

CORRELATES OF SCHOOL-AGE CHILDREN'S TIME IN  
SELF-CARE DURING THE AFTER-SCHOOL HOURS

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## ABSTRACT

Child, family, and neighborhood characteristics were examined as concurrent and longitudinal correlates of time in self-care (alone or with siblings/peers younger than 14). Participants were 150 predominantly middle-class children who were studied from first grade through fifth grade. Concurrently, several characteristics were associated with self-care time in Grades 2-5: child emotional readiness for self-care (more time in Grades 2-4), child behavior and emotional problems (less time in Grades 2-5), neighborhood safety (more time in Grades 2-4), and maternal work hours (more time in Grades 3-5). Longitudinally, associations were evident between child adjustment in Grade 1 and subsequent self-care time: emotional readiness for self-care (more time in Grades 2-5), behavior and emotional problems (less time in Grades 2-5), and academic grades and social skills (more time in Grade 3). Child sex and race, family structure, SES, and parenting practices generally were not associated with children's time in self-care.

## BACKGROUND

Much of the research on school-age child care has examined self-care arrangements, particularly links between self-care and child adjustment. Typically, a categorical approach is used to identify children as either participating in a self-care arrangement or not, and often, self-care is considered only if it is the "primary" care arrangement. Many studies utilizing this approach have examined child, family, and neighborhood characteristics as potential selection factors. Associations have been documented between use of self-care and child sex (Hofferth, Brayfield, Deich, & Holcomb, 1991; Pettit, Laird, Bates, & Dodge, 1997; Vandell, Posner, Shumow, & Kang, 1995), race (Posner & Vandell, 1994; Vandell et al., 1995), and maturity (Gravett, Rogers, & Thompson, 1987); family characteristics including maternal employment (Hofferth et al., 1991; Lovko & Ullman, 1989; Posner & Vandell, 1994), family structure (single- vs. two-parent family; Lovko & Ullman, 1989), socioeconomic status (SES; Pettit et al., 1997; Posner & Vandell, 1994; Vandell et al., 1995), and parenting practices (Vandell et al., 1995); and perceived neighborhood safety (Gravett et al., 1987; Vandell et al., 1995). The particular associations have varied between studies, due to sample differences and differing definitions of the self-care arrangement.

The categorical approach to identifying care arrangements has its limitations (Vandell & Posner, 1999). Variability in children's self-care experiences may be masked, or self-care may not be considered at all since it often is a supplemental arrangement for families. An alternative approach is to examine the amount of *time* spent in self-care. One recent study utilizing this approach (Laird, Pettit, Dodge, & Bates, 1998) found that more weekly time in self-care, averaged across the elementary school years, was associated with maternal employment, single-parent families, minority race, lower SES, and less proactive parenting. Self-care time also was associated longitudinally with pre-first grade assessments of child adjustment, with children who

exhibited more behavior problems subsequently experiencing more time in self-care.

In the current study, we examined concurrent associations between child, family, and neighborhood characteristics and time in self-care (defined as time alone or time with siblings and/or peers younger than 14) during Grades 2-5. We considered self-care in each of these grades separately so that we could examine patterns of relations over time. Longitudinal associations were examined between child adjustment in first grade and subsequent time in self-care.

## METHOD

### *Participants*

Participants were 150 children who were in first grade and enrolled in after-school programs at the start of the study. The children were studied through fifth grade. Fifty-one percent were male; 87% were White. One-quarter lived in single-parent households during first grade. Parents generally were well educated, with 57% of the mothers and 68% of the fathers having a bachelor's or graduate degree; an additional 32% of the mothers and 23% of the fathers had an associate's degree or some college. Annual family income was high, averaging \$63,567 during first grade ( $SD = \$39,283$ , range = \$7500 - \$200,000).

### *Measures* (see Table 1)

*Demographic characteristics.* Mothers were interviewed during the Fall of each school year (Grades 2-5) to obtain reports of (1) number of hours per week spent working, (2) family structure (single- vs. two-parent), and (3) SES (a standardized composite of maternal and paternal education and occupational codes, and family income). The percentage of single-parent homes was stable across years: 23%, 21%, 22%, and 22%.

*Permissive parenting practices.* Mothers reported their parenting practices on the 4-point Raising Children Checklist (Shumow, Vandell, & Posner, 1998) during the Fall of Grades 2-4.

Table 1

*Means and Standard Deviations of Child, Family, Neighborhood, and Self-Care Measures*

	Grade 1	Grade 2	Grade 3	Grade 4	Grade 5
Maternal work hours per week	37.4 (10.9)	38.9 (9.4)	38.1 (11.4)	37.8 (11.6)	37.8 (12.0)
Permissive parenting		1.6 (0.4)	1.6 (0.4)	1.7 (0.4)	
Neighborhood safety		3.5 (0.4)	3.6 (0.4)	3.6 (0.4)	
Academic grades	3.5 (0.8)	3.7 (0.9)	3.6 (0.9)	3.6 (0.9)	3.7 (0.9)
Social skills with peers	3.4 (0.9)	3.5 (0.9)	3.7 (0.9)	3.7 (1.0)	3.7 (0.9)
Readiness for self-care	2.1 (0.7)	2.1 (0.7)	2.4 (0.8)	2.8 (0.6)	
Behavior/emotional problems, <i>mother</i> report	0.18 (0.13)	0.18 (0.13)	0.14 (0.12)	0.14 (0.12)	0.12 (0.12)
Behavior/emotional problems, <i>teacher</i> report	0.16 (0.15)	0.18 (0.21)	0.13 (0.14)	0.14 (0.15)	0.15 (0.14)
Minutes in self-care per week	1 (12)	42 (147)	81 (191)	177 (246)	268 (257)

*Perceptions of neighborhood safety.* Mothers completed the 4-point Neighborhood Safety scale of a revision of the Self-Care Checklist (Posner & Vandell, 1994) in the Fall of Grades 2-4.

*Child competence.* Classroom teachers completed a mock report card (Pierce, Hamm, & Vandell, 1999) to provide 5-point assessments of *academic grades* and *social skills with peers* during the Spring of Grades 1-5.

*Child emotional readiness for self-care.* Mothers completed the 4-point Home Safety Feelings scale of a revision of the Self-Care Checklist (Posner & Vandell, 1994) in the Spring of Grade 1 and the Fall of Grades 2-4.

*Child behavior and emotional problems.* Mothers completed the 3-point Child Behavior Checklist (Achenbach, 1991a) and classroom teachers completed the 3-point Teacher's Report Form (Achenbach, 1991b) during the Spring of each school year.

*Time in self-care.* Mothers reported the weekly amount of time that children spent in self-care arrangements (time alone and time with siblings or peers younger than 14) in the Fall and Spring of Grades 1-5. These reports were averaged to obtain an annual report of time.

## RESULTS

Two sets of Pearson product-moment correlations were computed between child, family, and neighborhood characteristics and time in self-care. In the first set, we determined which characteristics were associated with use of self-care concurrently. These analyses were conducted for Grades 2-4 only because some measures of family and child characteristics were not collected when the children were in fifth grade. In the second set of analyses, we determined longitudinal associations between children's adjustment in Grade 1 and self-care time in Grades 2-5.

*Concurrent Relations between Child, Family, and Neighborhood Characteristics and Self-Care Time*

Table 2 shows concurrent correlations between child, family, and neighborhood characteristics and time in self-care during Grades 2-5.

- Greater maternal work time was associated with more self-care time for children in *Grades 3-5*.
- Children in single-parent families, compared to children in two-parent families, spent more time in self-care during *Grade 3*.
- Perceptions of greater neighborhood safety were associated with more self-care time during *Grades 2-4*.
- Greater child emotional readiness for self-care was associated with more time in self-care during *Grades 2-4*.
- More behavior and emotional problems as reported by mother were associated with less self-care time in *Grades 2-5*.

#### *Longitudinal Relations between Child Adjustment in First Grade and Subsequent Self-Care Time*

Table 3 shows longitudinal associations between child adjustment in Grade 1 and time in self-care during Grades 2-5.

- Better academic grades and social skills with peers in first grade were associated with more self-care time in *Grade 3*.
- Greater child emotional readiness for self-care in first grade was associated with more time in self-care during *Grades 2-5*.
- Higher maternal ratings of child behavior and emotional problems in first grade were associated with less self-care time in *Grades 4-5*; higher teacher ratings were associated with less self-care time in *Grades 2-4*.

Table 2  
*Concurrent Associations between Child, Family, and Neighborhood Characteristics  
 and Self-Care Time*

	Time in self-care			
	Grade 2	Grade 3	Grade 4	Grade 5
Child sex <sup>a</sup>	.00	.04	.02	-.03
Child ethnicity <sup>b</sup>	-.01	-.03	-.09	-.10
Maternal work hours	.14	.17 <sup>*</sup>	.29 <sup>***</sup>	.38 <sup>***</sup>
Single parent	.01	.16 <sup>+</sup>	-.04	.08
SES	.02	.01	-.06	-.09
Permissive parenting	.05	.07	.11	na
Neighborhood safety	.17 <sup>*</sup>	.14 <sup>+</sup>	.14 <sup>+</sup>	na
Academic grades	-.01	-.04	.10	.02
Social skills with peers	-.08	.11	-.02	.00
Emotional readiness	.29 <sup>***</sup>	.36 <sup>***</sup>	.27 <sup>**</sup>	na
Behavior/emotional problems, <i>mother report</i>	-.19 <sup>*</sup>	-.16 <sup>+</sup>	-.24 <sup>**</sup>	-.20 <sup>*</sup>
Behavior/emotional problems, <i>teacher report</i>	-.04	-.15	-.03	.01

<sup>a</sup> Child sex was dummy coded 0 = female, 1 = male.

<sup>b</sup> Child ethnicity was dummy coded 0 = White, 1 = minority.

<sup>+</sup>  $p < .10$     $*$   $p < .05$     $**$   $p < .01$     $***$   $p < .001$

Table 3

*Longitudinal Associations between Child Adjustment in First Grade  
and Subsequent Self-Care Time*

Grade 1 adjustment	Time in self-care			
	Grade 2	Grade 3	Grade 4	Grade 5
Academic grades	-.01	.20*	.13	.14
Social skills with peers	.01	.21*	.10	.07
Emotional readiness	.24**	.23**	.31***	.19*
Behavior/emotional problems, <i>mother</i> report	-.13	-.14	-.17 <sup>+</sup>	-.17 <sup>+</sup>
Behavior/emotional problems, <i>teacher</i> report	-.15 <sup>+</sup>	-.24**	-.22**	-.06

<sup>+</sup>  $p < .08$    \*  $p < .05$    \*\*  $p < .01$    \*\*\*  $p < .001$

## CONCLUSIONS

- Child characteristics were associated with the amount of time children spent in self-care during the after-school hours in Grades 2-5. The picture that emerges from the concurrent correlations is that families reserve self-care for the most competent children.
- Maternal judgments of the safety of their neighborhoods were associated concurrently with self-care time in the early elementary years, suggesting that contextual factors outside of the family play a role in the decision to use this arrangement.
- Both maternal and teacher reports of children's adjustment in early elementary school were associated with subsequent time in self-care. Only some of these associations were significant concurrently. Early evidence of child competence may lead to a mind-set among parents about their children's subsequent readiness for self-care.
- Maternal work time was not associated with the amount of time that children spent in self-care until the third grade, and the association became stronger as children got older. These results in conjunction with other correlations argue against children being placed in self-care simply because mothers are not available.
- Unlike other studies with more diverse samples, we found little evidence that child sex and race, family structure, SES, and parenting practices were associated with children's time in self-care. These child and family characteristics may play larger roles in determining use of self-care when families have fewer resources than the middle-class families in this sample.

## REFERENCES

- Achenbach, T. M. (1991a). *Manual for the Child Behavior Checklist/4-18 and 1991 Profile*. Burlington, VT: University of Vermont Department of Psychiatry.
- Achenbach, T. M. (1991b). *Manual for the Teacher's Report Form and 1991 Profile*. Burlington, VT: University of Vermont Department of Psychiatry.
- Gravett, M., Rogers, C. S., & Thompson, L. (1987). Child care decisions among female heads of households with school-age children. *Early Childhood Research Quarterly, 2*, 67-81.
- Hofferth, S. L., Brayfield, A., Deich, S., & Holcomb, P. (1991). *National child care survey, 1990*. Washington, DC: Urban Institute Press.
- Laird, R. D., Pettit, G. S., Dodge, K. A., & Bates, J. E. (1998). The social ecology of school-age child care. *Journal of Applied Developmental Psychology, 19*, 341-360.
- Lovko, A. M., & Ullman, D. G. (1989). Research on the adjustment of latchkey children: Role of background/demographic and latchkey situation variables. *Journal of Clinical Child Psychology, 18*, 16-24.
- Pettit, G. S., Laird, R. D., Bates, J. E., & Dodge, K. A. (1997). Patterns of after-school care in middle childhood: Risk factors and developmental outcomes. *Merrill-Palmer Quarterly, 43*, 515-538.
- Pierce, K. M., Hamm, J. V., & Vandell, D. L. (1999). Experiences in after-school programs and children's adjustment in first-grade classrooms. *Child Development, 70*, 756-767.
- Posner, J. K., & Vandell, D. L. (1994). Low-income children's after-school care: Are there beneficial effects of after-school programs? *Child Development, 65*, 440-456.
- Shumow, L., Vandell, D. L., & Posner, J. K. (1998). Harsh, firm, and permissive parenting in low-income families: Relations to children's academic achievement and behavioral adjustment. *Journal of Family Issues, 19*, 483-507.
- Vandell, D. L., & Posner, J. (1999). Conceptualization and measurement of children's after-school environments. In S. L. Friedman & T. D. Wachs (Eds.), *Measuring environment across the life span: Emerging methods and concepts* (pp. 167-196). Washington, DC: American Psychological Association.
- Vandell, D. L., Posner, J., Shumow, L., & Kang, K. (1995, March-April). *Concurrent, short term, and long term effects of self care*. Poster presented at the meetings of the Society for Research in Child Development, Indianapolis, IN.