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Articles

"Why are You Bored?": An Examination of Psychological and Social Control Causes of Boredom Among Adolescents

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The purpose of this study was to better understand the causes of boredom using psychologically based and social control models of boredom. For this study, 82 8th grade students completed two questionnaires, a face to face interview, and participated in a four day activity diary over a two week period of time. Hierarchical linear modeling (HLM) was used to assess the extent to which adolescents' level of boredom differed depending upon their reason for participating in the activity and on the individual characteristics they brought to the situation. Both psychological and social control variables helped to explain boredom. The results are discussed from a developmental and practical perspective.

KEYWORDS: *Adolescents, boredom, leisure, social control, recreation, adolescent development*

Introduction

Research on boredom has spanned decades and has been approached from a variety of philosophical, sociological, and psychological perspectives. During this time, discussion in the literature has addressed causes and consequences of boredom. The only apparent consensus is that boredom is a complex phenomenon. Understanding boredom during adolescence is even more challenging because boredom is compounded by concomitant developmental processes. These developmental issues, such as autonomy development, changing cognitive abilities, evolving relationships with parents, and the liminal quality of behavioral demands, make boredom particularly salient for youth. In addition, the amount of free time available to adolescents and the increasing control they have over this time compared to their childhood

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years suggests free time may provide a new challenge to adolescents as they take on increasing responsibilities for structuring their own time.

The increasing focus on boredom during adolescence is, in part, due to the fact that boredom has been linked with a number of problem behaviors such as alcohol and drug abuse (Iso-Ahola & Crowley, 1991; Orcutt, 1985), higher rates of dropping out of school (Farrell, Peguero, Lindsey, & White, 1988) and vandalism (Caldwell & Smith, 1995). Clearly, none of these behaviors are developmentally or societally productive. Thus, the general purpose of this study was to better understand the phenomenon of adolescent boredom in free time.

Theories of Boredom

Existing research provides us with an understanding of the associated outcomes of boredom in free time, but the body of knowledge is less clear regarding the causes of boredom. Two major perspectives help us understand the causes of boredom: psychological theories and social control theories. These theories are discussed in the following section, and where appropriate, developmental considerations are addressed.

Psychological explanations suggest that boredom stems from (a) a lack of awareness of stimulating things to do in leisure (Iso-Ahola & Weissinger, 1987); (b) a lack of intrinsic motivation, and in particular self-determination, to act on the desire to alleviate boredom (Iso-Ahola & Weissinger, 1987; Weissinger, Caldwell, & Bandalos, 1992); and (c) a mismatch between one's skill and the challenge at hand (e.g., Csikszentmihalyi, 1990). The latter is also known as the understimulation model of boredom (e.g., Larson & Richards, 1991).

Cognitive psychology suggests that adolescents are maturing in many ways that might influence perceptions of boredom. As adolescents grow older, they mature in their capacity to temper or regulate their interactions with their circumstances (Elliott & Feldman, 1990). At lower maturation levels, once boredom is perceived, adolescents might lack the ability to (a) identify changes that *could* be made and/or (b) perceive ways in which they could act on the desired change. In addition, the speed, efficiency, and capacity of basic cognitive processes change (Keating, 1990) which might contribute to being understimulated, and thus bored. For example, some tasks may seem to be repetitive as cognitive abilities mature, thus producing feelings of boredom.

Psychologically based theories, however, have been based on adult populations and have not addressed the specific developmental tasks of adolescence. The developmental process of autonomy development (Steinberg, 1990), for example, suggests that boredom may be a response of resistance to external control, such as the influence of parents or other adults (Larson & Richards, 1991). This type of boredom might occur in situations when an adolescent is unable to exercise autonomy and at the same time is unable to physically leave the situation; in this case the adolescent may disengage

psychologically through the experience of boredom (Eccles et al., 1993). Social control and resistance theories of boredom imply that boredom becomes a standard means of communication that turns into a routine aspect of the adolescent culture. This perspective suggests that free time activities that are structured by the dominant adult culture might be likely to produce boredom in adolescents because they interfere with the normative developmental impetus towards autonomy (Shaw, Caldwell, & Kleiber, 1995). For example, Larson and Richards (1991) stated that ". . . the frequent occurrence of boredom in adolescence is a product of subcultural (or personal) resistance to adult and school authority. . . " (p. 422).

Related to the social control perspective, the forced-effort theory of boredom (Larson & Richards, 1991; O'Hanlon, 1981) indicates that boredom occurs when individuals are forced to expend cognitive energy and effort on tasks construed as homogeneous. For adolescents, this boredom response might occur when parents, teachers, or coaches obligate routine, practice activities. In this case, participation is extrinsically motivated either by social pressure or by their instrumental role in the attainment of intrinsically motivated goals.

Both the forced-effort and social control/resistance theories of boredom play a role in adolescent boredom in a school context (Larson & Richards, 1991). Thus, extracurricular activities may offer opportunities for adolescents to engage in compelling leisure experiences. Obligatory activities, however, may undermine the potential for adolescents to exercise autonomy and increase the likelihood that adolescents experience boredom within these settings. As adolescents are in transition from a position of dependence on parents to one of increased freedom (i.e., autonomy), the negotiation and balance of decision making power is often problematic (Steinberg, 1990). Steinberg (1990) suggested that until a mutually comfortable position between parent (or by extension, other adults) and adolescent is achieved, tensions are likely. Thus if an adolescent perceives too much control of his or her actions by parents, social control theory suggests that boredom is a typical response.

This study used psychologically based and social control models to extend our understanding of adolescent boredom in leisure. The study has two levels of analysis, individual difference and situational. Table 1 summarizes the theories of boredom, related variables in this study, and corresponding hypotheses. At the individual difference level, we examined two variables that reflect differences in responses to boredom across situations (i.e., leisure experiences). The first variable, *parental monitoring,* reflects the social control/resistance model of boredom. The second individual difference variable was *level of intrinsic motivation* and reflects psychological theories of boredom. Both of these variables allowed us to take into consideration factors that might contribute to boredom across situations. At the situational level, we examined factors associated with boredom within an individual by examining three possible reasons for participating in a particular activity: Had to, wanted to, and had nothing else to do. Each reason stemmed from either a

social control or psychologically based perspective. These variables are described in more detail below.

Individual Difference Variables

The general level of intrinsic motivation perceived by the adolescent and the general level of parental monitoring of the individual are important because of their potential to moderate or mediate the experience of boredom. Weissinger et al. (1992) suggested, for example, that individual difference variables such as desire for intrinsic rewards will generalize across situations, and thus, are important considerations in understanding boredom. In this study, intrinsic motivation was important because of its (a) recognized importance to leisure experience (e.g., Gunter, 1987; Iso-Ahola, 1979; Neulinger, 1981) and (b) relationship to the experience of boredom from a psychological perspective (e.g., Weissinger et al., 1992).

The general level of parental monitoring perceived by an adolescent taps the extent to which the adolescent exercises autonomy and self-determination in leisure experiences versus the extent to which activities are controlled and monitored by parents. Although this variable is new to the leisure literature, previous work has suggested that level of parental monitoring does have some influence on the leisure of adolescents (e.g., Caldwell & Darling, in press), especially engagement in problem behavior and substance use (Steinberg, Fletcher, & Darling, 1994).

Situation Level Variable

At the situational level, we assessed the reason for participating in the activity. Three reasons, "I had to," "I wanted to," and "I had nothing else to do," directly reflect common reasons given by adolescents to explain their behavior. Each of these reasons relates to a psychologically or social control based theory of boredom. The "had to" situation reflects the feeling that someone (parent, teacher, coach, etc.) exerted influence on the adolescent producing a feeling of obligation. Boredom associated with this reason is thought to be a result of the social control/resistance models of boredom. The "wanted to" situation reflects self-determination and intrinsic motivation. We viewed the role of self-determination and intrinsic motivation as indicative of the psychologically based theories. The "nothing else to do" situation suggests a lack of stimulation, lack of optimal arousal, and/or lack of awareness of leisure opportunities, stemming from the psychologically based theories.

Contexts of Boredom in Free Time

We felt that it was important to understand the context of boredom. Different leisure contexts and activities may be associated with different outcomes (Caldwell & Darling, in press; Caldwell, Smith, & Weissinger, 1992b). In addition, Weissinger et al. (1992) suggested that a study examining both

context and dispositional factors with regard to boredom in leisure was an important "next step" study. Their finding was supported by the work of Larson and Richards (1991) who concluded that both context and individual difference variables were important in understanding adolescent boredom in and out of school. Thus, we felt it important to understand whether or not differences in boredom existed depending on the type of activity.

Hypotheses

This study sought to understand the causes of boredom in free time among adolescents using both the psychological and social control/resistance theories at two levels of analysis (individual and situational; see Table 1). We predicted that regardless of level of analysis, when adolescents felt as though they were autonomous and self-determined they would be less bored. Conversely, when adolescents felt controlled, they would experience boredom. Thus, at the situational level we hypothesized that the "want to" situation would produce the lowest levels of boredom; we could not hypothesize which of the other two reasons for participation would better predict boredom. At the individual difference level we hypothesized that high levels of perceived parental monitoring would be predictive of higher levels of boredom. We also hypothesized that low levels of intrinsic motivation would predict higher levels of boredom. We examined the relationship of context to level of boredom in post hoc analysis and thus made no predictions.

Methods and Procedures

Data for this investigation came from phase two of a three year longitudinal study conducted in a middle school in central Pennsylvania. In phase

TABLE 1
Variables in the Study by Theory and Level of Analysis

Level of Analysis and Related Hypothesis	Psychological Theories	Social Control Theories
Individual Difference Level	Intrinsic Motivation	Parental Monitoring
Hypothesis	The higher the level of intrinsic motivation, the lower the level of boredom.	The higher the level of parental monitoring, the higher the level of boredom.
Situation Level	Reason for Participation: Want to	Reason for Participation: Had To
Hypothesis	Wanting to do the activity would be associated with lower levels of boredom.	Having to do an activity would be associated with higher levels of boredom.
Situation Level	Reason for Participation: Nothing Else to Do	N/A
Hypothesis	Unable to specify hypothesis.	

two, all students in grades six through eight were asked to volunteer to complete an in-school questionnaire about parents, free time, friends, school achievement, identity, and self esteem. The present study used data from all grade eight students who volunteered to participate in an extended study. As part of this extended study, grade eight students who participated in the in-school survey were contacted by phone and asked to participate in a one hour in-depth interview (about dating as well as relationships with their friends and family), participate in an activity diary (about leisure activities), and to complete a follow-up questionnaire (about school achievement, parental monitoring, and other parenting practices). The data reported here come from the activity diary, in-school survey, and follow-up survey portions of the study.

A process of active consent was used. All students whose parents signed and returned the consent form (indicating either approval or refusal) received a coupon for a free Dairy Queen Blizzard. If students participated in the extended study, they received a movie ticket. For the phase two study, a total of 600 recruitment letters were sent to all parents of middle school students. Out of the 600, 398 parents gave permission for their children to participate in the general study (66% response rate). Of the 398 students, 143 were in grade eight. (Thus 72% of all grade eight students' parents provided consent.) Of these 143 grade eight students, 86 (60% of the 143 students who were allowed to participate) participated in the in-depth interview and follow-up survey and 82 (57%) students participated in the activity diary portion of the project. Scheduling conflicts were the most common reason for refusal to participate in the study. Participants predominantly identified themselves as white (92%), with 56% of the mothers and 60% of the fathers having graduated from college. The sample was 51% female, with a mean age of 13.2 years (s.d. = .44).

Instrumentation and Procedures

The in-school questionnaire was self-administered in large group settings (cafeterias and study halls) and took approximately 30 minutes to complete. The research team administered the questionnaires to the students. Questions were asked about parents, friends, leisure, school achievement, intrinsic motivation, boredom in free time, and problem behaviors (e.g., vandalism, substance use, etc.). Grade eight students who agreed to participate in the extended study completed a follow-up questionnaire at home and brought it with them to the personal interview. These grade eight students indicated their consent to continue their participation by filling out a sheet of paper asking for the continued cooperation. Each student who agreed to continue was then provided with a take-home questionnaire. Questions on the follow-up questionnaire and interview focused on parental monitoring, information disclosure to parents, conflict over rules, adolescent autonomy, self-esteem, and dating. These grade eight students were contacted by a research assistant and one-on-one interviews were scheduled with a trained interviewer. Once an adolescent participated in the in-depth interview and completed the fol-

low-up questionnaire, he or she then began the activity diary component of the study.

The activity diary was used to assess the daily free time behaviors and experiences of the adolescents in the study. The instrument was pretested on several eighth graders to ensure the questions and response categories were easily understood. Data were collected via phone interviews Monday through Thursday between 7:00 and 9:30 p.m. All phone interviewers completed a two session training program prior to the phone interviews. Participants were randomly scheduled to be interviewed four times over a two week period, although the two week period differed for each adolescent. Initially, data were to be collected on weekend days and weekdays. Interviewers had a difficult time scheduling interviews on weekend days, however, so the research team decided to collect data on Monday through Thursday evenings only. Although this meant that we have no weekend data, the data are more homogeneous and reflect the weekday pattern of activities and experiences of the grade eight students in this sample. Data collection for the activity diary portion of the study began in March and continued through mid-June.

After a brief introduction, the adolescent who was phoned was first asked to identify the main activity done that day between after school and dinner time, and then between dinner time and bedtime. The interviewer chose one of the activities to be the focus of a series of follow-up questions. The focal activity chosen represented a leisure situation. Thus, if the adolescent did homework and hung out with friends, the interviewer chose hanging out to be the focal activity. In the rare case where neither of the two activities were leisure oriented, the interviewer randomly chose one. If both activities were leisure, one was chosen at random.

All questions asked in the activity diary interview related to the focal activity. A variety of questions were asked, and covered topics such as experience (e.g., boredom), with whom the youth participated, location of activity, reason for doing activity, and so on.

Measures

The dependent variable, *level of boredom* for each activity, was assessed through a single item that asked participants to respond to how bored versus how involved they were in their activity where 1 = very involved and into it and 5 = very bored. Although several scales exist that measure boredom and reflect a more dimensionalized perspective, we used a single item to make it easier to respond over the phone and to reduce the burden of response time. As it was, the phone diary took about 20 minutes to complete. This single item seemed adequate for our purpose, which was to simply know if they were bored or not. Pre-test member checks indicated this was a valid measure for assessing a 13 year old's perception of whether a situation was boring or not.

Situation Level Variables. Reason for participation in the activity was assessed using a single item "Why did you participate in the activity?" Response choices included "had to," "wanted to," and "because there was nothing else

to do." Again, a single item was used and pre-test member checks indicated this question and response categories adequately captured the intent of the question. Adolescents' comments indicated this variable had high face validity.

The other situational level variable was the *specific activity* in which the adolescent participated. This variable was created by classifying each activity into one of six categories: media/home-based; school-based (e.g., arts, sports); social; outdoor/active; miscellaneous (e.g., church service, driving from the airport, and being interviewed); and maintenance/work. Decisions about classification of these activities was done by the team of researchers and was relatively straight forward. Although the categories are not mutually exclusive, for the purposes of this study this classification scheme was adequate.

Individual Difference Level Variables. *Parental monitoring* was assessed by a standard monitoring index (Patterson & Stouthamer-Loeber, 1984). Responses from this item came from the follow-up questionnaire. In this case, we used the mother as the parent of interest because typically mothers are more involved in parenting at all ages, especially monitoring children (Steinberg, 1990). Students responded to the stem "How much does your mother REALLY know" for five situations, including: "Where you go at night? How you spend your money? What you do with your free time? Where you are most afternoons after school?" Responses were coded on a three point response format, with 1 represented "knows a lot," 2 represented "knows a little," and 3 represented "doesn't know" (Cronbach's alpha = .80).

Intrinsic motivation was measured with a nine item index adapted from Harter (1981). This measure was comprised of the following items that were included on the in-school questionnaire: "I like challenging work," "I like to figure things out for myself," "I'd rather figure out mistakes on my own," "I like solving hard problems on my own," "I know how I'm doing without a report card," "I like hard school subjects," "I know how I'm doing without a teacher telling me," "I find difficult work interesting," and "I know if something is good when I turn it in". The response format was 1 = this is not at all like me and 5 = this is really like me (Cronbach's alpha = .86).

Analytic Strategy

This paper used a three-fold analytic strategy. First, descriptive statistics were examined. Next, inferential analyses were performed to assess the predictors of boredom at the individual difference level and the situation level. Finally, post hoc analyses were used to illustrate the nature of the relationships found and to gain insight into the differences between the predictors of boredom across activity types. Gender was included in the analysis due to past research that has indicated significant gender differences in all variables of interest to this study (e.g., Shaw, et al., 1995).

Analysis of the diary data was complicated by the non-independence of observations because each adolescent reported on activities for four different

days. Hierarchical linear modeling (HLM), a technique specifically designed to decompose variance into common source and situational variance (Bryk & Raudenbusch, 1992), was used to assess the extent to which adolescents' level of boredom differed depending upon their reason for participating in the activity and on the individual characteristics they brought to the situation (i.e., perceived parental monitoring, intrinsic motivation, and gender). In these analyses, HLM parses variance into a situational component (differences within an adolescent's level of boredom across different situations as predicted by reason for participation) and an individual component (differences between different adolescents' boredom predicted by gender, perceived parental monitoring, and intrinsic motivation). The former category is considered situational because reason for participation varied across different leisure situations or occasions, while the latter reflects characteristics individuals bring to all situations in which they participate.

HLM analyses provides two types of information: (a) an estimate of the component of variance in the outcome measure (boredom) that can be attributed to individual differences between people and to differences within people across situations, and (b) information about the extent to which each variance component can be predicted by its respective predictors (reason for participation, gender, intrinsic motivation, and perceived parental monitoring[1]). These analyses rely on data from 81 individuals observed across 234 situations. Because each adolescent reported on only four different situations, the model adopts the assumption of traditional regression models that the relationship between reason for participation and boredom is uniform across individuals.

Results

Descriptive statistics illustrating the relationship between reason for participation and adolescents' levels of boredom, intrinsic motivation, and perceived parental monitoring are presented in Tables 2 and 3[2]. In general, these descriptive findings support the general pattern hypothesized to underlie the relationships: when adolescents engage in activities because they want to they report lower levels of boredom during the activity, and higher levels of intrinsic motivation compared to those adolescents who are participating in activities because they felt they had to do it or had nothing else to do. Contrary to our hypothesis, however, perceived parental monitoring was higher for those 8th graders who wanted to do the activity. Overall, males reported slightly higher levels of boredom, lower levels of intrinsic motivation, and lower levels of perceived parental monitoring than females.

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[1]Type of activity was not included in the HLM analysis due to its polychotomous nature. Variables with more than three levels are not easily dealt with in HLM analysis; thus we used type of activity in planned post hoc descriptive comparisons.

[2]No statistical tests are reported testing differences in mean levels across groups due to the nonindependence of observations. That is, this analysis has repeated measures of categorical, independent variables, for which no statistical analysis is available.

TABLE 2
Descriptive Statistics of Reason for Participation, Intrinsic Motivation, and Parental Monitoring

	Had To Mean (s.d.)	Wanted To Mean (s.d.)	Nothing Else To Do Mean (s.d.)
Boredom	2.69 (1.34)	1.72 (.83)	2.64 (1.11)
Intrinsic Motivation	3.14 (.83)	3.44 (.87)	3.12 (.90)
Parental Monitoring	1.58 (.50)	1.63 (.49)	1.46 (.50)
N	54	208	57

Note: Boredom coded as: 1 = very involved and into it, 5 = very bored
Intrinsic Motivation coded as: 1 = low intrinsic motivation, 5 = high intrinsic motivation
Parental Monitoring coded as: 1 = doesn't know, 2 = knows a little bit, 3 = knows a lot

Predicting Boredom. HLM was used to predict levels of boredom from individual difference variables (i.e., intrinsic motivation, perceived parental monitoring, and gender) and situational variables (i.e., reason for participation). Reading and interpreting a conventional HLM table is not necessarily intuitive. Table 4 reflects the results of a series of steps in HLM that one conducts to get to the "bottom line." Although the most important results are reported at the top of the table, critical diagnostic information is contained in the middle and bottom. The information in the middle of the table, which is the first piece of diagnostic information, essentially tells us that we can proceed with our interpretation—the model contains sufficient variance to warrant investigation.

The next question to ask is how much of the observed variation in boredom can be explained by differences at the situation level (that is, within person), and how much by individual differences (that is, between persons). Baseline model statistics (lower portion of Table 4) indicate how much total

TABLE 3
Descriptive Statistics for Perceived Parental Monitoring, Intrinsic Motivation, and Boredom by Gender

	Boredom *M* (sd)	Intrinsic Motivation *M* (sd)	Parental Monitoring *M* (sd)
Males	2.12 (1.13)	3.28 (.87)	2.36 (.59)
Females	2.00 (1.04)	3.38 (.90)	2.50 (.48)

Boredom coded as: 1 = very involved and into it, 5 = very bored
Intrinsic Motivation coded as: 1 = low intrinsic motivation, 5 = high intrinsic motivation
Parental Monitoring coded as: 1 = doesn't know, 2 = knows a little bit, 3 = knows a lot

TABLE 4
Explanatory Model: Influence of Parental Monitoring, Intrinsic Motivation, and Reason for Participation on Boredom in Leisure

Fixed Effects	Estimated Coefficient	Standard Error	*T*-Ratio	*P*-Value
Base Boredom	2.056	.074	53.590	0.000
Gender	−0.067	.150	0.448	0.654
Intrinsic Motivation	−0.196	.087	2.247	0.025
Parental Monitoring	−0.290	.147	1.970	0.049
Had To v. Want To	−0.775	.178	4.312	0.000
Had To v. Nothing Else To Do	−0.051	.212	0.239	0.812

Random Effects	Estimated Parameter	Degrees of Freedom	χ^2	*P*-Value
Base Boredom	0.232	77	163.29	0.000
Situational Effects	0.814			

	Proportion of Variance Explained*			
	Situation Level Model		Individual Difference Level Model	
Model	var (β)	R^2	var (β)	R^2
Baseline	.9064		.2649	
Current	.8136	.10	.2090	.21

*23% of the variance in boredom is attributable to stable individual differences and 77% is attributable to situation level differences plus error.

variance can be explained by the model whereas the current model shows how much our model is actually explaining. Examination of the baseline model suggests that 23% of variance in adolescents' reported boredom can be explained by individual differences while the remaining 77% is attributable to situational differences plus error. The variance attributed to the individual difference level (23%) is calculated by dividing the baseline variance due to individual differences (.2649) by the total variance (.2649 + .9064). The R^2 scores are the proportion of variance at that level that is explained based on the proportion of variance that is possible. In addition to providing insight into the relative proportion of variance attributable to situational and individual differences, these baseline figures are also important because in an HLM analysis the ability of variables to predict the outcome is judged against only that proportion of the variance at the same explanatory level as the variable. Thus in examining the proportion of variance that can be ex-

TABLE 5
Relationship of Activity Type to Reason for Participation

	Had To % (*N*)[a]	Wanted To % (*N*)	Nothing Else To Do % (*N*)
Home Based	8.2% (4)	51.0% (25)	40.8% (49)
School Based	31.5% (23)	67.1% (49)	1.4% (1)
Social	2.9% (2)	76.5% (52)	20.6% (14)
Outdoor	1.9% (1)	85.2% (46)	13.0% (7)
Miscellaneous	17.5% (7)	60.0% (24)	22.5% (9)
Maintenance/Work	48.6% (17)	34.3% (12)	17.1% (6)

[a]*N* reflects the number of times an activity in the category was used as the focal activity for the activity diary interview.

plained by situational factors, we examined the proportion of variance within person attributable to reason for participation. Similarly, the success of intrinsic motivation, perceived parental monitoring, and gender in predicting boredom is examined relative to the between person variability.

The top of Table 4 provides information to test our hypotheses. The estimated coefficient for base boredom (2.056) represents the mean level of boredom across situations. The estimated coefficients for gender, intrinsic motivation, perceived parental monitoring, and reason for participation ("had to v. want to" and "had to v. nothing else to do") are the regression coefficients representing the relationship between each variable and boredom.

At the individual difference level, results indicate that adolescents with lower intrinsic motivation and lower levels of perceived parental monitoring are more likely to be bored ($p < .05$). Gender does not predict individual differences in boredom. Using data from the bottom of Table 4, we see that 21% (R^2) of the 23% of variance in boredom attributable to individual differences is explained by intrinsic motivation and perceived parental monitoring.

Because HLM cannot analyze categorical data, the three reasons for participation were dummy-coded into two dichotomous variables, with the "had to" condition serving as the reference category (coded 1). As indicated on the top of Table 4, adolescents participating in an activity because they "wanted to" were less bored than when they participated in an activity because they "had to" ($T(1,234) = 4.31$, $p = .000$). However, no difference existed between how bored adolescents were when they participated in an activity because they "had to" or because they "had nothing else to do" ($T(1,234) = .239$, $p = .812$). Ten percent (R^2, bottom of table 4) of the 77% of the within-person (i.e., situational) variance in boredom can be attributed to adolescents' reason for participating.

Influence of Context on Reason and Boredom. Does the reason adolescents participate in leisure activities" vary by activity type? Descriptive statistics presented in Table 5 suggest that they do. For outdoor, social, school-based, and miscellaneous activities, adolescents were more likely to "want to" do the activity, followed by "nothing else to do," and "had to" (except for school-based activity, where "had to" was the next most common reason). Although adolescents were more likely to "want to" participate in school-based programs, almost one third of the adolescents reported they "had to" participate in these activities. The only other activity with a relatively high proportion of "had to" responses was maintenance/work activities. There was almost a 50-50 split on reason given to participate in home-based activities between "nothing to do" and "wanted to." Not surprisingly about 41% of the time adolescents had nothing else to do, which was associated with some type of home-based activity. Social and miscellaneous activities (e.g., driving from airport) were also associated with having nothing else to do about 20-23% of the time.

The Effect of Reason on Boredom by Activity: To gain further insight into the nature of the relationship between reason for participation, activity type and boredom, mean levels of boredom were calculated separately by reason for participation within each activity type (Table 6). Again, due to the non-independent nature of the data, tests of significance were not performed. Although evidence for variability in boredom across activities existed, within each activity type the "wanted to" situation was associated with the lowest level of boredom. These results are consistent both with the HLM analyses and also with the interpretation that the relationship between reason for participation and boredom is not due to motivational differences in activity type.

Discussion

The purpose of this study was to help us better understand why adolescents are bored by contrasting two perspectives of boredom: psychologically

TABLE 6
Influence of Activity Type on Boredom During Leisure by Reason for Participation

	Had To		Wanted To		Nothing Else to Do	
	Mean (s.d.)	*N*	Mean (s.d)	*N*	Mean (s.d.)	*N*
Home Based	2.8 (1.71)	4	2.3 (0.89)	25	2.7 (1.03)	20
School Based	2.3 (1.22)	23	1.5 (0.64)	49	3.0 —	1
Social	2.5 (0.71)	2	1.7 (0.74)	52	1.9 (0.73)	14
Outdoor	1.9 —	1	1.5 (0.66)	46	3.0 (1.53)	7
Miscellaneous	3.1 (1.46)	7	2.0 (1.32)	24	2.9 (1.32)	9
Work/Maintenance	3.1 (1.33)	17	2.3 (1.23)	12	3.2 (0.75)	6

Boredom coded as: 1 = very involved and into it and 5 = very bored

based theories and theories related to social control and resistance. Through a series of analyses, we have painted a picture of adolescent boredom as experienced in free time activities using information about individual differences and situations. At the situational level, the results were as predicted. Having no choice (i.e., feeling pressured by external factors) or perceiving nothing to do (i.e., no optimally arousing options) were predictive of boredom, whereas being self-determined in activity choice (wanted to) was strongly associated with being involved (and not bored) in the activity. Furthermore, most of the variance in boredom came from situational factors (77% of the total possible to be explained), suggesting that adolescents are more prone to be influenced by "the moment" rather than those presumably stable individual difference characteristics they possess. At the individual difference level, we found mixed support for our predictions.

In the next sections we will discuss in more detail these findings, and where appropriate, offer developmental explanations or speculations. In particular, we will discuss developmental issues of autonomy, identity, and attention focusing. In some cases methodological issues will be discussed.

Social Control

Social control theory suggests that adult control may be associated with boredom in adolescent leisure experiences. We found mixed support for this contention, although the evidence to the contrary only explains a small proportion of variance and may be an artifact of measurement. In this study, the lack of autonomy ("I had to") clearly was positively associated with feelings of boredom. Perceived parental monitoring, however, was negatively associated with boredom. In the leisure literature, the role of parents in the leisure of adolescents has been minimally addressed. Although parental influences on youth leisure experiences have been explored from a purchase decision perspective (Howard & Madrigal, 1990) and from situations where parents were spectators in adolescent competitive sports (Leff & Hoyle, 1995), neither of these studies examined consequences of parental involvement on the outcomes (e.g., enjoyment, identity, and boredom) of adolescent leisure experiences.

In trying to understand why lower levels of parental monitoring were associated with boredom, it is important to consider the developmental stage of these 13 year olds. At 13, it is still probably considered reasonable and safe for parents to know where, what, and with whom the adolescent is engaged; thirteen year olds are in the early stages of making the transition to increased freedom in decision making. Thus, parental monitoring may not have been construed to be lack of autonomy, but rather was seen as supportive. Parental monitoring is associated with the authoritative style of parenting that is associated with enhanced engagement and performance in school (e.g., Steinberg, Lamborn, Dornbusch, & Darling, 1992). Our findings suggested that it is possible this effect carries over into a leisure context.

Other possible reasons may explain that higher levels of perceived monitoring by parents was associated with lower levels of boredom. First and most obvious, it could be that a parent had facilitated the experience in the first place, alleviating the adolescent from having to think of something to do. If this were the case, however, there would be a fine line between a parent facilitating an experience and a parent usurping autonomy. In other words, rather than having the perception that parental involvement with one's actions in free time was 'legitimate,' an adolescent might construe this involvement as over-controlling. In this case, according to both developmental theory and the social control/resistance theory of boredom, this situation would produce boredom. Thus, a future research question to address would be to determine whether level of perceived parental control was 'legitimate' or not, and how these perceptions relate to boredom.

Measurement issues are also important to consider. Our measure of parental monitoring was a general one, and not specific to the situation. As we saw from the HLM analysis, situation specific reasons for participating in the activity were stronger than individual difference variables. Finally, it is possible that parental monitoring was not a good measure of autonomy from parents. In sum, parental monitoring and parental influences on adolescents have not been well addressed by leisure researchers and this study suggests that further inquiry into this line of thinking might be productive.

Social control not only comes from parents, but also from other adults such as coaches and leaders of extracurricular activities. About one third of the adolescents in this study reported they "had to" do some of the school based extracurricular activities. A frequent activity reported on during the period of the activity diary was a play in which many adolescents participated. In many cases, these adolescents really wanted to participate. In other cases (almost one third of the time), they felt obligated, and as we reported, feeling obligated to participate was linked with a higher level of boredom. These results are consistent with Larson and Richards' (1991) finding that adolescents reported being bored 30% of the time during extracurricular activities. Note, however, that adolescents may want to participate in the extracurricular activity *in general,* although on a particular day they may have preferred doing something else. If further study supports these relationships, then the structure of after school activities should be consistent with the developmental process of autonomy formation and allow for more adolescent ownership of these activities so that choice and self-determined behavior are facilitated.

We have addressed the social control perspective considering adult structures and obligations as the controlling factor. Another consideration for future research is to examine whether the social control that peers have over each other produces the same results. The interactive decision making among adolescents in terms of deciding what to do may leave some adolescents feeling pressured or at least feeling like they lack control in some situations (Csikszentmihalyi & Larson, 1984; Hultsman, 1993). Evidence from an interpretive study on boredom of at risk youth suggested that social

control stemming from peer expectations is associated with boredom (Brake, 1997) but this relationship is a complex one.

Nothing to Do

The lack of anything else to do as a reason to participate in an activity was associated with higher levels of boredom than self-determined behaviors. Doing an activity because "I wanted to" implies that through self-determination and autonomy, adolescents are making an active choice of something do to. From a cognitive psychology perspective, this implication suggests that (a) these adolescents know of interesting things to do and (b) they have the skills and ability to carry out their desires. Perceiving nothing else to do indicates the opposite. In one sense, perceiving nothing to do might be the result of the inability to decide what to do. Kleiber and Rickards (1984) have suggested that although having free choice is critical to adolescents as they learn to increase their autonomy, actually deciding what to do might be extremely difficult. In part, Kleiber and Rickards suggested that this is because choosing an activity can be perceived as a reflection of who one is, and adolescents are faced with balancing the personal, peer, and parental demands on who they perceive themselves to be. Thus, doing something because the adolescent perceived nothing to do might actually be the result of an inability to choose something that satisfactorily balanced these perceived demands. Or, it could be that there was actually nothing to do.

Whether having nothing to do was real or imagined, or whether having nothing to do was based on an inability to choose something satisfactory, we do not know. The fact is that some adolescents in this study participated in an activity by default. In this case, the default choice did not carry the benefits of actively and deliberately choosing an activity. This conclusion is supported by much of the work of Silbereisen and his colleagues (e.g., Silbereisen, Eyferth & Rudinger, 1986) who discussed adolescent development from an "action in context" perspective. This perspective suggests that adolescents who are active producers of their own development (that is, make self-determined and deliberate choices) are healthier and more productive. In our research, we found a lack of deliberate choice undermined the leisure experience.

Larson and Kleiber (1993) suggested that because early adolescence is a critical period where one learns to focus one's attention, leisure activities that allow for, or even demand, self-controlled actions rather than other-directed activities (e.g., parents or coaches) are important to adolescent development. If adolescents could learn skills to help them direct their attention and focus on pleasurable leisure activities, they might learn to reduce the perception that there is nothing to do. It appears that some adolescents evolve naturally into the ability to self-direct, control, and focus their attentions but that others need assistance in learning how to do this. The ability to focus and direct one's attention increases with age; early on, adult structures actually help facilitate directed attention (Larson & Kleiber, 1993). But, as just seen, having to do a leisure activity due to adult structure is related

to increased boredom. Thus, again, a balance needs to be achieved between levels and type of control offered by adults. This suggests that gauging the developmental level of the adolescent in terms of ability to focus and control one's attention is important in judging the degree of structure or guidance needed. Future research could address this issue.

Other perspectives that provide insight into the default choice of nothing else to do suggest that boredom is an experience of inner conflict (e.g., Bernstein, 1975; Frankl, 1969; Keen, 1977) or ennui (e.g., Healy, 1984; Kuhn, 1976). These types of boredom are more deep-seated, chronic, not dependent upon external factors, and possibly more pathological. Harlow (1997) suggested that boredom is fashionable among today's youth, citing recent song titles as evidence (e.g., "Boring Summer" by CIV, "Bored" by the Deftones, "Being Bored" by Merril Bainbridge, and "Boring Life" by Far). He stated that music critics refer to this music as "angst and roll," and defined angst as melancholy and disdain for life's type of existential crisis. We do not know whether or not those adolescents who reported participating in an activity because of nothing else to do experienced this type of ennui as a way of being, or if truly there was objectively or perceptually nothing else to do. Future research on adolescents and boredom should not ignore this potentially productive perspective. This research might stem from an identity formation perspective. As adolescents mature, discover and create who they are, discovering or creating an identity based on boredom or ennui is not developmentally productive.

Our study findings are consistent with the long held understanding that intrinsic motivation and self determination, as hallmarks of leisure, are antithetical to the experience of boredom and are associated with high levels of being involved in an activity. To the extent that we can facilitate adolescent choice of activities, mitigate adult control and structure, or reduce feelings of obligatory participation, we can reduce feelings of boredom. From a developmental perspective, this autonomy enhancing potential of leisure is important.

This study has suggested that not only is boredom a complex phenomenon, especially when viewed within a leisure context, but also boredom might be linked to developmental processes such as autonomy development, cognitive agility, and possibly identity development. Future research that employs innovative and/or mixed method approaches is needed to continue to unravel the puzzle of adolescent boredom in leisure.

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