

FUSAM project: analysis of mother-child interactions for children affected with severe acute malnutrition vs healthy children



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Background

- Playing is essential to child development
- Not only playing but quality time is essential
- In this study, mothers rarely play with their children
- Playing is stressful for them
- Playing can be integrated in daily routines
- Mothers learn by playing
- Children learn and grow well by playing

Methodology

- Testers could not administer tests and observe the mother-child interactions.
- a 4 minutes video recording of free play
- ***'We are asking you to play with your child by giving your child a toy, singing songs, whatever is comfortable for you and your child. The camera will record during 4 minutes. Do you have any questions before we start?'***

Video



The observation grid

CHILD		MOTHER	
EMOTIONAL INTERACTIONS			
Smiles at mother		Responds to baby smiles	
Responds to mother's smiles		Smiles at her baby	
Shows affection to his/her mother		Shows affection to her child	
Seeks affection from his/her mother		Seeks affection from her child	
PHYSICAL INTERACTIONS			
Can be separated from his/her mother		Takes the child in her arms	
Seeks physical contact		Encourages the child not to be clingy	
Uses touch to explore		Stimulates the child's sense of touch	
Is active and moves		Encourages the child to be active	
Gives objects to his/her mother		Takes objects given by the child	
Takes objects given by his/her mother		Gives objects to the child	
Imitates his/her mother's gestures		Encourages the child to imitate her gestures	
VERBAL INTERACTIONS			
Uses his/her voice to communicate		Uses her voice to communicate	
Understands instructions and warnings		Gives explanations	
Laughs		Reacts to her child's cries	
Imitates, responds by echoing		Encourages the child to imitate her words and sounds	
VISUAL INTERACTIONS			
Looks for his/her mother and watches her		Seeks out visual contact with the child	
Responds to his mother's looks		Looks at her child	
Calls his/her mother's attention to objects		Calls the child's attention to objects	
Observes his/her environment		Encourages the child to observe his/her environment	

The analysis grid

At least 2 persons should analyze the video in order to ensure the reliability of the scoring

THE MOTHER				
Emotional	<i>Responds to child's smiles</i>	The mother smiles back; she shows affection more than once	The mother smiles back; she shows affection once	The mother does not respond and/or ignore the child's smile
	<i>Shows affection to her child</i>	The mother kisses, hugs, smiles, holds her child more than once	The mother kisses, hugs, smiles, holds her child once	The mother does not kiss, hug, smile, hold her child
Physical	<i>Takes the child in her arms</i>	The mother takes the child in her arms, hold her child sitting (on her laps) or standing more than once	The mother takes the child in her arms, hold her child sitting (on her laps) or standing once	The mother does not take the child
	<i>Stimulates the child's sense of touch</i>	The mother gives the object to the child and praise her child to play, to observe, to touch more than once	The mother gives the object to the child and praise her child to play, to observe, to touch once	The mother does not give the object to the child, she does not praise her child to play, to observe, to touch
	<i>Encourages the child to be active</i>	The mother frequently encourages the child to stand up, to dance, to throw toys, etc.	The mother encourages once the child to stand up, to dance, to throw toys, etc.	The mother keeps the child close to her, in her arms, does not play

CODE

ALWAYS = 3

SOMETIMES = 2

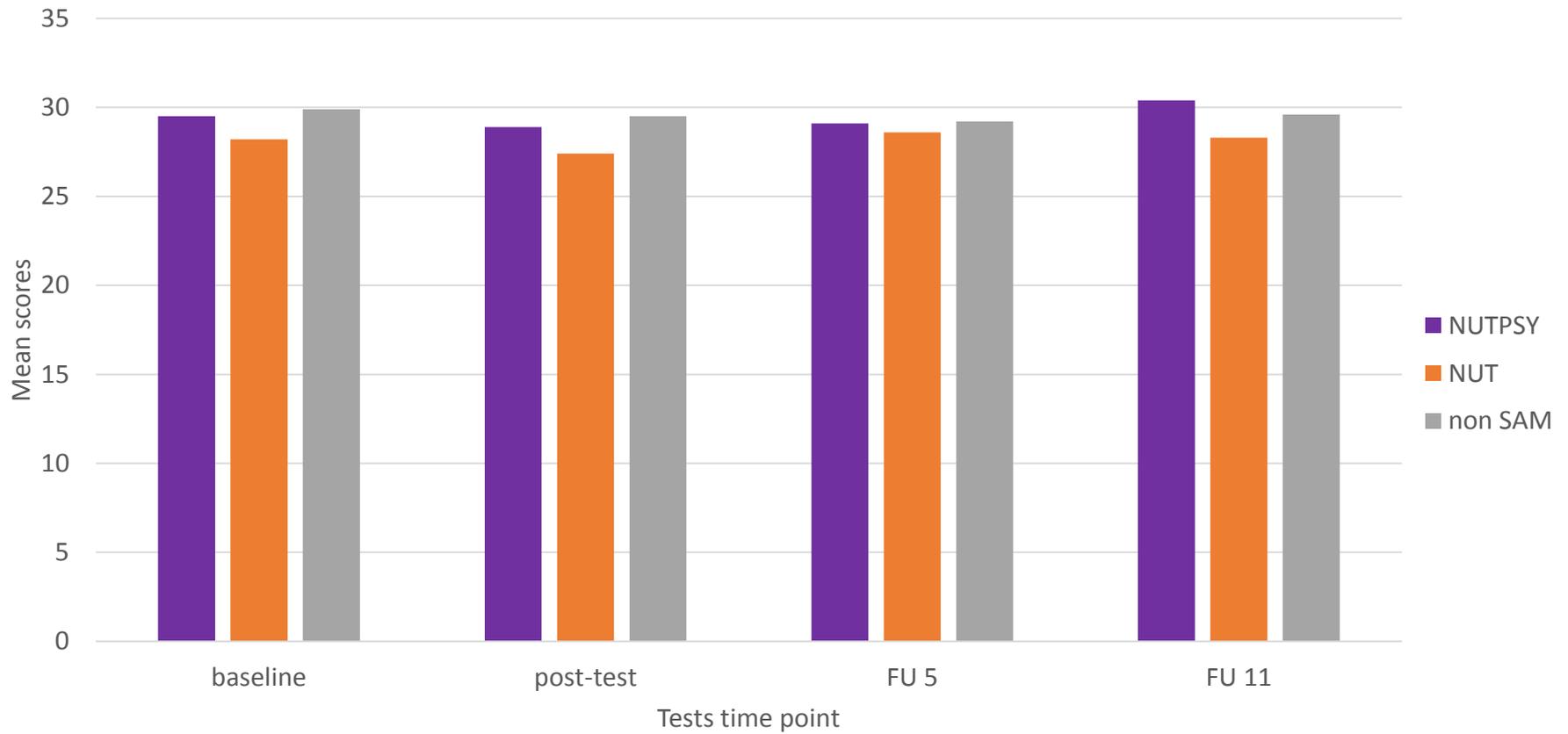
Not observed = 1

Results

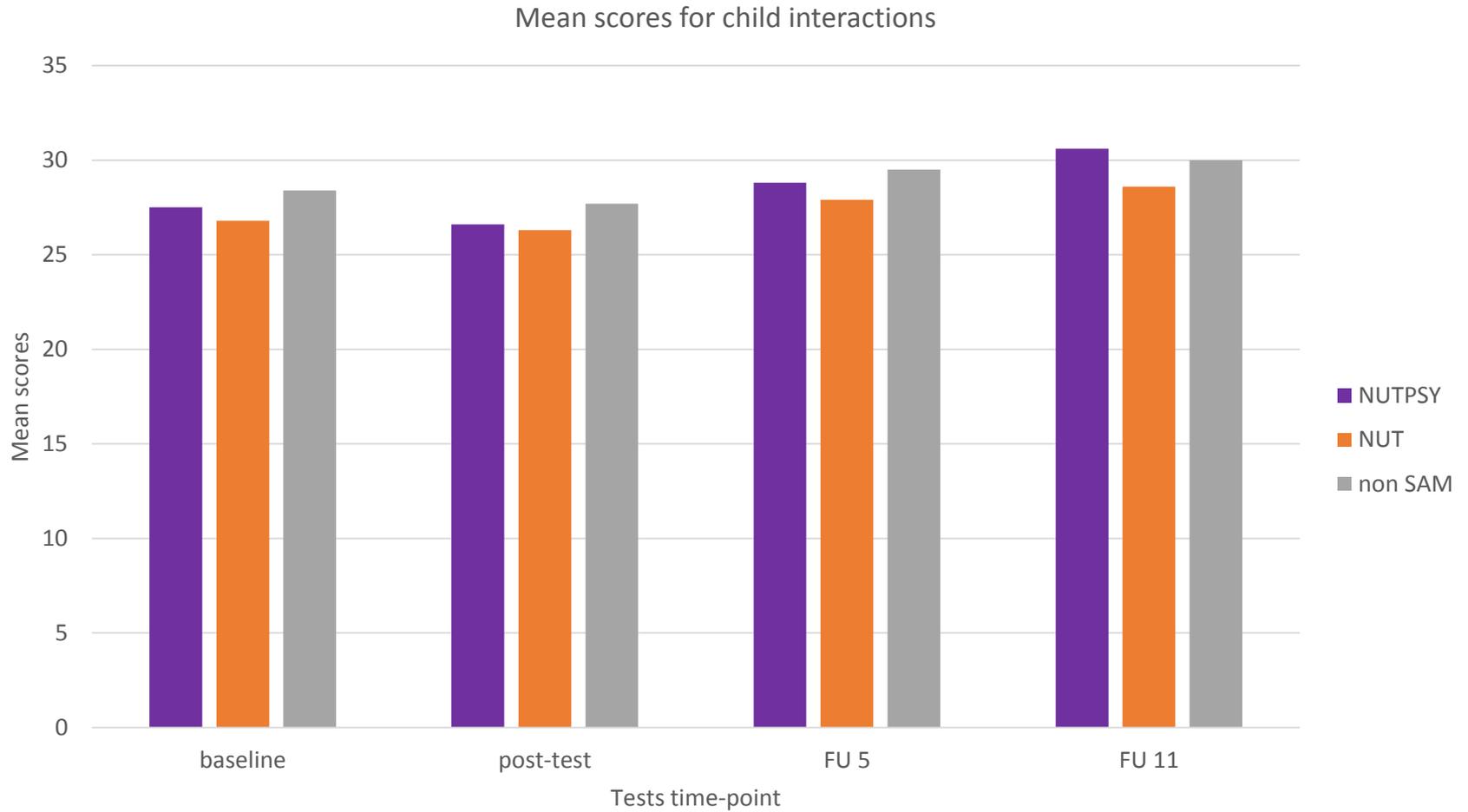


Mother interactions

Mean scores for mother interactions



Child interactions



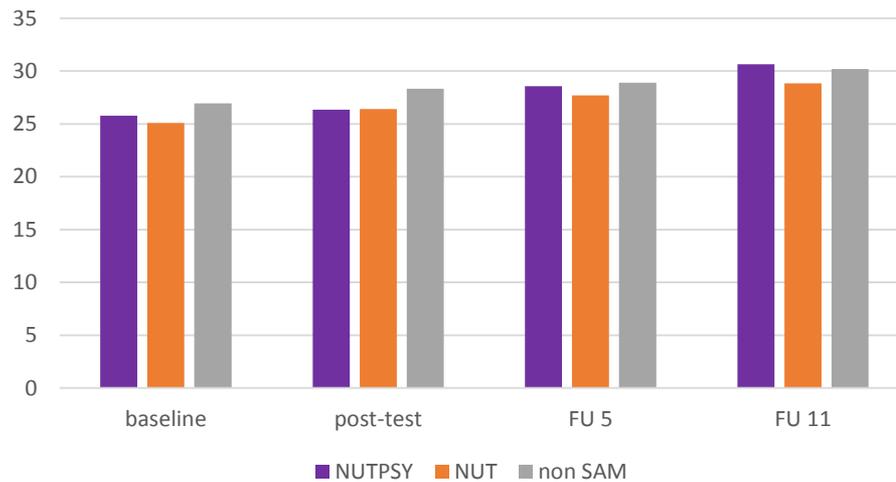
Mother-child interactions

		baseline	post-test	FU 5	FU 11
Total Child Interaction	NUTPSY/NUT	-	-	.048	.000
	NUT/non SAM	.000	.000	.000	.003
	non SAM/NUTPSY	-	.006	-	-
Total Mother interaction	NUTPSY/NUT	.001	.000	-	.000
	NUT/non SAM	.000	.000	-	.001
	non SAM/NUTPSY	-	-	-	-

**Green t-test indicates a significant effect at 5%, 95% Confidence interval*

Mother-child interactions for children 6 -12 months

Child interactions (<12 months)



		baseline	FU 11
Child Interactions	NUTPSY	25,77	30,64
	NUT	25,08	28,82
	non SAM	26,94	30,18

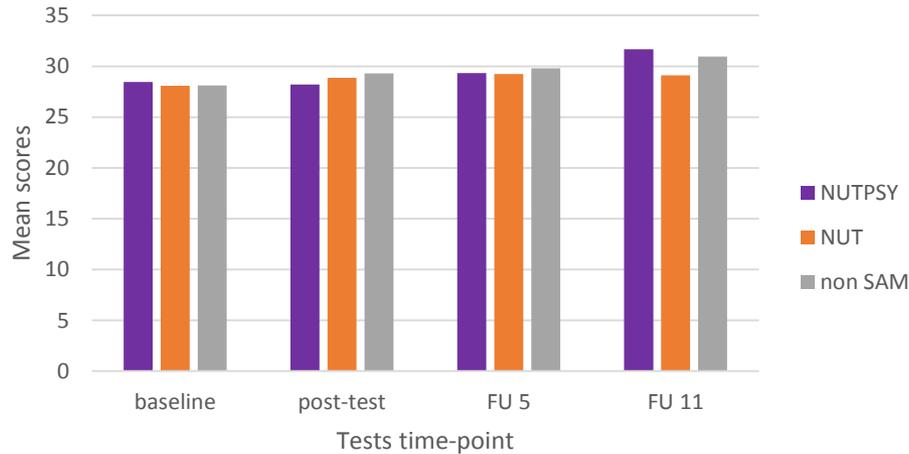
		baseline	FU 11
Mother interactions	NUTPSY	28,14	30,96
	NUT	27,08	29,14
	non SAM	29,28	30,71

Mother interactions with children <12 months



Mother-child interactions for children 12-17 months

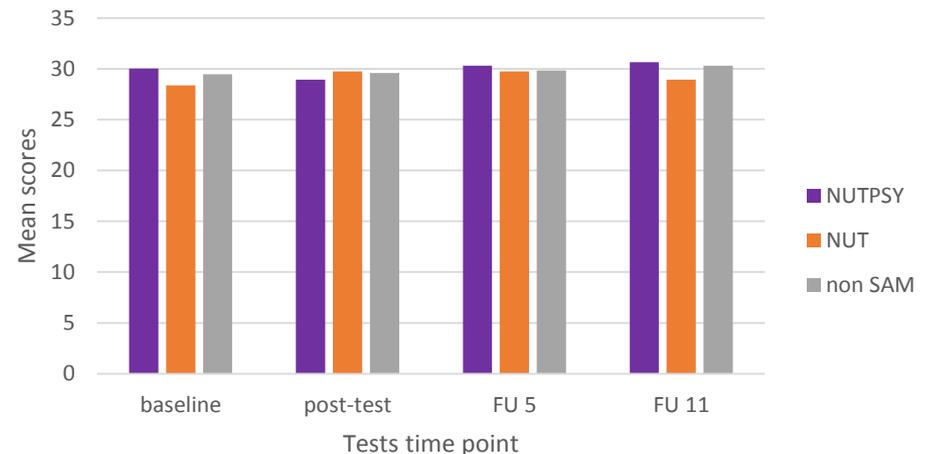
Child interactions



		baseline	FU 11
Child Interactions	NUTPSY	28,45	31,68
	NUT	28,08	29,1
	non SAM	28,12	30,96

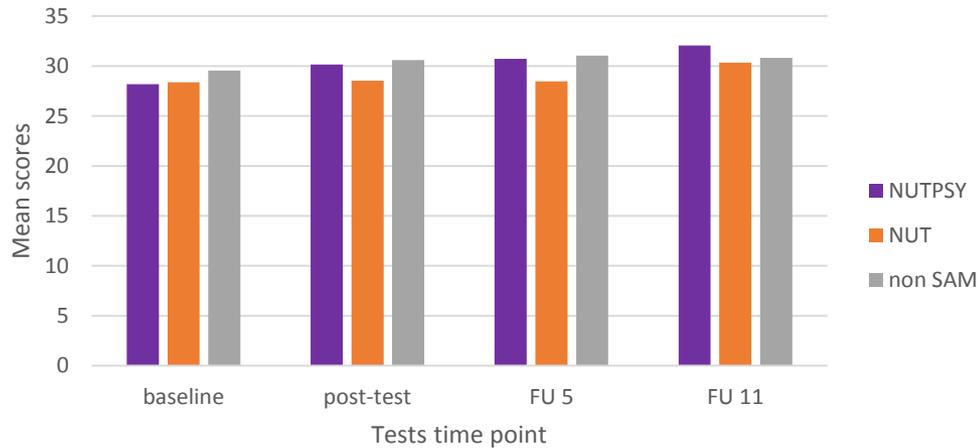
		baseline	FU 11
Mother interactions	NUTPSY	30,02	30,65
	NUT	28,39	28,94
	non SAM	29,48	30,31

Mother interactions



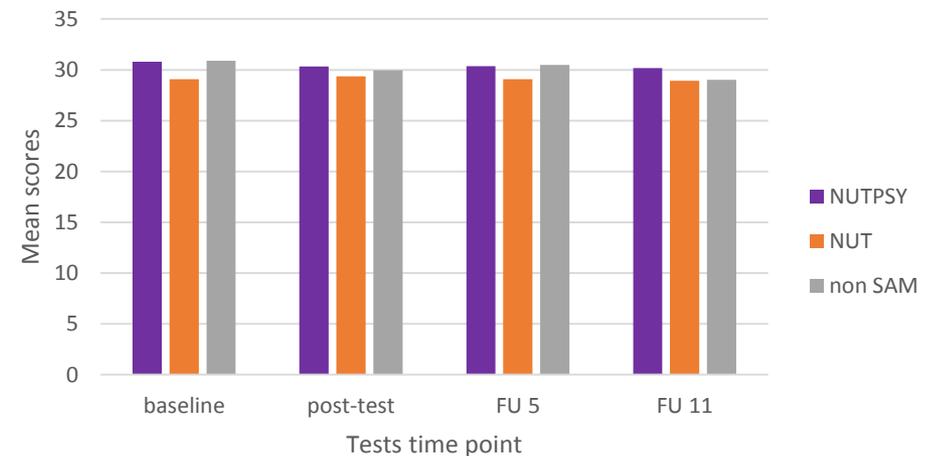
Mother-child interactions for children ≥ 18 months

Child interactions



		baseline	FU 11
Child Interactions	NUTPSY	28,19	32,05
	NUT	28,37	30,34
	non SAM	29,56	30,82

Mother interactions



		baseline	FU 11
Mother Interactions	NUTPSY	30,81	30,17
	NUT	29,08	28,94
	non SAM	30,88	29,01

1. The importance of the first 1000 days of life focusing on mother and child. These are the foundation for multiple aspects of the child's development such as emotional, cognitive and motor that will favour the child's mental and physical well-being for better future.

2. Promoting early childhood development is essential if we want that children reach their full potential

3. ECD provides a very good return on Investment : we invest on early childhood and children's future



4. It is not only the sole responsibility of a mother to take care of the child but it is equally important for the father and the community to contribute in child's development and health: interventions should target caregivers, families and the communities to be successful

The team

FUSAM team in Nepal: Shoyata Shrestha, Gobinda Koirala, Santosh Sapkota, Staff from District Public Health Office, Prathama Raghavan, Parmila Sah, Kamlesh, Shah, Laxmi Jah, Sakuntala Chaudary, Babita Das, Kabita Singh, Aarti Karki, Ramba Sah, Samjana Shrestha, Kabita Yadav, Kala Adhikari, Gita Yadav, Prativa Chaudary, Isabelle Rampa, Pauline Peenaert.



FUSAM team in ACF HQ: Cécile Bizouerne, Francesca Corna, Maria Doria, Paulina Acosta, Bryan Hocq, Alberto Kegue, Félicie Maire, etc.