

What Do Young Adolescents Do When School Let's Out?

Discretionary Time Use and Its Relation to School Adjustment

ABSTRACT

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In the present research we examined variations in the after-school experience of young adolescents as a function of family background characteristics and the extent to which after-school activities were associated with behavioral adjustment at school. After-school time use was assessed through telephone interviews with 438 young adolescents (sixth-graders, 221 female) who reported their locations, activities, and companions during a three-hour block of time following school on two consecutive days. Teacher ratings and school records provided school adjustment outcome data. The amount of time involved in unproductive and productive activities after school varied as a function of sex and SES. Only modest correlations were found between school adjustment and after-school locations and activities. Unproductive activities and travel were associated with externalizing behavior problems and poorer academic performance only for those children in self care. These results underscore the importance of considering the social context within which young adolescents' after-school experiences take place.

Researchers examining the impact of after-school experiences on children's adjustment typically have focused upon the extent of children's involvement in differing after-school care arrangements, particularly self care. Although the findings from some studies support the notion that children spending significant amounts of time in self care may be at greater risk for many social and academic problems, compared to children in adult-supervised forms of care (Galambos & Maggs, 1991; Lovko & Ullman, 1989; Pettit, Laird, Bates, & Dodge, 1997; Steinberg, 1986), other studies have failed to find associations between self-care and child outcomes (see Galambos & Garbarino, 1985; Rodman, Pratto, & Nelson, 1985). This discrepancy in findings may be due, at least in part, to the reliance upon a "social address" approach, in which children are classified as being in a singular type of care based upon the predominant form of care used, and then contrasts are made between children classified into different types of care (Posner & Vandell, 1994). The social address approach fails to take into account differences in children's experiences within particular types of care arrangements. Evidence for the non-equivalence of

experience within a care type comes from Belle (1997), who reports variations in the range of activities engaged in, settings, access to peers, and availability of social supports for children in self-care. It may be especially important to understand the after-school experiences of early adolescents, because during this period self care is likely to become a part of the child's after-school routine, and children this age have increasing opportunities for self-directed behavior (Medrich & Marzke, 1991). In particular, many young adolescents enjoy increased freedom to choose their activities after school (Steinberg, 1988). Young adolescents also become more selective in their choices of after-school companions, spending more time alone and with peers, and less time with parents (Larson, Kubey, & Colletti, 1989; Larson & Richards, 1991). Because of this increase in the amount of time young adolescents spend "on their own," some researchers have expressed concern about how this time is used, or misused (Medrich & Marzke, 1991; Hirschi, 1969). According to social control theory, individuals maintain behavior consistent with the conventional social order to the extent that they feel attached and committed to that order (Hirschi, 1969). It may be that young

adolescents who are involved in and feel affinity for conventional activities of the sort that adults normally supervise or help organize (eg., scouting, coached sports, ballet, etc.) come to feel greater attachment to and commitment to the conventional social order. Correspondingly, one would expect such adolescents to perform better at school and to show low levels of behavioral maladjustment. On the other hand, young adolescents who are not involved in conventional activities and are instead involved in time with peers away from adult supervision may be at risk for increased exposure to, and growing attachment to, non-conventional models and values. In this case, one would expect poorer academic performance and more behavioral adjustment problems. Thus, it is likely that variations in children's adjustment would be predicted better by a knowledge of both type of care and the activities engaged in than by type of care alone.

To date, researchers have not examined the activities, locations, and adult contact aspects of young adolescents' after-school experiences in relation to school adjustment. However, in a study of school-age children, Posner and Vandell (1994) report that third-graders in formal after-school programs spent more time engaged in

academic activities and less time watching TV than children in self-care. Moreover, more time spent watching television (irrespective of type of care) was associated with poorer classroom conduct, whereas more time spent in academic activities (again, irrespective of type of care) was associated with better peer relations and classroom conduct. Although these results are based upon the experiences of 3<sup>rd</sup>-grade children, it seems reasonable to expect that young adolescents may be more constructively occupied when they are in adult-supervised care arrangements and less constructively occupied when they are in self-care. Further, it may be that young adolescents in extensive self care who more productively utilize their time are less at risk for adjustment problems than are those young adolescents in self care who engage in nonproductive activities.

An understanding of the social context of young adolescents' after-school experiences necessarily requires consideration of ecological / demographic factors that may co-vary with or moderate the impact of care experiences on adjustment outcomes (Pettit et al., 1997; Vandell & Posner, in press). Demographic factors may co-vary with child care experiences because the type of care arrangements used

vary as a function of socioeconomic status (SES) and family structure (i.e., intact or single parent). Thus, it is unclear whether associations between after-school care and child outcomes are actually a marker of SES (Steinberg, 1986) or family background characteristics. Second, it may be the case that SES moderates the impact of care experiences on adjustment outcomes. Self-care may have a greater impact upon lower SES children than upon middle class children. In fact, children from low SES homes in high amounts of self-care are at greater risk for adjustment difficulties than are from higher SES families in high amounts of self-care (Pettit et al., 1997). It seems likely that young adolescent's choice of companions and activities, and the location in which they spend their time, may have different implications for children at different SES levels, and from different family structures. For instance, time spent playing unorganized sports in the neighborhood may be quite different for young adolescents from middle class households in the suburbs than it is for adolescents from lower SES households because of the likelihood that the neighborhood may be less safe, and also because of differences in the potential exposure to more negative role models.

In the present research we examined variations in young adolescent's discretionary use of after-school time - e.g., where they went, who they were with, and what they were doing - as a function of family background characteristics, and the extent to which activities and care arrangements were associated with behavioral adjustment at school. It is hypothesized that the activities that young adolescents engage in will vary as a function of the level of supervision. In particular, young adolescents in adult supervision are hypothesized to spend more time in productive activities and less time in unproductive activities than are young adolescents in self-care. Furthermore, it is hypothesized that time spent in unproductive activities will be associated with increased adjustment difficulties, whereas time spent in productive activities will be associated with decreased adjustment difficulties, particularly teens in high amounts of self care.

## METHOD

### Participants

The current research is based on telephone-based interviews with 438 early adolescents (sixth-graders; 221 female). The adolescents and their families were in the seventh year of participation in the

ongoing Child Development Project, a multi-site longitudinal study of socialization factors in children's and adolescents' adjustment (see Dodge, Bates, & Pettit, 1990; Pettit, Bates, & Dodge, 1997). Participating families were initially recruited from three geographical areas (Nashville and Knoxville, Tennessee, and Bloomington, Indiana) during kindergarten preregistration in the Summers of 1987 and 1988. A total of 585 families were included in the sample. At the time of recruitment, 52% of the children were male, 19% were of minority ethnic background, and 26% lived with single mothers. The Hollingshead (1975) four-factor index of social status was computed from demographic information provided by the parents. The mean family score on the index was 40.4 (SD = 14.2), however, there was a wide range in SES (from 8 to 66). Adolescents from 74.9% of the original families participated in the interviews. This subset is generally representative of the original sample (50.3% male, 15% minority, mean SES = 39.1).

#### Procedure and Measures

Adolescent after-school time use. During the late winter and early spring of the grade-six school year, families were contacted by

telephone a research staff member to schedule a time when the adolescent child would be available to participate in a telephone interview about children's experiences in the afternoon after school. If the child was at home and was agreeable to being interviewed at the time of the initial contact, the interview was then completed. If this was not possible, a later time was scheduled for the interview to take place. (Written informed consent for this procedure had been obtained from parents during an earlier home visit interview; verbal assent was obtained from the adolescent prior to the telephone interview.) Interviews lasted an average of 40 minutes. When the contact for the interview was made, the research staff member asked that the child complete the phone interview in a location that would be private.

Each adolescent was asked to recall his or her after-school experience for the present day and the preceding day. Because details of the earlier-occurring day may be more difficult to recollect, the adolescent was asked to report on the earlier day first to avoid these reports being influenced by recall of the current day. In the majority of cases, interviews were completed in the evening on a Tuesday, Wednesday, Thursday, or Friday. This allowed the child to

describe after-school experiences on adjacent days, including the current day. For a small number of families, interviews were conducted on a Monday or on a weekend day, which meant that the obtained descriptions were of after-school experiences on non-adjacent days (e.g., Monday and Friday). Also, in rare instances, interviews had to be scheduled in the afternoon hours, requiring that the two days prior to the interview day be described by the child. Inspection of the interview protocols suggested no differences in the general descriptions provided by children who were interviewed later in the week versus children who were interviewed early in the week, on weekends, or in the afternoon.

The children's responses were recorded using a modified version of the Posner and Vandell (1994) Activity Schedule. This instrument was used to determine the amount of time after school (broken down into twelve 15-min intervals) the child spent in the presence of parents, other adults, or with no adult supervision (alone, with siblings, and with peers). If siblings or peers were mentioned, then the interviewer asked for their ages and sex. Interviewers also recorded the reported activities for each 15-min interval, as well as the

location of the child for those intervals. An activity schedule was computed for both the present day and the preceding day, providing 24, 15-min intervals for the period of three after-school hours for each day. Interviewers were trained to efficiently and thoroughly guide the adolescent through the afternoon hours, using common activities (e.g., favorite television programs) as reference points. This technique has been found in prior research to provide a reasonably accurate assessment of children's involvement in various after-school activities (Posner & Vandell, 1994).

Interrater reliability of interviewer coding of location and activity was computed in two ways. For five interviews, a reliability coder listened to live recordings of the adolescent interviews and coded the location and primary activity for each 15-min interval. For an additional 12 interviews, a reliability coder coded the location and primary activity as recorded on the interview protocol. Overall reliability across the two methods was then determined. Interrater agreement for location codes was  $\kappa = .84$ . Reliability for activity codes was  $\kappa = .89$ . No reliabilities were computed for who was present because the question was asked directly and was not subject to interpretation.

Type of care was determined by children's reports of who was present during each interval. Parent care was defined as any interval in which the parent was present for the majority of the 15-min period. Other adult-supervised care included intervals in which the target child spent the majority of the 15-min interval with an adult other than the child's parents (e.g., babysitter, formal care program staff, teacher, etc.). A child was considered to be in self-care if he or she spent the majority of the 15-min interval alone, with younger siblings, with older siblings, or with peers. For a child to be considered in self-care for any interval, there must have been no adult present during that time. To obtain a measure of how much time each child spend in the various types of care, the total number of 15-min intervals in which the child was in each type of care was tabulated. The number of intervals spent in each of 11 locations (see Figure 1) and in each of 22 different activities (see Table y) provided a general indicator of the types of activities and locations in which these young adolescents spent their time.

Externalizing and Internalizing behavior problems. During the spring of grade 6 the child's teacher completed the 112-item Child

Behavior Checklist - Teacher Report Form (TRF; Achenbach, 1991).

For each item teachers note whether the statement is not true for the child (0), somewhat or sometimes true (1), or very true or often true (2).

The externalizing problems summary score was used in the current study to index children's behavior problems in grade 6. This score consists of 35 items for both boys and girls. The internalizing problems summary score was computed from the corresponding items on the TRF. The TRF externalizing and internalizing scores have been reported to have excellent psychometric properties (Achenbach, 1991).

Academic Performance. The academic performance outcome data were collected during the spring of Grade 6, and are based on records compiled for the most recently completed year of school (i.e., Grade 5 for most participants). Staff members examined each child's file and noted the grades earned in six subject areas (reading, math, language arts, spelling, social studies, and science). A composite grade point average (GPA) was calculated for each child by averaging the grades (A =4, B = 3, C = 2, D = 1) received across all subjects ( $\alpha = .93$ ). If grades were missing for some subject areas, the GPA is based on the number of subject areas in which grades were assigned. If

grades were missing on three or more subject areas, no GPA score was given.

Staff members also inspected the school files for achievement test scores. Because several different types were used, the percentile rankings for three common scales (reading, language, and math) were noted. A composite achievement test score was then computed by averaging the three summary scores ( $\alpha = .90$ ). For some children one or more scale scores were missing. If two scales were available, then these were averaged to form the percentile score; if two scales were missing, no achievement test score was computed for that child. The composite GPA and achievement test scores correlated .69 ( $p < .001$ ) and were averaged to form the academic performance composite used in subsequent analyses.

Demographic data. In addition to child sex, the demographic characteristics of family SES and family structure were obtained from mothers. In order to form comparison groups, family SES was divided into two classifications. From mother's reports families were classified as being in the high SES group ( $n = 320$ ) if their scores on the Hollingshead (1974) index were within the three highest levels,

whereas families whose scores were within the range of the lower two levels were classified as being in the low SES group ( $n = 116$ ).

Household marital status was also based upon mothers' reports; families in which the mother described herself as single, separated, divorced, or widowed were classified as single-parent families, whereas families in which the mother classified herself as married or co-habiting were classified as intact.

## RESULTS

Results indicated that the young adolescents spent a majority of time after school with parents (52.6% or 94.7 minutes a day), and lesser amounts of time with other adults (25.1% or 45.2 minutes a day) or in self-care (22.3% or 40.1 minutes a day). Of the time spent in self-care, 27.8% was spent alone, 32.6% with siblings, and 39.6% with peers. Most time was spent in unproductive activities, productive activities, or watching TV. Maintenance activities occurred more often in parent-care than in other types of care, whereas unproductive activities occurred most often in self-care (See Table 1). Adolescents spent the majority (54%) of their after-school time at home (see Table 2).



We next examined variations in care experiences as a function of family background characteristics. Adolescents living in single parent homes reported spending more time watching TV,  $F_{(1, 421)} = 6.42$ ,  $p < .05$ , and spending less time doing maintenance activities,  $F_{(1, 4321)} = 3.95$ ,  $p < .05$ , than did adolescents from intact families. Boys reported engaging in more unproductive activities,  $F_{(1, 436)} = 27.19$ ,  $p < .01$ , and fewer productive activities,  $F_{(1, 436)} = 5.07$ ,  $p < .05$ , compared to girls. Adolescents from high-SES families reported more productive activities,  $F_{(1, 436)} = 5.14$ ,  $p < .05$ , less TV watching,  $F_{(1, 436)} = 4.56$ ,  $p < .05$ , and fewer unproductive activities,  $F_{(1, 436)} = 4.47$ ,  $p < .05$ , compared to adolescents from low-SES families.

To examine relations with school adjustment, correlations were computed between after-school activities and the young adolescents' externalizing scores, internalizing scores, and academic performance. Higher rates of externalizing problems were associated with more time spent in unproductive activities in self-care ( $r = .14$ ,  $p < .01$ ), and less time spent in productive activities in self-care ( $r = -.12$ ,  $p < .01$ ). Further analyses revealed that the self-care unproductive activities that were related to increased rates of externalizing behavior were

unorganized outside activities ( $r = .24$ ,  $p < .05$ ) and supervised sports ( $r = .14$ ,  $p < .05$ ). It was of particular interest in the current study to ascertain if differences existed in the correlations between activities and school adjustment between the different care arrangement types. Further examination revealed variations in the pattern of associations between two categories of activities: unproductive and travel. Academic performance was associated with involvement in unproductive activities within self care ( $r = -.17$ ,  $p < .05$ ) but not parent care ( $r = -.01$ ) or other-adult care ( $r = -.01$ ). Additionally, externalizing behavior problems were associated with involvement in unproductive activities within self care ( $r = .14$ ,  $p < .05$ ) but not parent care ( $r = .05$ ) or other-adult care ( $r = .04$ ). Also, academic performance was positively associated with time spent in travel within parent care ( $r = .15$ ,  $p < .05$ ) but negatively associated with time spent in travel within self care ( $r = -.18$ ,  $p < .05$ ). Finally, externalizing behavior problems were associated with time spent in travel within self care ( $r = .14$ ,  $p < .05$ ), but not within parent care ( $r = -.05$ ) or other-adult care ( $r = -.03$ )

Regardless of care arrangement type, time spent in the

neighborhood was associated with lower grades ( $r = -.12, p < .05$ ) and higher rates of externalizing behavior ( $r = .24, p < .05$ ) (see Table 4). Further examination revealed that externalizing behavior problems were negatively associated with time spent at home during self care ( $r = -.11, p < .05$ ) but not parent care ( $r = .01$ ) or other-adult care ( $r = .01$ ). Internalizing behavior problems were positively associated with time spent at home during parent care ( $r = .12, p < .05$ ) and negatively associated with time spent at home during self care ( $r = -.11, p < .05$ ). Additionally, externalizing behavior problems were positively associated with time spent in the neighborhood during self care ( $r = .18, p < .05$ ) but not parent care ( $r = -.07$ ) or other-adult care ( $r = .07$ ). Externalizing behavior problems also were associated with time spent in transit during self-care ( $r = .11, p < .05$ ) but not parent care ( $r = -.08$ ) or other-adult care ( $r = .05$ ). Finally, Academic performance was positively associated with time spent in transit during parent care ( $r = .24, p < .05$ ) and negatively associated with Time spent in transit during self care ( $r = -.14, p < .05$ ).

#### CONCLUSIONS

Wide variations exist in young adolescents' after-school

activities, and these vary as a function of care type and family background variables. Young adolescents spent their time in a wide range of activities, with those in self care spending more time in unproductive activities (35%) than in other types of activities, those in parent care spending the largest percentage of time watching TV (24%) and those in other-adult care spending the largest percentage of time in travel (29%). Children in parent care spent the majority of their time at home (75%) whereas young adolescents in self care spent less than half their time at home (49%) and young adolescents in other-adult care spent only 15% of their time at home.

Generally, involvement in after-school activities was only very modestly associated with school adjustment. There is some indication that involvement in activities was more strongly associated with school adjustment when it occurred within different types of care arrangements. For example, time spent in unproductive activities and travel appear to be a risk factor for young adolescents in self-care, but not other types of care. Similarly, only modest associations were found between after-school locations and school adjustment, with time spent in the neighborhood and in transit a risk factor only during self care.

These findings suggest that the extent to which participation in different activities constitutes a risk factor appears to hinge in part on the degree to which adult supervision is present, and the broader social-ecological context.

These results underscore the importance of considering the social context within which young adolescents' after-school experiences take place. Future research should be directed towards understanding young adolescents' feelings about their after-school activities, obtaining detailed information about young adolescents' companions in after-school activities, and exploring variations in young adolescents' after-school activities in different types of neighborhoods.

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Figure 1: Percent of time spent in different activities.

- Maintenance
  - Hygiene
  - Chores
  - Eating
- Productive
  - Homework
  - Reading
- Organized Activities
  - Coached Sports
- Unproductive
  - Listening to music
  - Going to the mall
  - Playing video games
- Unorganized activities and sports
- TV
- Interactions
- Travel
- Other

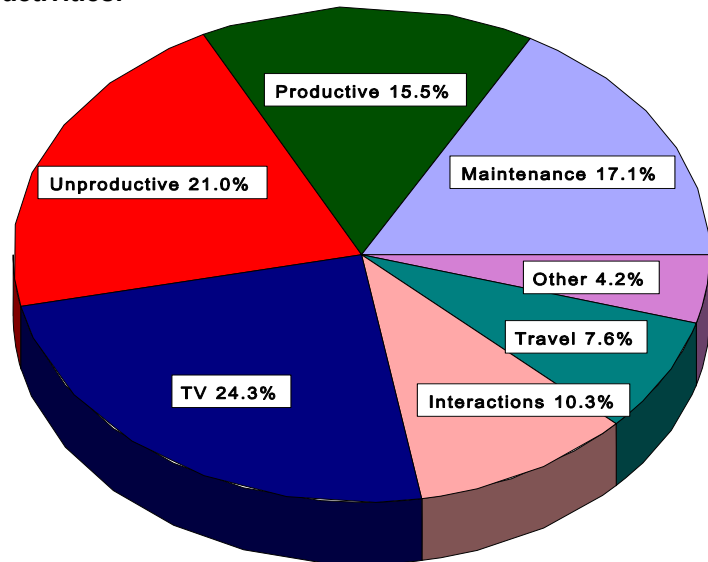
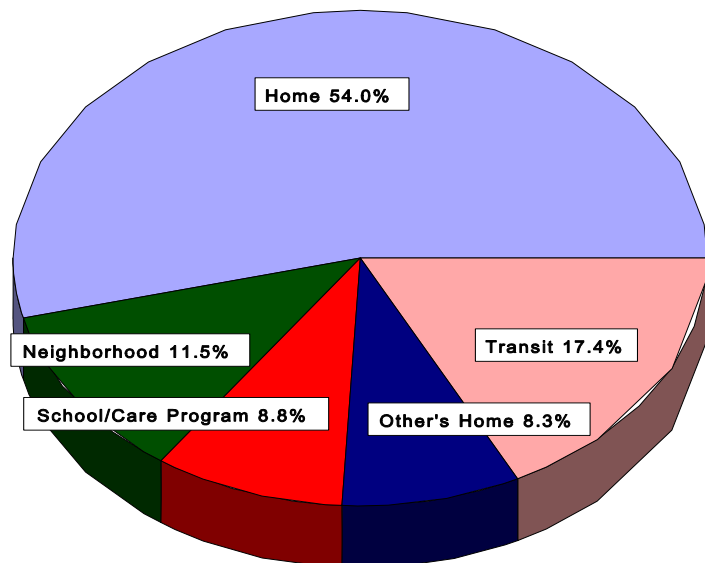


Figure 2: Percent of time spent at different locations.

- Adolescent's home.
- Adolescent's neighborhood.
- School / organized after-school program.
- Another person's home.
- Transit.



**Table 1: Percent of time spent in after-school activities for differing care arrangements.**

	Parent Care	Other-Adult Care	Self Care
Maintenance	17.1%	5.6%	8.3%
Productive	15.5%	19.8%	12.3%
Unproductive	21.0%	19.4%	35.0%
TV	24.3%	9.3%	18.9%
Interactions	10.3%	10.6%	11.3%
Travel	7.6%	29.2%	10.0%
Other	4.2%	6.0%	4.2%
	100%	100%	100%

**Table 2: Percent of time spent at different locations for differing care arrangements.**

	Parent Care	Other-Adult Care	Self Care
Home	74.5%	15.4%	48.7%
Neighborhood	9.3%	9.3%	19.2%
School/Care Program	3.9%	20.9%	6.8%
Other's Home	1.7%	19.1%	11.7%
Transit	10.5%	35.2%	13.6%
	100%	100%	100%

**Table 3: Associations between after-school activities and school adjustment, across care types.**

	Academic Achievement	Externalizing Behavior	Internalizing Behavior
Maintenance	.11* (-.11*)	-.04 (-.03)	.01 (.01)
Productive	.12* (.09)	-.08 (-.07)	-.09 (-.07)
Unproductive	-.14* (.09)	.14* (-.13*)	.06 (-.10)
TV	-.10* (-.06)	-.03 (-.04)	.06 (.01)
Interactions	.11* (.09)	-.07 (-.05)	-.07 (-.04)
Travel	-.02 (-.04)	.09 (.12*)	-.01 (-.01)

Notes: \* =  $p < .05$  (two-tailed). Values in parenthesis represent partial correlations controlling for SES.

**Table 4: Associations between after school locations and school adjustment, across care types.**

	Academic Achievement	Externalizing Behavior	Internalizing Behavior
Home	-.06 (-.04)	-.06 (-.08)	.06 (.02)
Neighborhood	-.02 (-.04)	.10* (.10*)	.07 (.08)
School/Care Program	.13* (.11*)	-.02 (.01)	-.12* (-.09)
Other's Home	-.05 (-.02)	-.02 (-.04)	-.01 (-.01)
Transit	.05 (.01)	.06 (.11*)	-.06 (.00)

Notes: \* =  $p < .05$  (two-tailed). Values in parenthesis represent partial correlations controlling for SES.