

Training Mothers of preschoolers in Elaborative Conversational Style

Maedeh Aboutalebi and Karineh Tahmasian

Abstract—This intervention assessed the effect of maternal training in elaborative Conversational Style. We designed this study to examine whether similar effects on mothers conversational style could be obtained by training Iranian mothers. Forty preschoolers (mean age = 55.1 months) were pretested and grouped as having high or low language skills. Children in each group were then randomly assigned to either training or no training conditions. Trained mothers were instructed to use 4 particular conversational techniques to improve children's understanding during events: Wh-questions, associations, follow-ins, and positive evaluations. Mother-child dyad were observed while they engaging in a specially constructed camping activity. Trained mothers did use Wh- questions, and positive evaluations more than untrained mothers, but there were no differences in mothers' overall use of associations, follow-ins. Indeed Trained mothers were more elaborative in their reminiscing than untrained mothers. Results are discussed with respect to theory and practice in cultural aspect.

Index Terms—conversational styles, elaborative, culture.

I. INTRODUCTION

One of the most important assumptions in child psychology is that parent – child interactions specifically parent – child conversations are fundamental in developmental process and outcome (Fivush, Haden, & Reese, 2006). Research show that the way in which parents discuss everyday experiences with their young children has significant implications for the acquisition of cognitive and socio-emotional skills (Fivush, Haden, & Reese, 2006). For instance, the way in which mothers and their children reminisce influences how the children come to understand, remember, and report their experiences, and may also influence their language and literacy skills, developing attachment relationships, and understanding of self, other, and mind (Wareham, 2006; Fivush, Haden, & Reese, 2006; wang,2008; Newcombe & Reese, 2004). Together, cognitive and socio-emotional research highlights that parent reminiscing with their young children may play a critical role in enhancing development across domains.

several studies have found that mothers talk more overall with preschool aged girls than with preschool aged boys, and are more highly elaborative and evaluative with girls than

with boys (e.g. Reese, Haden & Fivush, 1996).

As reminiscing is obviously a language-based task, child language skills may be related to reminiscing style (Fivush, Haden, & Reese, 2006). Children who have more advanced language skill may be better able to contribute in mother-guided reminiscing. In fact, several studies have found mothers to be more elaborative with young preschoolers who have higher verbal ability (Farrant & Reese, 2000; Newcombe & Reese, 2004; Welch-Ross, 1997).

A growing body of research points to cultural differences in maternal reminiscing style. They proposed that mothers from Western cultures are on the whole more elaborative during past event conversations than mothers from non-Western cultures, such as middle-class Maori (MacDonald, Uesiliana, & Hayne, 2000), Korean (Mullen & Yi, 1995), and Chinese (Wang, 2001; Wang, 2008) families.

Studies examining parent – child conversations style have asked parents, typically mothers, to reminisce about one-time events. Researchers have revealed a continuum of parental conversational style from less elaborative to highly elaborative (Fivush & Fromhoff, 1988; Reese, Haden, & Fivush, 1993). Highly elaborative mothers elicit relatively long and detailed conversations and tend to accept, follow in, and expand upon their children's responses more often. In addition they ask a greater number of open-ended "wh" questions; these kinds of questions have been found to be a critical maternal structural variable for children's memory (Reese, Haden, & Fivush, 1993). In contrast, low-elaborative mothers provide less information for their children and overall engage their children in shorter discussions. Furthermore they also tend to ask their children closed questions, and either repeat their utterance (Fivush & Fromhoff, 1988; McCabe & Peterson, 1991; Reese, Haden, & Fivush, 1993). These conversational styles affect children's subsequent personal event memories, children of high elaborative mothers report more information, both concurrently and longitudinally, with mothers and with experimenters, than children of low elaborative mothers (e.g., Peterson et al., 1991; Hudson, 1993; Boland and Haden, 2003; Reese et al., 1993; Newcombe and Reese, 2007).

To date, studies aimed at training mothers to use a high elaborative style have been successful. In the first reminiscing intervention of its kind, Peterson et al. (1999) were successfully trained mothers to spend more time reminiscing with their 43-month-old preschoolers, ask more open-ended and context eliciting questions, and encourage longer narratives through the use of back-channel responses (where previously discussed elements of an event are restated and drawn together). Their children subsequently produced

Child clinical psychology student, psychology department, Shahid Beheshti university, G.C.

Fmailly research institute, Shahid Beheshti university, G.C.

memory narratives with more context-setting descriptions about where and especially when the described experiences took place. Nonetheless, low participant numbers, made strong conclusions difficult. In a subsequent investigation of the high elaborative style during ongoing experiences, Boland et al. (2003) trained mothers of preschoolers to use elements of the elaborative style whilst participating in a play camping activity. The high elaborative elements, including 'wh' questions, linking the event to the child's prior knowledge, follow-ins (encouraging aspects of the conversation that the child is interested in), and praise, were outlined in a pamphlet and demonstrated on videotape. Mothers who received the training incorporated more of these elements into their discussions with their children than did untrained mothers, and children of trained mothers were subsequently able to recall more of the camping activity after both 1 day and 3 week delays than were children of untrained mothers. Children's language skill did not affect the degree to which training was effective, yet also contributed to recall. In the only reminiscing intervention to date to include a large sample and long follow-up, Reese and Newcombe (2007) trained 100 mothers to ask their 19-month-old toddlers open-ended questions and confirm their contributions during shared reminiscing conversations. Two months later, trained mothers asked more open-ended questions than did mothers on a waitlist control. Fifteen months later, trained mothers asked more open-ended questions and also made more confirmations and statement elaborations, irrespective of their original reminiscing style. Children of trained mothers provided more memory elaborations during shared recall than did children of control mothers. Finally in last experimental research, Wareham (2007) extend the findings past studies by training mothers to reminisce using a high elaborative and emotion style. 44 dyads completed all stages. After training, mothers and children in the reminiscing condition each used a more elaborative style and discussed emotions more than control condition. These differences were sustained across six months, at which time children in the reminiscing group also showed better emotion cause knowledge than did children in the control group.

These research demonstrating associations between parents' elaborative conversational styles and children's narrative and memory skill are causal, and that elements of the elaborative style can be identified and taught to parents (Peterson & McCabe, 1999; Boland and Haden, 2003; Newcombe and Reese, 2007; Wareham, 2007). Cultural differences in patterns of parent-child discourse clearly illustrate the importance of examine effect of teaching elaborative style in different culture.

We trained mothers' elaborative conversational techniques; the selection of these techniques was based on theoretical perspective regarding the encoding of events, as well as by previous research in this area (Peterson et al., 1999; Boland et al., 2003; Reese and Newcombe, 2007; Wareham., 2007).

This study designed to examine whether similar effects on mothers conversational style could be obtained by training Iranian mothers.

II. METHOD

A. Participants

Forty mothers and their children (22girls, 18boys) from preschools in Isfahan, Iran, participated in this study. Children's ages ranged from 44 to 64 months ($M=55.1$). Sixteen of the forty dyads were excluded from main analyses because of scheduling difficulties or missing data.

B. Procedure

This Procedure adapted from Haden and Boland (2003) consisted of four stages: children's language pretests, maternal training and memory event pretests, mother-child play, and children's event memory Post tests.

Language pretest. All mothers informed about research via day care center. Volunteers participated in a session that the researcher described the aim of study and got informed consent. Next language skill pretesting was conducted at the children's day care center. Language skills were measured using the WPPCI-R vocabulary subtest (Wechsler Preschool and primary scale of intelligence-Revised; Wechsler, 1967). Children were classified as having high language or low language skill based on median split on the WPPCI-R vocabulary subtest scores ($M=12.3$, $SD=2.6$, median =13). Dyads within each group were matched as closely as possible on the basis of child gender, maternal education then randomly assigned to the training or no-training group.

Maternal training and event memory pretest. During training session, mothers watched video describing the elaborative conversational Style. At the same time children participated in memory assessments were intended to yield a baseline measure of the children's skills for remembering past events (memory assessment of control group conducted before mother-child play). The interviewer examined the children's memory for two novel events (e.g., going to a party, park or market) that had been nominated by their mothers. Researcher used a memory interview that was adapted from Haden and Boland (2003). The interviewer first asked open-ended questions (e.g., "What do you remember about ground ma party?") And then moved on to two yes/no questions about aspects of the event that the mothers suggested (e.g., "Did you eat ice cream?") After each yes/no question, the children were again prompted with a general probe (e.g., "What else can you remember about that?") so as to give them the chance to recall additional information about the event. After that mothers were led through a training pamphlet by the experimenter. They then practiced the interaction style with their child, were given feedback.

Training Video and Pamphlet. The training video included clips of separate samples demonstrating each of the targeted conversational techniques as a female play with a child. Sub-titles drew attention to the four conversational techniques. Training video was approximately 12 minutes long. The pamphlet included training key elements, high elaborative conversations examples, and practice. Pamphlet was given to mothers to keep. Techniques derived from Haden and Boland (2003)

Included:

- 1) *Wh*- questions that ask the child to provide information,

such as when,

Where, why, what, who, or how (e.g., “Why grass became yellow?”).

2) *Associations* that involve making connections between what is happening

In the here and now of the event and what a child might already know or

Have experience with (e.g., child wear a hat and the mother

Asks, “Do you remember who bought it for you?”).

3) *Follow-ins* that encourage discussion of aspects of an event that the child is

Talking about or is showing interest in (e.g., child says, “I want eat this bread” to which the mother responds, “really, how you bake it?”).

4) *Positive evaluations* that directly praise the child’s verbal and nonverbal

Behaviors (e.g., “that was great cooking”).

Mother-child play: The next visit included mother-child engaging in a specially constructed novel camping event. Based on procedures adapted from Haden et al. (2001), the “camping” activity consisted of three parts. Dyads at first loading up backpacks with various play food items (e.g., chicken, apple) to take on their trip then they walked to a pond where there was a rod used to catch some fish. After fishing, they moved to a campsite where there was a carpet, in addition to an oven, glasses and spot that could be used for preparing and eating the food. This event thus involved a set of components or features that were provided to each family. The key manipulation in this study involved the instructions given to the mothers prior to the camping event. It is important to note that neither the trained nor the untrained mothers knew about that event just before the experience. Prior of play the mothers in the training group were asked to name and describe elaborative conversational techniques then instructed try to use them as they play with their children. Mothers in the no training group were simply instructed immediately prior to the activity to talk with their children as they naturally would when experiencing an event with them. The mother-child interaction were videotaped recorded as they play that lasted for approximately 20 min.

Event memory assessments. The experimenter interviewed children about the camping event following delay intervals of 1 day and 3 weeks. Researcher used a standardized memory interview that was adapted from Haden et al.(2001).The hierarchically organized interview began with general open-ended questions (e.g., “What did you do on that camping adventure you had with your mom?”),was followed by more specific open-ended questions (e.g., “What kind of food did you pack up?”), and finally by yes/no type probes (e.g., “Was there a spot?”). The specific and yes/no probes requested information from the children that were not provided by the children in response to earlier general questions. furthermore, to estimate the accuracy of the children’s responding, several yes/no questions were asked, event-consistent features that had not been provided to the family (e.g., “Was there a egg?” when no egg had been provided).

C. Coding

Mother-nominated events. The children’s recall of mother-nominated events was coded for the number of event elaborations. Following Reese et al.’s (1993) definition, an *event Elaboration* was described as any clause which introduced an event for discussion, moved the Conversation to a new aspect of the event, or added information about a Particular aspect. For example, “We eat ice cream” was coded as one event elaboration, and “dad didn’t play, but mom did” was coded as two event elaborations. To provide an average score across the two events discussed, a mean frequency of event elaborations per event was computed (see Reese et al., 1993). Interrater agreement, based on 25% of the audio records of this task, ranged from 80% to 100% for event elaborations, averaging overall 89.5%.

Engagement in the camping event. Mothers’ utterances during camping event were coded To determine the effectiveness of the training procedure, the same scheme as Boland and Haden (2003) was used. The coding categories were mutually exclusive; Mothers’ *Wh-* questions were intended to extract information about the event in general (e.g., “What should we do now?”) or a specific component feature of the activity (e.g., “What is this?”). Associations included any maternal comment or question that invited the child to relate a feature of this situation to his or her prior knowledge or past experiences (e.g., “Where else have you seen carpet like this?”; “this rod is look like yours”). Follow-ins included any maternal comment or question that followed directly from the children’s nonverbal or verbal behaviors during the event (e.g., child says that he catch the fish Mother responds, “how you catch it?”). Positive evaluations confirmed the child’s previous utterances or behaviors, or positively evaluated the event or aspects of the event (e.g., “that was great fishing!”; “We are having wonderful camping!”). Interrater agreement was established by having two observers separately code from the videotapes 25% of the camping events. Percentage agreement between each coder overall ranged from 100% to 53.8%, averaging 96.2% for open-ended questions, 98% for associations, 72.7% for follow-ins, 100% for evaluations.

III. RESULT

A. Preliminary Analyses.

We conducted one-way training condition ANOVAs on children gender, maternal education, children language and memory pretest. Analyses of these data indicated that children of trained mothers did not differ from the children of mothers in the no training group in their language scores, age, their mothers’ years of education or their memory pretest scores (all $p > .25$).

B. Changes in Maternal conversational style.

Our first goal was to conduct a manipulation check to determine whether the trained mothers differed from mothers in the control group in their use several specific conversational techniques when talking with their children about an event as it was unfolding. as table 1 display mothers who had received training used more *Wh-* questions, $F=3.9, p$

<.05 and evaluations, $F = 4.9, p < .03$, when talking with their children than did untrained mothers but There were no differences in mothers' overall use of associations, $F = 1.2, p < .28$; follow-ins, $F = .36, p < .55$. Nonetheless, As Figure 1

display, mothers in the training condition used more all trained techniques than used mothers in the control condition.

TABLE .1: MEAN NUMBER OF CONVERSATIONAL TECHNIQUES USED BY MOTHERS

	training	no training	F(1)	significance
Wh-questions	17.50 (10.42)	10.57 (6.67)	3.95	.05
associations	2.50 (2.46)	1.42 (2.27)	1.20	.28
follow-ins	62.60 (32.20)	34.85 (54.14)	.36	.55
evaluations	25.10 (23.42)	8.53 (10.07)	4.92	.03

Note. Standard deviations are in parentheses.

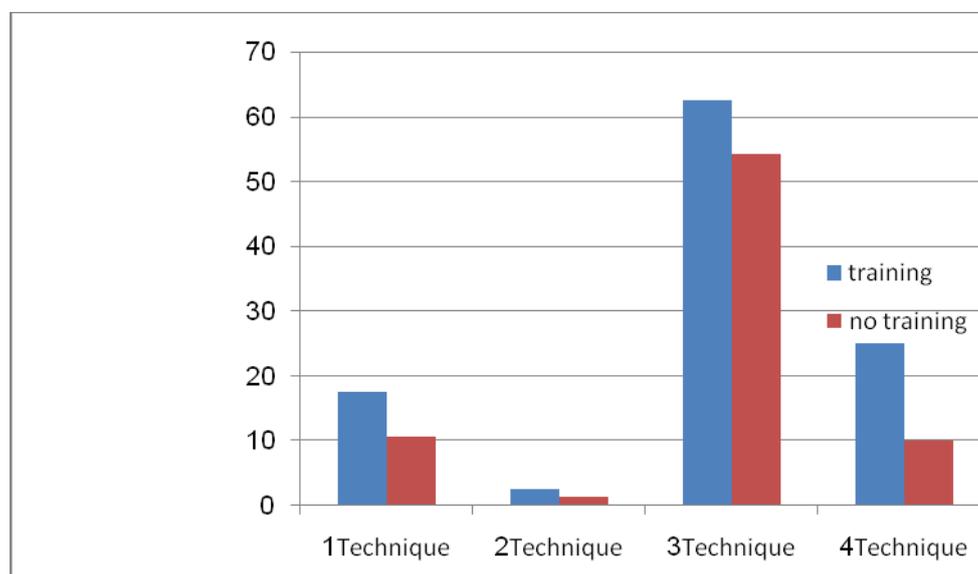


Figure 1: Mean Number of Conversational Techniques Used by Mothers

A. Changes in Children's Memory as a Function of Maternal Training.

A second question concerned with the role of maternal training in children's memory reports about the camping activity. Because of missing memory data we couldn't explore this effect.

IV. DISCUSSION

We trained mothers to use elaborative conversational techniques for enhancing children's understanding and memory. The findings indicate that trained mothers use more two of the Conversational techniques emphasized in the training program: *Wh*- questions, and positive evaluations than did untrained mothers. But training procedure didn't affect they use of, associations, and follow-ins. There are several possible explanations. At first because of missing data we can't explore effectiveness of training. Moreover, all maternal elaboration training studies have been conducted mostly with mothers of White European groups. It is possible

that elaboration training will not work in the same way with mothers of different cultural backgrounds (Reese and Newcombe, 2007) in which past-event talk is conducted to teach moral standards (Wang, 2001; Reese and Newcombe, 2007) or in cultures in which it is less appropriate for mothers to engage in child-centered talk (Ochs, 1982). On the other hand, Asian mothers are low elaborative than western mothers (Wang, 2008), for this reason it is harder to train them. Especially techniques like associations and follow-ins which needs many practice to become of behavioral repertoires. Our success in training mothers to use *Wh*-questions, and positive evaluations techniques associated with an elaborative conversational style is consistent with previous work in which mothers were trained to use *Wh*-questions, and evaluations when reminiscing about past experiences with their children (Peterson et al., 1999; Boland et al., 2003; Reese and Newcombe., 2007; wareham; 2007). In summary, the present study provides an avenue by which efforts can be made to improve mother's conversational style in Iranian culture.

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