Relationships between Attachment
Theory (Emotional Development) and
Theory of Mind-ToM (Cognitive
Development) in 4-to-6 Year-Old
Children who Live in Distinct
Socio-cultural-economic Contexts

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### Introduction



The unique, enduring, emotional bond shared between parents and children's development. Often called «attachment» in developmental research, this bond a fundamental component in many theories of socialization.

Bowlby (1969) was the first to theorize about the importance of attachment bonds between parents and children, postulating that secure attachment relationships developed during infancy, foster children's representations of relationships, which when they grow up, guide their future interactions with others.

## Introduction (Cont.)



Recently, some of researchers have begun investigating the relations between attachment and theory of mind (ToM) (Symons and Clark 2000; Ontai 2002; Goodvin 2007). ToM is the ability to attribute mental states—beliefs, intents, desires, pretending, knowledge, etc.—to oneself and others and to understand that others have beliefs, desires and intentions that are different from one's own

Children's theory of mind was worked by researchers of Western European and North American developed countries (Arranz, Artamendi, Olabarrieta & Martin 2001; Monks, Smith & Swettenham 2005; Ontai & Thompson 2008; Ricq 2005; Symons & Clark 2000). Turkey has not worked on this theme so far.

## Introduction (Cont.)



Investigation sampling of developed countries, these papers involve children of middle socia-economic status (middle class) and upper middle socia-economic status (upper middle class) (Meins, fernyhough, Wainwright, Gupta, Fradley & Tuckey, 2002; Ontai & Thompson 2008; Symons & Clark 2000).

Normally developing children aquire ToM before six years of age (Flavell 1999), but generally researchers worked ToM with children at the age of six years old

Generally, the investigations consist of a sampling group established with about 50 children (Meins etc.2002; Ontai & Thompson 2008; Symons & Clark 2000).

## Introduction (cont.)



### **Purpose**

On these grounds, the aim of the present study is to investigate the nature of relationships between attachment style and theory of mind (ToM) in 4-to-6 year old children who live in distinct socio-cultural-economic contexts. (Lower socio-economic classes such as children living in tents, villages and orphanages in southern Turkey).

## Introduction (cont.)



### **Research Questions**

This study is undertaken to address the following research questions:

- 1. Are there significant differences among theory of mind and attachment styles of children based on <u>age</u>?
- 2. Are there significant differences among theory of mind and attachment styles of children who live in <u>distinct socio-cultural-economic contexts</u>?
- 3. Are there significant *gender* differences in children's theory of mind and attachment styles?
- 4. Could the attachment styles of children significantly predict the theory of mind of children?

### Method



#### Method

 This research was designed as a relational and causal comparative study.

### **Participants and Procedures**

The sample of this study consisted of 227 children who were between the ages of 4 to 6 years old during the time of data collection. Participants were drawn from three distinct and disadvantaged groups in Turkey.

### Method



### Participants and Procedures (Cont.)

### Group 1:

Participant children were from a minority of children whose families still live in nomadic conditions (77 children were studied) and do not speak the official language of Turkish very well

Minority children whose families still live in nomadic conditions were visited at tent camps. I went to work with children in twelve <u>different tents</u>. Theory of Mind tasks and attachment <u>doll</u> play tasks were administered to each child individually in the tents

## Group 1: Children whose families live in tents





### Map of Emigration; Onion Session in May-July in Adana

- Group 1: They arrive in Adana, they labor on average one month in fields of Adana, then they go back to their home
- Group 2: They arrive in Adana, they labor on average one month in fields of Adana, than they go to lober fiedls of diffirent cities, they go back to their home 6 months after

## Information about the Families of Children who live in tents: Parental Education Levels



|                   | Mother |       | Father |       |
|-------------------|--------|-------|--------|-------|
|                   | N      | %     | N      | %     |
| Illiterate        | 73     | 94,8  | 25     | 32,5  |
| Literate          | 2      | 2,6   | 27     | 35    |
| Elementary school | 2      | 2,6   | 24     | 31,2  |
| High school       |        |       | 1      | 1,3   |
| Total             | 77     | 100,0 | 77     | 100,0 |

- Measures were translated into Kurdish by Kurdish-Turkish bilingual university students
- Verbal consent from parents and elderly were obtained
- 12 different tents areas were visited
- Families have around 6 children
- Eaxh child is breast-fed on average 17 month
- None of the participant children's siblings was a primary school graduate



### Participants and Procedures (Cont.)

### Group 2:

Participant children who live in rural areas and villages in Turkey (80 children were studied) who can speak the official Turkish language fluently.

I visited 13 rural areas and villages in Adana, Turkey. Children who live in rural areas and villages were asked to carry out theory of mind tasks and the attachment doll play tasks at their home

## Information about the Families of Children who live in who live in rural areas and villages: Parental Education Levels

|                   | Mather |       | Father |       |
|-------------------|--------|-------|--------|-------|
|                   | N      | %     | N      | %     |
| Illiterate        | 5      | 6,3   | 2      | 2,5   |
| Literate          | 6      | 7,5   | 2      | 2,5   |
| Elementary school | 67     | 83,8  | 63     | 78,8  |
| High school       | 2      | 2,5   | 13     | 16,3  |
| Total             | 80     | 100,0 | 80     | 100,0 |

- Native language of children were Turkish.
- Verbal consent of parents and village officals were obtained
- 13 different villages were visited
- Families have 2 children on avarage
- Every Child is breast-fed on average 10 month



### Participants Participants and Procedures (Cont.)

### Group 3:

Participant children who were institutionalized and live in orphanages in five different cities in southern Turkey (70 children were studied) who speaks the official Turkish language fluently

All the orphanages were established and operated by the Social Services and Child Protection Institution. Children were asked to carry out theory of mind tasks and the attachment doll play tasks at the orphanages



### **Instruments**

Theory of mind (ToM) Tasks:

In this study, False Belief tasks were administered to each child. this tasks consist of

change in location task,
appearance reality task,
unexpected contents task,
misleading picture task.

<u>Sally and Anne (change in location task):</u> The first instrument used for assessing ToM from Baron-Cohen et. al. (1985) study is the «Sally and Anne». The instrument was adopted by changing the name Sally and Anne to Ali and Ayse.

Appearance reality task: The name of the child's friend was obtained before starting the application of this task. Two objects that were sponges but appeared like rocks were shown to the child.

*Unexpected contents task*. A candy box was presented to the child and then, the child was asked about what he or she thought was inside.

Misleading picture task. A six-page book used by Astington and her colleagues (e.g., Astington & Jenkins, 1995; Gopnik & Astington, 1988; Jenkins & Astington, 1996) that included a series of pictures which were utilized for this task.



### Instruments

Attachment styles were measured using attachment stories

Parents and social workers completed a demographic information form

Each story was administered to children individually and coded by two independent coders.

### Instruments



### The Attachment Doll Play

- The complete administration of the doll play, including materials, procedures and classification criteria, followed that which was used by Solomon et al. (1995). These procedures were adapted from a semi-structured story completion task development by Bretherton, Ridgeway and Cassidy (1990).
- Children's attachment representations were assessed using the Attachment Doll Play Classification System. This system analyzes children's responses to a set of projective doll play stories which stem as the basis for attachment classifications. All the materials were administered to the participating children individually.

# Method (Cont.) Materials Table 1. Attachment Doll Play Stories



| Story                   | Story Stem   | Attachment Issue  |
|-------------------------|--|---|
| Birthday                |  | Worm-up story   |
| Drinking (Ayran / Coke) | when child wants to take a drink from the table (ayran/coke), he/she falls on dinner table.                    |   |
| Hurt Knee               | The child climbs a large rock, falls off, hurts his knee and cries.  | Pain as an elicitor attachment and protective behavior                  |
| Monsters in Bedroom     | The child is sent to bed, then cries out that there is a monster in the bedroom.                               | Fear as an elicitor of attachment and protective behavior               |
| Departure               | The mother and father leave for an overnight trip and a babysitter stays with the child.                       | Separation anxiety and coping ability                                   |
| Reunion                 | The babysitter sees the parents as they return the following morning and announces their return to the child . | Welcoming versus avoidant, ambivalent or disorganized reunion behaviors |

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### Instruments

- Children's Departure and Reunion stories were considered together in making a classification decision. Each child's narrative was assigned one of four attachment classifications:
  - Confident (Group B, Secure),
  - Casual (Group A, Avoidant),
  - Busy (Group C, Ambivalent/Resistant), or
  - Frightened (Group D, Disorganized/Controlling).

Group names capture the most notable characteristics of the classification type (Solomon et al. 1995).

# Method (Cont.) Analysis



- Currently, the researcher is in the process of data analysis.
- Associations between children's theory of mind scores and the attachment style scores will be examined.

## Thank you for Listening!!!

