

# **DEVELOPMENT AND ENVIRONMENT**

**The Örebro Project**

**Department of Psychology  
University of Stockholm**

## **METHODOLOGY AND STRATEGY PROBLEMS IN LONGITUDINAL RESEARCH**

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METHODOLOGY AND STRATEGY PROBLEMS IN  
LONGITUDINAL RESEARCH\*

Magnusson, D. Methodology and strategy problems in longitudinal research. The Örebro project, Department of Psychology, University of Stockholm, No. 43, 1978. - The purpose of the paper was to discuss a few general problems in planning and conducting longitudinal research. As a background a short overview is given of a longitudinal project on individual development and adjustment, which started by the first data collection 1965. In the project two full age groups, born in 1952 and 1955 respectively, each consisting of about 1,100 boys and girls from Örebro, have been followed and investigated in extensive data collections for the total groups and in intensive studies for small, homogeneous groups. Three general problems in longitudinal research are discussed; (a) the profits of investigating successive age cohorts, (b) the advantage and problems connected with studying representative samples, and (c) information and communication problems in large scale data collections. In the discussion of the problems under (b) special interest is devoted to methods by which very heterogeneous samples of subjects with respect to intelligence and social background can be studied.

Key words; Longitudinal, age cohorts, person by situation interactions, information, communication

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Most researchers can understand that longitudinal research involves many problems, and problems which do not arise in traditional cross-sectional research, be it laboratory experiments or field studies. However, the full implications of planning, performing and reporting a longitudinal project cannot be foreseen by theoretical analyses alone. They must be learned through experience. The consequences of bad planning can be serious in cross-sectional studies but in longitudinal research they can be disastrous. The need for foreseeing problems and handling them effectively is therefore much greater in longitudinal research. In this report a few problems met in longitudinal research, especially in large scale studies of groups representative for ages, will be described and discussed against the background of experiences gained in a longitudinal project at our department. I have led this project in close cooperation with Anders Dunér.

## TWO TYPES OF LONGITUDINAL PROJECTS

The distinction between two types of longitudinal projects with respect to their ultimate aims may be appropriate and fruitful, namely between what will be designated *descriptive* longitudinal projects, and *problem-oriented* longitudinal projects. Each of them has its own characteristics with respect to the planning and carrying through data collections and to the analyses of the data obtained.

### Descriptive longitudinal projects

Characteristic for a descriptive longitudinal project is that a certain variable or variables are studied as a function or functions of age. The parameters considered may be means, ranges, distributions, inter-correlations (stability and change in patterns of correlations over time, longitudinal stability of single variables, etc.) for such variables as intelligence, achievement, interests, etc. (See e.g., Bayley, 1955; Block, 1971; Magnusson & Backteman, 1977a, b).

Descriptive longitudinal studies imply the investigation of the same variable or variables over time. Once the decision has been made as to which variables are to be studied, they remain the same and are covered by data collected when the subjects reach certain ages. The problems in this kind of research are mainly two.

First, one and the same psychological variable, say an intelligence factor or anxiety, may (a) change its psychological content, and/or (b) change its manifest expressions insofar as they can be studied by standardized tests, self-ratings, or ratings by others. This implies that using the same instrument or method for data collection does not guarantee that the same underlying psychological variable is actually studied. The same method for data collection applied to the same verbally defined variable may actually cover different psychological characteristics of the individuals at different ages. Therefore, the choice of data for investigating the variables under consideration at different stages of development is an important problem.

Secondly, there are the general problems involved in measuring change, whether it is a matter of choosing the relevant unit for developmental curves or a matter of interpreting and comparing patterns of correlations at different ages.



## Problem-oriented longitudinal projects

Problem-oriented longitudinal projects, rather than studying development for a given set of variables, are directed towards investigating a certain problem or set of problems by following individuals over a period of time. Such studies may concern the development of criminal behavior, or the educational and vocational career. A problem-oriented longitudinal project implies the same main problems as those involved in descriptive projects, i.e. the choice of appropriate methods for data collection, once the variables have been defined, and the choice of appropriate ways of measuring change. These problems will be even more accentuated in problem-oriented projects. Moreover, problem-oriented projects deal with variables which will not necessarily, and perhaps not very often, be the same at different ages. They cannot be chosen once and for all. A problem-oriented longitudinal project, then, requires very careful planning and a heavy word load not only from the beginning, but also at every new stage, in order to ascertain which variable should be investigated and which methods are the most effective. The demands on the care and sophistication of the data analysis are also heightened considerably, since, for one matter, we are faced with different kinds of data for different variables at different ages.

### THE ÖREBRO PROJECT - A PROBLEM-ORIENTED LONGITUDINAL PROJECT

Thirteen years ago, 1965, the first data were collected in a problem-oriented longitudinal research project, called the Örebro project, from the name of the town in central Sweden where it is being performed.

#### The main purpose

In very general terms, the aim of the project is to study how an individual's life situation as an adult, as it can be described by others and as it is experienced by the individual himself, has its roots in a developmental process in which potential person factors interact with physical, social, and psychological factors in the environment,

This general formulation of the purpose had to be broken down into more specific terms to be useful for steering the planning and performance of the project. From the start, data collection and data treatment have been concentrated on a few problem areas, of which the main ones are the following:

1. The predictive value of early indicators of possible maladjustment.
2. Stability of single adjustment symptoms or patterns of symptoms, and sequences of changes (see Magnusson & Backteman, 1977a, b).
3. The educational and vocational career and its impact on the life situation (see Dunér, 1978; Ekehammar, 1977, 1978).
4. The developmental process underlying criminal behavior among boys (see Olofsson, 1971).

5. Overachievement as a stable person characteristic and its long-term consequences for the adult life situation (see Bergman & Magnusson, in press; Magnusson, 1976a, 1978).
6. Norms and values and their role for the adult life situation (see Henriksson, 1973).
7. Neglect, isolation, and rejection at the age of eleven, and their relation to the adult life situation (see Zettergren, 1978).

Other studies have been performed, e.g., one concerning creativity and its relation to adjustment at school.

#### Two crucial concepts; extrinsic and intrinsic adjustment

Two major aspects of individual development and the life situation have played a crucial role in the planning and carrying through of the investigation and in the planning of future research, namely *extrinsic* and *intrinsic* adjustment.

Extrinsic adjustment refers to the degree of agreement between an individual's factual behavior and achievement on the one hand and the demands and expectations directed at him, as a consequence of his roles in family life, working life, social life, and so on, on the other. We mean the individual's way of dealing with his potential capacities in relation to the demands from his environment, completely divorced from the positive or negative value we might like to attach to such an adjustment. Extrinsic adjustment is the individual's life situation as it can be observed and evaluated by others.

Intrinsic adjustment refers to the individual's own perception of and satisfaction with his family life, working life, social life, etc. Thus, intrinsic adjustment is the individual's life situation from his own point of view.

#### Subjects

In view of the project's purpose, it was desired that the sample of subjects should be as representative as possible for the age group. In order to minimize sampling problems as well as the crucial problem of drop-out during the following up stages, and to permit a more intense investigation of environmental factors, it was decided to study a complete age group in one local area, rather than to take a representative sample of individuals from all over the country. Such a strategy also makes the planning and performing of the data collections less expensive and less time consuming.

The final decision was to perform the study in Örebro, a town in Sweden with about 100,000 inhabitants, with a differentiated school system at different levels, and with a heterogeneous industrial structure. Data from the project have shown that the socioeconomic standard there is somewhat higher than the average for Sweden.

Two age groups of pupils from the Örebro school system formed the subject groups of the project, one consisting of the pupils born in 1955,



the other of those born in 1952. The first of these age groups has been our *main group*, and the second our *pilot group*. Each of the groups consisted from the beginning of about 1,000 boys and girls,

The number of pupils for whom data are available for different age levels and the number who have been followed over different time intervals are presented for the main group in Table 1.

The start populations of the pilot and the main group were defined as those who attended the local schools in the spring of 1965, when the first data collection took place. This means that institutionalized children were excluded from the investigation.

Table 1. Sizes of groups for which data exist for different grades and combinations of grades. Main group.

Grades	Boys	Girls	Total
Total grade 3	515	510	1,025
Total grade 6	543	557	1,100
Total grade 8	600	590	1,190
Total grade 9	609	578	1,187
3, 6 and 8	421	440	861
3, 6 not 8	31	27	58
3 and 6	452	467	919
6 and 8, not 3	81	65	146
6 and 8	502	505	1,007
8, not 3 or 6	94	83	177
3 and 9	418	431	849
3 and 11	264	234	498
3 and 12	102	85	187
9 and 11	358	306	664
9 and 12	141	114	255
3, 6, 8, 9, 11, 12	101	85	186

### Variables

As underlined in the introduction, the developmental process in which an individual's adult life situation has its roots is regarded as a continuous interaction between person factors and environmental factors. Physical, social and psychological factors in the environment are highly influential. The interaction is bidirectional; the individual is an active agent in the process and affects his environment in many ways. These statements are fundamentals in an interactional model of behavior (see Endler & Magnusson, 1976; Magnusson, 1976b; Magnusson & Endler, 1977). The interactional view leads to the conclusion that it is essential to investigate both person and environment factors to understand the developmental process in which an adult's life situation has its roots. Once this conclusion has been formulated, it seems obvious. Even so, it has not had the impact one might expect on actual research strategies for investigating development.

*Person variables.* On the person side one of the basic principles behind the planning of the strategy in the present project has been to

study both psychological and somatic variables. Too much research on development has failed to consider the inevitable, continuous interaction between psychological and somatic factors in the individual development process. Obviously, the character of the data collected on psychological variables in a certain situation may be strongly affected by the somatic status of the person in that situation. A good example is motivation; if this is studied at puberty in psychological terms only, without considering the individual's somatic status, one may be grossly misled.

Totally a large number of person characteristics have been covered, using various methods for data collection. The variables can be separated roughly into (1) person variables of trait character with a subdivision into (a) psychological, and (b) somatic variables, and (2) adjustment variables with a subdivision into (a) intrinsic and (b) extrinsic adjustment variables. This categorization, which is used below to present the variables studied for the main group is arbitrary. Some of the variables could be classified both as trait and as adjustment variables, for example.

*Psychological trait variables.* Table 2 lists the psychological trait variables, with comments as to when data collections were made, whether data were collected for the total main group or for a sample, and the methods used.

Table 2. Psychological trait variables.

Type of variable	Total group investigation	Sample investigation	Investigation year
1. a. General intellectual capacity	Objective tests		1965, 1968, 1970
b. Creative ability	Objective tests		1968, 1971
c. Aspiration level	Vocational questionnaires		1968, 1970, 1971, 1973, 1974
	Vocational differential		1968, 1970, 1971
	Teacher ratings		1965, 1968
d. Norms, attitudes, evaluations	Semantic differential technique		1965, 1968, 1971
	Student questionnaire, situations		1969
	Vocational questionnaire		1968, 1970, 1971, 1973, 1974
	Vocational differential		1968, 1970, 1971
	Student questionnaire, self-report		1971
	delinquency		
	Student questionnaire		1971, 1973, 1974
e. Interests and activities	Student questionnaire		1968, 1971, 1973, 1974
f. Personality	Inventory		1973
2. General emotional level (anxiety, uneasiness, depression, etc.)	Student questionnaire symptoms		1970

*Somatic trait variables.* A representative sample of 225 boys and girls was investigated with respect to a number of somatic variables. These were chosen to cover brain activity (EEG), hormonal function (urinary excretion of adrenaline and noradrenaline) in neutral and in stressful situations, physical capacity (ergometer cycle measures, lung capacity, etc.), and biological age (ossification measure). The total main group underwent a medical examination, which illuminated various aspects of somatic status. The variables measured, the ages at which data were collected and the methods for their collection are reported in Table 3.

Table 3. Somatic variables.

Type of variable	Total group investigation	Sample investigation	Investigation year
a. General physical capacity (working capacity)		Cycle ergometer test	1967
b. Neuropsychological situation		Electroencephalogram	1967
c. Hormonal excretion		Adrenaline and noradrenaline measures	1967
d. Biological age		Measures of ossification	1970
2. Total somatic status		Medical examination	1966

*Extrinsic adjustment variables.* Roughly, an individual's extrinsic adjustment can be expressed as (a) the degree to which he uses his potential capacities to meet demands and expectations as to achievement, and (b) the extent to which he meets demands and expectations as to social behavior. Table 4 lists the variables chosen to cover these two aspects of extrinsic adjustment.

Table 4. Extrinsic adjustment.

Type of variable	Total group investigation	Sample investigation	Investigation year
1. Scholastic achievement	Objective tests		
a. Absolute achievement	Objective tests		1965, 1968, 1970
b. Achievement relative to the individual's capacity	Objective tests		1965, 1968
c. Grades			1965, 1968, 1971, 1973-74
2. Social behavior			
a. Behavior in relation to classmates	Peer ratings Sociometric methods		1965, 1968 1965, 1968, 1970
b. Behavior in classroom	Teacher ratings	Teacher interview	1966 1965, 1968, 1971
c. Behavior at home	Parent questionnaire	Teacher interview	1966 1965, 1968
d. Behavior in society	Register data Student questionnaire		1967 1968, 1970, 1971

For achievement, two measures are reported in Table 4; "Absolute achievement" denotes the level of achievement as expressed by sums of scores for objective, standardized tests or by grades; "Relative achievement" refers to factual achievement in relation to intelligence capacity, as measured by intelligence tests. One way of expressing individual relative achievement is to take the difference between the actual score on an achievement test, for example, and the predicted score on the same test for the same individual based on his intelligence level. If this difference is positive, i.e. if the individual achieves more than could be expected from his intelligence level, he may be called an overachiever; if the actual achievement is lower than expected, he may be called an underachiever. The measure of relative achievement has proved to be a very useful person characteristic (see Bergman & Magnusson, 1976; Magnusson, 1976a).

*Intrinsic adjustment variables.* As defined earlier, data for intrinsic adjustment are best obtained from the individual himself, via his own descriptions of how he feels about his situation. Indirectly, an individual's satisfaction with his life situation may be evaluated from information from other persons, e.g., by ratings of dependency, security, disharmony, etc.

The main variables for intrinsic adjustment are reported in Table 5.

Table 5. Intrinsic adjustment.

Type of variable	Total group investigation	Sample investigation	Investigation year
1. Experienced satisfaction of needs, etc.			1965, 1968, 1970, 1971, 1972, 1973-7
a. Total experience of school	Student questionnaire Vocational questionnaire	Student interview	1968, 1970, 1971, 1973, 1974 1966
b. Experience of school work	Student questionnaire	Student interview	1965, 1968, 1970, 1971 1966
c. Experience of teacher contact		Student interview	1966
d. Experience of peer contact	Student questionnaire Student's ratings of own sociometric status	Student interview	1965, 1968, 1971 1966
e. Experience of parent contact	Student questionnaire		1969, 1970, 1971
2. Experienced somatic symptoms	Student questionnaire		1965, 1968, 1971 1966
3. Symptoms in behavior (disharmony, confidence, well-being, etc.)	Teacher ratings Parent questionnaire Peer ratings Student questionnaire symptoms	Teacher interview Parent interview	1965, 1968, 1971 1965, 1968 1965, 1968 1970 1966 1966



Environmental variables

In the presentation of the Örebro project, Magnusson, Dunér and Zetterblom (1975) discussed how the physical and social environmental factors influencing individual development and individual behavior can be described on different levels, in micro- and macro terms. This distinction has been elaborated more recently by Bronfenbrenner (1977).

The social and the physical environmental variables which have been covered are reported in Table 6.

Table 6. Environmental variables.

Type of variable	Total group investigation	Sample investigation	Investigation year
1. School environment			
a. Teacher relations	Teacher ratings		1965, 1968, 1971
b. Peer personality	See Individual variables		
c. Peer relations	Sociometric measures		1965, 1968, 1970
2. Home environment			
a. Economic situation of home, dwelling standard, etc.	Parent questionnaire		1965, 1968
b. Parents' educational level	Parent questionnaire		1965, 1968
c. Attitudes and norms of parents		Interviews	1966
3. External dwelling environment	Social ecological data		1969
4. Material standard of the school	Social ecological data		1969

The variables listed in Table 6 all represent micro-aspects of the environment, the home, the classroom, the schoolgrounds, and leisure-time facilities. The characteristics of the physical environment at school, at places for leisure activities, on the way from home to school, etc., have been mapped in socio-ecological studies.

For some studies, macro-aspects have been and will be of special interest. This is, for example, the case when we need information about the labour market, in order to evaluate the vocational and educational career for individuals and groups.

Data collection

Since the start of the project, large-scale data collections have been performed regularly on the subjects of the whole main group at ages judged to represent essential stages in development, i.e. 10, 13, 15 and 16 years. Data for specific variables were collected at appropriate stages. For example, data relevant for the study of the educational and vocational career were collected each time the subjects had to make a choice as to what educational program to follow.

*Sample investigations* have been performed in two main studies. Data for somatic variables were collected for a sample of about 225 boys and girls. In a study of aspects of social neglect and/or mobbing a sample of 90 boys and girls has been analyzed intensively. One study involved a close examination of drop-out from school. In these cases the appropriate data could be obtained for only one individual at a time. Data collection for the whole group would have been too expensive.

The data collected fall into three categories.

(a) *Basic information* on total groups. Data have been collected on pupils at the ages of 10, 13 and 15 years (grades 3, 6 and 8) concerning the following main areas, and using the following main methods:

<u>Area</u>	<u>Methods for data collection</u>
Domestic background, domestic situation	Parental Questionnaire
Intrinsic adjustment, satisfaction etc.	Pupil Questionnaire
Classmate relationships	Sociometric methods
Extrinsic adjustment: behavior in school at home in society	Teacher Ratings Parental Questionnaire Public records
Intelligence, knowledge	Tests and grades given on report cards
Attitudes and values	Semantic Differential

(b) *Information concerning special problems* collected in the course of sub-projects and applying to *total* groups, e.g.:

<u>Area</u>	<u>Age</u> <sup>1</sup>	<u>Methods for data collection</u>
Norms	15	Situation Inventory
Symptoms (girls)	15	Questionnaire
Criminality (boys)	16	Questionnaire, Situation Inventory
Study and vocational decisions	13-19	Questionnaires Semantic differential
Goals, values in life	18	Questionnaire

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<sup>1</sup> School start is at 7. Grades 1-9 are in comprehensive school. In grade 3 most children are 10, in grade 6 they are 13 and in grade 9 they are 16. Upper secondary school (gymnasium) has three grades, the students are 17-19 years old.

(c) *Information concerning special problems* collected in the course of sub-projects and concerning random samples from the total group, Used when expensive methods are necessary, e.g.:

<u>Area</u>	<u>Age</u>	<u>Methods for data collection</u>
Social relations (N=90)	10-12	Interview etc.
Biological variables (N=225)	13-15	EEG, hormone analysis, ossification measurements, physical achievement capacity
Drop out problems	16-17	Interview, questionnaire

#### Follow-up in adult life

The primary aim of the project is to study the interaction between an individual's person characteristics and environmental factors in development and to see how this interaction leads to his adult life situation. This means that the final information is not available until adulthood and that criterion data have to be collected at that age. The main issues of the project can be properly elucidated only when we have data on the life situation of our subjects as adults.

*Life-situation investigation.* Our subjects will be 25 years of age in 1980. At that time almost all of them have passed through the educational system and will have taken their place on the labour market. A follow-up study covering the life situation of our subjects is planned for performance at that time.

The life situation can be seen from two angles, both of which will be studied in the follow-up in adulthood,

1. The life situation in terms of *factual conditions* and states: somatic status, work, education, family life, leisure activities, cultural activities, etc.
2. The life situation in terms of *subjective experience*: satisfaction with respect to work, family life, leisure activities, etc.

*Extensive and intensive data.* Two kinds of extensive data, i.e. data for the total main group, will be collected, namely (a) data from public records, and (b) inventory data. Data of the first kind have proved very useful in other studies. As regard inventories, our experience of earlier data collections indicates that our subjects are willing to answer these, even when considerable time has passed since they left school.

*Intensive data* will be collected for groups of individuals, either drawn at random to be representative of the total group or defined by some criterion related to a particular problem. In studying these cases, all extensive data can be used as well as data that have been collected on a group, for some specific aim. These data collections will also be performed by instruments that have to be administered individually, e.g., interviews.

*Investigation of the total group.* The total group of subjects is fairly representative of the total age group in the country. It will be of interest in itself to describe the life situation, with respect to different aspects of extrinsic and intrinsic adjustment, for a whole group with this composition. One central question to be dealt with using the data on the total group is the role of educational and vocational career in the life situation.

*Studies of specific groups.* Right from the early planning stages, the collections of data have been steered by an interest in certain main aspects of adjustment and development, criminal behavior, norms and values, educational and vocational career, and so on. During the course of the project, other problems not formulated originally have attracted attention and become a focus of interest.

One strategy for studying specific problems within the general frame of reference is by studying groups of individuals, defined by criteria relevant for the problem in question. This strategy can be fulfilled in two ways. (a) By defining a group of subjects who, at an early age, say eleven, meet the criterion, and following them until adult life. (b) By defining a group of adult individuals and looking at them, in an absolute sense or in relation to the total group, in terms of appropriate variables at different stages of development.

In another strategy the interest is directed not towards groups, but towards variables and their cross-sectional and longitudinal relationships.

Using the two main strategies, the following five sub-projects are in focus as we plan the follow-up in adult life.

#### 1. The development of socially neglected and mobbed children

The life situation at home, at school, and during leisure time of fifteen boys and fifteen girls who were isolated, neglected or mobbed in their school-classes, was studied when these children were 10 to 11 years of age. As a control, the life situations of the same numbers of popular boys and girls and of randomly chosen boys and girls were investigated. The follow-up data hitherto collected on these 90 pupils will be available in the form of a report in the summer of 1978 (Zettergren, 1978). What is now planned is a specific follow-up of these boys and girls at the age of 25.

It must be important to learn more about the possibility of good adjustment in adulthood for boys and girls who have been socially neglected, isolated or mobbed during school years. The cases where development has been more successful or more positive than expected should be particularly worth investigating. Interest is focused on (a) actual incidents in the individual's life, (b) life circumstances after school, (c) attitudes and values expressed by the individual as an adult, (d) the description and evaluation given by the adult individual of his actual situation at the age of 11 and of what has happened to him/her from early age to adult life.

#### 2. Overtly criminal boys & men

A follow-up in adulthood will be made of the boys who were overtly criminal at the age of 15-16. This study will also include men who are



registered in public records for criminal acts as adults without having done so at the age of 15-16 according to our data,

A follow-up will enable us to test the prediction models for criminal development which have been evolved in the project,

### 3. Overachievement - overconformity - type A-behavior

During recent years, particularly in the context of research on stress in working life, much interest has been devoted to a certain personality type, characterized by type A-behavior (see Friedman & Rosenman, 1974). Related to type A-behavior - though not identical - is overachievement, i.e. achievement above that expected for a given intelligence (see page ), Two results of interest for this issue have been obtained in the project: (a) The measure of relative achievement, i.e. the difference between actual achievement and predicted achievement, is a fairly stable person characteristic for both boys and girls from the age of 10 to the age of 16. (b) A strong correlation exists between relative achievement and urinary adrenaline output in a stressful examination situation in boys but not in girls. These findings led to the formulation of a series of follow-up studies, designed to illuminate the long-term consequences of an habitual overachievement pattern of behavior, and of sex differences in this respect.

In this context we shall also investigate the group of individuals who had what may be called an overconformity pattern of behavior at an early age. There are some indications in our data that overconforming boys and girls show below-average intrinsic adjustment, i.e. lower satisfaction, lower self-confidence, etc.

### 4. Predictive value of early indicators of maladjustment

One of the main questions in the project has been the predictive value of early symptoms of possible maladjustment, for example, exaggerated aggressiveness, strong anxiety, strong inhibitions, etc. To what degree are such symptoms indicators of deep disturbance, with long-term consequences for the individual's extrinsic and intrinsic adjustment in adult life?

### 5. The reliability and validity of retrospective data

One of the follow-ups planned will provide unique possibilities for studying the reliability and validity of retrospective data. Such data are used to a large extent as bases for far-reaching conclusions, both in research and in practical contexts, for example, in guidance, admissions and placement, without their value in such connections having been investigated sufficiently.

## SUCCESSIVE AGE COHORTS

As described we follow subjects of two age groups, those born in 1952 and those born in 1955. The first one constitutes our pilot group and the second our main group. The strategy of using two age groups differing by at least a few years in age, was chosen for several reasons. It has obvious advantages with respect to resources and scientific outcome.

Performing a longitudinal project implies a series of theoretical, methodological, strategical, and practical problems. The outcome of the project is dependent upon the effectiveness with which the problems have been foreseen and handled from the beginning and at each stage of the project. A mistake at any stage of a longitudinal project will have much more serious and far-reaching consequences for the researcher than a mistake in a laboratory experiment. It is not possible to start anew, and the effects of a single mistake will follow and influence the project to its end. However, even with very careful planning, it is not possible to foresee and handle all the problems, e.g., drop-out, choice and constructions of instruments, environmental conditions, etc. in the most effective way. Important lessons are learned at every stage of a longitudinal project. It would have been of great value if the information thus gained had been available from the beginning.

By using two age groups of which the first serves as pilot group, it has been possible to gain experiences and information which have been invaluable for planning and performing data collections and data analyses on the main group. Besides experiences of the local environmental conditions for our project, in physical, organizational and personal respects, the pilot group has given us pilot data for comparison with data on the main group, as well as the possibilities of pretesting our instruments, testing our preliminary hypotheses and predictions, and separating age effects from temporary environmental effects.

#### Panel data

Following a group of individuals over time with successive collections of data will introduce two kinds of possibly irrelevant variance in data. First, we may have a test training effect. The subjects get used to the instruments, and the extent to which individuals direct their interest to problems in different domains of experiences and knowledge is influenced by the content of tests and inventories with which they have had to work. Second, the circumstance that the individuals are conscious of being the subjects of special interest may affect the information they deliver in different types of data both positively and negatively. Both these effects can be linear and interaction effects.

By using more than one age group, on which the collection of data starts at different ages, it is possible to estimate, to some extent at least, the linear effects of testing the same group successively.

#### Testing of instruments

Instruments for data collection may be geared specifically to the nature and aims of a given project. This has been the case within the Örebro project. To cover essential areas in the educational and vocational career and in the development of criminal behavior, for example, we have constructed new instruments, mainly inventories. Pretesting such instruments on the pilot group, composed of the same types of subjects from the same local area under the same environmental conditions provides especially effective information as to how the instruments should be reconstructed before using them on the main group.

#### Testing of hypotheses

Our project does not aim at testing a certain personality theory for development. Nor has the data collection been steered by one

and the same general personality theory. At each stage of the project, the variables to be covered have been formulated, and the choice of methods for data collection and analysis has been made with regard to the specific aim of the subproject. Moreover, the psychological knowledge and the theoretical analyses available for the specific problem area have been taken into consideration.

Data from the pilot group have made it possible to evaluate the effectiveness of the original set of hypotheses and predictions and to revise them for the main group.

#### Separating age effect - environmental effects

Person variables of central interest in longitudinal projects may be influenced, sometimes very strongly, by environmental factors. These factors may be specific for some individuals but they may also hold for the whole group. They may be linear or interactional. In a static society these factors would not need to be considered in the collection and analyses of data, since they would be the same for the next generation and would be part of the general development of all individuals. However, our society is characterised by rapid and important changes in cultural factors such as norms, values, modes, and ideologies, as well as in the labour market, in the attitudes to higher education and work etc. Strong changes in the environment in respects essential for the behavior of individuals and groups must thus be taken into account.

It is important to separate general age effects from environmental effects, and this can be done most effectively by studying different age groups composed in the same way and living in the same local environment. A good example can be taken from the area of educational and vocational career. From the time at which the subjects in our pilot study were about 13 years of age and had to make their first choice in their educational career, to a few years later, the situation in the labour market has undergone dramatic changes. The fact that we had data from two age groups differing by three years gave us the possibility of observing the effects of these changes on the willingness and interest to go on to higher education, among other things, and of estimating the strength of these effects.

#### REPRESENTATIVE SAMPLES - ADVANTAGES AND PROBLEMS

The definition and choice of the sample or samples of individuals to be studied depend on the purpose of the project. The individuals which form the age groups in the Örebro project are supposed to be representative for the age groups. Thus they represent a wide range of intelligence and social background. The advantage of studying data on groups thus defined is obvious; we would hardly have been able to reach our aim as effectively with a selected group. For example, data for basic variables for the total group form the frame of reference for the interpretation of data for any given subgroup, which may be defined in terms of one or a set of characteristics and studied in specific respects. However, when the interest is in data for the total groups of individuals, using a group of individuals with such a wide range of intelligence and social background, creates serious methodological problems. These must be considered and dealt with in planning the data collection and data analyses. One such problem concerning the methods for data collection will be dealt with here.

In our studies of the whole age groups we have used inventories to cover important aspects of the development. Inventory data usually contain systematic and unsystematic variance caused by the existence of irrelevant factors. Well-known effects of this type are those designated as social desirability, acquiescence, etc. Such factors may influence data in a linear way, and in an interactional way as well.

We have had to face and eliminate the problem that individuals differing in intelligence and/or in other personality variables related to social background, for example, may interpret our instructions, questions, and alternatives in procedures for data collection differently, thus introducing an irrelevant variance of unknown size in our data. When reliable data are available for intelligence or other variables which we want to control we can do so by statistical methods, partial regression analysis, and covariance analysis, for example. However, if no special considerations have been taken, irrelevant factors may influence even highly reliable measures. There are strong reasons to analyse possible sources of irrelevant variance carefully due to the fact that we have unrestricted groups of individuals, and to try to avoid them as far as possible.

The problem is not unique to our project or to other longitudinal projects; it holds true for all research using unrestricted samples of individuals. In all these cases it is fundamental to consider it carefully.

#### Minimum level of intelligence

The first problem in choosing inventories or constructing new ones for data collection at a certain age level is the minimum level of intelligence among the subjects. The items should be *understood* by everyone, i.e. also the least intelligent individuals. For many groups it is therefore necessary to formulate instructions, items, and alternative answers in very simple, concrete terms. In inventories in which the subject has to mark one of a number of alternatives, even subjects with a very low level of intelligence can mark one alternative without understanding its meaning. It might be difficult to ascertain to what extent this is the case, if the problem is not given special consideration. Since it is obvious that it is essential for all subjects to understand the questions, the instruction and the alternatives, e.g., pilot studies can be used to see if this is the case before the main data are collected.

#### Control of intelligence level and social background as irrelevant factors

However, it is not enough that all the subjects understand the instructions, the questions, and the alternatives. They should also understand and interpret them in the same way, and in the way which the researcher has intended. Due to differences in intelligence and/or in social background, individuals may understand and interpret instructions, questions and alternatives differently, thus answering different questions.

One way of avoiding this problem, to some extent, is to formulate the instructions, questions and alternatives in very simple concrete terms, which hopefully have the same meaning for all subjects. However, even if this strategy is possible to carry out in some cases for some limited purposes, it is not sufficient for avoiding the effects under consideration. As soon as we want to cover variables which have to do with attitudes,



values, norms, etc. we cannot avoid formulations which can be interpreted differently by subjects with different intelligence and/or different social background. And in most cases we still have the effects of social desirability, and acquiescence. Thus there is an obvious need for data to be collected for important variables with methods by which the factors I have described are minimized.

In our project the problem was especially relevant when we wanted to study such areas as norms and norm conflict among teenagers, and criminal behavior among boys. Inventories covering such areas would be especially sensitive to the irrelevant factors which we wanted to avoid. Traditionally, in studies of norms, for example, the subjects have to answer a series of general questions, concerning their own, their peers', or their parents' views. In an attempt to improve the control the irrelevant factors right from the start of the collection of data, we have chosen another procedure, which will be described.

### Situation inventories

In a subproject on norms and norm conflicts among teenagers we were interested in elucidating the questions as to whether there is *one* teenage culture or distinct subcultures and as to how the norms and evaluations of teenagers are related to norms and values among peers and parents, as they are experienced and estimated by the youngsters. The study included two main parts; one in which the evaluations and expectations by the youngsters were investigated, and one in which the behavior intentions were studied.

The intention was to minimize the effect of differences in intelligence and social background in understanding the instructions, the questions as much as possible.

The following ten situations, each involving the breaking of a specific norm, were formulated in concrete, verbally simple terms.

1. Tomas is walking down the aisle in a department store. He has no money but he is longing for sweets. There is a whole shelf with sweets; it is unguarded and he is tempted to steal a box of candy.
2. Björn has never smoked hashish. One day he meets some friends in town and they say that they have hashish. They ask if he wants to try but he is hesitant.
3. On his way to school Kalle meets some friends who are free from school and want to do something fun together. Kalle is tempted to play hookey.
4. Magnus has to be home at a certain time every evening. One evening he meets some friends in town and they are going out to the country. They won't be home until very late. Magnus is tempted to go with them but he hesitates over staying out that late without permission.
5. It is exam time, but Johan has not had time to prepare himself. It is important for Johan to succeed. He has a cheat-sheet with him. He hesitates over whether to use it.

6. In his class Anders has a friend who is using drugs. Anders is worried about him and thinks that he needs help to stop his abuse, but the friend doesn't want any help, Anders hesitates over whether he should tell the school medical officer or nurse about his friend.
7. Leffe meets some friends one evening and they have lots of beer and wine. He has never been drunk but the others are drinking heavily, He feels a bit dizzy. He is afraid that he will drink so much that he gets drunk.
8. Per has been dating a girl for some time. One evening he is at her place when her parents are away. They like each other very much, but Per is not certain whether they should use the opportunity to have sexual intercourse.
9. Bo's friends loiter about town every evening. They usually stand talking at the street corner or sit in a café. Bo finds himself hanging out with them more and more often. He wants to be part of the gang but he hesitates over whether to loiter about town every evening.
10. Lars' parents have forbidden him from going to "parent free" parties. He is invited to that kind of party and wants to go. All his friends are going but he hesitates over whether he should go and disobey his parents' orders.

For each situation the subjects had to answer five questions:

1. If your peers found themselves in the same situation as Tomas what do you think they would do?

- My peers -

would absolutely not	would probably not	would perhaps not	I am not sure whether they would	would perhaps	would probably	would definitely
<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5	<input type="checkbox"/> 6	<input type="checkbox"/> 7

take a candybox (shop-lift)

2. To be quite honest, what would you do in such a situation?

- I myself -

would absolutely not	would probably not	would perhaps not	I am not sure whether they would	would perhaps	would probably	would definitely
<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5	<input type="checkbox"/> 6	<input type="checkbox"/> 7

take a candybox (shop-lift)

3. What do you believe your parents think you would do?

- My parents think that I -

would absolutely not	would probably not	would perhaps not	I am not sure whether they would	would perhaps	would probably	would definitely
<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5	<input type="checkbox"/> 6	<input type="checkbox"/> 7

take a candybox (shop-lift)

4. How do you think your parents and your peers would react, if they found out that you had shop-lifted?

	would probably not worry	would perhaps not worry	I don't know how they would react	they would probably disapprove	they would de- finitely dis- approve strongly
My parents	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5
My peers	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5

5. Have you yourself shop-lifted?

Never	<input type="checkbox"/> 1
Once	<input type="checkbox"/> 2
2-3 times	<input type="checkbox"/> 3
4-10 times	<input type="checkbox"/> 4
more than 10 times	<input type="checkbox"/> 5

The inventory is presented in Appendix A.

This strategy has the advantage of directing the interest towards norms in terms of true-to-life *acts* instead of directing it towards the abstract content of verbal statements. Defining norms and norm breaks in terms of specific acts in given situations may reasonably be assumed to provide a greater probability (a) that the subjects understand easily, precisely and similarly to which norm a possible break refers which in turn implies (b) that they are taking a stand concerning the same norm break.

The data from such an inventory can be used as data from traditional inventories are used, i.e. by summing scores across situations to arrive at a sum score of behavior intentions and estimated intentions among peers and parents. However, besides the advantageous psychological and methodological effects which were mentioned above, the type of data obtained from situation inventories is especially useful for analyses in the interactional frame of reference. During recent years the interest in personality research has been devoted to the person-by-situation interaction in which behavior develops, both in learning process over time in a series of situations, and in a specific, actual situation (see e.g., Endler & Magnusson, 1976; Magnusson, 1976). In the interactional model of behavior, the continuous bidirectional influence of person and situation factors has been the focus of much debate and research.

One central assumption in an interactional model of behavior is that the characteristics of individuals are to be sought in their specific patterns of stable and changing behaviors across situations of different kinds. In that frame of reference the question of the existence of one homogeneous teenage culture was investigated in the following way, using latent profile analysis for the treatment of data,

Latent profile analysis categorizes individuals in homogeneous groups on the basis of their profiles, in this specific case on the basis of their profiles of behavior intentions across situations. The method has the advantage of not requiring any specific type of distribution of data or linearity in the relationship among the variables. The advantages and weak points of the method have been discussed by Mårdberg (1973), among others.

In Figure 1 the outcome of the analysis is presented. It is indicated that we can separate five subgroups of individuals, each with its specific, characteristic profiles of behavior intentions across a number of relevant norm situations. The meaningfulness of the grouping of individuals in these five subgroups has been investigated by testing predictions about the relationships between subgroup identity and other psychological characteristics. The calculations show that the subgroups differ in predictable ways with respect to other variables at the same age, and sometimes even at the early age of ten. Differences in cross-situational profiles for behavior intentions thus reflect different life styles, strongly questioning the rather common assumption that a homogeneous teenage culture exists.

#### INFORMATION AND COMMUNICATION IN LARGE SCALE LONGITUDINAL RESEARCH

The success of longitudinal research is dependent upon the cooperation of individuals not only on each testing occasion but also continuously. To form and to maintain cooperative relations to the subjects are thus imperative.

For a number of years, our data collections concerned children, and were performed in the homes and in the schools. This fact entailed the necessity of continuous cooperation with the pupils, the parents, the teachers, and the school-authorities. Much work has therefore been devoted to information and to communication with these groups. Measures taken in this context have been chosen with respect to the group and problems involved.

#### A reference group

A central role in the planning of every stage of the data collections has been played by a reference group, which was formed at the beginning of the project and which has served during the whole period of data collections in the school system of Örebro. The composition of the group had been surprisingly stable, affected only by changes in professional positions of single members.

The reference group has consisted of one member from the Swedish Board of Education, one member from the local board of education (the



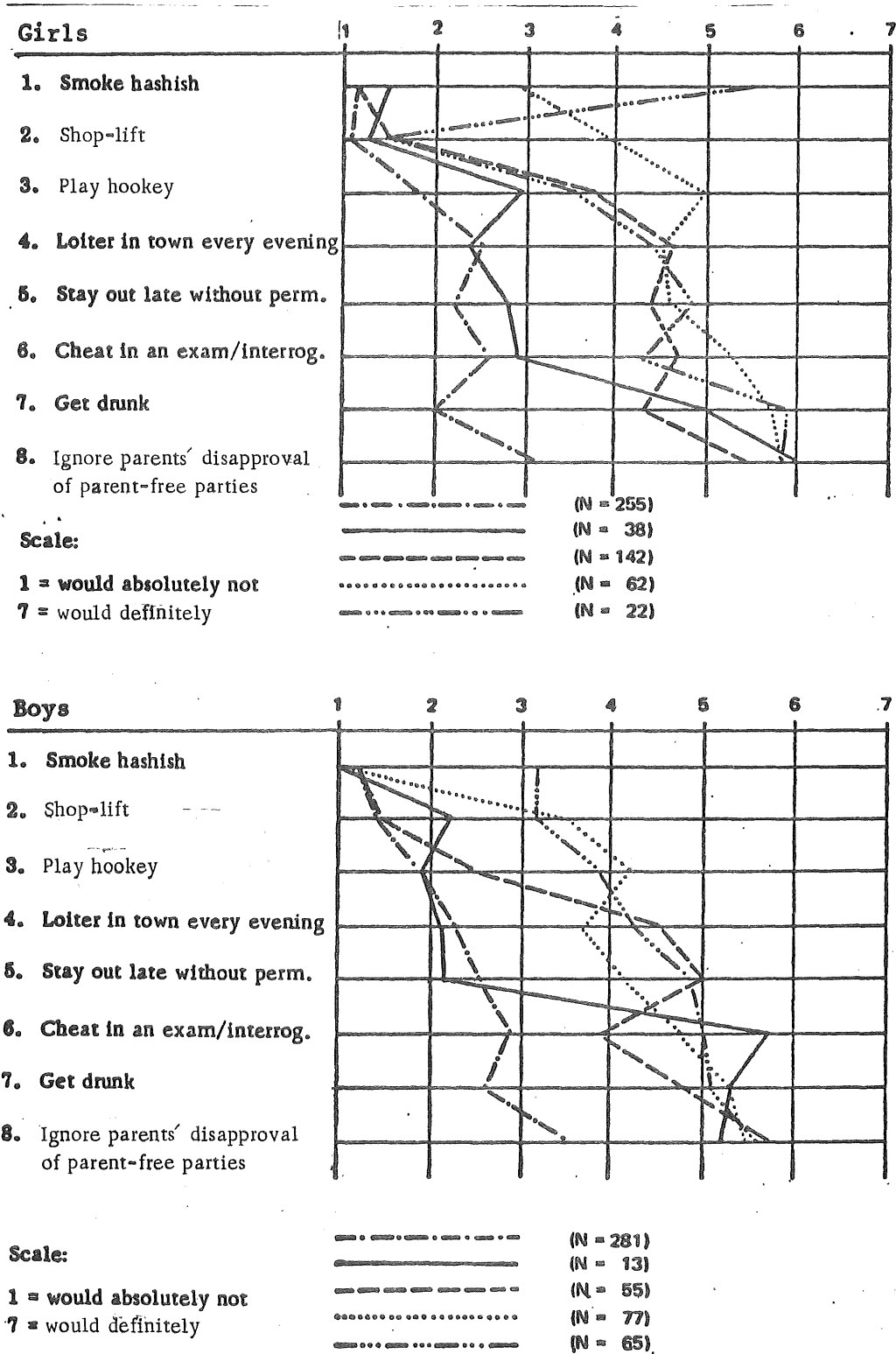


Figure 1. Profile groups based on the teenagers' own behavior intentions in Grade 8.

chairman), the head of the local school system, one school principal, one member of the parent-teacher association, and one teacher from each of the three main grade groupings in the school system.

At an early stage of the planning of each data collection, the preliminary material which was to be distributed was discussed in meetings with the reference group. The contact with administrative representatives made it possible to discuss administrative limitations and how to handle them properly. The representatives of the teachers and the parents provided essential information about attitudes and reactions towards the form and content of our methods. The members of the reference group participated very actively and constructively and played a substantial role for the success of the data collections.

#### Parents and teachers

Besides a direct influence on the procedures and instruments for data collection, the reference group provided a direct contact with the school authorities, the teachers organisations, and the parents organisation. The information to the single individuals who became involved, as subjects, as parents, or as teachers, was also an important part of the project. Continuous written information was given to the parents in connection with the parts of the data collections which did not concern internal school variables. All teachers were also informed beforehand, in close cooperation with the school authorities. On each data collection occasion, one member of the research group was present at each school, ready to answer questions from the teachers and to present supplementary information. Besides giving them information in the instructions accompanying different collections of data, the pupils were regularly invited to comment upon and discuss whatever they wished concerning the specific procedure and its content.

#### The press

In a large scale data collection running over a rather long period of time, there are many possibilities for misunderstandings and conflicts. Stories are told and rumours circulate about procedures and about the specific or general content of certain instruments. There are many examples of how such things have caused serious trouble in longitudinal projects.

The press can play an important role in this area. It is the duty of the press to observe and scrutinize what is going on in society and to present its findings to the public. However, it has happened that the press has published information about research projects which has been based on false facts or misunderstanding of facts, whereupon the changes of fulfilling the projects have been severely damaged. Such incidents have led to a critical and suspicious attitude towards the press among researchers in the behavioral and the social sciences. Many researchers have tried to avoid giving the press access to their instruments.

We took the initiative to co-operate closely with the two local papers, a cooperation which has functioned very effectively during the whole period of the project. The editors of the papers were given full information about each stage of the project, including all tests and instruments, and each paper appointed a special member of its staff to follow the project in cooperation with the researchers. We have continuously distributed material about the project to the papers for publica-

tion. We have done so prior to the extensive data collections and we have contributed short articles about results which we judged could be published without affecting further data collections.

The cooperation with the press has been very successful. In no way have the papers misused our information; on the contrary, they have supported us in their regular publicity. We have also seen cases where the journalists, since they have had access to full information, have been able to inform parents who have contacted them that the information that they had received from their children about what was going on was not correct. The fact that we have been able to collect data from more than 2,000 subjects over a period of thirteen years without any serious conflict or negative public debate is certainly due to a high degree to our cooperation with the press.

### Comments

Handling information and communication problems has taken more time and resources than expected. However, this work is a necessary precondition for good results in large scale longitudinal research and here it has obviously been worthwhile. A few figures can be presented to illustrate the trust with which parents and pupils have supplied us with information, even if it has sometimes been of a very personal character.

In the first stage of the project, the parents were asked to fill in an inventory and 98 percent of them did so. In 1975 a data collection took place for the pilot group, when the members were 23 years of age. Among those who had left school at the age of sixteen seven years earlier, without going on to higher education, 84 percent answered the inventory, and among those who had graduated from the gymnasium four years earlier, 93 percent answered.

Such a high rate of participation would not have been obtained, if considerable amount of time and other resources had not been devoted to analyses and discussions of information and communication problems in the planning stages and thereafter. It is indicated that the subjects place a high degree of trust in the project. Such trust is a necessary condition for the effective carrying through of a longitudinal project. In such projects, the researcher is forced to handle carefully the problems connected with spread of information to and communication with all parts involved. This fact should be observed by all those, who from the outside, advocate a bureaucratic control of the ethical aspects of scientific work.

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NORM INVENTORY

THE ÖREBRO PROJECT

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1970



1.

Tomas is in the department store and is walking between the shelves. He has no money but he is longing for sweets. There is a whole shelf with sweets and it is unguarded and he is tempted to take a candybox and pilfer.

1 If your peers found themselves in the same situation as Tomas what do you think they would do? My peers

would ab- solutely not	would prob- ably not	would per- haps not	I am not sure wether they would	would perhaps	would probably	would most certainly
<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5	<input type="checkbox"/> 6	<input type="checkbox"/> 7

take a candybox (pilfer)

2 To be quite honest, what would you do in such a situation?

		-I myself				
would ab- solutely not	would prob- ably not	would per- haps not	I am not sure wether I would	would perhaps	would probably	would most certainly
<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5	<input type="checkbox"/> 6	<input type="checkbox"/> 7

take a candybox (pilfer)

3 What do you believe your parents think you would do?

		-My parents think that I				
would ab- solutely not	would prob- ably not	would per- haps not	I am not sure wether they think I would	would perhaps	would probably	would most certainly
<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5	<input type="checkbox"/> 6	<input type="checkbox"/> 7

take a candybox (pilfer)

4 How do you think your parents and your peers would react, if they found out that you had pilferred?

	would prob- ably not worry	would per- haps not worry	I don't know how they would react	they would probably disapprove	they would certainly disapprove strongly
My parents.....	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5
My peers .....	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5

---

5 Have you yourself been pilfering any time?

- Never .....  1
  - Once .....  2
  - 2=3 times .....  3
  - 4-10 times .....  4
  - more than 10 times ...  5
-

2.

Björn has never smoked hashish. One day he meets some friends in town and they say that they have hashish. They ask if he want to try but he is hesitant.

1 If your peers found themselves in the same situation as Björn what do you think they would do? - My peers

would ab- solutely not	would prob- ably not	would per- haps not	I am not sure wether they would	would perhaps	would probably	would most certainly
<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5	<input type="checkbox"/> 6	<input type="checkbox"/> 7

smoke hashish

2 To be quite honest, what would you do in such a situation?

			- I myself			
would ab- solutely not	would prob- ably not	would per- haps not	I am not sure wether I would	would perhaps	would probably	would most certainly
<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5	<input type="checkbox"/> 6	<input type="checkbox"/> 7

smoke hashish

3 What do you believe your parents think you would do?

			- My parents think that I			
would ab- solutely not	would prob- ably not	would per- haps not	I am not sure wether they think I would	would perhaps	would probably	would most certainly
<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5	<input type="checkbox"/> 6	<input type="checkbox"/> 7

smoke hashish

4 How do you think your parents and your peers would react if they found out that you had smoked hashish?

	would prob- ably not worry	would per- haps not worry	I don't know how they would react	they would probably disapprove	they would certainly disapprove strongly
My parents.....	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5
My peers .....	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5

---

5 Have you been smoking hashish any time?

- Never .....  1
  - Once .....  2
  - 2=3 times .....  3
  - 4-10 times .....  4
  - more than 10 times ...  5
-

3.

On his way to school Kalle meets some friends who are free from school and want to do something fun together. Kalle is really tempted to ignore school and play truant.

1 If your peers found themselves in the same situation as Kalle, what do you think they would do? -

would ab- solutely not	would prob- ably not	would per- haps not	My peers I am not sure wether they would	would perhaps	would probably	would most certainly
<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5	<input type="checkbox"/> 6	<input type="checkbox"/> 7

play truant

2 To be quite honest, what would you do in such a situation?

would ab- solutely not	would prob- ably not	would per- haps not	-I myself I am not sure wether I would	would perhaps	would probably	would most certainly
<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5	<input type="checkbox"/> 6	<input type="checkbox"/> 7

play truant

3 What do you believe your parents think you would do?

would ab- solutely not	would prob- ably not	would per- haps not	-My parents think that I I am not sure wether they think I would	would perhaps	would probably	would most certainly
<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5	<input type="checkbox"/> 6	<input type="checkbox"/> 7

play truant

4 How do you think your parents and your peers would react if they found out that you had played truant? -

	would prob- ably not	would per- haps not	I don't know how they would react	they would probably disapprove	they would certainly disapprove strongly
My parents.....	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5
My peers .....	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5

---

5 Have you yourself been playing truant any time ?

- Never .....  1
  - Once .....  2
  - 2=3 times .....  3
  - 4=10 times .....  4
  - more than 10 times ...  5
-



4.

Magnus has to be <sup>home</sup> ~~home~~ at a certain time every evening. One evening he meets some friends in town and they are going out into the country. They won't be home until very late. Magnus is tempted to go with them but he hesitates over whether he shall stay out that late without permission.

1 If your peers found themselves in the same situation as Magnus what do you think they would do?      My peers

would ab- solutely not	would prob- ably not	would per- haps not	I am not sure wether they would	would perhaps	would probably	would most certainly
<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5	<input type="checkbox"/> 6	<input type="checkbox"/> 7

stay out that late without permission

2 To be quite honest, what would you do in such a situation?

			-I myself			
would ab- solutely not	would prob- ably not	would per- haps not	I am not sure wether I would	would perhaps	would probably	would most certainly
<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5	<input type="checkbox"/> 6	<input type="checkbox"/> 7

stay out that late without permission

3 What do you believe your parents think you would do?

			<u>My parents think that I</u>			
would ab- solutely not	would prob- ably not	would per- haps not	I am not sure wether they think I would	would perhaps	would probably	would most certainly
<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5	<input type="checkbox"/> 6	<input type="checkbox"/> 7

stay out that late without permission

4 How do you think your parents and your peers would react if they found out that you had stayed out that late without permission?

	would prob- ably not worry	would per- haps not worry	I don't know how they would react	they would probably disapprove	they would certainly disapprove strongly
My parents.....	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5
My peers .....	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5

---

5 Have you yourself been staying out that late without permission?

- Never .....  1
  - Once .....  2
  - 2=3 times .....  3
  - 4=10 times .....  4
  - more than 10 times ...  5
-

5.

They are going to have an exam, but Johan has not had time to prepare himself. It is important for Johan to succeed. He has brought a scrap of paper with notes. He hesitates over whether to take up the note and cheat.

1 If your peers found themselves in the same situation as Johan what do you think they would do?

			My peers			
would ab- solutely not	would prob- ably not	would per- haps not	I am not sure wether they would	would perhaps	would probably	would most certainly
<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5	<input type="checkbox"/> 6	<input type="checkbox"/> 7

take up the note and cheat

2 To be quite honest, what would you do in such a situation?

			I myself			
would ab- solutely not	would prob- ably not	would per- haps not	I am not sure wether I would	would perhaps	would probably	would most certainly
<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5	<input type="checkbox"/> 6	<input type="checkbox"/> 7

take up the note and cheat

3 What do you believe your parents think you would do?

			My parents think that I			
would ab- solutely not	would prob- ably not	would per- haps not	I am not sure wether they think I would	would perhaps	would probably	would most certainly
<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5	<input type="checkbox"/> 6	<input type="checkbox"/> 7

take up the note and cheat

4 How do you think your parents and your peers would react if they found out that you had taken up the note and cheated?\_

	would prob- ably not worry	would per- haps not worry	I don't know how they would react	they would probably disapprove	they would certainly disapprove strongly
My parents.....	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5
My peers .....	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5

---

5 Have you yourself been cheating any time?

- Never .....  1
  - Once .....  2
  - 2=3 times .....  3
  - 4-10 times .....  4
  - more than 10 times...  5
-

6.

In his class Anders has a friend who is using drugs. Anders is worried about him and thinks that he needs help to stop his abuse, but the friend doesn't want any help. Anders hesitates over whether he should tell the school medical officer or nurse about his friend.

1 If your peers found themselves in the same situation as Anders, what do you think they would do? My peers

would ab- solutely not	would prob- ably not	would per- haps not	I am not sure wether they would	would perhaps	would probably	would most certainly
<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5	<input type="checkbox"/> 6	<input type="checkbox"/> 7

tell the school medical officer or nurse

2 To be quite honest, what would you do in such a situation?

I myself

would ab- solutely not	would prob- ably not	would per- haps not	I am not sure wether I would	would perhaps	would probably	would most certainly
<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5	<input type="checkbox"/> 6	<input type="checkbox"/> 7

tell the school medical officer or nurse

3 What do you believe your parents think you would do?

My parents think that I

would ab- solutely not	would prob- ably not	would per- haps not	I am not sure wether they think I would	would perhaps	would probably	would most certainly
<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5	<input type="checkbox"/> 6	<input type="checkbox"/> 7

tell the school medical officer or nurse

4 How do you think your parents and your peers would react if they found out that you had told the school medical officer or nurse?

	would prob- ably not worry	would per- haps not worry	I don't know how they would react	they would probably disapprove	they would certainly disapprove strongly
My parents.....	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5
My peers .....	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5

---

5 Have you been telling the school medical officer or nurse about any friend

- with such a problem?
- Never .....  1
  - Once .....  2
  - 2=3 times .....  3
  - 4-10 times .....  4
  - more than 10 times ...  5
-



7.

Leffe meets some friends one evening and they have lots of beer and wine. He has never been drunk but the others drink quantities. He feels a bit dizzy and he is afraid that he will drink so much that he gets drunk.

1 If your peers found themselves in the same situation as Leffe what do you think they would do?

			My peers			
would absolutely not	would probably not	would perhaps not	I am not sure whether they would	would perhaps	would probably	would most certainly
<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5	<input type="checkbox"/> 6	<input type="checkbox"/> 7

drink so much that they got drunk

2 To be quite honest, what would you do in such a situation?

			I myself			
would absolutely not	would probably not	would perhaps not	I am not sure whether I would	would perhaps	would probably	would most certainly
<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5	<input type="checkbox"/> 6	<input type="checkbox"/> 7

drink so much that I got drunk

3 What do you believe your parents think you would do?

			My parents think that I			
would absolutely not	would probably not	would perhaps not	I am not sure whether they think I would	would perhaps	would probably	would most certainly
<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5	<input type="checkbox"/> 6	<input type="checkbox"/> 7

drink so much that I got drunk

4 How do you think your parents and your peers would react if they found out that you had drunk so much that you got drunk?

	would probably not worry	would perhaps not worry	I don't know how they would react	they would probably disapprove	they would certainly disapprove strongly
My parents.....	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5
My peers .....	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5

---

5 Have you yourself been drinking so much that you had got drunk any time?

- Never .....  1
  - Once .....  2
  - 2=3 times .....  3
  - 4-10 times .....  4
  - more than 10 times ...  5
-

8. Bosses

Bosses friends loiter about town every evening. They use to stand talking in the street corner or sit in a cafe. Bosses used to be with them sometimes but lately has has been with them more often. He wants to be with the gang but he hesitates over whether to loiter about town every evening.

1 If your peers found themselves in the same situation as Bosse what do you think they would do? — My peers

would ab- solutely not	would prob- ably not	would per- haps not	I am not sure wether they would	would perhaps	would probably	would most certainly
<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5	<input type="checkbox"/> 6	<input type="checkbox"/> 7

loiter about town every evening

2 To be quite honest, what would you do in such a situation?

— I myself

would ab- solutely not	would prob- ably not	would per- haps not	I am not sure what wether I would	would perhaps	would probably	would most certainly
<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5	<input type="checkbox"/> 6	<input type="checkbox"/> 7

loiter about town every evening

3 What do you believe your parents think you would do?

— My parents think that I

would ab- solutely not	would prob- ably not	would per- haps not	I am not sure wether they think I would	would perhaps	would probably	would most certainly
<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5	<input type="checkbox"/> 6	<input type="checkbox"/> 7

loiter about town every evening

4 How do you think your parents and your peers would react if they found out that you had loitered about town every evening?

	would prob- ably not worry	would per- haps not worry	I don't know how they would react	they would prob-ly disapprove	they would certainly disapprove strongly
My parents.....	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5
My peers .....	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5

---

5

Have you been loitering about town every evening?

- Never .....  1
  - Once .....  2
  - 2-3 times .....  3
  - 4-10 times .....  4
  - more than 10 times...  5
-

9. <sup>Lars'</sup>

Lasse's parents have prohibited him from going to "parent free" partys. He is invited to that kind of party and wants to go. All his friends are going but he hesitates over whether he should go and ignore his parents' prohibition.

1 If your peers found themselves in the same situation as Lasse what do you think they would do? -

-			-My peers			
would ab- solutely not	would prob- ably not	would per- haps not	I am not sure wether they would	would perhaps	would probably	would most certainly
<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5	<input type="checkbox"/> 6	<input type="checkbox"/> 7

ignore the parents' prohibition

2 To be quite honest, what would you do in such a situation?

-			-I myself			
would ab- solutely not	would prob- ably not	would per- haps not	I am not sure wether I would	would perhaps	would probably	would most certainly
<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5	<input type="checkbox"/> 6	<input type="checkbox"/> 7

ignore my parents' prohibition

3 What do you believe your parents think you would do?

-			-My parents think that I			
would ab- solutely not	would prob- ably not	would per- haps not	I am not sure wether they think I would	would perhaps	would probably	would most certainly
<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5	<input type="checkbox"/> 6	<input type="checkbox"/> 7

ignore the parents' prohibition

4 How do you think your parents and your peers would react if they found out that you had ignored your parents' prohibition?

	would prob- ably not	would per- haps not	I don't know how they would react	they would probably disapprove	they would certainly disapprove strongly
My parents.....	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5
My peers .....	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5

---

5

Have you been ignoring your parents' prohibition any time ?

- Never .....  1
  - Once .....  2
  - 2=3 times .....  3
  - 4-10 times .....  4
  - more than 10 times ...  5
-

List E.

What YOU YOURSELF think.

---

1

	<u>I think it is</u>					
very silly	silly	rather silly	not really OK	rather OK	OK	quite OK
<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5	<input type="checkbox"/> 6	<input type="checkbox"/> 7

to cheat in exams or interrogations

---

2

	<u>I think it is</u>					
very silly	silly	rather silly	not really OK	rather OK	OK	quite OK
<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5	<input type="checkbox"/> 6	<input type="checkbox"/> 7

to smoke hashish

---

3

	<u>I think it is</u>					
very silly	silly	rather silly	not really OK	rather OK	OK	quite OK
<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5	<input type="checkbox"/> 6	<input type="checkbox"/> 7

to stay out late at night without permission

---

4

	<u>I think it is</u>					
very silly	silly	rather silly	not really OK	rather OK	OK	quite OK
<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5	<input type="checkbox"/> 6	<input type="checkbox"/> 7

to play truant from school

---

5

	<u>I think it is</u>					
very silly	silly	rather silly	not really OK	rather OK	OK	quite OK
<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5	<input type="checkbox"/> 6	<input type="checkbox"/> 7

to get drunk (on beer, wine or spirits)

---

6

	<u>I think it is</u>					
very silly	silly	rather silly	not really OK	rather OK	OK	quite OK
<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5	<input type="checkbox"/> 6	<input type="checkbox"/> 7

to have sexual intercourse with a boy/girl friend



7

I think it is

very silly	silly	rather silly	not really OK	rather OK	OK	quite OK
<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5	<input type="checkbox"/> 6	<input type="checkbox"/> 7

to pilfer from shops

8

I think it is

very silly	silly	rather silly	not really OK	rather OK	OK	quite OK
<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5	<input type="checkbox"/> 6	<input type="checkbox"/> 7

to talk to the school medical officer or nurse  
about a friend with drug problems (to help the friend)

9

I think it is

very silly	silly	rather silly	not really OK	rather OK	OK	quite OK
<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5	<input type="checkbox"/> 6	<input type="checkbox"/> 7

to ignore parents' prohibitions (for example to go to  
a "parent free" party in spite of the parents' prohibitions)

10

I think it is

very silly	silly	rather silly	not really OK	rather OK	OK	quite OK
<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5	<input type="checkbox"/> 6	<input type="checkbox"/> 7

to loiter about town every evening (or hang around  
a drug store)

What you believe your parents think about adolescents doing different things.

1 My parents think it is

very silly	silly	rather silly	not really OK	rather OK	OK	quite OK
<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5	<input type="checkbox"/> 6	<input type="checkbox"/> 7

to loiter about town every evening (or hang around a drug store)

2 My parents think it is

very silly	silly	rather silly	not really OK	rather OK	OK	quite OK
<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5	<input type="checkbox"/> 6	<input type="checkbox"/> 7

to pilfer from shops

3 My parents think it is

very silly	silly	rather silly	not really OK	rather OK	OK	quite OK
<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5	<input type="checkbox"/> 6	<input type="checkbox"/> 7

to cheat in exams or interrogations

4 My parents think it is

very silly	silly	rather silly	not really OK	rather OK	OK	quite OK
<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5	<input type="checkbox"/> 6	<input type="checkbox"/> 7

to have sexual intercourse with a boy/girl friend

5 My parents think it is

very silly	silly	rather silly	not really OK	rather OK	OK	quite OK
<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5	<input type="checkbox"/> 6	<input type="checkbox"/> 7

to smoke hashish

6 My parents think it is

very silly	silly	rather silly	not really OK	rather OK	OK	quite OK
<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5	<input type="checkbox"/> 6	<input type="checkbox"/> 7

to play truant from school

---

7 My parents think it is

very silly	silly	rather silly	not really OK	rather OK	OK	quite OK
<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5	<input type="checkbox"/> 6	<input type="checkbox"/> 7

to ignore parents' prohibitions

---

8 My parents think it is

very silly	silly	rather silly	not really OK	rather OK	OK	quite OK
<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5	<input type="checkbox"/> 6	<input type="checkbox"/> 7

to stay out late at night without permission

---

9 My parents think it is

very silly	silly	rather silly	not really OK	rather OK	OK	quite OK
<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5	<input type="checkbox"/> 6	<input type="checkbox"/> 7

to get drunk (on beer, wine or spirits)

---

10 My parents think it is

very silly	silly	rather silly	not really OK	rather OK	OK	quite OK
<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5	<input type="checkbox"/> 6	<input type="checkbox"/> 7

to talk to the school medical officer or nurse  
about a friend with drug problems (to help the friend)

---

11

You have now said what you believe your parents think about ten different things concerning adolescents. Are there some of these things that you believe your parents think it is really important that you stay away from?

You answer by giving the number of the questions (1 - 10) in the small squares. (It is not necessary to give three answers).

- 1. Number
  - 2. Number
  - 3. Number
- 

12

Are there any of these ten things that your parents wouldn't care too much about if you did?

- 1. Number
  - 2. Number
  - 3. Number
- 

13

When you said what you believed your parents thought did you think most about

- What your mother thinks .....
  - What your father thinks .....
  - What both your parents think .....
  - I have only one parent .....
- 

14

Do you think your parents are of the same opinion about these things?

- They have the same opinion .....
  - They haven't the same opinion - mother is more restrictive .....
  - They haven't the same opinion - father is more restrictive .....
-

List K.

Here you say what you believe your peers think.

(By 'peers' we mean those whose opinions you care most about, whether they are in your class, in a gang or your best friends).

---

1 My peers think it is

very silly	silly	rather silly	not really OK	rather OK	OK	quite OK
<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5	<input type="checkbox"/> 6	<input type="checkbox"/> 7

to play truant from school

---

2 My peers think it is

very silly	silly	rather silly	not really OK	rather OK	OK	quite OK
<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5	<input type="checkbox"/> 6	<input type="checkbox"/> 7

to stay out late at night without permission

---

3 My peers think it is

very silly	silly	rather silly	not really OK	rather OK	OK	quite OK
<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5	<input type="checkbox"/> 6	<input type="checkbox"/> 7

to get drunk ( on beer, wine or spirits)

---

4 My peers think it is

very silly	silly	rather silly	not really OK	rather OK	OK	quite OK
<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5	<input type="checkbox"/> 6	<input type="checkbox"/> 7

to cheat in exams or interrogations

---

5 My peers think it is

very silly	silly	rather silly	not really OK	rather OK	OK	quite OK
<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5	<input type="checkbox"/> 6	<input type="checkbox"/> 7

to have sexual intercourse with a boy/girl friend

---

6 My peers think it is

very silly	silly	rather silly	not really OK	rather OK	OK	quite OK
<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5	<input type="checkbox"/> 6	<input type="checkbox"/> 7

to smoke hashish

7

My peers think it is

very silly	silly	rather silly	not really OK	rather OK	OK	quite OK
<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5	<input type="checkbox"/> 6	<input type="checkbox"/> 7

to loiter about town every evening (or hang around a drug store)

8

My peers think it is

very silly	silly	rather silly	not really OK	rather OK	OK	quite OK
<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5	<input type="checkbox"/> 6	<input type="checkbox"/> 7

to ignore parents' prohibitions

9

My peers think it is

very silly	silly	rather silly	not really OK	rather OK	OK	quite OK
<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5	<input type="checkbox"/> 6	<input type="checkbox"/> 7

to talk to the school medical officer or nurse about a friend with drug problems (to help the friend)

10

My peers think it is

very silly	silly	rather silly	not really OK	rather OK	OK	quite OK
<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5	<input type="checkbox"/> 6	<input type="checkbox"/> 7

to pilfer from shops

11

You have now said what your peers think about ten different things. Are there any things that your peers think it is brave to do?

You answer by giving the number of the questions ( 1 - 10) in the small squares. (It is not necessary to give three answers).

1. Number
  2. Number
  3. Number
- 

12

Are there any of these things that your peers think you definitely had better stay away from?

1. Number
  2. Number
  3. Number
- 

13

When you said what you think your peers thought about these things did you think most about

What your classmates in general think .....

What your friends in the gang think .....

What your best friend thinks .....

---

14

If you have said what your best friend or your friends in the gang think: Do you think that your friends think differently from your classmates?

Do your friends think more things silly .....

Do your friends think more things OK .....

Do they think in about the same way? .....

---