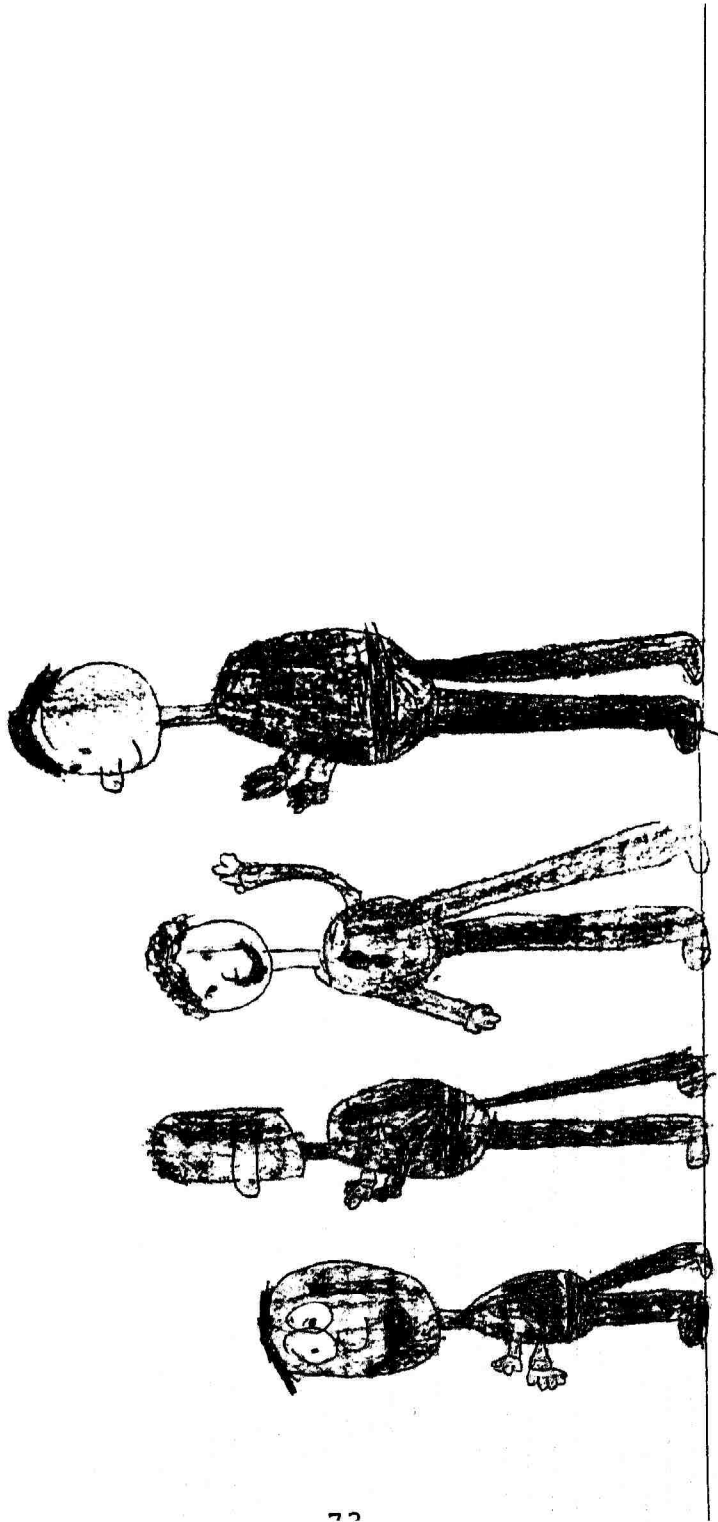
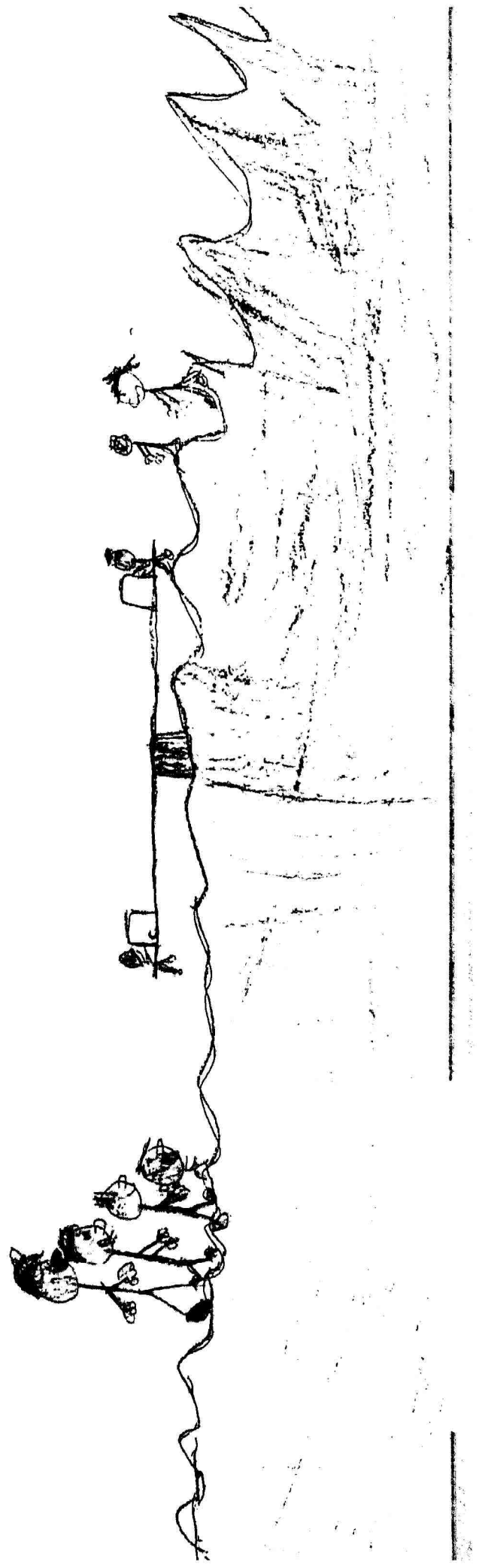


Figure 4.12: A scene at the playground.





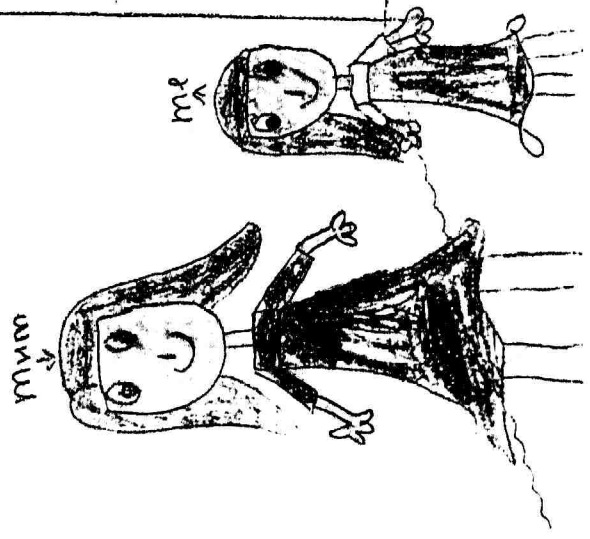
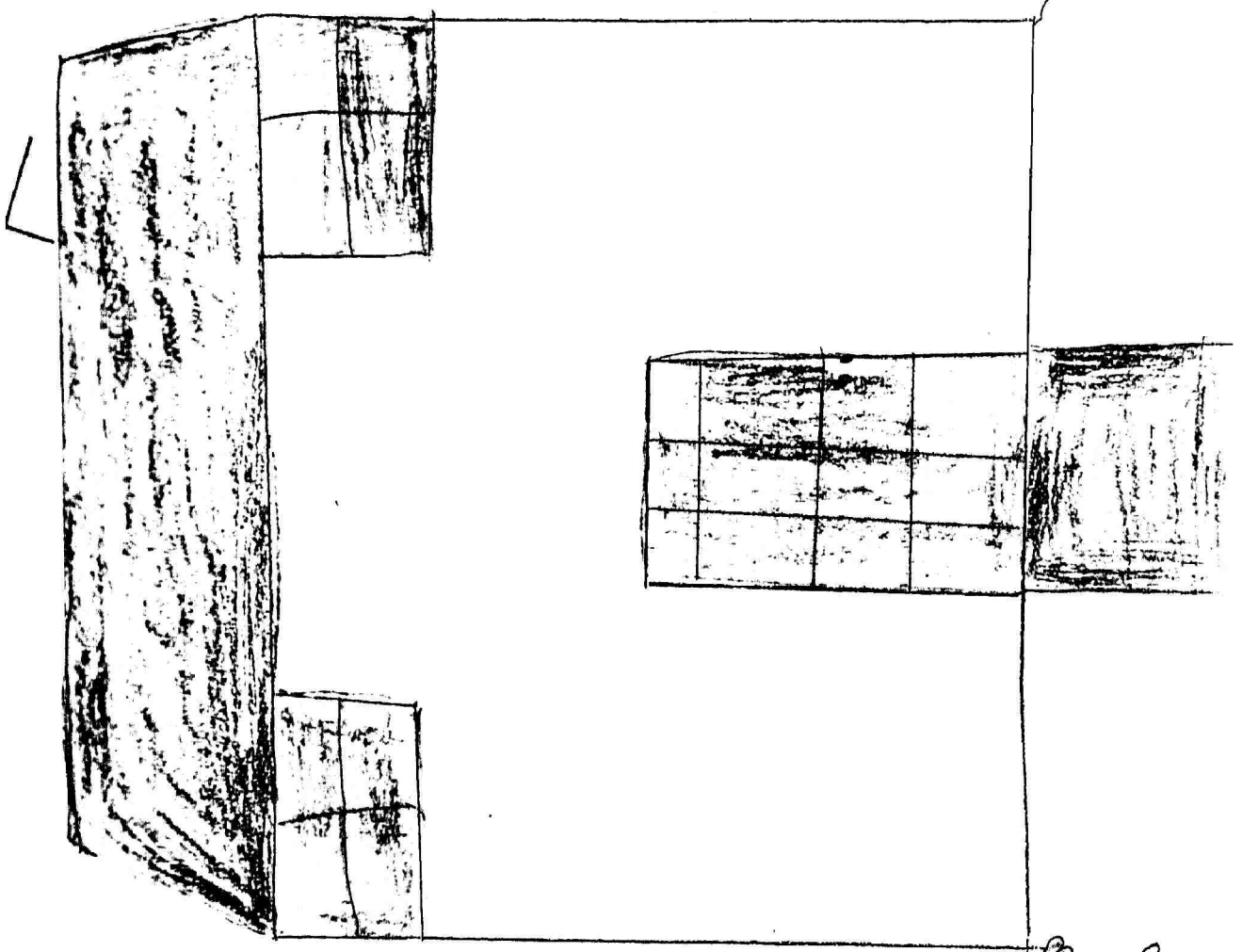
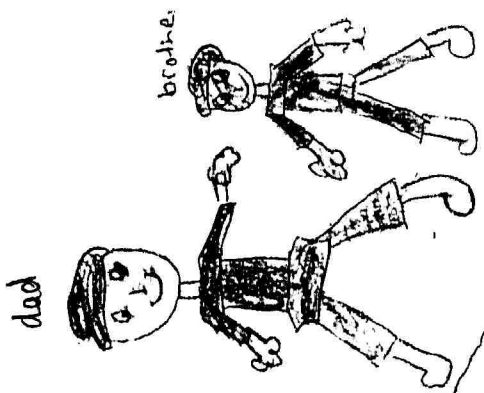
## CASE 7

The drawings by Case 7, an eight-year-old non-institutionalized girl, are shown as Figure 4.13 and Figure 4.14.

### a) Drawing of the Family (Figure 4.13)

Case 7 drew an enormous house in the middle of the page with two figures on either side of the house. The figures are clearly labeled to show all the members in the family, comprising the parents, older brother and the subject. The human figures contain all the body parts realistically to proportion. The heads have smiling faces displaying all the facial features clearly. The torsos are colourful, to show the various clothes of the figures and the limbs are drawn as double lines. The extremities and necks are also present in all the figures. The mother with long black hair is dressed in a green dress. The subject also with long black hair is dressed in an orange dress. The father is dressed in a purple and spots short black hair. The brother also with short black hair is dressed in a blue outfit. All the faces, limbs and extremities are coloured yellow.

The house, consisting of a green and blue window and a red door, displays an aerial on the red roof. All the windows and door are latticed. The picture is in the outdoors and displays a yellow sun in the left-hand corner of the page.



b) A playground scene (Figure 4.14)

The playground scene showed the foreground, consisting of green grass with two figures and the background, showing a yellow sun and a blue cloud. The figure, on the red slide, has a smiling face with long black hair. She has on a long purple dress showing the hands and fingers quite clearly but the legs seemed to be cut off. The figure standing on the left with short black hair also has a happy face. He is in a multi-colourful outfit, containing orange, green, red and purple colours. All the facial features and the extremities are also clearly seen. The limbs are drawn as double lines and the necks are present in both the figures. When asked to explain the picture, the subject said this scene showed her brother and herself in the park.

CASE 8

The drawings by Case 8, an eight-year-old non-institutionalized girl, are shown as Figure 4.15 and Figure 4.16.

a) Drawing of the Family (Figure 4.15)

In drawing the family, Case 8 drew four figures placed in the middle of the page: two in the background and two in the foreground. The figures represent the members of the family, consisting of the parents, an older brother and the subject. All the figures are complete, containing the various body parts such as the head, torso and limbs. The faces have facial features, hair and necks while the torsos depict the different coloured clothes worn by the figures. All the limbs are

Figure 4.14: A scene at the playground.

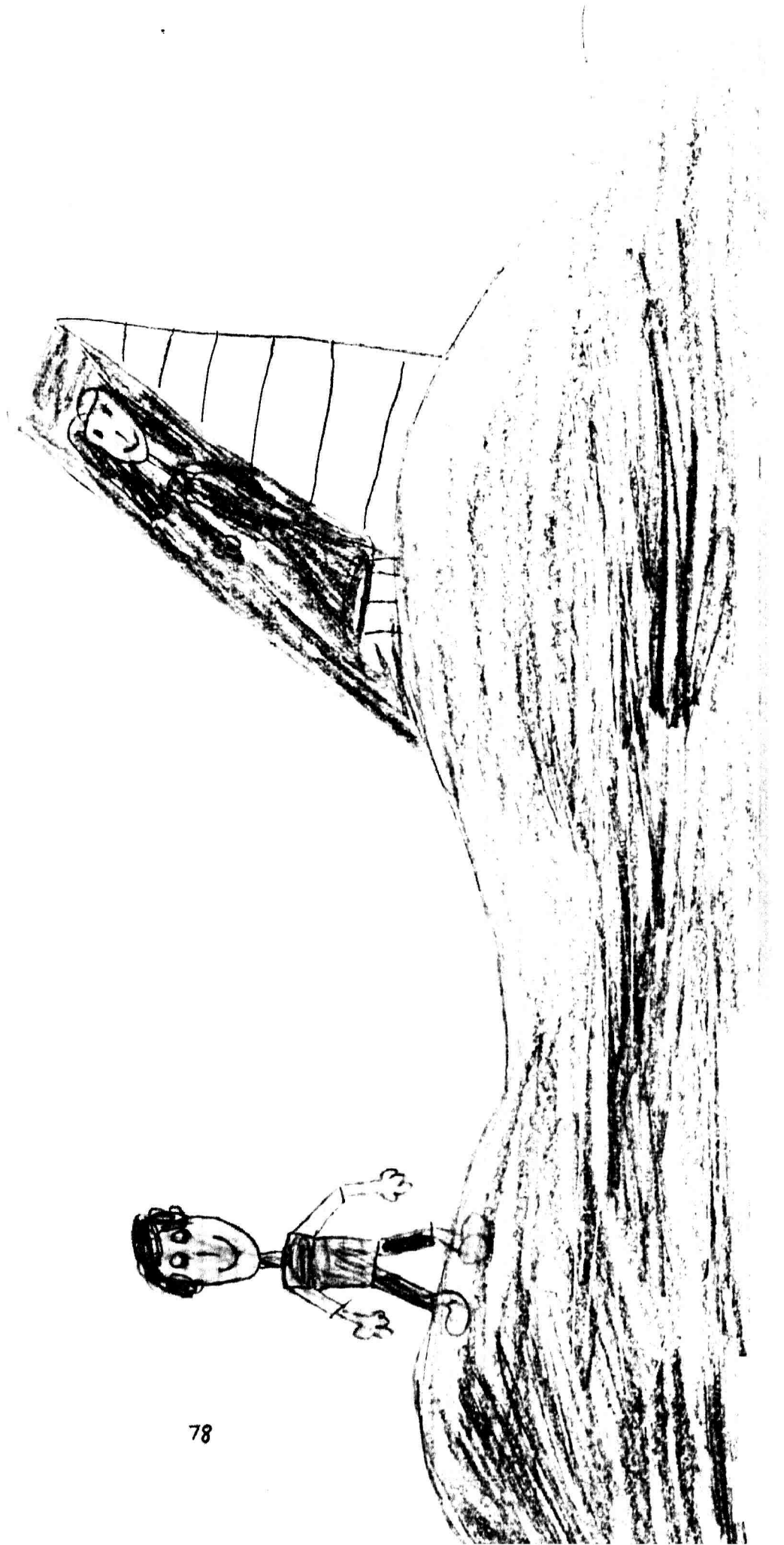
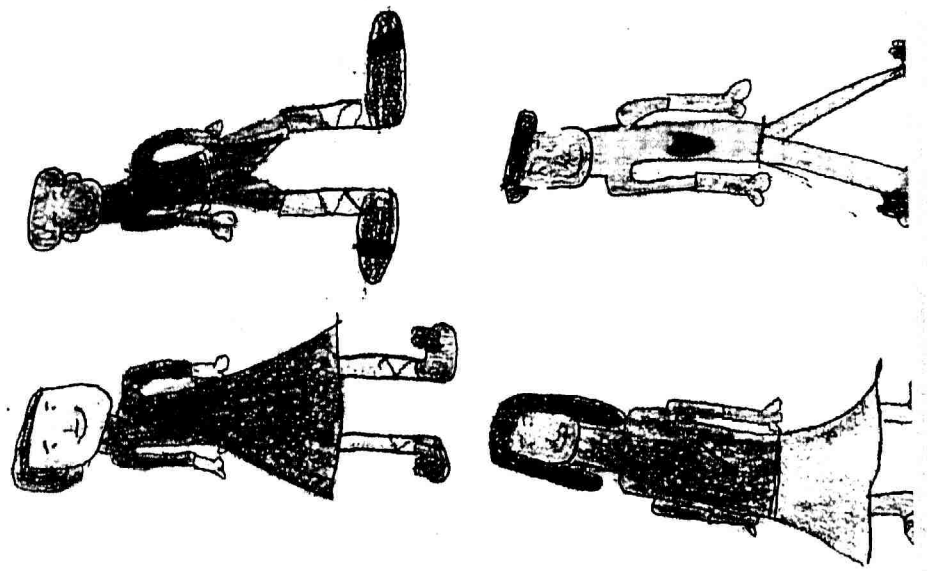


Figure 4.15: Drawing of the Family.

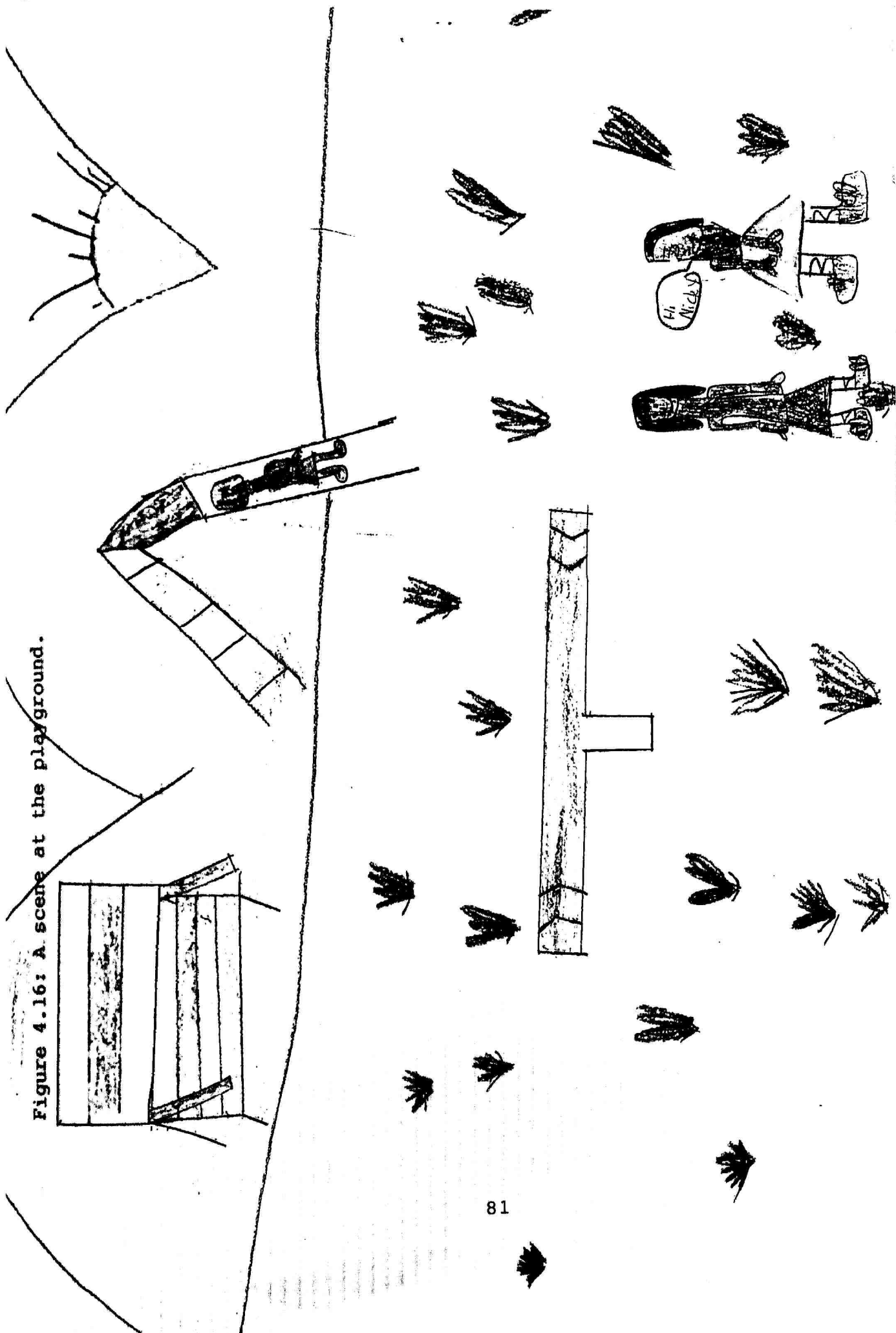


symmetrical and attached to the torsos. All the figures have happy faces. When interviewed, the subject revealed that the two figures in the back represented the mother and brother. The mother with short black hair is dressed in a green dress and pink shoes, displaying blue bows. The brother with short black hair is dressed in a dark blue shirt with a striped yellow and green shorts and black shoes. In the foreground, the father with short black hair is dressed in a yellow shirt, a pair of light blue long pants and yellow shoes. The subject with long black hair is dressed in a blue blouse with a light brown skirt and slippers. All the happy faces and limbs as well as the hands are coloured brown.

b) A scene at the playground (Figure 4.16)

In the playground, Case 8 drew a background, consisting of mountains and a yellow sun and a foreground, displaying three figures and some playground equipment. The three figures are complete, showing all the body parts including the facial features and the extremities. The figures depict contoured forms where the heads and the torsos as well as the arms are joined by a continuous line. The figure, on the slide, with short black hair is dressed in a pink blouse with a yellow skirt. The other two girls are talking while standing on the right side of the page. While one of them is dressed in a blue blouse with a pink skirt, the other is dressed in a green blouse with a yellow skirt. Both these girls, having black hair, are wearing pink shoes with white socks. The drawing also has a purple seesaw, a brown bench and a brown slide.

Figure 4.16: A scene at the playground.



4.2 **HYPOTHESIS 1:** The drawings of institutionalized children have more evidences of distorted figures than the drawings of non-institutionalized children.

Koppitz (1968) defined distorted figures as those with a poor integration of body parts, gross asymmetry of limbs, absence of extremities, facial features, neck, torso and arms, very short or very long arms and monster or grotesque figures.

In drawing the family (Figure 4.1), Case 1, a five-year-old institutionalized boy, used single lines to depict the limbs and torso and one arm was always significantly longer than the other. This subject also had excluded the extremities such as the hands and shoes/toes and hair.

Case 2, a seven-year-old institutionalized boy, drew two of the human forms with extra club-like "limbs" attached to the torsos with another figure squeezed between the shoulder region of these two figures (Figure 4.3). A distant figure had arms tucked at the sides and legs pressed together. The extremities, neck and hair of all the figures were omitted. In the playground scene (Figure 4.4), the genitals of the figure was depicted quite explicitly. It also had a sad face depicted by a turned down mouth.

Case 3 was an eight-year-old institutionalized girl. She had drawn her figures using single lines to depict the torsos and limbs. All the figures in her drawing of the family (Figure 4.5) had black pin-heads with no facial features. The extremities and hair were also omitted. In the playground drawing (Figure



4.6). the figures were again faceless and hairless while single lines were used to show the torsos and limbs.

In the drawing of the family, Case 4, another eight-year-old institutionalized girl, drew two figures. One of the figures was very large while the second was large and slanting (Figure 4.7). The limbs of these two figures showed asymmetry whereby the figures had a mixture of short and long or broad limbs. In the drawing of the playground (Figure 4.8), only one figure was depicted. Here, she had drawn a baby with only a set of eyes and eyebrows.

On the other hand, both the drawings of Case 5, a five-year-old non-institutionalized boy had drawn complete figures which included the main body parts, facial features, hair and extremities (Figure 4.9 and Figure 4.10). Even though in the drawing of the family (Figure 4.9), one of the figures had a pair of long arms while another figure had very short arms, there was no asymmetry of limbs on any one figure.

Case 6, a seven-year-old non-institutionalized boy had drawn all the figures completely and with good integration of the various body parts. The figures in the drawing of the family (Figure 4.11) and drawing at the playground (Figure 4.12) also had extremities, facial features, necks and hair.

In the drawing of the family (Figure 4.13) and the drawing at the playground (Figure 4.14), Case 7, an eight-year-old non-institutionalized girl had drawn the figures with good

spatial arrangement of the various body parts. All the figures in both the drawings had the main body parts as well as facial features, extremities, necks and hair.

Case 8, another eight-year-old non-institutionalized girl had drawn well-balanced human figures which showed good integration of the body parts in the drawing of the family and the drawing at the playground (Figure 4.15 and Figure 4.16). All the figures had drawn the main body parts, facial features, extremities, necks and hair.

This study found that the drawings of institutionalized children had more evidence of distorted figures compared to the drawings of non-institutionalized children. The drawings done by institutionalized children showed poor integration and asymmetry of the various body parts. Furthermore, the facial features, extremities, hair and neck were partially or completely omitted from the figures.

The human figures constructed by non-institutionalized children had minimal distortions. The figures in both the drawings were complete whereby all the body parts and facial features as well as torsos and limbs were present. Furthermore, the figures were realistically proportional and well-integrated. Even tiny figures, depicted the facial features and extremities as well as hair and necks. All the faces were happy too.

To obtain a more quantitative measure of the differences in the drawings between institutionalized and non-

TABLE 4.1 Means and Standard Deviations of Emotional Indicators of Institutionalized and Non-institutionalized Children.

SUBJECTS	EMOTIONAL INDICATORS		
	D1	D2	Mean
<b>INSTITUTIONALIZED</b>			
CASE 1	5.3	7.6	6.5
CASE 2	5.3	6.0	5.6
CASE 3	7.0	6.7	6.8
CASE 4	9.6	8.7	9.1
TOTAL	27.2	29.0	28.1
MEAN	6.8	7.3	7.0
SD	2.0	1.2	1.5
<b>NON-INSTITUTIONALIZED</b>			
CASE 5	3.6	1.6	2.6
CASE 6	0.6	1.0	0.8
CASE 7	0.0	1.0	0.5
CASE 8	0.0	0.3	0.2
TOTAL	4.2	3.9	4.1
MEAN	1.1	1.0	1.0
SD	1.7	0.5	1.1

D1 : Drawing of the family  
D2 : Drawing of the playground  
SD : Standard Deviation

institutionalized children, the distortions in the drawings were analysed using The Emotional Indicator Scoring System for Human Figure Drawing (Koppitz, 1968; Appendix B). The results presented in Table 4.1 gives a breakdown of the means and standard deviations of the total number of emotional indicators of each subject in these two groups. The mean number of emotional indicators for institutionalized children is 7.0 with a standard deviation of 1.5 while non-institutionalized children have a mean of 1.0 with a standard deviation of 1.1. The results suggest that the drawings of institutionalized children have a much higher number of emotional indicators than the drawings of non-institutionalized children. No t-test was carried out to test whether the means are significantly different because the sample size is too small.

The analysis confirms that the drawings of the four institutionalized children had more distortions in their human figures than those of non-institutionalized children. Therefore, this hypothesis is accepted.

**4.3 HYPOTHESIS 2:** The human figures are larger than average or smaller than average in the drawings of institutionalized children than in the drawings of non-institutionalized children.

In Koppitz's (1968) research, she classified a large figure as having a height of more than 9 inches, a tiny figure as being less than 2 inches high and a slanting figure as having a slant of more than 15 degrees. Using these criteria to catego-

size the size of the human figures, the data found 56 percent of all the human figures drawn by institutionalized children were either bigger or smaller than average compared to only 29 percent of the human figures drawn by non-institutionalized children.

Sixty percent of the figures drawn by Case 2 were less than 2 inches tall. In the drawing of his family, two out of the four figures were less than 2 inches high while one figure in the playground scene was also less than 2 inches (Figure 4.3 and Figure 4.4 respectively). Case 3 drew five tiny figures in both the drawings. Two out of the five figures in the drawing of the family (Figure 4.5) and all the three figures in the playground drawing (Figure 4.6) were less than 2 inches tall. Case 4 drew two figures in the drawing of the family (Figure 4.7), one figure had a height of more than 9 inches while another figure had a height of more than 9 inches and a slant of more than 15 degrees. Only Case 1 drew his human figures between 2 to 9 inches tall in both the drawings (Figure 4.1 and Figure 4.2).

In contrast, the human figures drawn by non-institutionalized children were realistically proportional. Good spatial arrangement and symmetry of the various parts of the body were also observed. Only Case 6 drew human figures with a height of less than 2 inches in the drawing at the playground (Figure 4.12). All the other cases drew human figures between 2 to 9 inches in height.

In summary, this study found that three of the institutionalized children had drawn either larger than average or

smaller than average human figures in their drawings compared to only one institutionalized child who had drawn within the average range. On the other hand, only one of the non-institutionalized child had drawn smaller than average human figures compared to three non-institutionalized children who had drawn within the average range. Thus, this hypothesis is accepted.

**4.4 HYPOTHESIS 3:** There is a greater distance between the figures in the drawings of institutionalized than in the drawings of non-institutionalized children.

In the drawing of the family, Case 1 drew his self-portrait (Figure 4.1) while Case 4 drew two friends standing close together (Figure 4.7). Case 2 drew three members of his family together but the middle figure was tiny and squeezed between the other two figures. A fourth figure was drawn 2.7 inches away from the family on the right side of the paper (Figure 4.3). Case 3 drew the members of the family in a line (Figure 4.5) but they were floating below the roof of the house.

In the drawing of the playground, Case 1, Case 2 and Case 4 had only drawn one figure each (Figure 4.2, Figure 4.4 and Figure 4.8 respectively). Only Case 3 had drawn three figures on the monkey bar (Figure 4.6). Two figures were 0.75 inches apart while another figure was directly above one of the two figures.

A possible reason for these drawings is that these children had never experienced the family as a whole and some

might not even know what is a family. Case 1 has a single parent and had been physically abused by the mother while Case 4 is an abandoned child. A figure at a distance and tiny in size was drawn by Case 2. This may be due to the fact that the subject's mother is a prostitute and the drawer had intended to place a psychological distance between the drawer and the person. Case 3 drew five members of the family but it contradicted the fact that the subject is the only child, an information provided by the shelter's manager.

On the other hand, Case 5 and Case 6 had drawn all the members of a real family in a straight line (Figure 4.9 and Figure 4.11 respectively). Case 7 had depicted her family members on either side of the house (Figure 4.13) at a distance of 6.6 inches apart. Case 8 had placed all the members of her family in a group, the mother and brother were placed in the back while the father and the subject were depicted in the front (Figure 4.15).

In the drawing of the playground, the non-institutionalized children had drawn children playing happily in the park, depicting a typical playground scene. Case 5 had drawn his self-portrait (Figure 4.10) while Case 6 (Figure 4.12) had drawn a group of five figures on the left and another group comprising of three figures on the right of the seesaw. These two groups of figures were 2.75 inches apart. Case 7 had drawn two figures in the playground (Figure 4.14), one on the slide and another standing 5.6 inches away, on the left of the slide. Case 8 had drawn three figures (Figure 4.16), two girls standing next to each

other along the bottom of the page while the third girl was 3.5 inches away on the slide behind them.

The empirical data suggests that there is a greater distance between the figures in the drawings by the non-institutionalized children than in the drawings of institutionalized children: Hence, this hypothesis cannot be accepted. However, this study revealed that seventy-five percent of the institutionalized children did not draw any family members. In contrast, all the non-institutionalized children had complete families in their drawings. Furthermore, three of the institutionalized children had drawn only one child in the playground while three of the non-institutionalized children had drawn more than one child playing in the park thereby depicting a typical playground scene.

**4.5 HYPOTHESIS 4:** Colours such as black, red and purple are more widely used in the drawings of institutionalized children while blue, green, yellow and orange are more common in the drawings of non-institutionalized children.

In the drawing of the family, Case 1 used one colour for each object drawn (Figure 4.1). For example, the human figure was coloured red and the house orange. One sun was green in colour while the other two suns were pink. In the playground scene (Figure 4.2), this subject coloured the hammer, triangle, his self-portrait and pools of water black. According to Lewis and Greene (1983), the use of black for more than fifty percent of the drawing indicates emotional distress and unhappiness.



In the drawing of the family (Figure 4.3), Case 2 coloured the facial features green while the limbs of the father and mother were a combination of yellow, blue and magenta. The figure between the two adult figures was completely black while the distance figure was left uncoloured. In the playground drawing (Figure 4.4), Case 2 used red for the legs, eyes, nose and a much darker red for the genitals of the human figure. This may suggest aggression and hostility (Lewis and Greene, 1983). The rest of the scene was uncoloured.

Case 3 had coloured the figures in the drawing of the family blue (Figure 4.5). The faces were all black except for one which was coloured green. The use of black for the face hid the facial features of the human figures. In the playground drawing (Figure 4.6), the whole drawing was completely blue.

The human figures in both the drawings by Case 4 were filled with strong colours without any reference to the actual appearance and colour of the objects drawn. The figures in the drawing of the family (Figure 4.7) had colourful faces and limbs. For example, the larger figure had an orange face and colourful limbs. The arms were orange and black while the legs were purple. The slanting figure was equally colourful, consisting of pink hair on a blue face. The limbs were a different shade of green. The figure in the playground had a green face (Figure 4.8).

The drawings by non-institutionalized children showed

greater receptivity for colours and combination of colours. The objects and human figures were conventionally coloured (for instance, grass is green, sky is blue) and well-coordinated. Thus, they were pleasing to the eye. Case 5 used simple but realistic colours for both his drawings. In the drawing of the family (Figure 4.9), this subject used blue to denote the pants of all the figures. The blouses/shirts were either red or yellow. The hair was black while the face and the arms were brown. The faces were yellow. The objects in the playground scene (Figure 4.10) were also coloured in basic colours: a yellow sun, a brown and red castle.

Case 6 too employed conventional colours. He used black for the hair and brown for the faces and limbs in all the figures. In the drawing of the family (Figure 4.11), this subject also used a different set of colours such as black, blue, purple or orange to colour the clothes worn by the family members. The playground scene (Figure 4.12) had green grass and a brown seesaw with pleasantly coloured figures.

The drawings of Case 7 had a variety of colours which coordinated well with the theme. In the drawing of the family (Figure 4.13), this subject used a different colour to depict the various clothes worn by each member of the family. Black was used for the hair and yellow for the faces and limbs. The house had a red roof and door with a green and blue window. In the playground scene (Figure 4.14) too, she used conventional colours for the natural objects such as yellow for sun, green for grass and blue for clouds. The figures in the drawings were

dressed in colourful clothes while the faces and limbs were yellow.

Case 8 coloured the members of her family (Figure 4.15) with natural-looking and well-coordinated colours. Every figure was well dressed; the clothes were colourful yet pleasing. Much attention was also given to details such as footwear and printed blouses/shirts. For the drawing at the playground (Figure 4.16) conventional colours for the objects were also used, for example the sun was yellow, the grass was green and the children were in colourful yet visually appealing clothes.

The colours used by institutionalized children were either darker or more colourful than the colours employed by non-institutionalized children. The colours were not coordinated well and had a poor finish. These children also rarely used conventional colours to colour the figures and the objects in their drawings. This resulted in the drawings looking unnatural and unrealistic. In contrast, the non-institutionalized children used appropriate colours for the figures and objects drawn. The colours coordinated well and the objects looked real. They also employed conventional and natural colour schemes.

The data gathered in this study did not show that institutionalized children used colours such as black, red and purple more widely while non-institutionalized children used colours such as blue, yellow and orange more commonly. Hence, this hypothesis is rejected. However, this study revealed that the institutionalized children employed very poor colouring schemes

compared to the non-institutionalized group. The different colour schemes demonstrated by the two groups of children show something of their emotional states. It evokes a mood or a certain emotion about the drawer and others who look at their drawings.

4.6 HYPOTHESIS 5: There is a higher incidence of baselining in the drawings of institutionalized children than in the drawings of non-institutionalized children.

Baselining is drawing all the figures and objects in a straight line. Case 1's elements in both his drawings were scattered around the page (Figure 4.1 and Figure 4.2). In the drawing of the family (Figure 4.3), Case 2 drew some curved patterns at the bottom of the page suggesting a baseline and then produced the human forms above this line. In the playground scene too, he had aligned the playground equipment along the bottom of the page (Figure 4.4). Case 3 drew the members of her family "floating" in the house while the figures in the playground were hanging on the iron frame (Figure 4.5 and Figure 4.6 respectively). In the family drawing (Figure 4.7), Case 4 had drawn her two figures along the bottom of the page.

In contrast, all the non-institutionalized used baselines, skylines or horizons to show good spatial arrangement and composition of the objects in the drawings. Two of the non-institutionalized children, Case 5 and Case 6 presented their families on a straight line (Figure 4.9 and Figure 4.11 respectively).

tively). Case 6 (Figure 4.12), Case 7 (Figure 4.14) and Case 8 (Figure 4.16) drew a horizon to make a distinction between the sky and the ground. Case 5 (Figure 4.10), Case 7 (Figure 4.13) and Case 8 (Figure 4.16) employed good compositional strategies when they made some form of distinction between the foreground and the background.

Baselining was found in the drawings of two institutionalized children while all the non-institutionalized children used baselines in their drawings. The evidence found suggests that baselining is not more prevalent in the drawings of institutionalized children than in the drawings of non-institutionalized children. Hence, this hypothesis is rejected.

#### 4.7 Additional finding

Even though the institutionalized children were not known to be sexually abused, the drawings produced by the children indicated some degree of sexual knowledge or abuse.

Case 1 drew large mouths in both his drawings. Huge circular mouths are often drawn when oral sex is involved (Buck, 1977). In fact, even the suns had enlarged mouths and teeth. These may indicate aggressiveness or oral sex experience.

Case 2 consistently drew many club-like objects attached to the human figures in his drawing of the family (Figure 4.3). These shapes represent phallic symbols and were freely depicted in the drawing. Furthermore, in one of the figures the

legs were pressed together. This indicates sexual anxiety and conflict. In his drawing of the playground scene (Figure 4.4), genitals were depicted quite prominently in the human figure. This could be due to the fact that the mother was a prostitute and was living with another man until she abandoned him.

#### 4.8 Summary

The findings of the study revealed that differences were discernible in the drawings of institutionalized and non-institutionalized children. The drawings by institutionalized children showed more evidence of distorted figures than the drawings of non-institutionalized children. There was also support to show that a greater number of institutionalized children drew either bigger or smaller human figures compared to the non-institutionalized children.

However, the study did not find a greater distance between the figures in the drawings of institutionalized children than in the drawings of non-institutionalized children. But, only one of the institutionalized compared to all the non-institutionalized children had drawn complete families.

There was also no evidence to support the finding that institutionalized children used colours such as black, red and purple more widely while the non-institutionalized children used colours such as green, blue, orange and yellow more commonly. But all the institutionalized children employed immature colour-

ing schemes while all the non-institutionalized children used more mature colouring schemes.

The study did not find evidence to support the hypothesis that there is a higher incidence of baselining in the drawings of institutionalized children. Instead, the non-institutionalized children used more baselining than institutionalized children. The non-institutionalized children also used better compositional strategies than the institutionalized children.

More interestingly, an additional finding surfaced in this study. The depiction of an enlarged mouth and genitalia were present in the drawings by two of the institutionalized children even though their records did not contain reports of sexual abuse. This study shows that drawings can reflect children's experiences, especially their traumatic experiences.

These findings provide strong evidence that art can depict children's emotional feelings and states. Since institutionalized children have been abused, neglected and abandoned, they are emotionally disturbed. Drawings of institutionalized children reflected their aggression, unhappiness and hostility more than the drawings of non-institutionalized children. These children did not draw smiling faces nor complete and real families as compared to the non-institutionalized children.