

## Arab Children's Narrative Development Measuring Narrative Interaction and Narrative Intervention in Arab-Speaking Children by Do-Bine and Do-Fine

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**Abstract:** This research represents a pioneering study in the Arab world, in which scientific data on children's language is still lacking, and this holds especially true for the development of narrative competence in early childhood. The goal of the present research was to measure the development of Arab children's narrative competence and to investigate whether its acquisition can be speeded up through the implementation of an intervention program based on the principles of the interactive approach. We assumed that the narrative competence of all children would increase with age, and further that improvements would take place in the research group due to the intervention program. The research form is an experiment; the experimental group was exposed to the intervention and another, control group was not. Measurements of narrative competence were taken in both groups before and after the intervention. The sample consisted of 124 children of the two ages 3-4 and 5-6 years. The sample was divided randomly into 60 children in the research and 64 in the control group. We used the "DO-BINE" program which assesses narrative competence, and "DO-FINE" intervention. The results show that the 5-6 year olds achieved higher scores than the 3-4 year olds in all three narrative competences. The findings of this study can help administrators and education-policy makers with the treatment of children in the development of spoken language skills and their emerging literacy in kindergarten. Moreover, serve for professionals in kindergarten for diagnosis, assessment and treatment of young children, including those with special needs.

**Keywords:** Narrative, Play, Language acquisition, Narrative measuring

### Introduction

Mastery of the spoken and written language is the main condition for a person's integration into society. The present work is a pioneering study conducted in the Arab world, in which data on young preschool children's development of narrative competence and linguistic ability is scant indeed. The development of narrative competence is complex and requires the integration of cognitive and linguistic domains (Paul & Smith, 1993), and, in spoken narratives, of the pragmatic-interactive domain as well (Quasthoff & Katz-Bernstein, 2007).

In this study we assessed narrative competence by reconstructing a "real life event" with children who are native speakers of Arabic and free of language development problems. After adapting it to speakers of Arabic, we used the DO-BINE program (Quasthoff, 2008), with the two-fold aim of turning this professional instrument into a diagnostic tool for teachers to measure the narrative competence of children entering formal school education as well as for the assessment of intervention programmes for the enhancement of narrative competence.

There are a number of diagnostic and assessment instruments of narrative competence in Hebrew, which are mostly English in origin and have been translated both into Hebrew and Arabic, but none of these have been validated scientifically. Researchers and teachers have thus been compelled to adopt the norms of the English language, and it is this lack of an instrument, appropriate for Arabic and Arabic culture that the present study intends to remedy.

In Israel's school system we found a total lack of appropriate normative instruments aimed at identifying, selecting, diagnosing, measuring or assessing development at preschool age both at the individual and social levels in a systematic way. This lack is especially severe in the Arab sector (Briznitz & Yamin, 2008). The development of narrative competence has been measured in many languages with a variety of instruments, but hardly any research at all has been conducted on this important subject among Arab children.

The present study employs the interactive approach to narrative development as exemplified in the work of Quasthoff and her associates (e.g., Hausendorf & Quasthoff, 1992, 1996; Nickolaus, Quasthoff, & Repp, 1984; Quasthoff, 1986, 1995, 1997), which takes the communicative dyad as the principal unit of analysis. The child and his/her more experienced interlocutor are seen as part of the interactive situation as a whole. Thus, although development can be viewed as taking place in the child as he/she gains communicative competence, it is more properly viewed as part of a holistic development of storytelling in conversation and not as change in the person per se. This approach maps out in micro-analytic detail how participants in an interaction contribute their different narrative competencies to the generation of the storytelling situation. Descriptions include for example how a participant gains the floor, maintains the telling ability of his/her narrative and reciprocally keeps up the activity or signals its close.

Originally based on the tradition of conversation analysis, this approach has expanded the boundaries of analysis by making the cognitive and linguistic processes involved in narrating subordinate to the overarching context. An example of this is that the sequential arrangement of the interaction is now of prime importance (Graesser, Gernsbacher & Goldman, 2003).

Although the interactive situation in early parent-child interactions is characterized as asymmetrical (due to their different communicative competencies), this imbalance is gradually levelled with development. This new approach culminates in the claim that the same mechanisms which are constitutive of the situational achievement of narrating also hold as developmental mechanisms. To illustrate this approach, we mention the following patterns of an adult listener's contributions to the successful interactive communicative task (Hausendorf & Quasthoff, 1992; Quasthoff, 1997):

- Demands: the adult directs the child into appropriate moves by using local and global sequential implications in an age-specific way.
- Localization of global demands: the adult establishes local implications that steer the child into fulfilling global tasks.
- Explication of global demands: the adult explicates global implications which are normally obeyed without explication.
- Demonstration: the adult obeys his or her own sequential implications, thus providing a model for the child to make an appropriate move.
- As-if treatment: The adult treats a child's locally initiated move as if it had the global relevance that it should have, according to the rules of job fulfilment.
- Attribution: the child does not behave according to an age-specific demand; the adult offers an age-specific account of the child's refusal, thus assigning a specific development to the child.

Lack of varied exposure (literary and spoken) may be the explanation of the phenomenon that children of a low socio-economic background achieve less than those from a more well-to-do background (Cummins, 1981; Duke, 2001; Whitehurst, 1997). This gap in language achievement might account for gaps in reading acquisition among populations of varied socio-economic backgrounds. Indeed, data on reading competence collected in Israel in recent years (National Feedback for the System of Education, *Hebrew and Arabic Native Languages 4*, 1996) point to a worrying gap in favour of higher socio-economic classes and a similar gap between Jewish and Arab children in favour of the Jewish children (Shatil, Share, & Levin 2000). To this distressing data we can add a series of low achievements on national and international tests, especially among children of a low socio-economic background (The System of Education as Reflected by the MEITZAV Exam, 2012; Mullis, Martin, Gonzales & Kennedy, 2003). In recent years, several intervention programmes have been developed in kindergartens which have managed to enhance literacy by means of writing or reading stories (Aram, & Biron, 2004; Aram & Levin 2004; Whitehurst, et al., 1994).

Great importance has been attached to intervention programmes in kindergartens, especially in those for Arabic speakers. Our intention is thus to design and apply an intervention programme for Arab children which will promote the development of their vocabulary, global discourse competence, and general linguistic capability.

The intervention programme used in this study uses the natural support system of the adults involved, to enhance the ability of the children to understand everyday scripts, create stories from them and help them tell those stories to uninvolved children. It was necessary for our purposes to divide the programme into two narrative development levels, the first being the one where pre-narrative abilities are transformed into genuine narrative competences, and the second being the level of the literacy skills of writing and reading stories.

### **Intervention for Producing and Accelerating Narrative Competence**

One of the common ways to categorize intervention types is to use the level of structure they provide to the research population. Some of the interventions are open and facilitate the events which they seek to narrate, such as the reconstruction of a personal experience. Others are more highly structured or close-ended and require the participants to refer to specific contents determined by the researcher but via a tool of their choice, such as a picture book or a story.

In the structured alternative, one can direct the contents of the text produced by participants without dictating how to organize the information into a story, and without dictating which language structures to use (Berman & Slobin, 1994). However, a narrative based on a given series of pictures causes difficulties in the translation of the static-visual presentation into dynamic-temporal speech. Participants often express only the physical characteristics of pictures separately and can have difficulties maintaining the unity of the characters in the transition from one picture to the next, and even resort to their inner world, ignoring the need to compose a story by integrating the pictures (Katzenberger, 1994). In other words, a story composed in an intervention that uses a highly structured method requires a greater degree of focus and planning because it is less personal and its semantic organization is given in advance.

In contrast, open methods allow a free choice, but researchers stimulate participants by asking leading questions. In this alternative, there are two types of intervention: the reconstruction of a unique, one-off experience, and the reconstruction of familiar everyday events.

Our method in this study has elements of both approaches: it is based on the structured method, but also makes use of narrative competence in the natural state of interactive narration (the listeners are realistic) and open dynamics.

Labov (1972) studied reconstructions of personal experiences among teenagers and adults, who were asked to describe a terrible fight or a situation in which they were in mortal danger. A similar approach is used in Peterson & McCabe (1983) and McCabe, Peterson & Connors (2006). A different method was chosen by Nelson and colleagues, who studied the reconstruction of everyday events such as shopping in the supermarket, eating in a restaurant and so forth (Hudson & Nelson, 1986; Nelson, 1986, 1991, 2010). With open methods, participants can choose the content of their story, and produce varied, richer spoken texts, reflecting linguistic riches, fluency and imagination in a free, productive manner (Berman, 1982; Peled, 2000). According to Labov (1972), a minimal story calls for the connection of two consecutive grammatical clauses by a temporal connector. In order to move the events in the story forward, there is a need for cause-and-effect connectors to produce a chain of events. Each event is the result of a previous event. Kindergarten children aged 5–6 learn to successfully cope with two tasks or with actions mentioned together with additional tasks. Children who reconstruct a genuine social experience maintain logical sequencing and use standard connecting devices.

In our intervention we used natural situations and sequences, genuine listeners who had not been present at the sequence of events, and mediation and support which enhanced the children's narrative capabilities. It has been shown that supporting children by asking leading and mediating questions about the activity and the feelings it generates makes it easier for children to construct an entire story. Structural weaknesses in stories, on the other hand, derive from the limits of active memory and the limitations of linguistic skills difficulties in the linguistic organization of ongoing, complex experiences.

The interactive dynamic methodology chosen for this research supported freedom in children's behaviour, since there was both structure and interaction, development of unique personal dynamics together with dialogue. This methodology is based on the premise that children learn most effectively when engaged in an activity in which they confront the need to solve a problem but are free to find their own solutions. This type of learning process satisfies children's needs without forcing them to engage in activities that have no interest for them. In this study, we chose to use children's everyday interactive experiences, the familiarity of which makes it easier for children to readily participate and be active while opening an interactive dialogue and conversation wherein

narrative skills are developed and refined, including retelling and reconstructing the experience directly to a person who is present and listens to the spontaneous telling by the child.

### **DO-FINE Intervention (Dortmund Fostering Development of Interactive and Narrative Competence)**

In the last decade there has been a growing interest in the study of narrative ability, the human capacity to create and understand stories through the use of certain linguistic tools to convey a central event. Measurement of narrative ability and early identification of children with poor narrative abilities is crucial, because at this stage in early education it can have an influence on the many important learning skills a child acquires, such as reading and writing. This study emphasizes the importance of early detection and intervention in children's natural environment, in a way that is compatible with their developmental ability. When conducted in this fashion, interventions will yield robust results and improve and enhance children's narrative ability, leading to a more successful learning experience in school (Andresen, 2007).

### **Measurement and Intervention**

Measurement and intervention enable us to measure narrative ability and identify already at an early age certain difficulties that could develop into more serious learning problems in primary school. The earlier an appropriate intervention takes place, the better the chances are of improving a child's narrative ability. Intervention already in preschool is thus of great importance, but this does not solve the problem of whether it is advisable to use the direct intervention of counselling, which is by definition verbal, in the case of pre-school children who have been measured to have poor narrative abilities? Is it feasible to develop and enhance their narrative ability by means of an intervention carried out by a properly trained preschool teacher?

In this study we used the DO-BINE method of evaluating narrative ability as our measurement tool (Quasthoff, 2006; Quasthoff & Katz-Bernstein, 2007; Quasthoff, et al., 2011). The method was implemented based on the principles of the interactive approach (Bruner, 1987; Vygotsky, 1978), using the medium of socio-dramatic play of everyday activities involving all the social, emotional, cognitive, and imaginative resources available to the subjects (Goncu, 1993; Goncu & Gaskins, 2011; Smilansky & Shefatya, 1993), making sure that this was done in a way that was appropriate to their developmental stage (Andresen, 2005; Tomasello, 2006). The children constructed, developed and expanded their ideas and the ideas of their playmates (Pellegrini, 2010; Quasthoff, 2011; Smilansky & Shefatya, 1993; Vygotsky, 2004).

- The evaluation of narrative ability was conducted on the general preschool population, that is to say all preschool children. The initial evaluation was conducted by the researcher, preschool teachers and research assistants, who received prior instruction and guidance in the DO-BINE1 tool, using unexpected simultaneous events, the first being the peas spill, and the second the preschool teacher sitting on biscuits (Quasthoff, 2006). Afterwards we continued planning the next stages of the intervention in order to improve the children's narrative ability, and then conducted a second evaluation, also using DO-BINE. The DO-BINE2 was similar to the DO-BINE1 instrument in structure and purpose to ensure the reliability of the test, albeit with some minor changes. For the second measurement two different events were used: (1) dropping tennis balls; (2) the teacher sitting on potato chips.
- The type, style, manner and scope of the intervention were adjusted to the needs of the participating population, the children's developmental level, their cultural environment and the conditions of the location. Parents were involved and continuously updated as to what was taking place in the kindergarten, which contributed to the intervention's successful achievement of the set goals. The decision to initiate and determine which type of intervention to use in preschool was not easy, since it required many preliminary visits for the purpose of establishing rapport and as natural an interaction as possible between the researcher and research assistants and the children and their nursery school teacher. It was only after these relationships were established that the groundwork was laid under the guidance of the preschool teacher and the research assistants. Next, parents were informed, the evaluation was carried out and the intervention begun.

The emphasis in this study was placed on the preschool teacher's active cooperation and involvement at every stage of the project, i.e. the evaluation of the children's narrative ability (prior to and following the intervention), and planning and then implementing the intervention. We took into account relevant background information

and experience, so that the early evaluation and intervention at preschool age would be helpful in moving forward the process of acquiring narrative abilities in a manner befitting these children.

This study used an intervention developed specifically for children, whereby their language could open up through everyday experiences. Below we present a description of "the improved concept" intervention which was done by building a "fruit and vegetable market" – DO-FINE (Quasthoff et al. 2011).

### **Intervention Principles**

- *Guided construction of narrative pre-competence*: This involved the definition of roles, development of contrasting roles, development of a script, grounds of plan encouraging transition.
- *Developmental adaptation*: Creation of a consistent history for each role; enactment of the programme's details; summary of the story accompanied by documentation from the very beginning.
- *Proximity*: to the children's own world, ability to formulate in a dynamic and focused way: determining previous experience and attracting the child's attention can be focused while the child's social problems can be addressed and handled (Katz, 2003). The researcher must consider the timing of the intervention, taking into account the child's urges and developmental stage.
- *Joint dynamic design*: The story is to be built in cooperation with the child, in real time, spontaneously. The researcher must decide which stimuli are most appropriate for a particular task, as well as the input and the level of interest maintained by the children, keeping in mind each child's developmental level.
- *Interactive construction of participants suited to the context*: Setting up a team of role players such as "salesman", "customer", "interviewer", "reporter", "narrator", and "observer" in order to facilitate a natural summary of the story. This makes for a smooth transition to the meta-narrative, combining the textual information and the formation of an overall continuum of events.
- *Plot development*: The plot of the story develops in the course of the role play. The initial plan eventually turns into a new script, and its resolution is found through roles created extemporaneously or by role-reversal until the plot finally reaches its unexpected resolution, via the children's negotiations.
- *Separating the child's world of play and its reporting*: this concerns the distinction between the meta-level and the level of action. The distinction between the imagined story and the telling of the story by the children is negotiated by means of language. The expressions and sentences used by the participants encourage the emergence of options to create a connection and establish coherence in terms of both form and overall semantic structure (Quasthoff et al., 2011).
- *Systematic structure*: Children's abilities are built in a systematic fashion. These include: assuming a role (which can be routine, hostile or problematic); making joint decisions that entail communication, agreeing solutions, sophistication, interruption of the role play, reporting what has happened, combining scenes to form a complete plot, discussions and documentation.
- *Documentation*: Adhering to the script and then transcribing it. This involves literacy skills: creating a plot naturally and spontaneously requires competencies that promote literacy (reading and writing) and give children a demonstration and example of the transformation of the plot into a written story, in this case their own story, causing them to reflect on and depict the experiences they have just had with the other children in preschool.

### **Aim of the Research**

The aim of the study was to learn about the development of narrative competence among Arabic-speaking children, and to inquire whether it is possible to accelerate the acquisition of such competence by means of an intervention program.

We assumed that narrative competence improves with age, that this increase will be higher in the target group as a result of the intervention program, and that the improvement will be felt in all three global dimensions

(Quasthoff, 1997). Moreover, we hypothesized that a correlation would be found between the three global dimensions and vocabulary.

## **Hypotheses**

First Hypothesis: The narrative ability of 5-6 year olds will be higher than that of 3-4 year olds.

Second Hypothesis: Narrative competence will increase with all the children of the study as a result of natural development.

Third Hypothesis: The gap between pre-test and post-test scores in narrative competence will be wider in the target group than in the control group, which did not receive the intervention.

Fourth Hypothesis: The level of narrative competence in the target group will be higher after the intervention.

Fifth Hypothesis: There will be a correlation between the three narrative competence dimensions and linguistic ability, especially vocabulary.

## **Method**

### **Sample**

The research sample consisted of 124 children chosen and divided randomly into experimental and control groups. The experimental group consisted of 60 children and the control group consisted of 64 children; 60 of children were 3-4 year olds and 64 were 5-6 year olds. The children were chosen from 4 kindergartens attended by both younger and older children. All children are native speakers of Arabic, with no developmental problems in their mastery of the language.

### **Instruments**

*DO-BINE (Quasthoff et al., 2011) - Dortmund observation procedure for interaction and narrative development – Arabic version*

We used the DO-BINE observation procedure for interaction and narrative development. The scientific basis of this procedure is the competence model of Quasthoff (2006), according to which the narration includes three ability dimensions:

*The global semantic dimension:* describes the child's ability to name and reproduced the context relevant for narration (relevant information), making for an efficient narrative context. For this the sequence is also important, that is, how the content is told.

*The global structural dimension:* showing how the child is able to enact the whole narration in the conversation from beginning to end.

*The formal dimension:*

a. Dimension of the global form: describes the ability to emphasize the structure of narration with words, for example beginning, peak and end.

b. The peak processing procedures at the local level: describes the ability to correlate between individual utterances to clarify language (real speaking).

### **Validity and Reliability**

To examine the validity of the measuring tools adjusted to the population of Arabic speaking children, the instrument was translated from German into Arabic by a translator who is well-versed in both languages. The translation was examined by another independent translator.

A pilot study was conducted in order to examine the instrument's reliability in evaluating narrative competence. Ten children participated in the pilot, of whom five were at the ages of 3-4 and five were older, ages 5-6.

In the pilot framework the children's responses were recorded and analyzed according to the DO-BINE protocol. A comparison was made between the two age groups regarding each of the three narrative competence measures: semantics, structure and form. The results are presented in Table1.

Table1. Comparison of the narrative competence of two age groups in the pilot study

	Younger (N=5)		Older(N=5)		T
	Mean	S.D.	Mean	S.D.	
Semantics	20.00	2.121	25.20	1.643	<b>4.333**</b>
Structure	11.00	1.581	15.60	1.517	<b>4.695**</b>
Form	11.80	1.924	16.00	3.808	<b>2.201**</b>

\*\* p <0.01

Significant differences were found between the two age groups – the older children's narrative competence was higher than that of the younger children. This finding enhances the measuring instrument's validity. To examine the instrument's reliability, two judges, both speech therapists, were asked to analyze the responses of ten children after having received instructions from the researcher regarding how to use the DO-BINE instrument. Correlations were calculated between the two judges regarding the DO-BINE instrument and all three dimensions. The resultant correlations were higher than 0.90, indicating high reliability.

### Procedure

The study consisted of 4 stages, after consent had been obtained from the kindergarten management and the parents, and following the pilot study, adaptation of the DO-BINE instrument to children who are native speakers of Arabic, and testing the chosen instrument's reliability and validity:

1. Utilization of the instrument in order to test the development of narrative ability among 3-6 year old native speakers of Arabic.
2. Implementation of a training program for 16 participating preschool teachers according to the instructions.
3. Application of intervention program aimed at developing children's global narrative competence.
4. Testing the experiment and the control groups again, to evaluate the effects of the program.

### *Preschool Teachers' Instruction*

The main function of the preschool teacher in the dynamics of the intervention program is to serve as a facilitator, cooperating with the child and granting him/her legitimization. Many of the research students and preschool teachers find this task difficult to perform, because they are incapable of abandoning the mind set of being an "educator" whose job is to direct and intervene, with themselves in the centre of things. It is not easy to change one's approach to that of a "facilitator", who serves more as a partner who encourages interactive discussions of every day experiences and children's play. According to the latter concept, the teacher provides the children with ample opportunity for reciprocal activity. Her job is to assist in the creation and preservation of the interactive social experiential framework in which discussion can take form and develop, giving support, structure and advice on what is happening, while adhering to the rules but without resorting to direct intervention in the plot itself.

In order for preschool teachers to fill this role in our study, and assist in measurement and advancement in the acquisition of narrative competence, they were given DO-FINE and DO-BINE guidance preparatory instruction over a two-month period at two weekly meetings, of two hours each. This took place in the preschool, and included discussions at the end of each session and also organizing for the next day's activities. In the course of instruction the preschool teachers, their assistants and the research assistants all learned about the program, the topics connected with the intervention program, and relevant terms such as "narrative", "interaction", and "experiment". The instruction was led by the researcher and the researcher's advisor. In each session they discussed the experiences and issues that emerged from the intervention; for instance, the best way to design the marketplace, how to facilitate interactive experiences that would generate the participating children's narrative ability, or how to allow for full expression of talents and cognitive skills, naivety and literacy, the social

behaviour involved in the acquisition of knowledge and narrative abilities in the future, all in an age-appropriate manner and in a way that retained the child's motivation.

It is worthwhile noting that the preschool teachers were proactive throughout the intervention. They emphasized the relevance of the topic to their work at the preschool. The instruction and the intervention plan filled gaps in their knowledge of the interactive narrative abilities of the children and helped speed up the process for them. During the instruction, the components for evaluating narrative ability were demonstrated to the teachers. In this manner the DO-BINE questionnaire which examined the narrative abilities via a series of questions came to be considered "very useful" to the work of teachers and assistants alike.

To summarize, in the process of the preparatory instruction and intervention, a significant learning process took place that gave the preschool teachers knowledge and clear criteria for evaluating, coping with and facilitating the acquisition and development of interactive narrative competence.

*Documentation and recording* during the research, evaluation of the level of narrative competence before, after and during the intervention:

*Evaluation* of narrative competence was carried out with the aid of the DO-BINE. Video and audio recordings were made of the children's discussions as they experienced the activities taking place in the classroom. The recordings were later transcribed and analysed peer case.

*Intervention* - Research assistants documented the process of preparing and implementing the intervention, including the discussions and the social interaction that took place among the children and between the children and the adults present at the time. The students documented the intervention using a video camera and filming everything that was happening.

## **Statistical Analysis**

Inter-judge reliability was examined by the Pearson coefficient of correlation between the scores of the two judges on each one of the three components of narrative ability. The first hypothesis was tested by t-tests for independent samples. The two age groups will be compared on each one of the three components of narrative ability.

The second, third and fourth hypotheses were tested by a 2 X 2 analysis of variance (ANOVA) with repeated measures. The independent variables are group (experimental/control) and time of measurement (before/after the intervention). The dependent variables will be the scores on the three components of narrative ability. The fifth hypothesis was tested by the Pearson coefficient of correlation between the three dimensions of narrative ability with linguistic ability and vocabulary.

## **Results**

To examine the first hypothesis, a multiple analysis of variance (MANOVA) was conducted with the age group (younger vs. older) as the independent variable and the three measures of narrative competence as dependent variables. Two analyses were made, one for the measurement before the intervention and one for the measurement after the intervention. Both analyses yielded significant multivariate effects ( $F(3,120) = 26.50, p < 0.01$ ) for the pre-intervention measurement and ( $F(3,120) = 15.0, p < 0.01$ ) for the post-intervention measurement. Univariate analyses yielded significant effects for each of the three measures. The results of these analyses are presented in Table 2.



Table2. Comparison between younger and older children in narrative competence in two1

		Younger (N=60)		Older (N=64)		F
		Mean	SD	Mean	SD	
Before	Global structure	7.70	1.14	9.38	1.60	44.24***
	Global semantic coherence	8.57	1.93	13.69	5.08	53.65***
Intervention	Global form/ narrative discourse patterns	7.75	1.05	10.05	2.37	47.44***
After intervention	Global structure	9.77	2.07	12.67	3.74	28.10***
	Global semantic coherence	12.73	4.02	17.81	5.01	38.35***
	Global form/ narrative discourse patterns	10.58	1.99	13.33	2.53	44.56***

\*\*\* p < 0.001

The results presented in table 2. show that the 5-6 year olds received higher scores than the 3-4 year olds in each measurement of all three measures of narrative competence. These results fully support the first hypothesis.

To examine the second and third hypotheses a 2 X 2 [group (experimental, control)] X [time (before intervention, after intervention)] ANOVA was conducted with repeated measures in the time variable. The analyses were conducted for each of the three measure of narrative competence separately.

The second hypothesis was tested by the main effect of the time. The results are presented in Table 3.

Table3. Comparison between two times of measuring narrative competences in two groups

	Before (N=124)		After (N=124)		F (1,122)
	Mean	SD	Mean	SD	
Global structure	8.56	1.63	11.27	3.37	203.90***
Global semantic coherence	11.21	4.64	15.35	5.21	431.24***
Global form/ narrative discourse patterns	8.94	2.17	12.00	2.66	365.21***

\*\*\* p < 0.001

The results show a significant increase between the two measurements in all three measures of narrative competence, thus supporting the second hypothesis.

The third hypothesis was tested by the interaction between time of measurement and group. The means and standard deviations of the three measures in the two groups before and after the intervention are presented in Table 4.

Table 4. Means and SD's of the three measures of narrative competence by time and group

	Experimental				Control			
	Before		After		Before		After	
	Mean	SD	Mean	SD	Mean	SD	Mean	SD
Global structure	8.33	1.62	13.22	3.40	8.78	1.62	9.44	2.08
Global semantic coherence	11.42	5.13	18.80	4.47	11.02	4.18	12.13	3.52
Global form/ narrative discourse patterns	8.88	2.22	13.73	2.29	8.98	2.15	10.38	1.84

The means of global narrative structure, global – semantic coherence and global form/ narrative discourse patterns, by time and group are presented also in Figure 1.



Figure1. Comparison between younger and older children in narrative competence in two groups

The ANOVA on global narrative structure yielded a significant interaction effect [ $F(1, 122) = 87.45, p < 0.001$ ]. The results presented in Table 4 and in Figure 1 reveal that the effect results from a higher increase in the narrative competence between the two measurements among children of the experimental than of the control group.

The ANOVA on global semantic coherence yielded a significant interaction effect [ $F(1, 122) = 111.28, p < 0.001$ ]. The results presented in Table 4 and in Figure 1 reveal that the effect results from a higher increase in the global semantic coherence ability between the two measurements among children of the experimental than the control group.

The ANOVA on global form/narrative discourse patterns yielded a significant interaction effect [ $F(1, 122) = 112.22, p < 0.001$ ]. The results presented in Table 4 and in Figure 1 reveal that the effect results from a higher increase in the global patterns ability between the two measurements among children of the experimental than of the control group.

These results support the third hypothesis. In addition to testing the third hypothesis regarding the general measure of pattern ability, it was tested for each of the two components of pattern ability: global and local. The test was conducted by the same ANOVA that was used for the general measure. The means and standard deviations of the three measures in the two groups before and after the intervention are presented in Table 5.

Table 5. Means and SD's of the two components pattern by time and group

	Experimental				Control			
	Before		After		Before		After	
	Mean	SD	Mean	SD	Mean	SD	Mean	SD
Local pattern	3.42	1.52	6.56	1.39	3.89	1.33	4.82	1.00
Global pattern	5.46	1.41	7.17	1.32	5.09	1.39	5.56	1.06

The ANOVA on the local component yielded a significant interaction effect [ $F(1, 122) = 32.98, p < 0.001$ ]. The results presented in Table 5 reveal that the effect results from a higher increase between the two measurements among children of the experimental than of the control group. The ANOVA on the global component yielded a significant interaction effect [ $F(1, 122) = 24.23, p < 0.001$ ]. The results presented in Table 5 reveal that the effect results from a higher increase between the two measurements among children of the experimental than of the control group.

To test the fourth hypothesis paired t-test were conducted to compare the narrative competence of the children in the experimental group before and after the intervention. The results are presented in Table 6.

Table 6 Changes in narrative competence of children in the experimental group

	Experimental (N=60)		T		
	Before		After		
	Mean	SD	Mean	SD	
Global structure	8.33	1.62	13.22	3.40	11.94***
Global semantic coherence	11.42	5.13	18.80	4.47	13.02***
Global form/narrative discourse patterns	8.88	2.22	13.73	2.29	18.64***

The results presented in table 6 show a significant increase in all three measures of narrative competence, supporting the fourth hypothesis.

To test the fifth hypothesis Pearson correlations were computed between the three measures of narrative competence in the pre- and post-intervention measurements separately. The results are presented in table 7.

Table 7. Correlations between measures of narrative competence

Correlation between:		Coefficient (r)
Before intervention	Global narrative structure with global semantic coherence	0.48***
	Global narrative structure with global form/narrative discourse patterns	0.83***
	Global semantic coherence with global form/ narrative discourse patterns	0.44***
After intervention	Global narrative structure with global semantic coherence	0.88***
	Global narrative structure with global form/ narrative discourse patterns	0.88***
	Global semantic coherence with global form/narrative discourse patterns	0.78***

\*\*\* p < 0.001

The results show significant positive correlations among the three measures of narrative competence in both the measurement before the intervention and the measurement after the intervention. The results support the fifth hypothesis

### Additional Analyses

To examine the relationship between gender and the influence of the intervention, a multiple analysis of variance (MANOVA) was conducted with gender as an independent variable. The three dependent variables were difference scores between pre and post intervention, on each of the three narrative measures. Table 8 presents the means and SD's of the three difference scores by gender.

Table 8. Means and SD's of difference scores by gender

	Boys		Girls	
	Mean	SD	Mean	SD
Global structure	5.62	3.06	4.19	3.15
Global semantic coherence	8.09	4.87	6.74	3.85
Global form/narrative discourse patterns	4.90	2.14	4.80	1.99

The analysis did not reveal a significant effect of gender ( $F(3,56) = 1.42, N.S.$ ) indicating that the impact of the intervention was similar for boys and girls.

To examine the relationship between children's age and the influence of the intervention, a multiple analysis of variance (MANOVA) was conducted with age as an independent variable. The three dependent variables were difference scores between pre and post intervention, on each of the three narrative measures. Table 9 presents the means and SD's of the three difference scores by age.

Table 9. Means and SD's of difference by age

	Younger (N=60)		Older(N=64)	
	Mean	SD	Mean	SD
Global structure	3.03	2.67	6.73	2.49
Global semantic coherence	7.20	4.66	7.56	4.17
Global form/narrative discourse patterns	4.40	1.67	5.30	2.24

The analysis yielded a significant effect of interaction on global narrative structure ( $F(1,58) = 30.78, p < .001$ ) resulting from a higher increase in ability among older than younger children. No significant effects were found on the two other measures.

## Discussion

The research hypotheses are completely supported by our findings, which show that the older children, aged 4-5 years, received higher grades than the 3-4 year olds, as reflected in all three narrative competence dimensions. The scholarly literature on developing and enhancing narrative competence points out that each increase in age brings an increase in the child's narrative abilities.

Accordingly, the focus of narrative competence development starts from the simple ability to describe a situation and progresses to relying on events and a temporal connection between events and causal associations. As narrative competence develops, it focuses on the consolidation of ideas and concepts into a text based on the activities in the framework of the narrative action structure. Eventually this evolves further in the children, becoming enriched and embellished with more precise and detailed information, including personal evaluation, the expression of thoughts and feelings, as well as personal interpretation, through the use of age-appropriate linguistic expressions and maintaining an awareness of the listener's level of knowledge and expectations.

The results of the current research confirm the fact that both cognitive development and social awareness have an impact on the ability to grasp and organize a narrative and its significance, and influence the use of language, in addition to the goal of gaining narrative competence, which needs to be accomplished in each of its three dimensions. This development can only occur at certain ages. Children aged 3-4 embellish their stories with more facts and details because they are less able to cope with the mental processing of the overall structure and do not bother with editing the details. Instead, they relate more to their individual experiences and activities. Their description might have a richer vocabulary, though it is mostly based on an arbitrary expression of literal meaning.

Our findings show that narrative competence improved among all the groups under study. Previous studies relating to narrative competence development were conducted among various populations representing many spoken languages. The present study of Arabic-speaking children demonstrates similar results. One fact that deserves great emphasis is that the range of linguistic means of constructing a text, and recognizing the connections between its parts, expands in relation to the child's developmental age.

One of the most prominent phenomena is the transition from a limited vocabulary of temporal connectives (*and... then...*) to a wider range of items (*before...so....therefore...*). Children began by organizing events in the order of their occurrence without any additional comments; then advanced by inserting connective words such as "and" and "then"; and subsequently continued to a higher level of using temporal and causal connectives such as "before", "so then" and "therefore"

This finding adds an additional matter for consideration in research on the Arabic language. Importantly, the claim is reinforced that the development of narrative competence in Arabic resembles that in other languages and also shares universal characteristics with them.

The third research hypothesis was that there would be a definite improvement in the narrative ability in all of its dimensions in the research group as opposed to the control group, which received no intervention whatsoever.

The results validated this hypothesis: the findings clearly show that a marked strengthening of competence occurred between the initial measurement and that taken after the intervention. The improvement occurred in all three dimensions of narrative competence: global structure, global semantics and global form. There was a marked 50% improvement on the initial measurement, which can be attributed to the "improved concept" (see chapter 7.1.3) of the short, dynamic, interactive, experiential, everyday activities intervention carried out in the kindergartens. The comparison of the older children aged 5-6 with the younger ones aged 3-4, before and after the intervention in the target group, confirms the effectiveness of the intervention programme on the older children at the structural level. At the other two levels, however there was no discernible difference.

Examinations of the components comprising the pattern clearly demonstrate this improvement at both the local and the global levels. Its significance lies in the implication that building and implementing an intervention programme contributed to the narrative competence in both dimensions of form. This has far reaching consequences and can affect later language development in school-age children, which in turn can affect the development of both oral and written narrative competence. Likewise, the results reaffirm the value of an intervention which *precedes* the development of narrative, semantic, literacy, linguistic, interactive, and pragmatic competence.

In the present research, the intervention took a special form: on the one hand it was definitely structured, while on the other it relied upon the participation of the children themselves. The preschool children operated freely, though they certainly received a guiding hand from the adults. The fact that play-time was fun and enjoyable provided more than enough motivation for the children to engage in the activities. In addition, the fact that these activities took place in the children's natural surroundings rather than in a setting that was constructed specially for the experiment without the children's input, enriched the children's behaviour during the research (Burghardt, 2011).

The interactive socio-dramatic play, together with our research intervention, enabled script development and problem solving. The events which the children experienced, including unexpected scenes and episodes, made possible not only thought processes and the use of verbal concepts, but also problem solving and thought processes at the level of cause and effect.

The study's findings show that the literacy that was revealed in the wake of the intervention was a social act based on the use of spoken language, and an active and smooth transition to written language. The naturalness of this learning style contributes to the educational support system by satisfying children's curiosity when they are totally involved and engrossed in their game. Many significant goals are achieved in this fashion. It is worth noting that the play setting may contribute towards the development of literacy in children, thus enabling, enhancing and encouraging socio-dramatic, interactive experiences in early childhood. The results of the study offer conclusive proof that children are capable, given proper support from adults, of generating discourse with narrative characteristics, which contributes directly towards building their literacy competence.

Younger children advanced more in coherence than in the two other dimensions while older children advanced in all three dimensions. Similarly, it is apparent from the findings that among the three narrative competence dimensions, coherence develops to a larger degree than the other dimensions and plays a significant role in cultivating younger children's narrative competence. In order to create a coherent, solid narrative, both the local and global organization must be activated together.

To accomplish this goal, the use of many linguistic tools is required, and in particular those that express relations of dependency clearly. Studies on the relationship between a story's schematic development and linguistic tools (Nelson, 1986, 2010; Hudson & Shapiro, 1991) have shown a parallel development in two aspects of narratives – cognitive and linguistic. They have also pointed out the influence that an episode's structure and other structural details of the story have on children's use of various linguistic tools. Also, their ability to construct a coherent narrative demands a certain prerequisite level of linguistic as well as cognitive development. Cognitive development is in fact the foundation upon which linguistic and textual abilities can develop. That is to say that the ability to find linguistic forms to fit the narrative scheme is a function of children's cognitive maturity acquired by interactive experiential intervention. In light of some studies, the objection can be made that already at the age of three children have numerous means at their command of fulfilling major narrative functions at sentence level. However, children must still undergo a long series of developmental stages to reach the proper use of the multiple linguistic and rhetorical means that language offers

for storytelling, both in terms of narrative structure and verbal expression. Nelson claims that the initial stage of narrative knowledge in children is found in the mental processing of routine familiar activities, which he calls a "script". A script is a basic abstract representation stored in the child's mind following a frequent sensory experience. In other words, children re-experience the same experience and form a template in their minds to represent the experience's or event's components (Nelson, 1998, 2006, 2010).

From this we can appreciate the importance of understanding how information is contextually organized in order to create a coherent text using linguistic means. The developmental level of organizing information in "scripts" is dependent upon the child's ability to organize information already present at an early age, specifically their ability to organize information at the temporal, causal or structural level. For instance, a child can recognize various elements that belong to a script without understanding the causal relations between them, or they can have difficulty in associating a single event with the overall script framework, despite their familiarity with it. Processing information by means of the script allows the child to build a temporal and/or causal connection between the events, these connections being essential in the narrative dialogue. Children's abilities, especially that of giving coherence to their narratives, prove that the developmental level of knowledge in children becomes the basis both for dealing with the experiential, interactive narrative task at hand, and for handling the construction of a narrative text based on linguistic and non-linguistic features in the narrative. The present study suggests that it is possible to speed up the process of acquiring narrative competence through the interactive, dynamic experience of everyday activities suitable for children at different ages. However, progress is more apparent in older children, while younger children exhibit an ability to obtain some "pre"- storytelling competence. The DO-BINE tool presented here is not intended for the latter because it measures the quality of literal language, but this was taken into consideration for the intervention in its emphasis on the development of pre-competences.

Cognitive competence entails knowledge about the sequence of the plot. The spoken texts must be prepared to fit the exact timing of the episodes, so that the plot can develop. This involves relating to incoming information in order to provide some background for essential information and a full description of the story's components, as well as the ability to enter the storyteller's perspective. Linguistic ability requires lexical knowledge; knowing which words are suitable and how to arrange them to construct proper sentences which are grammatically correct and coherent in describing the events. Storytellers need to make use of appropriate grammatical tools, taking into account both the universal aspects of the narrative and its specific linguistic aspects, in order to determine the form of the story and its verbal content.

Competence in the use of various linguistic tools also finds expression at sentence and discourse level. As concerns the sentence level, the children in this study discovered information and displayed the ability to express semantic and syntactic relationships among the bits of information, events and experiences, all by verbalizing the items involved and assigning them a time and a place. As for the level of dialogue, the children devised local and global connections between the sentences by relating to the items outside of their immediate obvious connection. The linguistic tools they acquired, and then honed, helped them in arranging the story in such a way that it was coherent and easily understood by the listener.

The crucial element of the intervention here was the process by which the young children learned from their older classmates, who in effect acted as their role models, in accordance with Andresen's theory (Andresen, 2005). The intervention supported the children's ability to form connections between the experience and its significance as a driving force to discovering and obtaining new information to embellish the immediate experience by tying it to other experiences as a need to control and plan activities, and to successfully meet possible challenges, solve problems, and complete tasks. During the intervention, discussions were carried out by the children at a high discourse level, as expressed in their mutual contributions to the conversation and their mutual interests, thanks to their high level of engagement in building a shared discourse, which created and formed the rich basis for the mutual learning of narrative abilities. During the intervention carried out in this study, it was clear that within the dynamic structure of play the children maintained a certain level of decorum, and were punctilious about keeping certain conventions in the game, which allowed them to create a stable social framework within which they then felt free to develop a clear and coherent plot. Despite the fact that there were no rules or guidelines in the socio-dramatic interactive experiential play to ensure a coherent plot in advance, or even its continued existence, it was noticeable that the children themselves created certain norms to help them maintain a social framework and a coherent plot.

In addition, the dynamic character of their play generated a great deal of creativity among the children. They successfully devised sophisticated strategies in a complex yet flexible context of dynamic play. The literacy ability of the children at play increased and could be seen in their narrative discourse, which was articulate, clear

and coherent; a blend of discourse elements with clearly defined boundaries. All of the above contributed to the clarity and smooth chronology in the narrative text. Cooperation in constructing the plot was an important and even essential factor. The high level of cooperation and standard of dialogue during the construction of the plot in the children's play helped to produce a smoothly structured and coherent story text; in short, a literate text. Discourse that takes place in a group of multi-aged children in which the participants help one another in the construction and telling of the story is directly related to literacy.

One of the attributes of the DO-FINE intervention is that, alongside the active independent design opportunity they had at every stage of the game, the children were also given support at a "narrative distance", a "de-contextualization" which led them to a crystallization of their experience into a story for an audience that had not been present, and then to documentation. Beyond the general contribution of these numerous skills to their development, they had an influence on the school's social and educational success.

Findings show tangible, albeit not high, correlations among all three dimensions of narrative ability. This finding can be explained by the fact that all three dimensions are interconnected conceptually, as each reflects aspects of the same ability. On the other hand, each has its own unique quality and significance. What underlay our research intervention was the interactive approach, according to which many factors come into play in the process of language acquisition: social, cultural, linguistic, cognitive and biological, and they all exist in a mutual give-and-take relationship (Vygotsky, 1962). It is the regulation of these signal systems that marks a child's personal development. Thought processes and their intellectual development are dependent on language, and inextricably connected to the child's mastery of thinking sociably. For the child to successfully participate in a conversation, they need to have the linguistic tools for putting together as well as combining sentences in a logical sequence appropriate to a particular situation. Through interactive play, the child is an active participant who has an understanding of the situation at hand from their personal experience and in accordance with their age. This is what enables a literate narrative discourse to take place, and enrich and enhance the child's linguistic and communicative conceptions (Fagen, 2011; Goncu & Gaskins, 2011; Goncu, Mistry & Mosier, 2000; Hausendorf & Quasthoff, 1996; Quasthoff & Katz-Bernstein, 2007).

Research has established that many preschool activities can develop a narrative competence in children, which is of paramount importance in nurturing literacy. Narrative competence requires mastery of the language and enables the formation of linguistically acceptable phrases. Textual competence enables discourse while narrative competence enables the primary organization of the story (Berman, 1997b). It has been shown that the development of narrative competence is dependent on the mutual relationship between the storytelling competence and cognitive skills which find expression in linguistic knowledge (Berman, 1997). Preschool children can become literate if they are both cognitively mature and exposed to an atmosphere that is supportive in its encouragement of literacy in their surroundings (Hall, 1989). Feuerstein (1998) and Klein & Yavlon (2008) concur with Berman and emphasize the importance of mediation and support to foster, broaden and deepen the world of children and stimulate their curiosity and desire to look beyond what they comprehend with their senses.

Adult support offered by way of comments or suggestions allows the child to acquire a mechanism for interaction which helps with language learning. The interactive model that was implemented in our research led to a more sophisticated and precise use of language and promoted narrative competence in all its components. Moreover, discussion of children's respective roles and their purpose enabled and encouraged cognitive and linguistic aspects, which in effect formed the basis for their development and acquisition (Quasthoff et al., 2011). Cognitive abilities include knowing the plot sequence in order to develop a strategy of action and aptly describe the components of the narrative. Linguistic ability includes choosing the right words and forming grammatically correct sentences from the stock of words for the description of events and experiences in a coherent manner.

The differentiation between the world of play and reports about it involves the separation of the meta from the action level, taking into account the expressions and sentences that encourage and give coherence and correlation, and enable children to crystallize action at the level of form, structure and global semantic skills (Andresen, 2005; Quasthoff, et al., 2011).

For the time being, the significance of this finding seems to be that the individual components of the narrative should be examined separately, as was done in the present study, rather than the narrative as a whole. This finding confirms Schroder's findings (Schroder, 2009), who also used DO-BINE in her narrative analysis and noted that children with learning disabilities also benefit from the differentiation, which substantiates our claim

that differentiation is important in early childhood and helps in identifying, boosting and accelerating the programme by focusing specifically on a single, particular ability in the disabled child.

The intervention in this study took place in a setting of natural communication, enabling kindergarten children to develop a literate discourse and providing them with a chance to convey ideas in a logical order and formulate a coherent style, in which the wording was suited each time to a different interactive social purpose, always taking into account the other participants. The literacy discourse skills were expressed in the precise use of language and the choice of the correct words in the proper social and cultural context. The children learnt to build various independent "global semantic" textual sequences.

The natural context of their peers' discourse served to help the children in their engagement with the internal structure of the sentences, expressions and phrases they used and their connection with each other, and aided them to create a coherent sequence, which contributed to their development of a pragmatic, "global structure". The availability of new scripts demanded additional cooperation and joint construction on the part of the children, which presented more challenges and enabled efficient use of language suitable to the social "global formal" context. The children's natural and spontaneous play found expression in their ability to join phrase to phrase in an independent fashion, in order to build a coherent sequence of the story, incorporating correct and appropriate linguistic expressions. It also promoted their ability to express intent in conversation, and respond in an appropriate manner, in other words, the acquisition of discourse skills (Quasthoff, 2006).

The improvement in cognitive ability gained via play interactions serves as a significant motivating factor that enables the acquisition of new words by active creative connections which turn into a context and a script. The innovative element of our research intervention was manifested in the fact that it was carried out via the construction of the context, assuming a role, demonstrating the interaction and inventing goals, reporting from within, without context; by creating context it enabled the children to desire and seek out the semantic, linguistic and interactive skills they needed.

Verbal communication and speech "symbols" contain linguistic statements connected to the actual content in the telling of the imaginative plot. The interactive discussion contained verbal and nonverbal messages intended to organize and direct the dramatic activity taking place at the "marketplace". The improvisation process during the play and the interaction between the players during the improvisation were done through direct and creative suggestive communication, whereby linguistic choices and linguistic structures are made; for example, the use of names and roles as a non-explicit technique and display of verbal expression in the game. Conversations that ensued between the groups of children while they were involved in their role playing developed their language and thought processes.

Children improve their expressive ability by trying out words through verbal interaction while busily discussing or creating the practice script. They participate in verbal interactions, learn new words from their peers, and thereby enrich their language. As well as learning new words, they improve their ability to express thoughts, increase their vocabulary, and communicate successfully. Verbal communication among children necessitates a good command of language in order to be able to carry on a conversation precisely; being part of the game obligates the child to use various forms of speech in different situations, and to match its verbal expressions to the situation. In the group decision making process, the children learn that they must speak clearly, precisely, and emphasize the main point of what they want to say. In the role playing process, children learn to speak intuitively and to use words appropriate to the particular role they are portraying. Peer conversations that arose during the play in the marketplace offered a multitude of opportunities for the children to engage in new experiences, many of which were helpful in developing and boosting their discourse in the spoken language. Speech in the socio-dramatic play had another important function: constant planning, changing and developing throughout the play necessitated cooperation that was achieved by means of verbal explanations of various sorts.

The use of meta-communication during the marketplace play and the transitions involved in the game mediated and contributed to the development of narrative competence and social skills in the children. Studies show that meta-communication used in play has one of the strongest correlations with the onset of reading and reading comprehension (Pellegrini & Galda, 1991). It has even been claimed that play constitutes the optimal arena for children to comprehend that symbols are arbitrarily connected to their referents and that the connecting symbol can be disconnected from the object and adapted to symbolize something else. Vygotsky (1987) noted that children interpret the connection between symbol and referent and they become aware to the process of representation. The internalization of this concept is the foundation of the process of acquiring writing skills.



The various social encounters enriched the children's language. They learned to use the precise meaning of a word and discovered the impact of their words on their peers' reactions. Speech and language bestowed meaning to thoughts and feelings. Moreover, their social development enabled them to give full pro-social expression to their experiences and developed their ability to verbally express intention and react with an appropriate response to another person.

Social role playing in the marketplace through everyday activities gave the children a chance to have an active emotional experience and also provided a learning experience. In the framework of this activity the children made use of their natural language, communicating socially with their classmates in play situations that combined creativity and fun.

As it passed from one stage to the next for the purpose of the children's acquisition of skills in all those areas where the marketplace context provided the framework, the intervention process, as the results of this study show, consistently allowed over a period of time the children's continuous natural development towards literacy competence.

## **Contribution of the Research**

### **Practical Implications**

- To train and empower preschool teachers, to apply dynamic interactive intervention.
- The "DO-BINE" narrative assessment tool can be used in clinical therapeutic settings (differences of narrative attributes and construction of treatment and interventions).
- Use of the assessment research tool revealed development in narrative competence.
- Use of the measuring tools among Arab researchers and research participants, where tools in this significant field are lacking.

### **Future Research**

- Research to examine the influence of the intervention developed for this research among populations with special needs.
- Research to examine the influence of the intervention with the children in the long-term.
- Research to examine the different aspects of literacy competence after the intervention.
- Expansion of the research to a greater number of participants in order to construct standards of narrative competence acquisition according to age brackets.

## **Conclusion and Recommendations**

The present study is a pioneer research in the Arab world, which lacks scientific data about the development of the narrative competence and of the language of preschool children.

The study has provided knowledge about narrative competence that has not been available previously for speakers of Arabic, with the assistance of the method developed by the Research School in Germany (DO-BINE by Quasthoff, 2008). We adapted the method developed in Germany, including the research findings from previous studies, and were assisted by the statistic experts of the R-School in Dortmund.

The adaptation of the instrument to the Arabic language will enable the mapping of the level of spoken discourse and linguistic competence among preschool children; it will also be useful for treating children with learning difficulties.

The findings of the study can help policy makers in administration and in education with the treatment of children in the development of spoken language skills and emerging literacy in kindergarten. It will also contribute to the discovery of new ways of developing materials and instruments of assessment of the spoken language and the design of intervention materials for the fostering of language in kindergarten. The study may serve as basis for a system of selection, diagnosis, assessment and treatment for workers in preschool.

## References

- Andresen, H. (2005). Role play and language development in the preschool years. *Culture and Psychology*, 11, 387-414.
- Andresen, H., & Januschek, F. (2007). *Sprache Spielen*. In H. Andresen, & F. Januschek (Eds.), *Sprache Spielen* (pp. 7-25). Freiburg: Fillibach. 7 – 25
- Aram, D., & Biron, S. (2003). Promoting literacy in preschool: Intervention programs in Jaffa. *The Kindergarten's Echo*, 2, 4-24. (In Hebrew).
- Aram, D., & Biron, S. (2004). Joint story-book reading and joint writing interventions among low SES preschoolers: Differential contributions to early literacy. *Early Childhood Research Quarterly*, 19, 588-610.
- Aram, D., & Levin, I. (2004). The role of maternal mediation of writing to kindergartners in promoting literacy achievements in second grade: A longitudinal perspective. *Reading and Writing: Interdisciplinary Journal*. 17(4) 387-409.
- Berman, R. (1982c). Dative Marking of the Affectee Role: Data from Modern Hebrew. *Hebrew Annual Review*, 6, 35-59.
- Berman, R. A. (1997b). Narrative theory and narrative development: The Labovian Impact. *Journal of Narrative and Life History*, 7, (1-4), 235-244.
- Berman, R.A., & Slobin, D.I. (1994). *Relating Events in Narrative: A Crosslinguistic Developmental Study*. Hillsdale, NJ: Erlbaum.
- Briznitz, Z., & Yamin, R. (2008). From education research to achievement at the early childhood education. The Israeli academy. *Diagnosis, Measurement and Evaluation kinder garden -2 grade.* [in Hebrew].
- Burghardt, G. M. (2011). Defining and recognizing play. In Pellegrini A.D. (Ed.), *The Oxford handbook of the development of play* (pp. 9-18). New York: Oxford University Press.
- Cummins, J. P. (1981). The Role of Primary Language Development in Promoting Educational Success for Language Minority Students. In F.C. Leyba (Ed.), *Schooling and Language Minority Students: A Theoretical Framework* (pp. 3-49). Los Angeles, CA: Evaluation, Dissemination, and Assessment Center, California State University.
- Duke, N. (2001). Print experiences and environments offered to children in very low- and very high- SES first grade classrooms. *Teacher Education Research*, 37 (2), 441-478.
- Eaton, J., Collis, G., & Lewis, V. (1999). Evaluative explanations in children's narratives of a video sequence without dialogue. *Journal of Child Language*, 26, 699-720.
- Fagen, R. (2011). Play and Development. In Pellegrini A. D. (Ed.), *The Oxford handbook of the development of play* (pp. 83-100). New York: Oxford University Press.
- Göncü, A. (1993). Development of inter subjectivity in the social pretend play of young children. *Human Development*, 36, 185-198.
- Göncü, A., & Gaskins, S. (2011). Comparing and extending Piaget and Vygotsky's understandings of play: Symbolic play as individual, sociocultural, and educational interpretation. In A. D. Pellegrini (Ed.), *The oxford handbook of the development of play* (pp. 48-57). New York: Oxford University Press.
- Goncu, A., Mistry, J., & Mosier, C. (2000). Cultural variations in the play of toddlers. *International Journal of Behavioral Development*, 24, 321-329.
- Graesser, A. C., Gernsbacher, M. A., & Goldman, S. (2003). *Handbook of discourse processes*. Mahwah, NJ: Erlbaum.
- Hall, S. [1989] 1996. New ethnicities. In D. Morley & K. H. Chen (Eds.), *Stuart Hall. Critical Dialogues in Cultural Studies* (pp. 441-449). London-New York: Routledge.
- Hausendorf, H., & Quasthoff, U. M. (1992). Patterns of Adult-Child-Interaction as a Mechanism of Discourse Acquisition. *Journal of Pragmatics* 17, (3) 241-260.
- Hausendorf, H., & Quasthoff, U. M. (1996). An Interactive Approach to the study of narrative: In A.C. Graesser, M. A. Gernsbacher, S.R. Goldman (Eds.), *Handbook of Discourse Processes* (p. 411). Lawrence Erlbaum Associates.
- Hudson, J. A., & Nelson, K. (1986). Repeated encounters of a similar kind: The effects of familiarity on children's autobiographical recall. *Cognitive Development*, 1, 253-271.
- Hudson, J.A., & Shapiro, L.R. (1991). From knowing to telling: The development of children's scripts, stories, and personal narratives. In A. McCabe & C. Peterson (Eds.), *Developing Narrative Structure*. Hillsdale, NJ: Lawrence Earlbaum Associates, Publishers.
- Katz-Bernstein, N. (2003). Therapie aus pädagogisch- psychologischer Sicht. In M. Grohnfeldt (Ed.), *Lehrbuch der Sprachheilpädagogik, Therapie und Rehabilitation*. (ed.4) (pp. 66-90). Stuttgart: W. Kohlhammer.
- Katzenberger, I. (1994). Cognitive, linguistic and developmental factors in the narration of picture series. Unpublished doctoral dissertation. Tel-Aviv University. [In Hebrew].

- Klein, P., & Yavlon, Y. (2008). From research to action in early-age education, Jerusalem: National Science Academy Available at:  
<http://www.academy.ac.il/data/egeret/86/EgeretArticles/early-childhood-education->
- Labov, W. (1972). *Language in the Inner City: Studies in the Black English Vernacular*. Philadelphia: U of Pennsylvania P.
- McCabe, A., Peterson, C., & Connors, D. M. (2006). Attachment security and narrative elaboration. *International Journal of Behavioral Development*, 30(5), 398-409.
- Mullis, I. V. S., Martin, M. O., Gonzales, E. J., & Kennedy, A. M. (2003). *PIRLS 2001 international report. IEA's study of reading literacy achievement in primary school in 35 countries*. Boston, MA: International Study Center, Lynch School of Education, Boston College.
- Nelson, K. (1986). *Event knowledge: Structure and function in development*. Hillsdale, NJ: Erlbaum.
- Nelson, K. (1991). Remembering and Telling: A Developmental Story, *Journal of Narrative and Life History*, 1, 109-127.
- Nelson, K. (2006). Advances in pragmatic developmental theory: The case of language acquisition. *Human Development*, 49, 184-188.
- Nelson, K. (2010). Cognitive Function of Language in Early Childhood: In B.D. Homer & C.S. Tamis-LeMonda (Ed): *The development of Social Cognition and Communication* (pp. 7-28). Mahwah, NJ: LEA.
- Nickolaus, K., Quasthoff, A.M., & Repp, M. (1984). An Interactive Approach to the study of narrative: In A. C. Graesser, M.A. Gernsbacher & S. R. Goldman (Eds.), *Handbook of Discourse Processes* (2003, pp. 411). Mahwah, NJ: LEA.
- Paul, R., & Smith, R.L. (1993). Narrative Skills in 4 years old with Normal, Impaired and Late-Development language. *Journal of Speech and Hearing Research*, 36, 592-598.
- Peled-Elhanan, N. (2000). 'Teaching as praxis vs. teaching as technique'. In O. Schwardsold, S. Blum-Kulka & E. Olstein (Eds.), *Raphael Nir Book – Studies in Teaching, Language and Communication*. Jerusalem: Carmel Publishers. [in Hebrew]
- Pellegrini, A. D. (2010). Play and games mean different things in an educational context. *Nature*, 467, 27.
- Pellegrini, A.D., & Galda, L. (1991). Longitudinal relations among preschooler's symbolic play, metalinguistic verbs and emergent literacy. In J. F. Christie (Ed.), *Play and early literacy development* (pp. 47-67). Albany, NY: State University of New York Press.
- Peterson, C., & McCabe, A. (1983). *Developmental psycholinguistics: Three ways of looking at a child's narrative*. New York: Plenum.
- Quasthoff, U. M. (1986, 1995, 1997). An Interactive Approach to the study of narrative: In A. C. Graesser, M. A. Gernsbacher & S. R. Goldman (Eds.), *Handbook of Discourse Processes* (p. 411). Published by Lawrence Erlbaum Associates.
- Quasthoff, U. M. (2006). Erzählkompetenz zwischen Mündlichkeit und Schriftlichkeit. In *Grundschule*, 12(38), 32-33.
- Quasthoff, U. M. (2008). Mündliche Kommunikation. In: Jürgens, Eiko & Jutta Standop (Eds.), *Taschenbuch Grundschule*. (ed.4): Fachliche und überfachliche Gestaltungsbereiche, (pp. 57-69). Schneider Publisher Hohengehren.
- Quasthoff, U. M., & Katz-Bernstein, N. (2007). Diskursfähigkeiten. In: Grohnfeldt, Manfred (Ed.), *Lexikon der Sprachtherapie* (pp. 72-75). Stuttgart: Kohlhammer Publisher.
- Quasthoff, U.M., Fried, L., Katz-Bernstein, N., Lengning, A., Schröder, A. & Stude, J. (2011). (Vor)Schulkinder erzählen im Gespräch: Kompetenzunterschiede systematisch erkennen und fördern. *Das Dortmunder Beobachtungsinstrument zur Interaktions- und Narrationsentwicklung (DO-BINE) und der Dortmunder Förderansatz (DO-FINE)*. Schneider Verlag Hohengehren.
- Schröder, A. (2009): Vergleichende Analyse interaktiver Erzählfähigkeiten beisechsjährigen Kindern mit einer so genannten Spezifischen Sprachentwicklungsstörung und Kindern mit unauffälligem Spracherwerb. <https://eldorado.tu-dortmund.de/bitstream/2003/27128/1/Dissertation.pdf>.
- Shatil, E., Share, D. C., & Levin, I. (2000). "On the contribution of kindergarten writing to grade one literacy: A longitudinal study in Hebrew", *Applied Psycholinguistics*, 21, 1-21.
- Smilansky, S. & Shefatya, L. (1993). *Facilitating play: ha-Miṣḥaḳ ha-sotsyodramaṭi : emtsa'i le-ḳidum limudi, ḥevrati ye-rigushi shel yeladim tse'irim*. Kiryat Byalik: Ah Press. [In Hebrew].
- Tomasello, M. (2000). The item based nature of children's early syntactic development. *Trends in Cognitive Sciences*, 4, 156-163.
- Vygotsky, L.S. (1962). *Thought and Language*. Cambridge, MA: MIT Press.
- Vygotsky, L. S. (1987). *Thinking and speech* (U. Minick, Ed. and Trans.). New York: Plenum, (translation of Vygotsky, 1982b).

- Vygotsky, L.S. (2004). Imagination and creativity in childhood. *Journal of Russian and East European Psychology* 42, 1, (4 – 84). (Original work published 1930).
- Whitehurst, G. J., Epstein, J. N., Jeffrey, N., Angel, A., Payne, A. C., Crone, D., & Fischel, J. E. (1994). Outcomes of an emergent literacy intervention in Head Start. *Journal of Educational Psychology*, 86, 541-556.
- Whitehurst, G.J. (1997). Language processes in context: Language learning in children reared in poverty. In L. B. Adamson & M. S. Ronski (Eds.), *Research on communication and language disorders: Contribution to theories of language development* (pp. 233-266). Baltimore, MD: Brookes.

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