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AUTHOR Hagekull, Berit; Bohlin, Gunilla  
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## ABSTRACT

This longitudinal study examined the relationship of care quality in children's homes and external day care settings to children's emotional expressions and to problem and competence behaviors. Subjects were 123 children (63 males, 60 females) mostly from middle-class Swedish families. When children were 29 months old, data about quality of care and child emotional expressions were collected in the home and day care environments. The care quality observational protocol and a supplementing interview with the mother and the external caregiver were based on the HOME instrument. When children were 4 years old, maternal, paternal, and child group leaders' ratings of externalized and internalized behavior problems were obtained in the Behar and Stringfield Preschool Behavior Questionnaire. Results showed that externalizing behaviors were related to home quality; internalizing behaviors and positive behaviors were related to quality in both settings. In general, high quality contributed to fewer problems and more positive behaviors. A low level of stimulation in the home and a high child-to-adult ratio in external care were related to more peer competence. (MM)

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# QUALITY OF CARE AND PROBLEM BEHAVIORS IN EARLY CHILDHOOD

Berit Hagekull and Gunilla Bohlin  
Department of Clinical Psychology  
Uppsala University, Sweden

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## ABSTRACT

As part of a longitudinal study, aiming to delineate factors influencing socio-emotional development during the first four years of life, quality of care in home and day care settings was related to children's emotional expressions and to problem and competence behaviors. At the start of the project (at infant age 6 weeks), the sample comprised 123 infants (63 males, 60 females) from mainly middle class Swedish families. Attrition at 4 years was 17%.

At child age 29 months, data about quality of care and child emotional expressions were collected in the home (108 cases) and the day care environment (for 49 of the 108 children who had external day care arrangements). The care quality observational protocol and a supplementing interview with the mother and the external caregiver were based on the HOME instrument and included different aspects, categorized as structure (e.g. number of children/adult, security, caregiver training), education (e.g. goals, methods, stimulation), emotional climate (in child-adult and peer relationships), and adaptation (to the individual child). A global 5-step rating of quality of care as well as measures of specific quality components were used in the present analyses. Child emotional expressions were directly observed during the home and day care visits and recorded on 5-step scales.

When the children were 4 years old, maternal, paternal, and child group leader ratings of externalized and internalized behavior problems were obtained in the Behar and Stringfield Preschool Behavior Questionnaire. Also, social competence and ego strength/effectance behaviors were rated in the questionnaire.

The results showed that externalizing behaviors were related to home quality, internalizing behaviors and positive behaviors to quality in both settings. In general, high quality contributed to fewer problems and more positive behaviors, but a low level of stimulation in the home and a high child/adult ratio in external care were prospectively related to more peer competence; a higher ratio was also associated with a lower degree of internalizing problems at 4 years.

## AIM

To relate care quality in children's home and external day care settings to socio-emotional functioning, both concurrently and prospectively. Overall quality as well as specific components of quality were studied.

## METHOD

### Subjects

A longitudinal Swedish middle class sample was followed from infant age 6 weeks (N=123) to child age 4 years. The present study is based on two points of data collection:

At 29 months: 108 families participated.

49 of the families had external daycare arrangements.

At 4 years: 105 families participated.

### Procedure at 29 months

Quality of care in homes and day care settings was studied via structured observations (5 hours) and interviews (with parent and caregiver) based on the HOME instrument (Caldwell & Bradley, 1979). Structural aspects (e.g. child/adult ratio, security, caregiver training), educational aspects (goals, methods, stimulation), emotional climate (in child-adult and peer contacts), and adaptation (to the individual child) were focussed.

The child's socio-emotional behaviors were directly observed for 5 hours in homes and day care settings.

### Procedure at 4 years

Behavior problems were studied as aggregated maternal, paternal and child group leaders' ratings in the Preschool Behavior Questionnaire (PBQ; Behar & Stringfield, 1974; Hagekull & Bohlin, in press).

Competences were studied in behavioral descriptions included in the PBQ questionnaire (aggregated maternal, paternal, group leader data); the items were adapted from Waters, Wippman, & Sroufe, 1979.

# Measures

## Home quality components:

*mother's child-related education/experience* (mean of two 5-step ratings;  
interview)

*emotional tone* (5-step rating; observation)

*stimulation* (sum of eight 4-step frequency/quality ratings of indoor and outdoor  
activities; interview)

## Overall home quality:

5-step rating based on observation and interview

## Day care quality components:

*child/adult ratio* (range 1-9; M=3.2; interview)

*emotional ties* target child - other children, and target child - caregiver  
(mean of two 3-step ratings; interview)

*stimulation* (sum of 8 4-step frequency/quality ratings of indoor and outdoor  
activities; interview)

## Overall day care quality:

5-step rating based on observation and interview

## Child behavior:

### *Externalizing behaviors*

29 months: mean of four 5-step ratings of aggressive, anger, foolish, fuzzy  
behaviors (observation)

4 years: PBQ scale of aggressiveness and concentration problems (mean of 13  
items; pooled parental and group leader ratings)

### *Internalizing behaviors*

29 months: 5-step rating of sadness behaviors (observation)

4 years: PBQ scale of fearful/withdrawing behaviors (mean of 7 items;  
pooled from three raters)

### *Positive emotional and competence behaviors*

29 months: pooled 5-step ratings of happy and content behaviors (observation)

4 years: questionnaire scale of peer competence behaviors (mean of 6 items;  
aggregated as above)

4 years: questionnaire scale of ego strength/effectance behaviors  
(mean of 6 items; aggregated as above)

## RESULTS

**Table 1.**

The independent contribution of each quality component to child behavior was analyzed in two sets of multiple regressions, one with HOME quality and the other with CARE quality components as predictors. Significant contributors and explained variance in each equation are shown.

PREDICTIVE COMPONENT	$\beta$	$R^2$	CHILD BEHAVIOR
HOME emotional tone	-.39***	.17	Externalizing 29 mos
HOME emotional tone	-.29**		
HOME mothers' child educ/exp	-.22*	.15	Externalizing 4 yrs
HOME emotional tone	-.25*		
HOME stimulation	-.18+	.11	Internalizing 29 mos (sadness)
CARE stimulation	-.27+	.09	
CARE child/adult ratio	-.30+	.13	Internalizing 4 yrs
HOME emotional tone	.58***	.35	Pos. emotions 29 mos
HOME stimulation	-.37***		
HOME mothers' child educ/exp	.18+	.14	Peer competence 4 yrs
CARE child/adult ratio	.28+	.10	
HOME stimulation	-.30**		Ego strength/ effectance 4 yrs
HOME mother's child educ/exp	.35**	.15	

+  $p < .10$

\*  $p < .05$

\*\*  $p < .01$

\*\*\*  $p < .001$

HOME  $n=95$

CARE  $n=43$

## Table 2.

The relationships between overall quality and child behavior were described as product moment correlations.

CHILD BEHAVIOR	OVERALL QUALITY	
	HOME n=96-105	CARE n=42-46
<hr/>		
Externalizing		
29 mos	-.33***	-.13
4 yrs	-.29**	-.19
Internalizing		
29 mos	-.22*	-.18
4 yrs	-.18+	-.34*
Positive behaviors		
29 mos pos. emotions	.47***	.43**
4 yrs peer competence	.15	.42**
4 yrs ego strength/eff	.08	.36*

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+ p<.10

\* p<.05

\*\* p<.01

\*\*\* p<.001; two-tailed

# SUMMARY OF RESULTS

1. Externalizing problem behaviors are related mainly to home quality both concurrently and prospectively.
2. Internalizing problem behaviors are concurrently related to quality in both settings but prospectively mainly to external care quality.
3. Positive emotional expressions and competences are related, both concurrently and prospectively, to quality in both settings.
4. In most cases, what is generally seen as high quality contributes to fewer problems and more positive behaviors.
5. However, a low level of home stimulation at 29 months is associated with more social competence and higher ego strength/effectance at age 4 years. A higher child/adult ratio in the care setting seems to foster more peer competence and ego strength/effectance and fewer internalizing problems.
6. The overall quality assessment in the home accounted for much the same variance in child behaviors as the component "emotional tone" did. There was no such overlap between care quality measures.
7. All comparisons between home and care quality must be made with caution because of the small number of observations of care quality compared to the number of home quality observations.

## REFERENCES

- Behar, L., & Stringfield, S. (1974). A behavior rating scale for the preschool child. Developmental Psychology, 10, 601-610.
- Bohlin, G., & Hagekull, B. (in press). Behavioural problems and competences in 4-year-olds: Dimensions and relationships. International Journal of Behavioral Development.
- Caldwell, B. M., & Bradley, R. H. (1979). Home observation for measurement of the environment. Manuscript, University of Arkansas at Little Rock, Arkansas.
- Waters, E., Wippman, J., & Sroufe, L. A. (1979). Attachment, positive affect and competence in the peer group: Two studies in construct validation. Child Development, 50, 821-829.