New Trends and Issues Proceedings on Humanities and Social Sciences

Volume 7, Issue 1, (2020) 142-148

www.prosoc.eu

The investigation of interactional synchrony between 3-year-old children and their mothers according to family types

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Suggested Citation:

Seven, Z. D. & Seven, S. (2020). The investigation of interactional synchrony between 3-year-old children and their mothers according to family types. *New Trends and Issues Proceedings on Humanities and Social Sciences. 7*(1), pp 142–148. DOI: 10.18844/prosoc.v%vi%i.4878

Received from November 12, 2019; revised from April 25, 2020; accepted from June 10,2020.
Selection and peer review under responsibility of Assoc. Prof. Dr. Jesus Garcia Laborda, University of Alcala, Spain.

Abstract

In this study, the synchronisation characteristics of mothers and their 3-year-old children living in extended and nuclear family types were examined in a semi-structured play process. In this study, grounded multi-case research, which is a type of case study, was used. The participants of the study consisted of 12 mothers and their 3-year-old children, 6 of them are from an extended family type and 6 of them are from a nuclear family type. Observational and interview techniques were used to describe the interactions of the studied group in detail. As a result, interactional synchrony behaviors were very limited in all mother–child couples in the extended and also nuclear families. However, it was observed that the eye contact of mothers was inadequate.

Keywords: Interactional synchrony, parents, social interaction, family, attachment.

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1. Introduction

Scientists who formed the theoretical framework of attachment had strongly incorporated maternal sensitivity in the cues sent by the baby in developing a secure infant–mother attachment relationship (Bowlby, 1969). Ainsworth, Blehar, Waters and Wall (1978) developed various scales to assess attachment and maternal sensitivity. As a result of the studies conducted with these scales, it was found that the sensitivity history of the mother was related to the quality of attachment (Smith & Pederson, 1988). De Wolff and van IJzendoorn (1997) found that maternal sensitivity was an important variable for secure attachment, as a result of a meta-analysis study which contained 66 studies with certain measurement tools. Similarly, Atkinson et al. (2000) conducted a meta-analysis from 1970 to 2000, with 41 studies examining the relationship between maternal sensitivity and attachment. According to the results of the meta-analysis, maternal sensitivity affects the quality of attachment.

Maternal sensitivity is seen as a key factor in mother–child interactions (Vereijken & Riksen-Walraven, 1997). Sensitivity is defined by Ainsworth, Bell and Stayton (1974, p. 127) as 'the ability to correctly perceive and interpret the signals and communication demands of the infant's behaviour and to respond to them quickly and appropriately with this understanding'. It is believed that sensitive mothers give the interaction experiences they need to develop a sense of security with their babies in the mother–child relationship (Vereijken & Riksen-Walraven, 1997).

There are basically five dimensions of mothers' parenting behaviours examined by developmental psychologists in the context of attachment relationships. These include sensitivity cycle, sensory sensitivity, emotional availability, mind-mindedness and interactional synchrony (Seven & Alabay, 2020).

Interactive synchronicity refers to the structure of the rhythm and timing of mother–infant interactions. The focus of the structure is to reflect the baby's behaviour and to adjust the rhythm and tempo of her own behaviour to her baby's behaviour (Thomson, Kennedy & Kuebli, 2011). Unsynchronisation is defined as sharp interruptions in the flow of interactions. The restoration of the relationship after an interruption occurs when one or the other of the pair continues to interact. The transition from synchronicity to an asynchronous state is considered quite normal in the effort to repair the synchronicity. According to Biringen's (2000) study, even in the best interaction, there are conflicts and contradictions. However, the existence of an asynchronous situation without a successful solution is indicative of incompatibility (Thomson et al., 2011).

In this study, we aim to examine the interactional synchrony characteristics of mothers and their 3-year-old children living in extended and nuclear family types within a semi-structured play process.

2. Method

2.1. Research model

Qualitative research is a type of research in which qualitative data collection techniques, such as observation, interview and document analysis, are used, and a qualitative process is carried out to present the perceptions and events in a realistic and holistic way in the natural environment (Yildirim & Simsek, 2000). In this qualitative research, embedded multi-case research, which is a type of case study, is used (Yin, 2003). In this study, the grounded theory multi-case study is chosen to determine the basic behaviour patterns in the mother–child interaction.

2.2. Study group

Mother–child couples who participated in the study were determined based on criterion sampling, among the purposeful sampling methods used in qualitative research. In an investigation, observational units may consist of persons, events, objects or situations of a particular nature. In such

case, the units that meet the criteria determined for the sample were taken into sampling. In this study, the criterion was chosen as the sampling method in order to express the situation best. In this research, the main criteria are family types and children's age.

The participants of the study were 12 mothers, 6 mothers living in extended families with 3 girls and 3 boys between the ages of 31 and 28 months and 6 mothers living in nuclear families with 3 girls and 3 boys between the ages of 31 and 38 months. The families voluntarily participated.

Twelve mothers and 12 children (6 girls and 6 boys) participated in the study. The extended families consisted of 6 mothers, 3 girls and 3 boys; and the nuclear families consisted of 6 mothers, 3 girls and 3 boys. The ages of the children were between 31 and 38 months. The mothers were not working and were usually primary school graduates. The families generally had low incomes. The ages of the mothers were between 26 and 37 years. When the number of siblings of the children was examined, it was seen that five of them had three siblings and the others had less siblings. All of the mothers in the nuclear families had previously grown up in extended families.

2.3. Data collection tools

Mother–Child Observation Form and the Mother–Child Information Form were prepared for this research study. The related literature was examined in order to determine the interaction behaviours that would determine the interactive homogeneity between the mother and the child. Based on this, the observational behaviour list, which directs mother–child interaction, was prepared. The observational behaviour list was sent to five experts. Their opinions were received and necessary arrangements were made and the form was finalised. The Mother–Child Information Form was prepared by examining the literature on the factors affecting the mother–child interaction in order to better identify the child and the mother (Juffer, Bakermans-Kranenburg & van Ijzendoorn, 2008; Yorgason, 2015). The form contains factors that are thought to have an impact on interactive synchrony, such as maternal age, maternal education level, economic level of the family, number of siblings of the child and mother, and family type.

2.4. Data collection and analysis

The video recordings of the mother and child couples of 10-minutes play activities were collected. The Mother–Child Information Form was filled out by the researcher based on the interview technique after the play activity.

The game activity was carried out using the standard four-coloured play dough, which was structured in the natural environment related to observation and was fixed for all mother–child couples participating in the study. Presentation time was 10 minutes. The play dough mould was not used. The presentation took place in the homes of the participants, where the mother–child couples felt most comfortable. The researcher positioned the camera at a point that would not catch the child's attention, but could clearly record the mother–child behaviour. During the observation process, the researcher was in the same environment but did not intervene in any way. The game presentations took place in August 2017. Necessary permissions were obtained from the families before the presentation.

In this research, a descriptive–interpretive data analysis was used. In this type of analysis, the data are reduced and put in a certain order, and then the data are selected and comments are made. In this type of analysis, appropriate interpretations are given on descriptive narratives (Ekiz, 2007). In this study, the data were examined, categories were tabulated and results were written and interpreted. The video recordings obtained as a result of observation were encoded by two encoders and the data were generated.

3. Findings

3.1. Interaction synchrony between mother and child in extended families

The synchrony of the mother–child couples living in extended families was found to be inadequate. As seen in Table 1, when the mother–child couples living in extended families were examined, it was observed that negative behaviours caused by mother were much higher than positive behaviours during interaction. All of the most common behaviours observed during the interaction were negative. The most common negative behaviour was defined as the mother's interventions in the game. It is also worth noting that the mothers often experienced breaks while following the child's play. It was also observed that all mothers in the extended families interfered with the child's play from time to time. On the other hand, it was determined that all mothers in the extended families were aware of the child's cooperation messages at least once.

The most common negative behaviours in the extended families were the mother's unwillingness to participate in the game, intervening in the child's play, frequent disconnection from the game, attempts to disrupt the child's on-going or finished product and trying to teach the child to play things other than the play, which was a very rare establishment of eye contact. In the extended families, children were often prevented by their mothers. As a result, the blocking of children resulted in negative emotional reactions. These obstacles were by disliking the child's plan, interfering with the child's product during the game and destroying the child's product.

When the process was examined, it was observed that the mothers frequently broke off from the game. Mothers' efforts to teach, their willingness to implement their own plan and their unwillingness to participate in the game caused breaks. On the other hand, it was found that the children tried to repair the broken processes. Children showed behaviours like asking questions, drawing attention, making eye contact and behaving in their own way to repair the broken process. For example, C2 wanted to see his mother in his game during game time. At the beginning of the game, he asked questions such as ‘What is this?‘, ‘Who is this??’ and ‘Where is the plate?’ Based on the mother's neutral and negative reactions, the child tried to get the attention of the mother by saying, ‘Look what I'm doing’ and by holding the rhythm.

3.2. Interaction synchrony between mother and child in nuclear families

The interaction synchrony of mother–child couples living in nuclear families was found to be weak. As seen in Table 1, when the mother–child couples living in nuclear families were examined, it was observed that negative behaviours caused by the mother were higher than positive behaviours during interaction. However, it appears that two mothers in the nuclear families predominantly exhibited three positive behaviours, unlike mothers in the extended families. Again, the number of positive behaviours was a little bit more. However, it was determined that mothers in the nuclear families also exhibited widespread negative behaviours. In addition, it was observed that two mothers predominantly showed four negative behaviours.

The negative behaviours were mostly similar to the mother–child couples in the extended families. Interaction problems were from the mother. In the mother–child couples in the nuclear families, the most frequent interventions of the mother were recorded as problems. However, it was observed that the mother interfered with the child's plan. In addition, the breaks of the mother during the gaming process have been widely determined. Efforts to teach something to the mothers in the nuclear families and some mothers not being aware of the children's plans caused interruptions in the interaction. Mutual rhythmic synchrony was observed in M6 and M7’s products. For example, in M6 and C6 interaction, this process started with the suggestion that the child make a birthday cake. The mother and the child planned a birthday cake together and made it together, and the mother first said ‘happy birthday’.

In M6 and C6, the child had blown the candles on the cake, and then the child said 'happy birthday' for the mother and the mother had blown the candles. In the nuclear families, eye contact is frequently established between A8 and C8. This was not observed in other mothers. Eye contact was found to be quite weak in couples other than this pair. Children also attempted to repair the disturbed interaction in the nuclear families. He showed this through his efforts to add the mother to the game, and the boy blew out the candles on the cake. The mother then said to the child 'happy birthday 'and the mother blew out the candles. Eye contact was found to be quite weak in couples other than this pair. Children also tried to repair the disturbed interaction in the nuclear families. He showed this through his efforts to include his mother in the game.

4. Discussion

Similar positive and negative behaviour patterns were observed in both extended families and nuclear families. However, the frequency of positive and positive behaviours differed slightly according to family types. The frequency of positive behaviour was seen in nuclear families and the frequency of negative behaviour was seen in extended families.

Interaction synchrony was very weak in all mother–child couples in the extended family. While the coordination and cooperation behaviours were negligible in the M5–C5 mother–child couple in the nuclear families, it was observed that the other mother–child couples in the nuclear families acted mutually in harmony, despite some breaks and forming little products together. Nevertheless, it can be said that the coordination and cooperation behaviours of mothers had little place in the whole play. Poor synchronisation between the mother and the child may be a symptom of non-compliance (Thomson et al., 2011). In the extended families, M4–M8 in the nuclear families played the game according to their own agendas, and the children were often unable to plan or realise their plans. Mothers consistently responded negatively to the children's attempts to play. Towards the end of the game, C5 showed crying behaviour to participate in the game. On the other hand, C2, C3 (extended families) and C7 (nuclear families) behaved according to their own agenda during the game.

M7 behaved according to the agenda of the child. In the extended families, in M2 and M3, it was observed that mothers avoided planning the process. As a result of the study, it is understood that the mind-mindedness expressed by (Meins et al., 2012). It can be said that low sensitive awareness is an important indication that children's interaction synchrony needs are not sufficiently fulfilled.

It was observed that mothers exhibited a number of interactive disruptive behaviours. In all the mothers, inadequate intervention behaviour was observed at least three times during the game. As a result of these behaviours, children continued to play restlessly.

Throughout the play process, it was observed that the children first tried to get their attention and entertained them, and finally showed crying and protesting behaviours against their preventive and neutral attitudes. Indeed, this situation was seen in A5. This supports the idea that negative behaviours will increase when there is no positive effect, as suggested by Tronick (1989), and when the broken coordination is not repaired. However, according to Grossman, Bretherton, Waters and Grossman (2016), when the child sends a play invitation message, the child may react to distress and anger if the mother does not notice or misunderstand. When the child does not get the result he/she wants, he/she will continue to send new messages to restore the interaction, depending on the capacity to regulate, and to try and establish balance. It can be said that the attention, entertaining effort, crying and protesting behaviours in this research were efforts to repair the interaction by sending messages in different ways, according to the capacities of the children.

The most common family type in the Ottoman period was the extended family. In the Republican period, the nuclear family became the most common type of family, first in cities and then in rural areas (Ahioglu-Lindberg, 2012). However, some nuclear families who have migrated to rural and urban areas maintain their extended family functions to a large extent (Nacak, Yagmurlu, Durgel & Van De Vijver, 2011). All the mothers in this study who live in both extended and nuclear families come from

extended families. Although mothers living in extended families exhibited weaker behaviours than the mothers in the nuclear families in terms of synchrony, similar characteristics were observed in terms of their behaviours. In terms of hiding emotions in the mothers from both family types, lack of physical contact and eye contact, working together for the purpose, deficiencies and problems were observed. This supports the idea that the mother's own internal working model is transmitted (Holmes, 2009). Traditional care practices and pattern behaviours in the extended family are believed to be effective in the formation of this model. Therefore, it is understood that stereotypical behaviour and traditional practices have an effect on the behaviour of mothers towards their children in transitioning from an extended family to a nuclear family.

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