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ABSTRACT

Children's knowledge of daily events in full-day child care was assessed. Interviews with 14 children produced spontaneous narratives that revealed script-like knowledge of the child care day, including events such as indoor play, outdoor play, breakfast, lunch, nap, and snack. Younger children reported a smaller number of events in their narratives. All children reported more events when provided with probes about expected events, and language forms used by children reflected a sense of regular, ongoing activity. Findings were seen to relate to the project of documenting child care experience from the perspective of participating children. (Author/RH)

Child Care as Script:

Children's Descriptions of Daily Experiences

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Abstract

Children's knowledge of daily events in full-day child care was assessed. Interviews of 14 children produced spontaneous narratives that revealed script-like knowledge for the child care day, including events such as indoor play, outdoor play, breakfast, lunch, nap, and snack. Younger children reported a smaller number of events in their narratives. All children reported more events when provided with probes about expected events. The language forms used by children reflect a sense of regular, on-going activity. Findings are discussed in terms of documenting child care experience from the perspective of participating children.

Child Care as Script:
Children's Descriptions of Daily Experiences

Children's experience in child care continues to be an important matter, as the number of children needing out of home care grows (Grossman, 1980) and as we learn more about the significance of group caregiving for development (e.g., Farran and Ramey, 1977; Rubenstein and Howes, 1979). The current study attempted to assess child care experience from the perspective of the participating children. The purpose of this study was to describe children's knowledge of their own child care experiences.

Recently, there has been a recognition of the fact that educational and developmental research may not represent the meanings of the subjects we study in the contexts we study them. The child's knowledge and understanding of phenomena are not really considered as we attempt to describe those phenomena. Mischler (1979) argues that research tends to strip contexts of the meanings children might give them. The child's point-of-view is ignored. Cole, Hood and McDermott (Note 1) go so far as to argue that "real life" contexts should be the subject matter of research, that daily experience is a cognitive task to be understood through research. How children think about and in their daily environments is important information for researchers who want to understand mental development. What children know about their experience can be seen as an index of the meaning that experience has for them; it can provide us with their understanding of the programs and experience we intend them to have.

One way of investigating a participant's perspective of experience is by analyzing scripts of the events they have experienced, using the

model of event knowledge presented by Shank and Abelson (1977; Abelson, 1981). Knowledge of routine experiences presumably is organized into temporal-spatial representations. Nelson and her colleagues have investigated the development of event knowledge by questioning children about their experiences eating lunch (Nelson, 1978; Nelson and Gruendel, 1979, 1981), attending a party (Nelson and Gruendel, 1981), attending half-day kindergarten (Fivush, 1982), and participating in common and special activities at camp (Hudson and Nelson, Note 2). Knowledge of events comes to guide behavior, by providing information on what typically is associated with experiences. Event knowledge also shapes expectations, by virtue of the fact that structural relationships imply the presence of elements in any given experience. For example, on the second day of kindergarten children already expect a sequence of acts including "coming in," play, group meeting, class work, lunch, and "going home" (Fivush, 1982). Additional acts were added to this structure by the second week of school, at which point the script for kindergarten stabilized to a large extent. This script formed the children's expectations for the school day and directed their behavior accordingly.

Two elements are characteristic of script formation. First, there must be a statement about acts, which are memories for events as experienced. For example, a group of children questioned about lunch at school responded with statements about cleaning up for lunch, setting the table, serving food, eating food, and cleaning up (Nelson and Gruendel, 1981). These acts comprise the event of school lunch. Earlier research has found consistent statements of acts for children as

young as three (Nelson and Gruendel, 1981) who have had as little of one day's previous experience with an event (Hudson and Nelson, Note 2).

The second element of script formation is the language form used to state acts. Scripts are expressed with either "we" or "you" (in the sense of "one") combined with the timeless present tense (e.g., We go outside to play. You go to sleep at nap time.). This form suggests the regular, on-going nature of the acts presented in the script.

Bower (1978) has criticized the free description method used for eliciting scripts in investigations of event knowledge, stating that "there is no good argument for claiming that information gained by one method is in the memory script whereas the remaining knowledge revealed by a more sensitive method is not in the script." (p. 351). Children's scripts may not reveal all that they actually know about the event. The use of recall probes has been suggested as a method for eliciting knowledge that has not been spontaneously provided in a narrative. The current study was designed to elicit and compare knowledge of child care by means of narrative description and probed recall of constituent child care acts. This expands on earlier work by investigating an event that is much longer than has been previously studied (i.e., a full day) and by comparing spontaneously generated scripts to elicitations of specific event knowledge. Age differences are explored to ascertain developmental changes in event knowledge.

Methodology

Subjects

Subjects were 14 children, age 3 through 6, representing a variety of ethnicities. Eleven were female and 3 were male. All were English speaking, non-handicapped children in a small, full-day, campus based,

federally funded child care center.[1] At the time of the study, the children had been attending the center for seven months. Program activities, as described by the teachers, included self-directed indoor and outdoor activities (including art, block play, dramatic play, puzzles and games) and group experiences (including stories, music and games), eating and rest time. The basic schedule consisted of the following: arrival, breakfast, indoor activities, group/story time, outdoor activities, lunch, nap, indoor activities, outdoor activities, and departure.

Procedure

Each child was interviewed by the first author, who was familiar to the children, in a room adjacent to the center. Interviews were tape recorded. They were guided by two sets of directions. The first direction elicited spontaneous narrative (i.e., Tell me what you do at school every day.). The following directives probed for information about specific events, as suggested by teachers description of daily events (e.g., Tell me what you do at breakfast. Tell me what you do at story time. Tell me what you do outdoors.) The second group of directives was continued until the child's responses were exhausted. Tape recordings were transcribed. Each event protocol was broken down into its component acts. An act was defined as a single action or activity that can occur (e.g., "We hear a story." "And then you have lunch.") A sample of a spontaneously recalled narrative is presented in Figure 1, with its constituent acts marked. Responses to directives about

Insert Figure 1 about here

specific acts were scored if the child provided any relevant information

about the event (e.g., What do you do at breakfast? We eat.). Sample responses also appear in Figure 1. Two graduate students independently coded 25% of the transcripts, achieving an interrater reliability of 84%. One of the students coded all of the remaining transcripts.

Findings

Every child spontaneously provided some knowledge about acts at child care. The frequencies of reported acts are reported in Table 1,

Insert Table 1 about here

including a breakdown by age. There is a fairly common structure to daily activities, including breakfast, play activities (indoor), outdoor play, story, lunch, nap, snack, and going home, which corresponds with the teachers' account of events. (Responses in the "other" category were instances of acts that were not every day activities in the center [e.g., We make bread. We put powder (cornstarch) in the plates and then put water, and then we do with our hands.] Two of the younger children generated all the "other" responses.) The number of "other" responses did not alter significantly the statistics computed, so those responses were dropped from the analysis.

The average number of acts per child in narrative scripts and in directed responses is presented in Table 2. An average of four acts per child appear in the spontaneous scripts. An average of 6.7 acts result from probed responses. That difference is significant ($t = 2.66$, $df = 26$, two-tailed test). Relatively more knowledge is provided by children in response to specifically probed requests about acts.

Insert Table 2 about here

To ascertain the effect of age on responses, the sample was divided by age; the seven 3- and 4-year-olds comprised the younger group, and the seven 5- and 6-year-olds comprised the older group. Table 2 demonstrates that the older children included a greater average number of acts per child in their spontaneous narrative scripts ($t = 3.05$, $df = 12$, $p < .02$). Older children spontaneously produce scripts that reflect more knowledge of the child care day than do younger children. Older children also provide a greater average number of responses per child to direct requests about acts ($t = 3.06$, $df = 12$, $p < .01$, two-tailed test).

T-tests were conducted to compare the average number of acts reported by each child, in spontaneous scripts and after probes. For younger children, there is a significant increase in the average number of acts they represent as they respond to probes ($t = 3.66$, $df = 12$, $p < .01$, two-tailed test). For older children, the change does not reach the .05 level of significance. (With a larger sample, the change would undoubtedly be significant for older children. For this sample, the $t = 1.77$, which borders on significance at the .05 level for 12 degrees of freedom.)

What events differentiate between the scripts and probed knowledge representations for child care? In spontaneous narratives, all of the children displayed knowledge of indoor play activities (e.g., We play with puzzles. We play with toys.); nearly 2/3 reported outside play (e.g., We climb the tree. We play hide and seek.); roughly half the sample reported nap as an event. Smaller numbers reported breakfast, story, lunch, snack, handwashing, and brushing teeth. The frequencies show that more than twice as many children come to represent breakfast, story time, nap, snack, and going home when probed specifically about

those acts. These events, with their focus mostly on basic, functional needs such as eating and resting, do not emerge until they are specifically probed for. Programatically, those acts would seemingly be considered to be critically important. Certainly, much planning is done around those acts, because food and rest related activities are necessary and inevitable in a full day program. Yet, those very activities do not appear in children's spontaneous narratives.

It also appears that some of the difference between script and probed acts is age linked; the younger children tended to not mention much about those functional events, even when probed to do so. Fisher exact tests comparing younger and older children's responses indicate that younger children remember less about breakfast ($p = .01$) and story ($p = .01$) (even when probed), and less about lunch ($p = .01$) and snack (in their spontaneous scripts). For younger children, eating especially plays much less of a role in their representations of child care.

Discussion

Findings from this study, while limited due to small sample size, present a fairly consistent picture of child care in this setting, beginning with rudimentary scripts and descriptions as early as age three. Classroom activities (i.e., play), outdoor play, and (when probed) meals, story, and nap emerge early on as important acts from the child's point of view. A small, but significant, increase in the amount of knowledge spontaneously given by children from age three to age six is consistent with earlier findings on scripts (Nelson and Gruendel, 1981). The regular appearance of acts in both the spontaneous scripts and in probed responses suggest a common child care event structure for

all children, comprised of acts such as breakfast, play, story, lunch, nap, snack, outdoor play, and going home.

Bower's (1978) reservations about the use of scripts for assessing event knowledge are confirmed by data on age difference for the comparison of the script and probed recall findings. The children in this sample were able to provide significantly more knowledge than they provided in their scripts. They had representations for acts that were not produced in their scripts. It remains a major question whether they lack the cognitive skills to organize their knowledge into a script for the whole event and why they do not produce more of that knowledge spontaneously. In any case, younger children especially know significantly more than they reveal in scripted narratives.

While the current data suggest that scripts do not reflect as much of children's knowledge as other means of expression do, the data do not repudiate the validity of the script concept as a way of viewing the organization of knowledge. As the example in Figure 1 illustrates, children do spontaneously represent knowledge about prototypical experience as a set of temporally related acts (e.g., After breakfast we have a story), making use of linguistic indicators such as the timeless verb (e.g., we get on our coats) and the general "you" (e.g., You go to sleep) (Nelson and Gruendel, 1981). Knowledge is represented in scriptal form, but there is additional knowledge that does not appear in scripts. This study has demonstrated that scripts are formed by young children for events of day-long duration like center-based child care. This adds to what we have previously learned about events of shorter daily time duration such as kindergarten, lunch, and parties.

Child care is an experience for young children that can be understood in terms of their understanding of daily activities. Earlier efforts attempted to document that experience in terms of outcome measures or observed process measures and have not considered the child's knowledge of child care as a pertinent source of information. At least by age 5, children can provide fairly reliable knowledge of what transpires in a child care program. It is worth considering whether the child's representation of daily experience could serve as an indicator of the effectiveness (i.e., organization, orderliness, consistency) of the program, since they can contribute a valid perspective on their experience in the program.

Footnote

1. The sample size is admittedly small. The decision was made to work with all possible children in one small center housing a wide age range, allowing for assessment of one relatively homogeneous program across ages. Larger centers tend to have more rigid age segregation, so that the program for 3-year-olds is not temporally or experientially like the program for 5-year-olds.

Reference Notes

1. Cole, M., Hood, L., & McDermott, R. P. Ecological niche picking: Ecological validity as an axiom of experimental cognitive psychology. Unpublished manuscript, University of California at San Diego and Rockefeller University, 1978.

2. Hudson, J., & Nelson, K. Scripts and autobiographical memories. Unpublished manuscript, City University of New York, 1982.

References

Abelson, R. P. Psychological status of the script concept. American Psychologist, 1981, 36, 715-729.

Bower, G. H. Representing knowledge development. In R. S. Siegler (Ed.), Children's thinking: What develops? Hillsdale, NJ: Erlbaum, 1978.

Farran, D., & Ramey, C. Infant day care and attachment behaviors toward mothers and teachers. Child Development, 1977, 48, 1112-1116.

Fivush, R. Learning about school: The development of kindergartner's school scripts. Unpublished doctoral dissertation, City University of New York, 1982.

Grossman, A. S. Working mothers and their children. Monthly Labor Review, 1980, 104, 49-54.

Michler, E. G. Meaning in context: Is there any other kind? Harvard Educational Review, 1979, 49, 1-19.

Nelson, K. How young children represent knowledge of their world in and out of language. In R. S. Siegler (Ed.), Children's thinking: What develops? Hillsdale, NJ: Erlbaum, 1978.

Nelson, K., & Gruendel, J. At morning it's lunchtime: A scriptal view of children's dialogues. Discourse Processes, 1979, 2, 73-94.

Nelson, K., & Gruendel, J. Generalized event representations: Basic building blocks of cognitive development. In M. E. Lamb and A. L. Brown (Eds.), Advances in developmental psychology (Vol. 1). Hillsdale, NJ: Erlbaum, 1981.

Rubenstein, J. L., & Howes, C. Caregiving and infant behavior in day care and in homes. Developmental Psychology, 1979, 15, 1-24.

Shank, R. C., & Abelson, R. P. Scripts, plans, goals, and understanding. Hillsdale, NJ: Erlbaum. 1977.

Table 1

Number of Children Reporting Acts

	Narrative Scripts			Probed Responses		
	Total (N=14)	Younger (n=7)	Older (n=7)	Total (N=14)	Younger (n=7)	Older (n=7)
Breakfast	5	1	4	10	3[1]	7[1]
Play Activity Inside (e.g., play with puzzles, play with stuff)	14	7	7	14	7	7
Play Activity Outside (e.g., climb the tree, play hide and go seek)	9	3	6	13	6	7
Go Inside*	3	0	3	3	0	3
Story	3	0	3	9	2[2]	7[2]
Hand Washing*	1	0	1	3	1	2
Lunch	5	0[2]	5[2]	8	3	5
Brushing Teeth*	1	0	1	5	2	3
Nap	6	1[3]	5[3]	12	5	7
Snack	5	1	4	11	5	6
Going Home	2	1	1	6	2	4
Others*	19	11	8			

[1] Fisher Exact p = .04

[2] Fisher Exact p = .01

[3] Fisher Exact p = .05

*Events spontaneously provided by children but not by teachers; probes were not elicited for these events.

Table 2

Average Number of Acts Reported

		Narrative Scripts	Probed Responses
Total Sample N = 14		$\bar{X} = 4.00$[1] SD = 2.91	$\bar{X} = 6.71$[1] SD = 2.46
By Age	Younger n = 7	$\bar{X} = 2.14$[2] SD = 1.07 [4]	$\bar{X} = 5.12$[2] SD = 1.86 [5]
	Older n = 7	$\bar{X} = 5.86$[3] SD = 3.02 [4]	$\bar{X} = 8.29$[3] SD = 1.98 [5]

1. $t = 2.66$, $p < .02$, two-tailed test
2. $t = 3.66$, $p < .01$, two tailed test
3. $t = 1.77$, n.s.
4. $t = 3.05$, $p < .02$, two-tailed test
5. $t = 3.06$, $p < .01$, two-tailed test

Figure 1

Event Narrative of Child care
(Girl, age 5)

Act	
arrive	Well, I come in the morning and we
breakfast	eat breakfast, and after breakfast we have
story	a story. And then we go
outside play	outside to play. After we play outside, then we come in to
lunch	eat lunch. After lunch we
nap	get on our cots and to to sleep. And then we
snack	eat snack. And after we eat snack, we have our
indoor activity	art activity. And after our art activity, we
outside	go outside and other stuff, and then we just come back in.
	And that's all, from outside.

E: Tell me about story time.

S: We listen to it. We listen with our ears. And she shows us the pictures, and we look with our . . . our eyes. (Girl, age 5)

E: Tell me about nap time.

S: Nap time? You go to sleep. (Girl, age 4)

E: Tell me about taking a nap.

S: I don't go to sleep in my cot. [You don't?] No, some day I do. I'm trying to go to sleep, but they wake me up. (Girl, age 3)

E: Tell me about lunch.

S: Well, when we get ready for lunch, we gotta be --- we gotta be washed our hands, have our hands washed. Those that set the table have to have our hands washed cause the dishes . . . the dishes are supposed to be clean. And, and, and then we'll start to brush our teeth. (Girl, age 5).