Parent/Grandparent–Child Interactions and their Influence on Child Development

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Abstract: This ethnographic study sought to explore, among parents working in an industrial setting, parent/grandparent-child interactions and the influence these interactions have on child development. Participants were parents and grandparents from twenty-two families who had children 13 to 36 months of age. The families were recruited from healthcare centers and factories in an industrial area of eastern Thailand. Data were collected via participant observation, in-depth interviews, audio/video tape-recordings, field notes and one secondary source. Analysis of data involved descriptive statistics, and Roper and Shapira's strategies of ethnographic analysis.

The results revealed parent/grandparent-child interactions occurred within five major activities: feeding, playing, teaching, disciplining and daily-routine caring. The parents' and grandparents' behaviors, during interactions with their children, emerged as: encouraging, supporting, ignoring and threatening. The children, simultaneously, responded to their parents or grandparents interactions by using either cooperative or non-cooperative behaviors. The influence of the parent/grandparent-child interactions on child development was found to occur within four categories: physical, cognitive, language, and emotional and social.

The findings suggest the need for nurses and other health professionals to take into account, as they work on improving parent/grandparent-child interactions among families who work in an industrial area, parental/grandparent activities and behaviors related to child development. The results also provide a structure for the creation of interventions, among families with toddlers who reside in an industrial area, which may foster improved parent/grandparent-child interactions and child development.

Pacific Rim Int J Nurs Res 2011 ; 15(4) 305-322

Key words: Parent/grandparent-child interactions; Ethnographic study; Industrial setting; Child development

Background

Interactions between parents and a child are important because they influence the child's ability to learn and develop positive behaviors. For example, supportive and sensitive mother–infant interactions have been found to enhance the development of a relationship and attachment between a mother and

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her infant.[1,2] In addition, parents who express their enjoyment, about being a parent, tend to interact through pleasant facial expressions and vocalizations, touching, smiling and laughing, which, in turn, enhances their child's ability to better regulate his/her emotions.[2]

The literature indicates interactions among parents and a child are fundamental to their child's development in regards to: cognitive ability; communication and linguistic competency; motivation to explore and learn about the world; understanding self and others; and, development of positive social relationships.[2-5] The first three years of life have been found to be extremely crucial to a child's personality formation, as well as emotional, social, communicative and cognitive competencies.[2,6,7] Positive outcomes for children appear to be dependent upon sound parenting practices, including nurturing, training and caring.

A national survey, regarding the development of Thai children less than five years of age, revealed, between 2004 and 2007, a 5 percent decline in the number of children who manifested normal development.[8,9] In addition, Thai children, between 12 and 35 months of age, were found to have less motivation and skill for mastery/attention compared to American children the same age.[10] One of the leading factors identified, regarding delayed development in children, was the presence of inappropriate parent-child interactions.[1,2]

Culture plays a critical role in the socialization of individuals during their childhood.[2, 11,12] Cultural and societal structures, customs and value systems influence the way parents raise their children. Prior research has found cultural and social conditions to be key influencing factors on the socio-emotional development of children.[13-16] The shift from an agrarian to a more industrialized society has caused Thai people to make changes in their social structure and way of life, including: alternations in living and working conditions; changes in belief and value systems; modifications in lifestyles; changes in health practices; and, alterations in childrearing. This is especially true on the eastern seaboard of Thailand where migration of people, from other regions of Thailand, has occurred for the purpose of employment. An increasing number of Thai men and women now engage in industrial work, rather than in work related to agriculture. As a result, these men and women have developed a culture of childrearing that is much different from the type of childrearing previously carried out in the agrarian society. Since an increasing number of women work outside the home, to help support their family, changes in childrearing practices have influenced them and their availability to other family members. Some parents now are unable to provide full-time care to their children and must rely on grandparents and child care centers/nurseries in their communities.[17,18]

Despite the fact there have been numerous studies on parent-child interactions, the studies primarily have been conducted in Western cultures. In addition, little is known about the effect the movement from an agrarian setting to a more industrialized setting has had on childrearing within Thailand. Exploration and assessment of parent-child interactions appears needed so as to identify effective ways to promote the health and well-being of children growing up in an industrialized area. Therefore, the purpose of this study was to explore the influence of parent/grandparent-child interactions on child development in families, with 13 to 36 month old children, living in an industrial area on the eastern seaboard of Thailand.

Method

Design: An ethnographic approach was undertaken to explore the influence of parent/grandparent-child interactions. This method was

considered appropriate for obtaining information about parent/grandparent-child interactions as they relate to the culture, traditional life activities and behaviors of the participants.

Ethical considerations: Data collection was initiated following approval to conduct the study from the Graduate School's Ethical Research Committee of the primary investigator's (PI) academic institution, and the administrators of the eleven organizations used to access potential subjects. All potential participants were informed about: the nature of the study; what study involvement entailed (i.e. interviews, observations, audio/video recordings and note taking by the PI); anonymity and confidentiality issues; voluntary involvement; and, the right to withdraw from the study at any time without repercussions. Those who consented to participate either signed a consent form or gave verbal consent.

Participants and setting: Potential participants were recruited from eight factories and three healthcare centers in the industrial area used as a study site. The industrial area was selected because it was on the eastern seaboard of Thailand where numerous migrations of people occurred for employment.

The criteria for inclusion of a family was having at least one parent who: was at least 20 years of age; had a 13 to 36 month old child; worked in the industrial area; was willing and available to participate in the study; and, was able to communicate. Members of families who had a history of mental health illness, chronic illness or severe health issues were excluded from participation.

Potential participant families from the healthcare centers were identified, via the children's medical records, on the day each center was conducting vaccinations for children. Potential participant families from the factories were identified via circulation and return of a survey that asked if they had a child between 13 to36 months of age.

Originally, 25 families consented to participate in the study. However, three families withdrew during the data gathering process because of moving outside the area or having insufficient time to take part in the interview process. Thus, 70 family members from 22 families (22 children, 22 mothers, 20 fathers and 6 grandmothers) participated in the study. Due to parents of two of the families being separated, only 20 fathers took part in the study. The 22 families proved sufficient for saturation of the qualitative data.

Fifty-nine percent (n = 13) of the children were boys and 41% (n = 9) were girls. The majority of children were 13 to 24 months of age (n=13; 59%). Over half the fathers (n=13; 59%) were 30 to 40 years of age, while the majority of mothers (n= 15, 68%) were 20 to 30 years of age. The majority of parents (n=15; 75% of fathers and n= 17; 77% of mothers) were migrants. Six (30%) fathers and 10 (45%) mothers came from the Northeastern region of Thailand. Six (30%) fathers and three (14%) mothers were from the Northern region, while three (15%) fathers and four (18%) mothers were from the Central region. Five (25%) fathers and five (23%) mothers were from the Eastern region, including the province where the study was conducted. The majority of participant families (n= 20; 91%) lived in a residential area near the industrial study site area. Seven (32%) families rented a house or room, while 14 (64%) were home owners with a mortgage. The one (4%) remaining family lived with relatives.

Seven (32%) mothers and four (20%) fathers had worked more than 10 years, in the industrial area, while seven (35%) fathers and seven (32%) mothers had worked five to 10 years. Nine (45%) fathers and eight (36%) mothers had worked less than five years. Parents tended to work in: electrical parts (n = 3; 15% of fathers and n = 7; 32% of mothers); household appliances (n = 4;

20% of fathers and n = 4; 18% of mothers); food products (n = 3; 15% of fathers and n = 3; 14% of mothers); and footwear (n = 2; 10% of fathers and n =2; 9% of mothers).

Six of the 22 families had a grandmother who was part of the family structure and served as parental childcare giver. All of the grandmothers (n = 6) were 51 to 65 years of age (mean = 58). Five (83%) grandmothers indicated they moved to the eastern region of Thailand because their adult children had relocated for employment.

Instruments: Two instruments, one recording device and one secondary source were used to guide the data collection process. The instruments included a demographic data sheet and an in-depth observation/interview guide that focused on parent/grandparent-child interactions, while the recording device was an audio/videotape-recorder. The one secondary source of information was each child's health record ("Pink Book") which was kept at his/her parents' respective health care center.

Data sought via the demographic data sheet included each family's: structure; age of parents/grandparents; educational level of parents; family monthly income; gender of child; age of child; gender of grandparents; reason for grandparents living with adult children; regional area of parents origin; living arrangements (home ownership, renting or living with relatives); presence of a home mortgage; and, length of time and specific area of parents' industrial employment. Data obtained from the "Pink Book" included each child's birth weight and developmental growth (current height and weight).

The in-depth interview guide consisted of: guidelines for observations; and, 30 open-ended and 25 probing interview questions. Areas requiring observation included description of each participant's: housing conditions; family relationships; and, types of parent/grandparent-child interactions. Examples of family relationships and parent/grandparent-child interactions included observations regarding: what was happening between the parents/grandparent and their child during a typical day; how the parents/grandparent responded to their child; and, how the child responded to his/her parents/grandparent. Recording of observations made of each family were done by way of field notes. The interview component of the instrument consisted of 30 open-ended questions such as: "What do you do with your child during a typical day?"; "Please describe the type of activities you do with your child during a typical day?"; "How do you respond to your child's various types of behavior?"; and, "How does your child respond to your various actions?" Examples of the 25 probing interview questions included: "Please describe that specific behavior of your child in a bit more detail?"; "Please clarify exactly what you mean?; "Please give another example of your reactions to your child's responses to you?"; "Please give another example of how you discipline your child?"; "Please demonstrate the playing you normally do with your child?; and, "Please give another example of the playing you do with your child?".

The audio/video tape recording device was used throughout each interview, as well as during the parent/grandparent-child interactions when feeding, playing, teaching, disciplining and daily routine caring occurred. Audio/video taping was done so as not to inadvertently miss data, as well as to facilitate review of the data and validate the findings. The recording device was set up, by the PI, prior to each interview/observation, and discontinued when the interview/observation ended.

Procedure: Once a potential participant was identified and approached (either in the waiting room of one of the health clinics or in the lunch room of one of the factories), determined to meet the study's inclusion criteria, assured of his/her ethical rights and consented to take part in the study,

by signing a consent form, information regarding his/her home address and telephone number were obtained. Subjects were telephoned two to three days after initial contact with the PI to set up an appointment in their home.

To build trust and allow participants to become familiar with the PI, the PI made one to two visits, to each home, prior to collecting data. In addition, so as to better understand the everyday lives of the participants, the PI moved to an apartment near the industrial park and became involved in activities with the parents/grandparents and/or their children (i.e. singing; playing with toys; and, going to the playground, healthcare center, day-care center or factory).

After the pre-data gathering home visit(s) had been completed, the PI and each participating family agreed upon an appointment time for the PI to conduct a 1.5 to 2 hour observation and in-depth interview of the parents/grandparent in their respective home. Interviews generally were scheduled on a weekend or when the parental participants had a day off from work. To assure accuracy of the data, the PI asked six families to review the interpretations that had been made of their respective data. The entire data gathering process took 2-3 months per family unit.

Data analysis: Demographic data were analyzed using descriptive statistics, while observational and interview data were examined using Roper and Shapira's[19] strategies for ethnographic analysis. All interview data recordings were transcribed verbatim, and data from all field notes, written from observations and the secondary source, were reviewed. Content analysis was performed concurrently with data collection. Roper and Shapira's ethnographic analysis is a process of discovering patterns and themes, searching for relationships among categories; developing explanations through use of coding (using descriptive labels), sorting data for patterns and determining outliers.

Trustworthiness: To ensure trustworthiness of the study, the PI used triangulation techniques, prolonged engagement, persistent observations and member checking. Triangulation was addressed by use of multiple data sources (parents, grandparents and child health records), data collection methods (interviews, observations and field note review) and data analyzers (all members of the research team). Prolonged engagement was addressed by the PI's long-term observations and emersion into the participants' lives until specific situations were understood. Persistent observation involved the PI spending sufficient time observing participants so that thick descriptions could be written in the field notes and data, obtained from the secondary source, could be interpreted in a systematic manner. Finally, member checking occurred as a result of six families being asked to review the accuracy of the data transcribed and the interpretations made.

Results

The purpose of this study was to explore the influence of parent/grandparent-child interactions on child development in families, with a 13 to 36 month old child, residing in an industrial setting on the eastern seaboard of Thailand. As shown in **Figure 1**, the data emerged into the following themes: a) major parent/grandparent-child activities; b) characteristics of parents'/grandparents' and children's behaviors during interactions; and, c) influences of parent/grandparent-child interactions on child development.

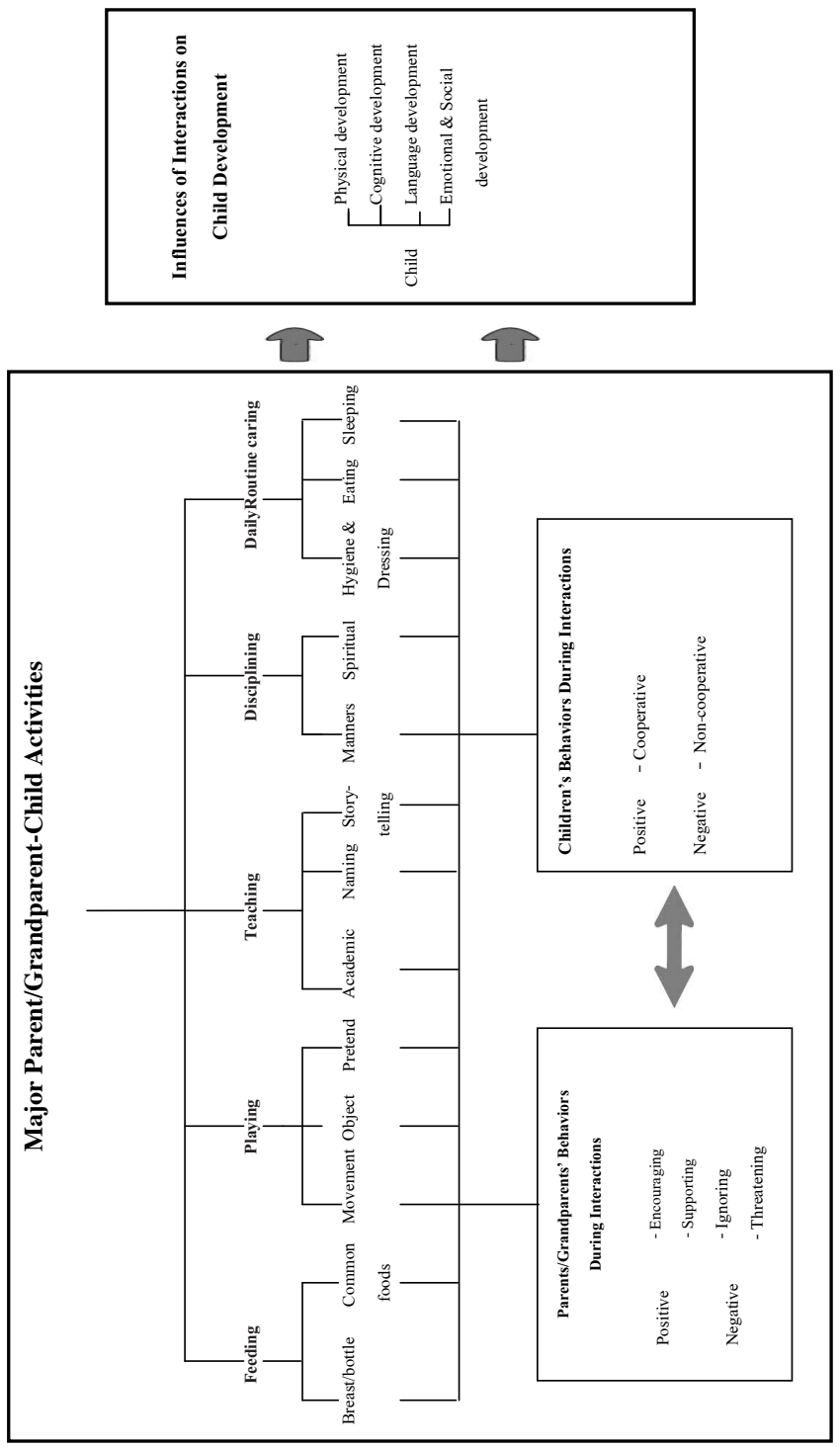

Figure 1: Parent/grandparent-child interactions, among families in an industrial setting, and their influence on child development.

Major parent/grandparent-child activities: Parent/grandparent-child interactions, within the families, took place around five major activities of daily living: feeding, playing, teaching, disciplining and daily routine caring. All of the mothers exclusively breast fed their children during the first month of life. However, because of the need to return to work, the majority (n = 15; 68%) began weaning their child, at three months, from breast milk and starting the use of baby formula. At which time, all of the children were offered rice two to three times a day (breakfast, lunch or dinner).

Playing occurred as three types of activities: movement play, object play and pretend play. In movement play, parents liked to engage in: peak-a-boo (*ja-ae*), patty-cake (*tob-pae*), tickle (*jag-ka-jee*), ride a horse, gently throwing the child into the air and then catching him/her, and lightly swinging the child from side to side. In object play, four types of objects were preferred by the children, including: commercial toys, kitchen items (pots, pans, spoons, plastic glasses and bottles), grooming items (hairbrushes, combs, mirrors and lipstick) and rubber bands. However, because they could not afford them, seven (32%) mothers revealed their children seldom played with commercial toys. These mothers also believed toys were not useful for children because they could neither be eaten nor be of functional use.

Three types of teaching activities were revealed: academic, naming and storytelling. In academic teaching, parents/grandparents taught their children the Thai alphabet, the English alphabet and numbers. They believed these activities were best for preparing their children to write and to be ready for school. In name teaching, parents/grandparents taught their children names of various people, family members, body parts, animals and items within their surroundings. Six (27%) families indicated telling stories to their children. Some of the mothers did not tell their children stories because they had never experienced story telling as a child, and had no idea what it was or how to do it.

Discipline activities were found to occur in two ways: manners and spiritual. Manners discipline involved being instructed on using basic manners, such as appropriately greeting people, respecting others, sharing with others, being polite, picking up toys after playing with them and knowing right actions from wrong actions. The children were shown how to respectfully greet others by saying hello (sawasdee) or giving a slight bow with the hands pressed together in a prayer-like fashion (Wai). Since all participants were Buddhist, spiritual discipline involved taking the children to temple and offering food to the monks. Seven (35%) families indicated they took their children to temple every important Buddhist day, such as Visakha Bucha, Maka Bucha, Buddhist Lent and the end of Buddhist Lent. The parents/grandparents of the seven families indicated they wanted their respective "child to be good natured and a compassionate person."

Daily routine caring activities were identified, by the parents/grandparents, as the most important everyday parent/grandparent-child interaction. These activities involved considerable time, each day, and included: bathing, dressing, eating, oral hygiene, washing and combing of hair, and sleeping.

Parents'/grandparents' and children's behaviors during interactions: Data obtained during the audio/video taping of the parent/grandparent-child interactions during feeding, playing, teaching, disciplining and daily routine caring revealed two themes: positive interactions and negative interactions. Positive interactions were found to occur within two categories: encouraging and supporting. Encouraging interactions were demonstrated by parents/grandparents persuading, talking in a positive manner, answering and asking questions, touching, hugging, making eye contact, praising, smiling, introducing and

reinforcing behaviors with their children. Supporting interactions were manifested through: assisting, advocating, approaching, talking, preparing a position, preparing objects, helping, caretaking, answering questions and orientating.

Negative interactions also were shown to occur within two categories: ignoring and threatening. Ignoring interactions were manifested by way of: disregarding, not responding, not praising, not soothing, not encouraging, not supporting, not suggesting and not providing. Threatening interactions were shown by way of: complaining, prohibiting, enforcing, beating, intimidating, using a high tone, banging and hitting.

Children's behaviors also emerged in two categories: cooperative and non-cooperative. Cooperative interactions, which mostly occurred in response to their parents/grandparents encouraging and supporting interactions, were manifested through: looking at parents/grandparents, responding, approaching, touching, talking, smiling, reaching, giggling, pointing and answering questions. Non-cooperative interactions, which tended to occur when parents/grandparents ignored or threatened their child, were manifested by: refusing to look parents/grandparents, quitting, not answering, not smiling, playing alone, walking away, crawling away, looking dull or fearful and doing activities alone.

It was noted, in some of the families, a combination of positive and negative interactions were used within one encounter between parents/grandparents and a child. Children also were found, at times, to use a combination of cooperative and non-cooperative interactions when responding to parents. However, for the purpose of providing clear examples, the following cases address, separately, the families' demonstrations of positive, negative, cooperative and non-cooperative interactions.

Positive interactions of parents/grandparents and cooperative interactions of children: Encouraging interactions, a type of positive interaction, were manifested within the majority (n = 15; 86%) of families during feeding, playing, teaching, disciplining and daily routine caring. The following conversational phrases and responses are examples of encouraging interactions noted between a mother and her 19 month old son who was having lunch. The specific methods used by the mother are noted in bold and brackets, while the subsequent responses of the child are noted in bold and parentheses.

Mother: "Let's eat." **[introducing & talking]**

Child: Turns face towards mother, looks at mother and then opens mouth for food **(looking at parent)**

Mother: Before feeding, she says "*aar aar aum...*" Then puts food into son's mouth while looking at him. **[persuading]**

Child: Gives a little smile and chews food. Picks up a toy car and walks to the bicycle located nearby. **(smiling)**

Mother: "*Tang, come, come quick to eat.*" **[reinforcing behavior]** Mother looks at son. **[making eye contact]**

Child: Turns to mother and walks directly to her. Opens mouth, looks at mother, and smiles. **(looking at parent & smiling)**

Mother: "*Arr Arr AUm.*" Mother feeds son and then praises him by saying "good." **[praising]** Mother smiles at son. **[smiling]**

Child: The child looks at mother and smiles. **(smiling)** Child chews food, looks at mother, turns face and looks at toy. Walks around mother.

Mother: "*Come and eat. Open your month*" **[reinforcing behavior]**

Child: Turns face to mother, looks at her, and nods. **(responding)**

Mother: Feeds son until he is satisfied. Wipes son's mouth. Lunch takes 30 minutes to complete.

Supportive interactions, another type of positive interaction, were found to be present in the majority (n =14; 64%) of families during feeding, playing, teaching, disciplining and daily routine caring. The following phrases and responses demonstrate examples of supportive interactions between a mother and her 24 month old son as they play "putting the string in the hole of a rosary." The specific methods used by the mother are noted in bold and brackets, while the subsequent responses of the child are noted in bold and parentheses.

Mother: Sits near son, looking at him and saying, "*Ta, let's do*" Mother takes string and rosary. **[preparing a position]**

Child: Turns face directly towards mother, looks at her, and then looks at string and rosary. **(looking at parent)** Reaches towards mother. **(reaching)**

Mother: "*Ta, how do I do it?*" Mother looks at son. **[talking]**

Child: Stands up, holds string and then drops it. **(responding)**

Mother: Looks at string and rosary and says, "*Pick it up.*" Nods head and makes eye contact with son. **[advocating]**

Child: Picks up rosary and puts string in hole of rosary. Sometimes looks at mother. **(looking at parent &responding)**

Mother: Helps son pick up rosary. **[assisting]**

Child: Puts string in hole of rosary. When finished, turns face towards mother and shows her the rosary. Has smile on face. **(responding & smiling)**

Mother: Looks at son, smiles and says "*Good.*" **[talking]** Claps hands.

The following case is another example of supportive parent/grandparent interactions and the cooperative responses of a child. In this example, a mother is sitting in front of the family home with her daughter, while the child's father walks from the living room of the home to the outside of the home where his wife and daughter are seated. The specific methods used by the mother and father are noted in bold and brackets, while the subsequent responses of the child are noted in bold and parentheses.

Mother: Looks at daughter and says, "*Let's play with father.*" **[preparing a position]**

Child: Turns face directly towards father. **[looking at parent & responding]**

Father: Looks at daughter and says, "*Let's play together.*" Walks to another area in front of house. **[orienting]**

Child: Looks at father and walks towards him. **(looking)**

Father: Picks up chair for daughter, lifts her and put her on chair. **[preparing object & preparing position]**

Father: Sits opposite daughter, turns face to face with her, and says "*Let's play patty-cake.*" **[talking & approaching]**

Child: Looks at father and smiles. **(looking at parent & smiling)**

Father: Presses hands together while looking at daughter.

Child: Imitates father by pressing hands together. **(responding)**

Father: Counts "*one*" and then places one hand on daughter's hand, smiles and focuses attention on playing with daughter. **[orientation]**

Child: Imitates father with patty-cake cake game. **(responding)** Slowly stops playing and looks away.

Father: Nods head and says "*Let's play repair car.*"

Child: Stops playing, climbs down from chair, while smiling, and walks away. **(responding)**

Negative interactions of parents/grandparents and non-cooperative interactions of children: Ignoring interactions, a type of negative interaction demonstrated by parents/grandparents, occurred in seven (32%) families while engaged in feeding, playing, teaching, disciplining and daily routine caring. The following phrases and responses are examples of the ignoring interactions and non-cooperative response that occurred between a mother and her 31 month old daughter while they were at a playground for one hour. The specific methods used by the mother are noted in bold and brackets, while the subsequent responses of the child are noted in bold and parentheses.

Mother: "*Tal, let's play.*"

Child: Runs to playground object.

Mother: Looks at daughter, walks close to her, but says nothing. **[not responding]**

Child: Rides big toy animal, moves arms in and down, smiles, and looks excited about toy.

Mother: Looks at daughter, but gives no suggestions. Doesn't speak. **[not supporting & not responding]**

Child: After 5-6 minutes, leaves this play activity and walks to merry-go-round.

Mother: Shows no facial interest in daughter's activity. **[disregarding]**

Child: Expressed excitement on merry go-around, smiled and sways from side to side.

Mother: Looks at daughter and says, in harsh voice, "*Be careful, don't fall.*" **[not encouraging]**

Child: After 5 minutes, leaves merry-go-round and sits alone. **(walking away & playing alone)**

Mother: Walks to where daughter is sitting, but says nothing. **[not suggesting]**

Threatening interactions, another type of negative interactions demonstrated by parents/grandparents, occurred in six (27%) families while engaged in feeding, playing, teaching, disciplining and daily routine caring. The following phrases and responses are examples of threatening interactions of a mother, who had to leave work to care for her 12 month old son, and the subsequent non-cooperative responses of the son. The specific methods used by the mother are noted in bold and brackets, while the subsequent responses of the child are noted in bold and parentheses.

Child: Says, "*Water, water.*" Comes to mother and looks up at her.

Mother: Pours water in cup.

Child: Stands and lifts face towards mother.

Mother: Holds one arm of son and helps him drink.

Child: Drinks water, is interested in the water, but sometimes looks away.

Mother: Says "*Hold the cup of water.*" Doesn't hold cup for son.

Child: Tries to hold cup with both hands, but it is slippery. Water slips on floor. Looks at mother in fear.
(looking fearful)

Mother: Says in a high tone, "*Oh, why didn't you be careful.*" Strikes son's arm with hand.
[using a high tone, complaining, & hitting]

Child: Chokes on water, coughs three times and looks away from mother.
(refusing to look at parent)

Mother: Picks up cloth and wipes water from floor.

The following case is another example of threatening parent/grandparent interactions and the uncooperative responses of a child. The following phrases and responses are examples of threatening interactions of a grandmother, who was responsible for caring for her granddaughter, and the subsequent non-cooperative responses of the granddaughter.

Grandmother: Says, "*My granddaughter is so naughty, she never maintains her composure.*"

Child: Suddenly takes basket of toys and puts it on floor.

Grandmother: Looks at grandchild and says, "*No no, I will beat you. Don't be naughty.*" **[prohibiting]**

Child: Looks at grandmother and has dull expression on face.
(looking dull)

Grandmother: Looks at basket and says, "*Keep it up and I will beat you.*" Picks up 1 meter stick. Talks with high toned voice.
[using high tone & intimidating]

Child: Looks at grandmother with fear. **(looking fearful)**

Grandmother: Shows stick to granddaughter and says, "*Keep it up! Keep it up!*" Points to sofa.

Child: Stands up, picks up basket of toys and puts it under sofa. Comes to grandmother and sits near her.

Grandmother: Looks at granddaughter, looks at clock and says, in a high toned voice, "*Go to sleep. It is time for you to sleep.*"
[using a high tone]

Child: Looking forlorn, walks over to mattress near sofa, lies down and puts left leg over right leg.
(not smiling)

Grandmother: Looks at granddaughter, hits her on the leg with hand and says, "*Your position is not polite.*" **[hitting]**

Child: Crawls away from grandmother, changes position of legs and looks fearful.
(crawling away & looking fearful)
Goes to sleep.

Influences of parent/grandparent-child interactions on child development: Data from the interviews, observations, field notes and secondary source showed the influence of parent-child interactions on child development. This development occurred in 4 categories: physical, cognitive, language, and emotional and social.

Physical development: Regarding physical development, 14 families (64%) reported, when they fed their children or played with them, there were a number of activities they encouraged to promote gross motor development. These activities included: walking, moving, running, rolling and

kicking balls, pulling and pushing plastic cars, playing hide–and–seek, and playing with dolls or plastic toys.

As parents of Tum, an 18 month old boy, stated:

> Mother: *"I help him when he plays. For example, when he plays with a toy truck, he bends down to put other toys in the truck and then walks while dragging the truck. I think it makes his muscles strong. When we walk for pleasure, it makes his body healthy."*
>
> Father: *"I bought many toys for him to play with, such as a truck and bicycle. I think playing and moving make him healthy. He can walk and move faster than when he was younger."*

From observations of the interactions between Tum and his parents, it was noted Tum could understand many gestures and commands. For example, he stopped immediately when his father said "*Do not go out*" as he was walking toward the door. In addition, Tum's physical development was normal since he could walk and pick up toys without falling. In addition, the secondary source revealed he had a birth weight of 3,500 grams, with a current height of 76 centimeters and weight of 12 kilograms. These are normal according to the growth chart for Thai children.

Another example of physical development was demonstrated in Te, another 18 month old boy. His grandmother thought walking and running helped children become strong. As a result, she encouraged her grandson to walk and run. She commented:

> *"I want to make him healthy. I want to help him grow up rapidly and not easily become sick. In my free time, I hold his arm on one side, talk to him and make him walk alone. He takes a step little by little and then he sits down. At first, he could not do it, but now he can walk directly to me."*

From observations of interactions between Te and his grandmother, it was noted Te could crawl fast, climb stairs, stand without support, walk with assistance, and pull and push his tricycle. He also understood simple commands. For example, when Te's grandmother asked him to bring her a comb, he did so without difficulty. From review of the secondary source, Te's birth weight was 2,300 grams, with a current height of 73 centimeters and weight of 10 kilograms. These are normal according to the growth chart for Thai children.

Some parents and grandmothers said playing with their children made them exercise. As a result they were healthier and had no illnesses. As the mother of Tukta, a 30 month old girl, stated:

> *"Playing makes her healthy. It makes her bones healthy in every part of her body. She is almost never sick and has grown up rapidly. Sometimes we exercise together by walking. She also hugs and plays with her big doll."*

From observations of interactions between Tukta and her mother, Tukta was noted to run well and kick a ball without losing her balance. She also had good hand–finger coordination, could jump with both feet, hold a crayon with her fingers, and build a tower of 8 blocks. On one occasion, after exercising with her grandmother on the treadmill, Tukta took her coloring book and drew pictures of trees. From review of the secondary source, it was noted her birth weight was 2,550 grams, with a current height of 86 centimeters and weight of 12 kilograms. According to the Thai growth chart for children, Tukta demonstrated a normal growth pattern.

Cognitive development: In 15 (68%) families activities that required cognitive function were performed. These activities included teaching children to: count numbers, fingers and toes; identify colors; and, learn the names of people, body parts, names and sounds of animals and the alphabet. As the parents of Art, a 30 month-old boy, remarked:

> *Mother: "I teach him the Thai alphabet (ก ไก่ ข ไข่ to ฮ นกฮูก) because he has to know it when he goes to school. Presently, he can speak. He recites from ก ไก่ ข ไข่ to ฮ นกฮูก."*
>
> *Father: "With me, if he does as I tell him, I buy a toy for him. He memorized ก ไก่ ข ไข่ to ฮ นกฮูก. Because he could do it, I bought him a toy car."*

From observations of parent-child interactions, Art was noted to be able to recognize a number of words, knew the alphabet from A to Z, counted from one to ten, identified colors and knew the names of family members. He also used the pronouns "I" and "you," and incessantly talked. When talking about his toys, Art picked them up and showed the ones he liked.

Another example of cognitive development was demonstrated by Te, a 13 month old boy. As stated by Te's mother and grandmother:

> *Mother: "When I teach him to play games, such as 'bye bye,' I teach him to use his hand to wave. When he can do it, I feel happy. Because he can understand my request, I think his brain has developed."*
>
> *Grandmother: "I teach him to identify the radio, fan and telephone. I want him to know what they are. When I ask him to turn off the fan and turn on the radio, he can do both things. He can understand."*

From observations of interactions between Te, his mother and grandmother, he was noted to wave his hand and say 'bye bye.' In addition, Te understood simple commands, such as "stand up."

Another example of cognitive development was shown by Ta, a 24 month old boy. Since he was 12 months of age Ta's mother has tried to promote his memory by teaching him to name things. Ta' mother stated:

> *"I want him to have a good memory. I look at picture books with him and talk with him almost every day. From one to two years of age, I have worked with him. I ask him to point to a picture of a bow. He points to the correct picture. One day he pointed to the correct picture almost ten times. I was so excited. It was unbelievable that he could remember. He has a good memory!"*

From observations of interactions between Ta and his mother, it was clear Ta understood directional commands. He could count from one to twelve and identify a number of colors (i.e. red, yellow, white and blue). When Ta's mother asked him to point to the picture of a cat, in one of his books, he correctly did so. Ta also verbalized his need for food and milk.

An example of poor cognitive development was noted in To, a 33 month old boy. To's parents did not encourage him to learn the Thai alphabet, names of colors or how to count. When To was asked, by the PI, to identify the color red, he was unable to do so. To simply shook his head and looked at the PI. In addition, he could not correctly identify the colors white, blue and green when asked to do so. When asked to count from one to ten, he counted only to three.

Language development: The development of language skills during parent/grandparent-child interactions was noted in nine families (41%). The language skills activities included: learning the Thai and English alphabets; verbalizing names of parents and relatives; verbally identifying objects; responding to verbal commands; reading; and, writing. As the mother of Toyting, a 30 month old girl, stated:

> *"I tape posters of the Thai and English alphabets on the wall. Then I teach Toyting to identify the letters in the alphabets. Sometimes, I point to a picture of a letter and ask her "What is this letter?" She can give me the right answer."*

From observations of interactions between Toyting and her mother, Toyting was noted to not only memorize the Thai alphabet, but to also obey her mother. She was able to recognize a number of words, recite the alphabet from A to Z and count from one to ten. On one occasion, Toyting was sitting on her rattan bed drinking soy milk, when her mother asked her to throw the soy milk box in the garbage after she finished the drink. She followed her mother's instructions.

Another example of language development was demonstrated by 30 month old Tukta. Tukta's mother's and grandmother's commented:

> *Mother: "When we ask her to speak, she can. When we tell her to do something, she can do it. For example, when we ask her to put away her toys after playing, she puts them away."*

> *Grandmother: "I taught Tukta to count from one to ten. I taught her to say 'one, two, three, four, five,' Now she can speak, but she cannot write. I say to her, "Come, sit down so I can teach her."*

From observations of interactions between Tukta, and her mother and grandmother, it was noted Tukta knew a number of words and incessantly talked. She understood English words, such as 'come, sit down.' When her grandmother would say 'come,' in English, Tukta would come and sat near her. When her grandmother would say 'sit down,' in English, Tukta would sit down. When the grandmother was asked, by the PI, why Tukta could speak English words, she stated she worked where there were a number of foreigners who spoke English. As result, she had learned English and was teaching it to her granddaughter.

Emotional and social development: The development of emotional and social skills was noted in 12 families (54%). Types of activities that tended to occur during the parent/grandparent-child interactions included: pleasant and happy facial expressions; vocalizations; hugs; smiles; and, laughter. The parents and grandparents often stated playing with their children made the children happy. Some of the games they would play were: Ja-ae (peek-a-boo); Tob-pae (patty cake); hide and seek; singing a song; playing with toys; going to the playground; and, playing imaginary games. Examples of parents/grandparents' comments regarding emotional and social development included:

> *Mother of Ton, a 24 month old girl: "When playing together, it makes us exercise and her healthy. She smiles, is joyful and not fussy."*

> *Mother of Tangmo, a 13 month old boy: "When we play, he laughs loudly, especially when he plays with his father. He will laugh loudly and make a lot of gestures."*

> *Grandmother of Te, a 13 month old boy: "I think he enjoys playing. It makes him cheerful. I see him laugh. He is not fussy. I am so glad."*

> *Mother of Tong, a 15 month old girl: "When we play together, she likes to play "Num-kang-sai" (sweet ice). I hold her in my arms and then move from left to right. It looks like we are pushing ice from side to side. She will laugh loudly and I am gratified."*

> *Father of Da, a 21 month old boy: "If we did not teach him, he may not have spoken as soon as he did. I think it helped him develop*

quicker. When I let him play, it makes him cheerful. I took him to the playground in our industrial area. It seemed he was happy there since there were many play areas. When we arrived there, he walked ahead and looked for a place to play."

Another example of emotional and social development was demonstrated by Ta, a 24 month old boy. Ta's mother stated:

"He feels happy and is having fun playing games, such as robot and shooting a gun. He likes it very much. He smiles and laughs loudly."

From observations of interactions between Ta and his mother, Ta played 'shooting the gun' with his mother and his mother pretend to die by lying down on the floor. Afterwards, he kissed his mother. On another occasion, Ta played horseback riding on his mother's back. When his mother bent down, Ta moved his body back and forth to imitate the actions of riding a horse.

Discussion

The findings revealed the parents/grandparents interacted with their children during five major daily activities: feeding, playing, teaching, disciplining and daily routine caring. It was interesting to note that in regards to the teaching activities, the findings were consistent with prior research. For example, Phupaibul and colleagues[20] also found teaching to be an important activity that occurred between parents and children. They noted when parent-child interactions of preschool children involved reading and writing, the children were better prepared for enrollment in school. Unfortunately, in this study, because some parents did not realize the contributions story-telling made and they had not experienced story-telling themselves, only a small number of the families offered story-telling to their children. This finding was congruent with prior findings, wherein only 43% of parents and caregivers were found to ever tell a story to their children.[21] Thus, it is important for healthcare providers to educate parents and grandparents regarding the importance of frequent story-telling, either from oral traditions or a book. Story-telling can enhance children's curiosity, reading skills, and ability to concentrate and pay attention.[22,23]

In playing activities, seven of the mothers had less positive attitudes towards play, including: viewing play as activities that were either not useful, a waste of time or a waste of money. Therefore, strengthening parental awareness of the significance of play is needed among the study population, so they understand how playing contributes to a child's physical and social development. It is not necessary for parents/grandparents to buy expensive toys for their children, but the need to provide them with appropriate play activities and learning opportunities in accord with their abilities and developmental level. They need to recognize that playing is considered the 'work of a child.[22,24]

Analysis of the parents'/grandparents' behaviors while interacting with their children revealed two positive categories (encouraging and supporting) and two negative categories (ignoring, and threatening). The children simultaneously responded to their parents with either positive (cooperative) or negative (non-cooperative) behaviors. These findings are similar to prior findings that have noted positive infant behavior follows positive maternal behavior.[25] In addition, a supportive and sensitive mother-infant interaction is known to pave the way for the development of a competent relationship and attachment between a parent and child.[1,2]

The findings noted parent/grandparent-child interactions influenced four types of child development: physical, cognitive, language, and emotional and social. These findings are congruent with previous research

wherein interactions between parent and child has been found to serve as a foundation for child development.[2,3,4,5]

The fact negative parent/grandparent-child behaviors were found highlights concerns about the: decline, between 2004 and 2007, in normal development among Thai children less than 5 years of age;[8,9] and, fact that 10% to 30% of 3 to 5 year old Thai children, in 2009, demonstrated delayed cognitive and emotional-social development.[26] Thus, all healthcare professionals working with families, who have small children, need to understand the dynamics of parent/grandparent-child interactions. In addition, it may prove helpful to develop programs that teach and foster positive parent/grandparent-child interactions so as to enhance normal development among Thai children.

Limitations and Recommendations

Like all studies, this research has limitations that need to be considered when applying the findings. First, only families who worked in an industrial setting and had children 13-36 months of age were participants. The study also was conducted in only one industrial area, in one province, of Thailand. Therefore, generalizability of the findings to other settings must be used with caution.

Future research on parent/grandparent-child interactions needs to: be conducted in multiple industrial sites throughout Thailand; be longitudinal in design; and, examine the long-term influences of negative interactions on the physical, cognitive, language and emotional/social development of Thai children.

Acknowledgement

A special thank you is extended to the Thailand Nursing and Midwifery Council for partial funding of this research.

References

1. Sumner G, Spietz A. NCAS caregiver/parent-child interaction feeding manual. Seattle (WA): NCAST Publications; 1994.
2. Bornstein MH, Tamis-LeMonda C. Mother-infant interaction. In: Bremner G, Fogel A, editors. Infant development. Oxford, England: Blackwell; 2004.
3. Wacharasin C, Barnard KE, Spieker SJ. Factors affecting toddler cognitive development in low-income families: Implications for practitioners. Infants Young Child. 2003; 16: 175-81.
4. Hockenberry MJ, Wilson D, Winkelstein ML, Kline NE. Wong's nursing care of infants and children. Houston (TX): Mosby Elsevier; 2003.
5. Barnard K. Influencing parent-child interactions for children at risk. In: Guralnick MJ, editor. The effectiveness of early intervention. Baltimore (MD): Paul H. Brookes, 1997.
6. Papalia DE, Olds SW, Feldman RD. A child's world: Infancy through adolescence. New York (NY): McGraw-Hill Higher Education; 2004.
7. Schore AN. Effects of a secure attachment relationship on right brain development, affect regulation, and infant mental health. Infant Mental Heath. 2001; 22(1-2): 7-66.
8. Deerassamee S. Health department found the low Intelligence Quotient of Thai child; 2011 [update 2011 Jan 18; cited 2011 Jul10]. Available from: http://www.manager.co.th/Qol/ViewNews.aspx?NewsID=9540000006893.
9. Aungkasuwapla, N. Health department found a decrease in Thai child development; 2008 [update 2008 Jan 09; cited 2011 Jul 10]. Available from: http://www.thainhf.org/index.php?module=news&page.
10. Mosuwan L, Isaranurug S, Ruengdaraganon N, Nantamongkonchai S, Sa- nga P, Nitiruengcharas K, *et. al.* Holistic development of Thai children: Its association with family factors and child rearing. Bangkok, Thailand: Limbrasder; 2004. (Thai)
11. Kuczynski L, Marshall S, Schell K. Value socialization in a bidirectional context. In: Grusec JE, Kuczynski L, editors. Parenting and children's internalization of values. Toronto, Canada: John Wiley & Sons; 1997.

12. Snow CW. Infant development. 2nd ed. Upper Saddle River (NJ): Prentice Hall; 1998.
13. Wachs TD. The nature of nurture. Newbury Park (CA): SAGE; 1992.
14. Wang JF. Caregiver-child interactions in Japan, Taiwan, and the United States. J Obstet Gynecol Neonatal Nurs. 1995; 24(4): 353-61.
15. Harwood RL, Schoelmerich A, Schulze PA, Gonzalez Z. Cultural differences in maternal beliefs and behaviors: A study of middle-class Anglo and Puerto Rican mother-child pairs in four everyday situations. Child Dev. 1999; 70(4): 1005-16.
16. McCollum JA, Ree Y, Chen Y. Interpreting parent-infant interactions: Cross-cultural lessons. J Infant Young Child. 2000; 16(2): 22-33.
17. Richter K, Podhisita C, Soonthorndhada K, Chamratrithirong A. Child care in urban Thailand: Choice and constraint in a changing society. Nakhon Pathom, Institute for Population and Social Research. Bangkok, Thailand: Mahidol Univ.; 1992.
18. Bureau of Policy and Strategy. Thailand health profile report, 2005-2007; 2008 [cited 2008 Sept10]. Available from: http://www.moph.go.th/ops/thp/index.php?option=com_content.
19. Roper JM, Shapira J. Ethnography in nursing research. Thousand Oaks (CA): SAGE; 2000.
20. Phupaibul R, Tachudhong A, Kongsuktrakul C, Oon-Sawai J. Family developmental tasks in childrearing families: From infancy to adolescence. J Faculty Nurs, Burapha Univ. 2002; 10(1): 1-14.
21. Health Promotion Center Region 3. Maternal and child health data base; 2008 [updated 2008 Mar 10; cited 2008 Jun 11]. Available from: http://hpc3.anamai.moph.go.th/databasesys/momchild45-49.pdf.
22. Potts NL, Mandleco BL. Pediatric nursing: Caring for children and their families. 2nd ed. Clifton Park (NY): Thomson Delmar Learning; 2007.
23. Betz CL, Hunsberger MM, Wright S. Family-centered nursing care of children. 2nd ed. Philadelphia (PA): WB Saunders; 1994.
24. Wong DL, Perry SE, Hockenberry MJ. Maternal child nursing care. St. Louis (MO): Mosby; 2002.
25. Tarabusy GM, Tessier R, Gagnon J, Piche C. Attachment classification and infant responsiveness during interaction. Infant Behav Dev.1996; 19:131-43.
26. Aekpalakorn V. Report of national health examination survey for Thai people, 2008-2009. Bangkok, Thailand: Public Health Ministry; 2009.

การปฏิสัมพันธ์ระหว่างบิดามารดาหรือปู่ย่าตายายกับเด็ก ที่ส่งผลต่อพัฒนาการของเด็ก

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บทคัดย่อ: การศึกษาเชิงคุณภาพ แบบชาติพันธุ์วรรณนานี้ มีวัตถุประสงค์ เพื่อค้นหาลักษณะของการปฏิสัมพันธ์ระหว่างบิดามารดากับบุตรและผลที่เกิดขึ้น ในครอบครัวที่บิดามารดาทำงานในเขตอุตสาหกรรม ผู้เข้าร่วมวิจัยประกอบด้วย 22 ครอบครัว ที่มีบุตรอายุ 12-36 เดือน ทำงานในเขตอุตสาหกรรม กลุ่มตัวอย่างคัดเลือกจากสถานีอนามัย และโรงงานในเขตอุตสาหกรรม ในอำเภอศรีราชา จังหวัดชลบุรี เก็บรวบรวมข้อมูลโดย การสังเกตแบบมีส่วนร่วม การสัมภาษณ์ เชิงลึก และศึกษาเอกสารที่เกี่ยวข้อง ช่วงเวลาเก็บข้อมูลตั้งแต่ เดือนสิงหาคม 2008 ถึงเดือน กันยายน 2009

วิเคราะห์ข้อมูลเชิงคุณภาพโดยการวิเคราะห์เนื้อหา ผลการศึกษาพบว่าในชีวิตประจำวัน การปฏิสัมพันธ์ระหว่างบิดามารดาและบุตรเกิดขึ้นใน 5 กิจกรรมคือ การให้อาหารลูก การเล่นกับลูก การสอนลูก การฝึกระเบียบวินัยลูก และการดูแลกิจวัตรประจำวันของลูก ส่วนลักษณะของพฤติกรรมของพ่อแม่เมื่อปฏิสัมพันธ์กับลูก เกิดขึ้นใน 4 ลักษณะ คือ การกระตุ้น การสนับสนุน การไม่สนใจหรือเพิกเฉย และการขู่หรือคุกคามลูก ส่วนลักษณะพฤติกรรมของลูก ในระหว่างปฏิสัมพันธ์กับพ่อแม่มี 2 ลักษณะ คือ การให้ความร่วมมือ และการไม่ให้ความร่วมมือ นอกจากนี้ ผลการวิจัยยังพบอีกว่า การปฏิสัมพันธ์ระหว่างพ่อแม่กับลูก ส่งผลต่อการเจริญเติบโตด้านร่างกาย ด้านสติปัญญา ด้านภาษา และอารมณ์และสังคมของเด็ก

ผลการศึกษาครั้งนี้จะช่วยให้พยาบาลและบุคลากรด้านสุขภาพ เข้าใจลักษณะปฏิสัมพันธ์ระหว่างพ่อแม่ลูก ที่ส่งผลต่อพัฒนาการเด็ก สามารถนำความรู้นี้ไปใช้ในการส่งเสริมการปฏิสัมพันธ์ระหว่างพ่อแม่ลูก โดยเฉพาะในครอบครัวที่มีบุตรในวัยทารกและวัยก่อนวัยเรียน และสามารถพัฒนาโปรแกรมเพื่อเพิ่มคุณภาพการปฏิสัมพันธ์ระหว่างพ่อแม่ลูกที่จะนำไปสู่พัฒนาการเด็กที่ดีขึ้นต่อไป

Pacific Rim Int J Nurs Res 2011 ; 15(4) 305-322

คำสำคัญ: การปฏิสัมพันธ์ระหว่างบิดามารดาหรือปู่ย่าตายาย และเด็ก, การศึกษาเชิงชาติพันธุ์วรรณา, เขตอุตสาหกรรม, พัฒนาการเด็ก

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