

Chapter 12

The Ecology of Adolescent Activity and Experience

Twenty-five adolescents reported their daily activities and the quality of their experiences for a total of 753 times during a normal week, in response to random beeps transmitted by an electronic paging device. In this sample adolescents were found to spend most of their time either in conversation with peers or in watching television. Negative effects were prevalent in most activities involving socialization into adult roles. Television viewing appears to be an affectless state associated with deviant behavior and antisocial personality traits. The research suggests the importance of a systemic approach which studies persons' activities and experiences in an ecological context. The experiential sampling method described in this chapter provides a tool for collecting such systemic data.

Mihaly Csikszentmihalyi: Associate Professor of Human Development and Associate Master of Social Sciences at the University of Chicago. Received his Ph.D. from the University of Chicago. Latest books include *Beyond Boredom and Anxiety* (1975), dealing with the experience of enjoyment, and *The Creative Vision* (1976), about problem finding in art.

Reed Larson: Graduate student in human development at the University of Chicago. Current interests are problems of juvenile delinquency and aging.

Suzanne Prescott: University Professor, College of Human Learning and Development, Governors State University. Received her Ph.D. from the University of Chicago. Research interests include the sociology of science and the role of women.

© 1977 Plenum Publishing Corp., 227 West 17th Street, New York, N.Y. 10011. To promote free access to published material in the spirit of the 1976 Copyright Law, Plenum self reprints articles from all its Journals. This availability underlines the fact that no part of this publication may be reproduced, stored in a retrieval system, or transmitted, in any form or by any means, electronic, mechanical, photocopying, microfilming, recording, or otherwise, without written permission of the publisher. Shipment is prompt; rate per article is \$7.50.

Rights with Springer, reprinted from *Journal of Youth and Adolescence*, vol. 6, no.3, 1977. Please use full reference to.

Introduction

When social scientists attempt to describe the psychology of a given stage of the life cycle, such as adolescence, they are faced with some basic methodological choices which will affect the data they obtain and hence the conclusion they derive. Studies of “normal” adolescents may rely on the case study format (e.g. Blos 1962; Henry 1963) which often produces enlightening insights, but has the drawback of depending heavily on the intuitive skills of the researcher. Or periodic tests and interviews may be used (e.g. Douvan and Adelson 1966; Offer 1969; Coleman 1974b) to describe continuities and changes in the respondents’ cognitive, social, and affective performance.

While this approach has been extremely useful in beginning to outline areas of stress and conformity, it is limited because it does not deal with adolescents in their natural milieu. The information it provides is a step removed from the subjects’ interaction with the material and social environment. Consequently, one is not entirely sure whether the testing and interviewing, which are based on the researchers’ prior notions of what is important, will reflect the salient issues as adolescents encounter them in their daily lives.

Other approaches allow a more direct appraisal of adolescents in natural contexts, but are subject to major limitations. Observational approaches (e.g., Dunphy 1963; Sherif and Sherif 1972) suffer from the intrusive impact of the observer and/or some limitations on the contexts that can be studied. Diary or time budget methods such as those reported in Szalai (1972) could provide information on the salience of adolescent activities, but are limited by the inaccuracies of retrospective report. No method used to date has provided systematic subjective data on the motivation, affect, and moods associated with persons’ daily activities.

Development involves the evolution of adolescents’ systemic interaction with the world. We believe that in order to understand adolescents one needs to know what they do all day and the pattern of feelings associated with what they are doing. We need a systemic, ecological approach which will describe where adolescents invest their attention, and thus the systems of interaction in which they are engaged. And we need to determine the climate of motivation and affect involved in the various uses of attention, and hence the quality of feedback these uses produce. Over 80 years ago William James wrote that a person’s mind and sense of self are shaped exclusively by what he or she chooses to attend to (Bakan 1966). What a person will pay attention to is in large part determined by the daily activities he engages in. Therefore, knowledge of these activities and how they affect participants is essential in attempts to infer the structures of attention which develop and which in turn determine the cognitive and affective patterns which define adult personality.

The method of experiential sampling, developed by Prescott et al. (1976) is an attempt to combine the more personalistic approaches of psychology with the more systemic approaches of ethologists and sociologists. The technique is designed to answer the following types of questions:

What do adolescents do all day long? How is their attention channeled through interaction with various activities?

What motivates these activities? What rationales are given for engaging in various forms of interaction?

How do they perceive the quality of the interaction? How much challenge do they perceive in the various activities, how much do they see that there is at stake?

How are adolescents affected by involvement in various activities? What is the feedback they derive from interaction, and how does it change their affective states?

Method

Procedure

The data were obtained from a sample of adolescents, each of whom filled out self-report forms at random times during the waking hours of a normal week. The scheduling of self-reports was controlled by one-way radio communication. Each subject carried a pocket-sized electronic paging device on his person for a period of 1 week. Radio signals with a 50-mile radius were emitted from a central location according to a predetermined random schedule. These signals caused the receivers to make a series of audible beeps, which served as the stimulus for subjects to complete the self-report forms.

The schedule specified 5–7 signals per day at random times between the hours of 8 a.m. and 11 p.m. All seven days of the week were included in the schedule. The 42 signals per week were transmitted according to the same random pattern to each *S*; although the sequence differed depending on which day of the week a *S* started. Records were collected according to this procedure during the months of February and March, 1976.

Sample

The sample consisted of 25 volunteer subjects obtained through personal contacts by graduate students in a course on adolescence. All lived in the Chicago area. Their ages ranged from 13 to 18, with a median of 14. There were 16 girls and 9 boys. Sixteen of the subjects were White; 6 were Black, and 3 were of Spanish-American descent. A substantial minority of the *Ss*, 40 %, lived with only one parent (mother), the rest lived with both parents. AU subjects had at least one sibling. Socioeconomic status of the guardian was coded according to Hollingshead's two-factor scale. The sample was skewed toward the highest class (32 %), with only 3 *Ss* (12 %) in the lowest class. The intermediate classes contained 5, 4, and 5 *Ss* respectively. The 25 *Ss* filled out a total of 753 self-report records. The

records completed ranged from 21 to 38 per person, with an average of 30. Subjects responded to approximately 89 % of the signals by filling out records. Thus the data set does not include 11 % of the sample activity. Informal reports suggest that some subjects turned the receivers off or failed to respond when sleeping, taking a test, engaged in a sport such as swimming where the receiver could not be kept on their person, or when they just did not feel like filling out the form. Omissions also occurred when subjects forgot the receiver or the forms at home, and when subjects traveled beyond the signal transmission range.

Clearly this sample of 753 records is not a representative sample of adolescent activities. In addition to the imbalances of the subject pool and the 11 % rate of missing records, it must be remembered that the sampled times were restricted to the winter months of February and March and the hours between 8 a.m. and 11 p.m. Nonetheless it is felt that these data provide an unprecedented glimpse at the daily lives of a fairly normal group of adolescents, and that this research will serve as a pilot study to illustrate the potential which this novel methodology offers for understanding behavior.

The Self-Report Form

Ss were provided with bound booklets of 50 identical forms. Each form consisted of two sides of a page containing items that required approximately two minutes to complete.

1. The first items were open-ended questions asking, "Where were you?" "What was the main thing you were doing?," and "What other things were you doing?" Responses to these questions permitted coding Ss' *primary and secondary activities*. An additional question inquired whether the S was alone, with friends or acquaintances, with family, or with strangers.
2. Next came the question "Why were you doing this?" Three choices were given which could be checked either yes or no: "I had to do it," "I wanted to do it," and "I had nothing else to do," Responses to these items identify the *rationale for the activity*.
3. An additional group of items was designed to measure the *quality of the Ss' interaction with the environment*. A 10-point scale from "low" to "high" was provided for answering such questions as "Were you in control of your actions?" and for ratings of "challenges in the activity," "skills in the activity," and "Was anything at stake for you in the activity?"
4. Another group of 13 items solicited semantic differential ratings of *mood and physical state*. Subjects were asked to rate which of two opposite adjectives best described their state at the time they were signaled. The ends of the 7-point scale corresponded to extreme opposing states such as "hostile" versus "friendly," "happy" versus "sad." The middle point on the scale was marked "do not feel either."

Analysis and Interpretation of the Data

The activities in which Ss were engaged at the time of sampling were initially coded into 152 categories, which were later pooled. This chapter gives special attention to the 11 most prevalent activities, comprising 542 (72 %) of this sample's responses. The remaining 211 observations include such activities as sleeping, traveling in a car, watching people, fantasizing, and numerous other activities which occurred too infrequently to be systematically evaluated (e.g., attending a religious service, being examined by a doctor).

The major activity categories are:

- (1) Talking with peers (also talking on the phone, discussing school work with other students);
- (2) Talking with adults;
- (3) Watching television;
- (4) Playing sports or games;
- (5) Eating (snacking, drinking);
- (6) Grooming (combing hair, dressing, bathing, brushing teeth);
- (7) Walking;
- (8) Work (cooking, washing dishes, cleaning, doing laundry, moving things from place to place);
- (9) Reading (magazines, newspapers, and books);
- (10) Studying (for a class, working on problems, writing papers);
- (11) Class (listening and participating in class, talk with teacher).

The scale format of the remaining items was suited to interval level treatment. Semantic differential items were coded on a scale of 1–7 with the response “do not feel either” coded as 4.

A comparison of early and late records revealed significant differences on 4 out of 19 variables measuring mood and quality of interaction. These differences might be attributed to habituation to the task. A *t* test contrasting the means of the first half of the week with the means of the second half (*df* = 753) showed that in the second half of the week 5 s felt significantly less self-conscious ($p = 0.009$), and more constrained ($p = 0.03$). They also reported higher levels of challenges ($p = 0.01$) and skills ($p = 0.01$) in the situations they were in.

Results

The Structure of Adolescent Activity Patterns

The 753 random observations of 25 persons provide an estimate of how adolescents divide their time among major activities. Talking with peers, watching TV,

Table 12.1 Percentage of time *Ss* ($N = 25$) were observed ($N = 753$) in the major activity categories

Activities	Percent of time primary	Percent of time secondary
Talk with peers	14.7	18.1
Talk with adults	4.1	4.0
Watching TV	10.6	2.9
Games/sports	4.4	0.0
Eating	4.8	5.0
Grooming	5.2	2.3
Walking	4.5	1.3
Work	4.0	0.9
Reading	5.7	1.3
Studying	8.8	4.1
Class	5.2	1.2
Other	28.0	23.4
Total (%)	100.0	66.5

and studying appear to be the most prevalent primary activities of adolescents. The frequencies are presented in Table 12.1.

Talk absorbs 41 % of adolescents' time, either as a primary or as a secondary activity. There were no significant differences between boys and girls, or between younger and older *Ss* in the prevalence of talk. Lower SES *Ss* tended to spend more time talking with peers ($p < 0.06$). Persons ranked lower in the sibling birth order spent more time talking with adults ($p < 0.05$).

Talk with peers as a primary activity occurred most often in public (38 % of times) or in school (34 % of times) and rarely at home. Talk with adults occurred in the respondents' homes on 61 % of the occasions; hence it can be inferred that parents are the primary partners for adult talk. The other 39 % was evenly distributed between school (17 %) and other public environments (20 %).

Outside of talk the two major forms of recreation for this sample were watching television and playing sports and games. Virtually all teenagers did some television watching; only 2 did not report watching TV at least once. It was equally prevalent among upper-and lower-SES adolescents, boys and girls, older and younger subjects. Television watching was typically done with family (43 % of times) or alone (37 % of times). It nearly always occurred in the home (89 % of times). Secondary activities such as talking, eating, and studying were mentioned in two-thirds of instances where watching TV was the primary activity.

Playing sports or games was reported more frequently by boys than by girls, 9.9 % of the boys' activities falling into this category, and only 2.0 % of the girls'. It was also more common among younger members of the sample. School was the setting for sports and games 44 % of the times and other public environments 35 % of the times.

While boys spent a disproportionate amount of time in sports and games, the girls spent more time grooming. Grooming was reported 6.9 % of the times by girls and only 1.6 % of the times by boys.

Table 12.2 Variability of involvement in major activity categories

Activities	Number of observations (<i>N</i> = 542)	Proportion of Ss' responses		Ss never reporting activity (<i>N</i> = 25)	Midspread range of percentages for half the sample
		Median percent	Maximum percent		
Talk with peers	111	11	26	0	7–18
Talk with adults	31	3	14	10	0–7
Watching TV	80	11	37	2	6–16
Games/sports	33	0	26	14	0–3
Eating	36	5	14	4	3–9
Grooming	39	3	16	8	0–10
Walking	34	3	24	10	0–6
Work	30	0	8	15	0–5
Reading	43	3	21	9	0–11
Studying	66	8	18	2	6–13
Class	39	6	30	4	3–7

Among the remaining major activity categories, there were no substantial differences in frequencies by background variables. Reading, studying, and class involvement, for example, were each roughly equal in prevalence across sexes, SES groups, and ages.

The uniformity of time allocation is rather striking. Table 12.2 presents data on the distribution of individual frequencies for each of the eleven major activity categories. It shows, for example, that half the subjects (the quartiles above and below the median) reported talking with peers within the narrow range of 7–18 % of all the times they were sampled. Table 12.2 also shows that during the week, 15 adolescents (60 % of the sample) never reported doing housework or any other kind of work besides studying, and 14 (56 %) never reported being involved in any game or sport.

Experiences Associated with Adolescent Activities: Rationale, Quality of Interaction, and Moods

Having estimated the frequency of the most common types of situations in the daily lives of adolescents, we turn to the second objective, which is to determine the constellation of motivation and affect associated with these standard attentional contexts.

Rationale for Activities

Responses to the question “Why were you doing this?,” which was included in each observation provide evidence for the motivations involved in adolescent activities. 12 % of the time subjects checked the response, “I had to do it;” 6 % of the time subjects checked “I had nothing else to do;” and 38 % of the time, they marked the response “I wanted to do it.” In other words, purely voluntary activities are three times as frequent as purely coercive ones. The remaining 44 % of the responses contained combinations of the three possibilities (see Table 12.3). For each activity that an individual engaged in, we could identify whether he or she more frequently considered it purely coercive (“I had to do it”) or purely voluntary (“I wanted to do it”). For each activity counts were made of the individuals who more frequently rated it as purely coercive and the number who more frequently rated it as purely voluntary. Differences in the distribution of these two rationales were evaluated by comparing the distribution of counts to binomial tables (sign test).

Four activities rated significantly more voluntary than coercive were talking with peers, watching TV, eating, and playing sports or games. The two activities which were rated significantly more coercive than voluntary were studying and class activities. It should be noted, however, that watching TV and playing sports or games, although primarily voluntary, were engaged in about half of the time because the subjects also had “nothing else to do,”

Quality of Interaction

What motivates teenagers to engage in activities becomes clearer when one considers how they rate the quality of interaction in these same activities. Table 12.4 presents the mean ratings of how much is at stake and the level of challenges, skills, and control in various primary activities. The data suggest that the perceived amount of stakes and challenges are most affected by what one does, while perception of skills and control appears to be more independent of activities.

The only activities in which adolescents perceived substantial stakes are school-related activities. These are also the activities that they tended to perceive as coercive (see Table 12.3), Sports and games received the highest ratings for challenges, followed by schoolwork. The lowest ratings on both scales were given to watching TV. The most frequent activity, talk, received intermediate ratings on these two scales.

Adolescents reported highest “skills in the activity” when doing such things as reading, eating, housework, and grooming, which are usually solitary activities. They perceived themselves to have markedly low skills when talking with peers or adults. The lowest rating of skills occurred when watching television. The highest ratings of “control of your actions” were given when subjects were talking with adults and grooming, while the lowest ratings occurred again for TV watching.

Table 12.3 Rationales given by subjects for engaging in major activity categories

Activities	Number of observations	Percent		Nothing else to do					Significance of differences ^a (1) versus (2)
		Had to do it (1)	Wanted to do it (2)	(3)	(1) + (2)	(1) + (3)	(2) + (3)	(1) + (2) + (3)	
Talk with peers	105	3.8	52.3	5.7	6.7	1.9	26.7	2.9	0.001
Talk with adults	28	7.1	46.4	3.6	7.1	3.6	32.1	0.0	0.1
Watching TV	76	1.3	42.1	13.2	1.3	1.3	40.8	0.0	0.001
Games/sports	33	3.0	39.4	0.0	6.1	3.0	42.4	6.1	0.03
Eating	36	5.6	50.0	2.8	13.9	0.0	25.0	2.8	0.001
Grooming	37	24.3	35.1	8.1	16.2	0.0	10.8	5.4	NS
Walking	34	14.7	35.2	8.8	23.5	0.0	11.8	2.9	NS
Work	30	26.7	16.7	6.7	13.3	0.0	16.7	20.0	NS
Reading	43	20.9	34.9	2.3	14.0	4.7	16.3	7.0	NS
Studying	63	33.3	14.3	1.6	20.6	9.5	6.3	14.3	0.03
Class	35	35.3	11.4	8.6	16.6	16.6	2.9	8.6	0.03
Subtotal	520	13.0	38.0	6.1	11.0	3.3	23.4	5.3	
Other activities	200	11.0	38.2	6.1	10.1	5.7	18.4	10.5	
Total	720 ^b	12.3	38.0	6.1	10.7	4.0	22.0	6.9	

^a Computed by binomial sign test

^b No rationale was given for 33 observations

Table 12.4 Mean ratings on quality of interaction by major activity categories

Activities	Number of observations	Stakes	Challenges	Skills	Control
Total	542	2.13	3.39	5.60	7.40
Talk with peers	111	2.28	2.86	5.29	7.25
Talk with adults	31	1.43	2.90	5.00	7.79
Watching TV	80	1.00	1.53	4.96	6.66
Games/sports	33	1.77	6.65	5.61	7.12
Eating	36	1.54	1.97	6.06	7.68
Grooming	39	1.23	2.15	6.00	8.25
Walking	34	1.69	1.55	4.33	7.31
Work	30	2.07	2.79	6.55	7.24
Reading	43	1.48	4.40	7.14	7.54
Studying	66	4.42	6.37	6.16	7.75
Class	39	3.63	4.97	5.08	7.62
F value ^a		8.07 ^b	20.54 ^b	3.01 ^b	2.12 ^c

^a Significance computed by one-way ANOVA, $df = 11,531$

^b $p < 0.001$

^c $p < 0.05$

Moods and Physical States

The mood ratings provide evidence on the quality of adolescents' subjective experiences in the most common activities of their daily lives. A significant relationship was found between the eleven activity variables and ten of the thirteen mood items. The items suspicious-trusting, creative-dull, and resentful-satisfied showed no relation to activities. This finding suggests that these mood variables are relatively more stable characteristics of a person's state. The mean values for seven other mood items are presented in Table 12.5. Ratings on the remaining mood items—alert-drowsy, tense-relaxed, and irritable-cheerful—were not included because they correlated so highly with some of the other scales that they provided essentially redundant information. Activities have the greatest effects on the mood variables active-passive and free-constrained. Relatively least affected by situations is perceived happiness—although it should be recalled that perceived trust, satisfaction, and creativity are even less affected, which is why they were excluded from the table.

Of the eleven primary activities, the ones that provide the most positive experiences are playing games or sports (in which Ss perceived themselves as being most strong, active, free, excited, and sociable—although relatively hostile), and talking with peers (in which Ss were the most happy and also very friendly and sociable). The activities associated with the least positive overall mood are watching television (when Ss felt the most weak, and next to the least active, happy, friendly, and sociable) and studying (when Ss felt the least free and excited). Doing work made teenagers feel quite strong and active, but it also made them feel the least happy, friendly, and sociable.

Table 12.5 Mean ratings on selected mood variables, by major activity categories^a

Activities	Number of observations	Strong-Weak		Active-Passive		Free-Constrained		Excited-Bored		Happy-Sad		Friendly-Hostile		Sociable-Lonely	
		Mean	Rank	Mean	Rank	Mean	Rank	Mean	Rank	Mean	Rank	Mean	Rank	Mean	Rank
Total	542	4.27		4.20		4.22		4.18		4.82		4.75		4.57	
Talk with peers	111	4.34	4	4.32	5.5	4.65	3	4.59	4	5.25	1	5.32	2	5.05	7
Talk with adults	31	4.28	6	4.14	7	4.39	6	4.71	2	5.14	2	5.48	1	4.96	3
Watching TV	80	3.95	11	3.63	10	4.10	8	3.80	9	4.44	10	4.35	10	4.10	10
Games/sports	33	5.48	1	5.58	1	4.94	1	4.78	1	4.85	5	4.39	9	5.09	1
Eating	36	3.97	10	3.57	11	4.31	7	4.09	7	5.06	3	4.89	3	4.79	5
Grooming	39	4.18	7	4.39	3	4.49	5	4.64	3	5.00	4	4.85	4	4.47	6
Walking	34	4.50	2	4.82	2	4.56	4	4.29	5	4.62	9	4.59	7	4.38	7
Work	30	4.41	3	4.34	4	3.93	9	4.00	6	4.28	11	4.28	11	3.70	11
Reading	43	3.98	9	3.70	9	4.71	2	3.70	10	4.53	8	4.62	6	4.17	9
Studying	66	4.16	8	4.11	8	3.62	10	3.97	8	4.78	6	4.47	8	4.30	8
Class	39	4.29	5	4.32	5.5	3.58	11	3.42	11	4.76	7	4.63	5	4.95	4
<i>F</i> values ^b		4.47 ^c		5.83 ^c		5.54 ^c		3.87 ^c		2.59 ^d		4.35 ^c		4.50 ^c	

^a Higher numbers indicate more positive moods

^b Significance computed by one-way ANOVA, *df* = 11,531

^c *p* < 0.001

^d *p* < 0.01

Discussion

The assumption of this study was that if one could measure how adolescents spend their time during a normal week, why they spend their time as they do, and how they feel about their activities, one would get a clearer idea of the social and psychological forces at this stage of the life cycle. The methodology used was particularly appropriate to study this problem.

In this sample, the most prevalent activity was found to involve conversation with peers, which occurred one-third of the total time. This activity was also the most voluntary and was highly positive in mood. By contrast, work of any kind was rare: only 13 % of the time were Ss studying, and 5 % of the time were they doing other work. These activities were the least voluntary and were associated with negative moods.

This pattern suggests that both quantitatively and qualitatively the main context of socialization for adolescents is peer interaction. The developmental function of this types of interaction is fairly obvious. Piaget (1965), Sherif and Sherif (1972), and many others have stressed that adolescents evolve autonomy and the behavior appropriate to an egalitarian social order through experiences with peers. The prevalence of talk with agemates over talk with adults can be expected to support the predominance of egalitarian modes of social interaction over hierarchical ones. Yet the fact that adolescents who are talking with peers rate themselves as relatively weak, passive, and unskilled suggests that such an activity may involved conformity to group pressure.

At the same time, interaction restricted to peers is likely to have the negative effect of engendering cohort-specific identification, modes of communication, styles of life, and views of the world, perpetuating the age-based segregation which Bronfenbrenner (1970) and Coleman (1974a) have lamented. On the rare occasions when adolescents participated in activities conducive to the learning of adult roles, they tended to experience strongly negative feelings. To the extent that one must enjoy an activity if one is to develop the intrinsic motivation needed for self-initiated socialization (Brim 1968; Csikszentmihalyi 1975; Smith 1968), the data suggest that the preconditions for self-initiated socialization into meaningful adult roles were conspicuously absent.

The lack of productive activities in the lives of these teenagers does not seem to be compensated for by what school has to offer. Although homework and class were seen as challenging and providing relatively high stakes, they were also seen as constraining and boring.

Another intriguing finding concerns television viewing. Although this is the second most prevalent activity for this sample, adolescents tended to choose it because they had nothing else to do, and when they did they reported feeling worse than when they did anything else.

While the fact that moods concurrent with watching television are consistently below those for other activities justifies labeling them as *negative*, an examination of the pattern of responses suggests that *mindless* is a more apt term. In contrast to

participation in other activities, subjects watching television tended to respond “do not feel either.” When watching TV they tended not to feel happy or sad, friendly or hostile, strong or weak, lonely or sociable. Simply put, they did not feel.

Nonfeeling is a characteristic of the sociopathic personality described by Cleckley (1955) and Lykken (1957). We were led to ask whether extended cultivation of this nonfeeling state might be related to sociopathic behavior and personality. As part of this research, subjects had been administered a self-report delinquency questionnaire, asking whether they had ever engaged in any one of eleven deviant activities, (Several of the items were taken from a questionnaire used by Short and Nye 1958). Seven of the eleven acts were common enough in our sample to be useful for analysis. Subjects were also administered the Maddi Alienation Index (Maddi et al. 1976) and the Jackson Personality Inventory (1965).

Correlation coefficients were computed between these indices and the proportion of times that each individual had watched TV during the sampled week. The amount of television watching was significantly correlated with a tendency to engage in three of the seven “delinquent” acts: vandalism ($r_{pb} = 0.50$, $p = 0.01$); taking small things from stores ($r_{pb} = 0.48$, $p = 0.02$); and skipping school ($r_{pb} = 0.40$, $p = 0.06$). It was positively, but not significantly, related to four of five primary scales of Alienation and significantly correlated to the secondary scale of Vegetativeness ($r = 0.41$, $p = 0.05$). Of the 22 scales in the Jackson inventory, it was significantly correlated to Infrequency ($r = 0.47$) and negatively correlated to Affiliation ($r = -0.44$), Nurturance ($r = -0.46$), and Understanding ($r = -0.48$). These findings support the hypothesis that the emotionless state characteristic of TV watching is associated with the development of antisocial behavior and personality.

Although the sample used in this study was not representative and was not meant to produce generalizations about all adolescents, the trends uncovered will probably hold up for other groups of the same age. Our main goal, however, was to show some of the questions that become amenable to more precise inquiry with the experiential sampling method used in this study.

It is our belief that a systemic approach is necessary to understanding adolescents (or any other group of people). Such an approach requires an ecological mapping of *activities* and *experience*. Only by knowing where adolescents channel their attention and what kinds of feedback they receive from the interaction can we begin to understand the evolution of behavior patterns. The experiential sampling method appears to be a promising start in this direction.

Acknowledgments The authors wish to thank the many persons who helped collect the data, especially Ms. Patricia Marott and her colleagues in H.D. 362. The research reported herein was partially funded through PHS Grant 5-R01 MH-22883-03.

References

- Bakan, P. (Ed.). (1966). *Attention*. New York: Van Nostrand.
- Blos, P. (1962). *On adolescence*. London: Collier-Macmillan.
- Brim, O. G., Jr. (1968). Adult socialization. In J. A. Clausen (Ed.), *Socialization and society* (pp. 270–320). Boston: Little, Brown.
- Bronfenbrenner, U. (1970). *Two worlds of childhood*. New York: Basic Books.
- Cleckley, H. (1955). *The mask of sanity*. St. Louis: Mosby.
- Coleman, J. (1974a). *Relationships in adolescence*. London: Routledge & Kegan.
- Coleman, J. C. (1974b). *Youth: Transition to adulthood*. Chicago: University of Chicago Press.
- Csikszentmihalyi, M. (1975). *Beyond boredom and anxiety*. San Francisco: Jossey-Bass.
- Douvan, E., & Adelson, J. (1966). *The adolescent experience*. New York: Wiley.
- Dunphy, D. C. (1963). The social structure of urban adolescent peer groups. *Sociometry*, 26, 230–246.
- Henry, J. (1963). *Culture against Man*. New York: Random House.
- Jackson, D. N. (1965). *Personality research form*. Goshen: Research Psychologists Press.
- Lykken, D. (1957). A study of anxiety in the sociopathic personality. *The Journal of Abnormal and Social Psychology*, 55, 5–10.
- Maddi, S., Kobasa, S., & Hoover, M. (1976). *The alienation-commitment test: reliability and validity*. Unpublished manuscript, The University of Chicago.
- Offer, D. (1969). *The psychological world of the teenager*. New York: Basic Books.
- Piaget, J. (1965). *The moral judgment of the child*. New York: Macmillan.
- Prescott, S., Csikszentmihalyi, M., & Graef, R. (1976). *Environmental effects on cognitive and affective states: The experiential sampling approach*. Unpublished manuscript, The University of Chicago.
- Sherif, M., & Sherif, C. (1972). *Reference groups*. Chicago: Regnery.
- Short, J., & Nye, I. (1958). Extent of unrecorded delinquency: Tentative conclusions. *The Journal of Criminal Law, Criminology, and Police*, 49, 296–302.
- Smith, B. (1968). Competence and socialization. In J. A. Clausen (Ed.) *Socialization and society*. Boston: Little, Brown.
- Szalai, A. (1972). *The uses of time*. The Hague: Mouton.