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ABSTRACT

The mother-child interaction procedure described in this manual was developed as one part of the evaluation measures for the Houston Parent-Child Development Center. The Maternal Interaction Structured Situation (MISS) involves the videotaping of a mother and her child involved in a variety of tasks. Using standardized instructions, the tester explains the rationale for the measure, and the task procedures. Mothers of one-year-olds are asked to complete the Book Task, Teaching Toys, and Free Play. Mothers of two-year-olds are asked to complete the Book Task, Animal Sort, Square Task, Play Village, and Free Play. Mothers of three-year-olds are asked to complete Free Play, Book Task, Block Sort, Block Design, and Teaching Toys. The videotapes of the mother-child interactions are evaluated on eight rating scales: Mother's Affectionateness, Mother's Use of Praise, Mother's Use of Criticism, Mother's Control of Child Behavior, Mother's Use of Reasoning with Child, Mother's Encouragement of Child's Verbalization, Child's Verbal Communication, and Mother's Interest in the Situation. (BW)

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Instructions for Administration of the
Maternal Interaction Structured Situation (MISS)

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Parent-Child Research Center
Houston, Texas

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The mother-child interaction procedure described in this manual was developed as one part of the evaluation measures for the Houston Parent-Child Development Center. It was the work of many people as the various tasks were tried and revised.

Alfred J. Kahn and Rosa Davila carried the primary responsibility for developing the MISS and the manual. In the early stages, Jeanne Deschner, Jere Brophy and Eliana Freire contributed much. The late version and the procedures for older children benefited greatly from the contributions of Soledad Riera-Lira, Stella Garcia, and Ursula Diaz-Albertini.

An extended manual of procedures for ages one through six is also available.

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Introduction

The tester escorts the mother and child into the testing room which is furnished with a bench, a small table, two small chairs, and a closed cabinet which contains the toys for the free play situation. At one end of the testing room is a one-way mirror and a microphone attached to the wall. A videotape of the session is made through the window.

The mother is given a rationale for the procedure by the tester in the initial instructions (see below), and she is informed that a videotape will be made of the session. In delivering the initial instructions and all subsequent task instructions, the tester keeps two things in mind:

- (1) Making sure that at the time the instructions are given, the mother is paying full attention
- (2) To try and put the mother at ease via a casual, relaxed conversational tone of voice.

To avoid possible distraction, materials from previous tasks are first removed and materials for the subsequent task are withheld until all the instructions have been given. The only exceptions are materials that are used as part of a modeling procedure necessary for the mother's comprehension of the task, i.e. block design tasks.

At the end of the MISS sessions, the usual procedure (time permitting) is to ask the mother if she would like to see a portion of the tape. This is done for two reasons:

- (1) Some mothers are curious about the taping procedure
- (2) The mothers and their children enjoy watching themselves on the tape

MISS: ONE-YEAR OLDS (T₁)

<u>PROCEDURE:</u>	<u>TIME:</u>	<u>MATERIALS:</u>
1. Book Task	4 min.	<u>FARM ANIMALS</u>
2. Teaching Toys	4 min.	Nesting cups, poker chips, snap lock beads
3. Free Play	8 min.	Dolls (boy & girl), balls baby shapes

INSTRUCTIONS TO MOTHER:

1. Rationale for Procedure:

Let me explain why we've brought you and your child here.

We are interested in learning how children and their mothers play together. This is not a test of your child's ability. We are doing this with all of the families to see the different ways mothers and their children play together.

We will be making a videotape of this session. Is that okay? The camera will be behind this mirror, but you'll probably forget about it once you and your child get involved in playing. The only thing we ask is that you try and keep your child from going beyond this line, so that we may see him better in the camera. It's alright if he goes over there to get a ball or something, but try to keep him over here as much as possible. Do you have any questions?

We have three different parts and I'll give you the instructions for each one as we go along. We'll get started now, alright?

2. BOOK TASK (TESTER BRINGS IN BOOK AND HOLDS IT WHILE GIVING INSTRUCTIONS)

Here's the first one, it's a book.
(TESTER TELLS MOTHER SHE MAY SIT ON THE BENCH, OR USE THE TABLE AND CHAIRS, OR EVEN SIT ON THE FLOOR TO LOOK AT BOOK--"whichever is most comfortable")

As you know, children learn a lot from looking at books, and their mothers can help them learn. Here's a book for you and your child to look at together. We'd like for you to help him learn from this book in any way that you and your child like.
(TESTER HANDS BOOK TO MOTHER)

Do you have any questions?

Your child may not be interested in the book at first, but try to look at it together anyway. I'll be back in a few minutes.

(TESTER RETURNS IN 4 MINUTES AND REMOVES BOOK BEFORE GIVING INSTRUCTIONS FOR NEXT PART)

3. Teaching Toys :

Let me tell you what we'd like for you to do next. Children can learn a lot from toys too, and just as with books, their mothers can help them learn. Here are some toys for you and your child to play with together. We'd like you to help him learn from these toys in any way that you and child like. Do you have any questions? (TESTER EMPTIES TOYS ON TOP OF CABINET OR TABLE) Feel free to put these toys on the floor or wherever you like. I'll be back in a few minutes, okay? (TESTER RETURNS AFTER 4 MINUTES AND REMOVES TOYS)

4. Free Play:

(TESTER BRINGS IN TOYS IN A CARDBOARD BOX)

Now we're ready for the third part. We don't have any specific instructions for this part. We have some more toys here for you and your child to play with. You both can do whatever you like. Just make yourselves at home. Let me just remind you that we'd prefer your child stay down at this end as much as possible so we can see him better in the camera. Do you have any questions? I'll be back in about ten minutes, okay?

(TESTER EMPTIES TOYS ON FLOOR)

(TESTER RETURNS IN 8 MINUTES)

MISS: TWO-YEAR OLDS (T₂)

<u>PROCEDURE:</u>	<u>TIME:</u>	<u>MATERIALS:</u>
1. Book Task	4 min.	<u>THE GREAT BIG CAR & TRUCK BOOK</u>
2. Animal Sort	4 min.	Plastic goats and dogs, 2 containers
3. Square Task	4 min.	Wooden rectangular blocks
4. Play Village	8 min.	Fisher Price "Play Village"
5. Free Play	8 min.	Play telephones, doll, pull-a-long lacing shoe, dump truck, tea set, puzzles, stringing beads, shape sorter, cylinder board

INSTRUCTIONS TO MOTHER

1. Rationale for procedure:

As you probably know, we are interested in learning how children and mothers play together. We are doing this with all of the families to see different ways mothers and their children play together. This is not a test of your child's ability. Do you have any questions?

We will again be making a videotape of this session. Is that okay? The camera will be behind this mirror, but once you and your child get involved in playing, you will probably both forget about it. The only thing we ask is that you try and keep your child from going beyond the line, so that we may see him better in the camera. It's alright if he goes over there to get a ball or something, but try to keep him over here as much as possible. Do you have any questions?

We have five different situations set up for you. I'll give you instructions for each one as we go along. We'll get started now, okay? (TESTER BRINGS IN BOOK AND HOLDS IT WHILE GIVING INSTRUCTIONS)

Here's the first one, it's a book.

(TESTER TELLS MOTHER SHE MAY SIT ON THE BENCH, OR USE THE TABLE AND CHAIRS, OR EVEN SIT ON THE FLOOR TO LOOK AT THE BOOK--"whichever is most comfortable for you.")

2. BOOK TASK: (MOTHER AND CHILD SHOULD BE SEATED)

As you know, children can learn a lot from books, and their mothers can help them learn. Here's a book for you and your child to look at together. We'd like for you to help him learn from this book in any way that you and child like.

3. ANIMAL SORT: (TESTER ASKS MOTHER AND CHILD TO SIT AT THE TABLE IF THEY ARE NOT ALREADY DOING SO AND BRINGS IN CONTAINERS WITH GOATS AND PIGS)

Let me tell you what we'd like you to do next. We'd like

you to teach your child to place all the goats in one container and all the pigs in the other container.

(TESTER EMPTIES ANIMALS ON TABLE IN ONE PILE AND PLACES CONTAINERS ON TABLE) Do you have any questions? I'll be back in a few minutes. (TESTER RETURNS AFTER FOUR MINUTES AND REMOVES CONTAINERS WITH ANIMALS)

4. Square Task: (TESTER BRINGS IN BLOCKS FOR DEMONSTRATION)

Now in this next part we'd like you to try and teach you child to make a square with these blocks. (TESTER MODELS FOR THE MOTHER) This may be too difficult for your child, but we'd like you to try and teach him anyway. (TESTER PLACES REMAINDER OF BLOCKS ON TABLE) Do you have any questions? I'll be back in a few minutes. (TESTER RETURNS AFTER FOUR MINUTES AND REMOVES BLOCKS)

5. Play Village:

We know that children can learn a lot from playing with toys, and just as with books, their mothers can help them learn. For this next part, we'd like you and your child to play together with this toy. Try and help him learn from this toy in any way that you and your child like. (TESTER PLACES CLOSED TOY ON FLOOR) Do you have any questions? I'll be back in about ten minutes. (TESTER RETURNS AFTER EIGHT MINUTES. TESTER ATTEMPTS TO AVOID ABRUPT REMOVAL OF THE TOY.)

DIRECTED TO CHILD: We have some more toys for you to play with, but first would you like to help your mother put up this one? (IF NECESSARY TESTER PUTS UP "PLAY VILLAGE." TESTER THEN REMOVES "PLAY VILLAGE" BEFORE GIVING NEXT INSTRUCTIONS.)

6. Free Play :

Now we're ready for the last part. We don't have any specific instructions for this part. We have some more toys here in this cabinet for you and your child to play with. (TESTER OPENS CABINET DOORS, MAKING SURE ENTIRE CABINET IS VISIBLE TO CAMERA) You both can do whatever you like. Just make yourselves at home.

Let me just remind you that we'd prefer your child stay down at this end of the room as much as possible so we can see him better in the camera. I'll be back in about ten minutes, okay? (TESTER RETURNS IN EIGHT MINUTES) We're finished now. (TO CHILD)-- WOULD YOU LIKE TO HELP YOUR MOTHER PUT UP ALL THE TOYS?

MISS: THREE YEAR OLDS (T₃)

<u>PROCEDURE (2 SESSIONS)</u>	<u>TIME</u>	<u>MATERIALS</u>
<u>1st Session</u>		
1. Free Play	20. Min.	Play telephones, doll, pull-a-long lacing shoe, dump truck, tea set, puzzles, stringing beads, shape sorter, cylinder board
<u>2nd Session</u>		
1. Book Task	6 Min.	<u>The Great Big Car & Truck Book</u>
2. Block Sort	A. 6 Min.	2 large blue blocks, 2 large yellow
	B. 6 Min.	2 small blue, 2 small yellow
	BREAK	
3. Block Design	6 Min.	14 Blue blocks
4. Teaching Toy	12 Min.	Fisher Price "Play Village"

INSTRUCTIONS TO MOTHER:

1st Session-- Rationale

We're interested in watching children and their mothers play together and it's fun to watch children as they grow and change from year to year. As you know, we do this each year with all the families. We're going to be doing some filming now and next time you come we will be doing some more. This year we're doing the filming in two parts so next time it won't take so long.

Just as before we will be making a videotape of this session. That's okay, isn't it? The camera will be behind this mirror, but you'll probably forget about it once you and your child get involved in playing. The only thing we ask is that you try and keep your child over here on this side of the line as much as possible, so that we may see him better in the camera. If he has to go over there to get a toy or ball, that's okay, but try and keep him over here as much as possible. Do you have any questions?

1. Free Play:

We don't have any specific instructions for the part we are going to do today. We have some toys here in this cabinet for you and your child to play with. (TESTER OPENS CABINET DOORS, MAKING SURE ENTIRE CABINET IS VISIBLE TO CAMERA) You both can do whatever you like. Just make yourselves at home.

(TESTER RETURNS IN 20 MINUTES) We're finished now. (TO CHILD) -- WOULD YOU LIKE TO HELP YOUR MOTHER PUT UP ALL THE TOYS?

2nd Session--Rationale

Last time you were here we told you that we have been interested in watching children and their mothers play together to see the different ways they act together. We also told you we do this with all the families each year.

We will be making a film of this session just as we did last time. That's okay, isn't it? As I told you last time the camera will be behind this mirror, but you'll probably forget about it once you and your child get involved in playing. The only thing we ask is that you try and keep your child over here on this side of the line as much as possible, so that we may see him better in the camera. If he has to go over there to get a toy or ball, that's okay, but try and keep him over here as much as possible. Do you have any questions?

We have four different parts and I'll give you the instructions for each one as we go along. Do you have any questions? We'll get started now, all right?

Here's the first one, it's a book.

(TESTER TELLS MOTHER SHE MAY SIT ON THE BENCH, OR USE THE TABLE AND CHAIRS, OR EVEN SIT ON THE FLOOR TO LOOK AT THE BOOK--"whichever is most comfortable for you.")

1. BOOK TASK (MOTHER AND CHILD SHOULD BE SEATED)

As you already know, children learn a lot from books, and their mothers can help them learn. Here's a book for you and your child to look at together. We'd like you to help him learn from this book in any way that you and your child like.

(TESTER HANDS BOOK TO MOTHER) Do you have any questions?

I'll be back in a few minutes.

(TESTER RETURNS IN 6 MINUTES AND REMOVES BOOK BEFORE GIVING INSTRUCTIONS FOR NEXT TASK)

2. BLOCK SORT:

(IF MOTHER IS NOT ALREADY SEATED AT TABLE, TESTER ASKS HER TO DO SO. CHILD IS TAKEN OUT OF ROOM DURING INSTRUCTIONS TO MOTHER.)

A. Let me tell you what we'd like for you to do next. (TESTER PLACES BLOCKS ON TABLE.) There are several ways these blocks can be put into groups. Let me show you two different ways we'd like you to teach your child to put these blocks into groups.

We'd like you to teach your child to put all the yellow blocks into one groups and all the blue ones into another group. (TESTER PLACES BLOCKS INTO TWO GROUPS - BLUE AND YELLOW) We'd also like you to teach your child to put all the large ones in one group and all the small ones into another group. (TESTER PLACES BLOCKS INTO TWO GROUPS - LARGE AND SMALL.) Do you have any questions? (TESTER MIXES BLOCKS)

It doesn't make any difference which way you teach him first, but try to teach him one way until he's able to do it by himself and then teach him the other way. When you think he can do both ways by himself, just wave and I'll come in for the next part. This is difficult for some children this age, but try and teach him anyway. (CHILD IS BROUGHT BACK INTO ROOM AND SEATED AT TABLE WITH MOTHER.)

I'll be back when we're ready for the next part, okay? (TESTER RETURNS WHEN MOTHER SIGNALS OR AFTER 6 MINUTES.)

B. (CHILD IS AGAIN TAKEN OUT OF ROOM)

For this next part I'm going to show you another way to put these blocks into groups. (TESTER SEPARATES BLOCKS INTO FOUR GROUPS - LARGE BLUE, SMALL BLUE, LARGE YELLOW, SMALL YELLOW.) We'd like you to teach your child to make these four groups (TESTER POINTS TO EACH GROUPS WHILE LABELING)--large blue blocks, small blue blocks, large yellow blocks and small yellow blocks. (TESTER THEN MIXES BLOCKS.)

Do you have any questions? Try to teach him until he's able to do it by himself and then just wave and I'll come in. Again, this is difficult for some children this age, but try to teach him anyway.

(CHILD IS BROUGHT IN AND SEATED)

(TESTER RETURNS WHEN MOTHER SIGNALS OR AFTER 6 MINUTES.)

(TESTER REMOVES BLOCKS. Break is taken before continuing to next part so that child may be taken to bathroom or to drink water.)

3. BLOCK DESIGN: (MOTHER AND CHILD SHOULD BE SEATED AT TABLE)

For this next part, we'd like you to try to teach your child to make this design with the blocks (TESTER MAKES MODEL FOR THE MOTHER). I'll leave this picture here for you to see in case the blocks get mixed up while you are teaching your child. Do you have any questions?

I'll be back in a few minutes.

(TESTER RETURNS AFTER 6 MINUTES AND REMOVES BLOCKS BEFORE GIVING INSTRUCTIONS FOR NEXT PART.)

4. TEACHING TOY: (TESTER PLACES CLOSED TOY ON FLOOR)

We know that children can learn a lot from playing with toys, and just as with books, their mothers can help them learn. For this next part, we'd like you and your child to play together with this toy. Try to help him learn from this toy in any way that you and your child like.

(TESTER PLACES CLOSED TOY ON FLOOR)

Do you have any questions? I'll be back in about ten minutes.

(TESTER RETURNS AFTER WIGHT MINUTES. TESTER ATTEMPTS TO AVOID ABRUPT REMOVAL OF THE TOY)

PROCEDURES FOR RATING VIDEOTAPES

The rater views the tape for a one minute period at which point the video-recorder is stopped. The interaction is then rated for all scales across the coding sheet, designating task and segment in the appropriate columns and entering each rating in the column for that particular scale. If necessary the segment is viewed again before completing ratings. The rater proceeds through all segments of each task in this manner.

1. Rating scale for Mother's Affectionateness
2. Rating Scale for Mother's Use of Praise
3. Rating Scale for Mother's Use of Criticism
4. Rating Scale for Mother's Control of Child Behavior
5. Rating Scale for Mother's Use of Reasoning with Child
6. Rating Scale for Mother's Encouragement of Child's Verbalization
7. Rating Scale for Child's Verbal Communication
8. Rating Scale for Mother's Interest in the Situation.

1. Rating Scale for Mother's Affectionateness

Rate the mother's expression of affection to the child personally. Does she manifest an intense personal affection to the child; a warm temperate emotion; or a cool aloof or even hostile attitude?

What is her most typical behavior?

1. Cool, aloof, distant, or hostile.
- 2.
3. Objective, neutral, matter-of-fact.
- 4.
5. Temperate, fond, attached, forgiving, kind.
- 6.
7. Affectionate, warm, fondling, loving, expressive.
- 8.
9. Passionate, consuming, intense, ardent, uncontrolled.

2. Rating Scale for Mother's Use of Praise

Rate the mother's tendency to praise the child's behavior during the tasks, conveyed both in words and tone. Does the mother lavish praise upon the child, or does she allow his successes to go unacknowledged? Rate independently of the mother's tendency to criticize the child.

1. Mother never praises the child now shows approval, either in words or tone.
2. Mother praises very little and/or shows little approval in words or tone, providing mostly mere feedback.
3. Mother praises the child occasionally and/or shows moderate approval in words or tone. She tends to praise the child's more important accomplishments but responds to his minor actions with simple feedback.
4. Mother praises somewhat frequently and/or shows fairly enthusiastic approval, either in words or tone, rewarding the child when he concludes both important actions and significant subsections of the tasks.
5. Mother praises the child frequently and/or shows enthusiastic approval, rewarding even the most inconsequential successes.

3. Rating Scale for Mother's Use of Criticism

Rate the mother's tendency to criticize or to be critical of the child's actions. Is she critical of the child in word or tone for every error or inadequate performance, or does she simply help the child to correct his errors or perform without criticizing him? Rate independently of the mother's tendency to praise the child.

1. Mother never criticizes the child or is critical in words or tone; merely provides feedback.
2. Mother rarely criticizes, is rarely critical in words or tone, reacts to most errors with simple feedback.
3. Mother is somewhat critical, in frequency and/or intensity expressing disapproval of the child for poor performance.
4. Mother is fairly critical, in frequency and/or intensity expressing disapproval of the child for poor performance.
5. Mother is frequently and/or intensely critical of the child in word or in tone, punishing even the smallest errors or lacks in performance.

4. Rating Scale for Mother's Control of Child Behavior

Rate the extent to which the mother discourages the child's independence (child's self-help, making choices and decisions, taking initiative, evaluating own behavior, etc.) by giving unsolicited direction, help, and guidance to regulate child's behavior. This scale does not consider the mother's direction and help which are in response to child's solicitations, i.e., child's requests and behavioral solicitations (helplessness, difficulties, passivity, fatigue, etc.)

1. Gives no unsolicited help. Laissez-faire or permissive regarding child's independence.
2. Gives unsolicited help only rarely and with weak intensity.
3. Gives unsolicited help and guidance with moderate frequency. Help tends to be moderate in intensity, e.g., encouraging requests, reasoning, suggestions, hints and/or information, etc., rather than strong directive comments or physical help such as doing the puzzles.
4. Gives considerable unsolicited direction. Help is frequent and/or fairly intense.
5. Discourages child's independence and encourages dependency by giving frequent unsolicited direction, help, and guidance. Help is strong in intensity, e.g., directive structuring of tasks and of child's behavior when used as guidance, demonstrating techniques, helping to do the puzzle, etc.

5. Rating Scale for Mother's Use of Reasoning with Child

Rate the extent to which the mother uses reasoning (explaining or describing positive or negative consequences of actions) to influence child's behavior or in response to child's questions, disobedience, or other behavior. Includes listening to child's views and trying to take them into account when presenting own reasoning. Examples of reasoning: describing a self-injury consequence to discourage defiant behavior, asking logical questions (asking whether a dog lives in a fish bowl).

1. No use of reasoning.
2. A little use of reasoning.
3. Moderate or occasional use of reasoning. Not necessarily emphasized.
4. Considerable use of reasoning. Fairly frequent and emphasized.
5. Constant use of reasoning. High in frequency and strongly emphasized.

6. Rating Scale for Mother's Encouragement of Child's Verbalizations

Rate the extent to which the mother encourages and responds to the child's statements and questions. This encouragement includes: responding to his verbalizations frequently; making full responses; drawing him out with questions; listening attentively and with interest; showing approval of his communications and ideas.

1. No encouragement of child's verbalizations as evidence by failure to respond to them and ignoring his questions, or failure to initiate any questions to the child.
2. A little encouragement of child's verbalizations: infrequent and weak.
3. Moderate encouragement of child's verbalizations: moderate frequency and strength.
4. Considerable encouragement of child's verbalizations: frequent and somewhat strong.
5. Constant and strong encouragement of child's verbalizations.

7. Rating Scale for Child's Verbal Communication

Rate the amount and quality of the child's verbal communications with the mother. Does he communicate actively and fully, does he respond briefly, or usually not at all?

1. Almost never communicates verbally with mother, never or almost never responds to her statements and questions, never or almost never initiates statements and questions, responds very briefly if at all.
2. Communicates verbally a little or occasionally, usually responds to her statements and questions briefly; rarely initiates statements and questions.
3. Communicates verbally with the mother to a moderate degree. Usually responds to her statements and questions adequately but not fully, sometimes initiates statements and questions.
4. Communicates verbally with the mother considerably. Usually responds to her statements and questions, fairly fully; somewhat frequently initiates statements and questions.
5. Communicates verbally with the mother constantly as evidenced by: active participation in responding to her statements and questions, frequent initiation of questions and statements, and responses which are comparatively full.

8. Rating Scale for Mother's Interest in the Situation

Rate the extent to which the mother displays interest in the situation. Does she seem attentive to the task or the child's activities, or does she seem bored, distracted, or impatient with the situation? Rate independently of the mother's interaction with the child.

1. Not involved, uninterested in situation.
2. Little involvement, little interest; rarely seems attentive to the situation.
3. Moderate involvement, moderate interest; appears attentive to the situation most of the time or intermittently.
4. Great amount of interest and involvement; constantly attentive to the situation.