

Future orientation of institutionalized and noninstitutionalized delinquents and nondelinquents*

GISELA TROMMSDORFF

Technische Hochschule, Aachen

HELMUT LAMM

Universität, Köln

Abstract

The present study is an analysis of the relationship between delinquency, institutionalization and future orientation, based on a social-learning theoretical framework. Two hundred and forty male adolescents (institutionalized and noninstitutionalized delinquents and nondelinquents) answered open and structured questions concerning their anticipations and evaluations of the future. The data were analysed by analyses of variance and t-tests and partly confirm the hypotheses: Delinquents structure their future in a less differentiated, less extended, and more internal way than nondelinquents. This was especially true for the institutionalized delinquents. However, delinquents structured their fears concerning their personal development more extensively than nondelinquents. Future orientation varied according to the length of institutionalization in different domains of life. These results do not support the dominant assumption of the literature that delinquents have an unrealistic future orientation. Rather, it is shown here that institutionalized delinquents anticipate rather negative future events which they expect to occur shortly after the time of their release. However, the present results have to be cautiously interpreted on account of the special selection of the sample and the rather short duration of institutionalization. Also, the method of a differentiated measurement of future orientation used here is hardly practiced in the literature though such a conceptualization as a multidimensional construct seems to be theoretically fruitful.

*This study was conducted at the Sonderforschungsbereich 24, Sozialwissenschaftliche Entscheidungsforschung, Universität Mannheim (West Germany) and financed by the Deutsche Forschungsgemeinschaft, with support from the Government of Baden-Württemberg. The first author directed the project of which this study is a part of. The data have been collected by S. Hornmuth, I. Michelitsch, and H. Scheuermann for the Diploma Thesis. Wolfgang Woerner made valuable suggestions for the data analysis. We especially thank two anonymous reviewers and the editor for their helpful comments.

INTRODUCTION

Delinquent behaviour has been described and explained by sociologists and psychologists primarily in terms of the discrepancy between social goals and individual means for their attainment (Merton, 1957; Cohen, 1955); deficiencies in the socialization of delinquents (psychoanalytic theories: *cf.* Friedlander, 1947; social learning theories: *cf.* Glueck and Glueck, 1950); or the interaction processes by which certain individuals are labelled delinquent (Becker, 1963; Sack, 1968).

Thus delinquency has been predominantly explained in terms of socio-structural conditions and/or as a result of certain personality characteristics or traits. Such traits are often apparent in impulsivity, low frustration tolerance, hedonistic tendencies and a minimal future time perspective. The socio-structural and personality trait approaches could be integrated when the personality traits are considered not as 'given traits' but as dependent upon (and possibly also influencing) social conditions which mediate social values, reinforcements, prestige, social learning, and the abilities necessary to conform to socially approved behaviour.

In the culture of Western middle class, much emphasis is placed on personality characteristics such as self control, high frustration tolerance, and long-term planning. Incomplete social learning should result in deviance from these values, and delinquents should have less of these characteristics than nondelinquents (*cf.* Quay, 1965).

Several studies, in fact, do support the stereotype that delinquents ignore the possible future consequences of their present behaviour, are less able to bind tensions, act more impulsively, and are less inclined to delay gratification than nondelinquents (*cf.* Mischel and Gilligan, 1964; Rosenquist and Megargee, 1969; Hormuth *et al.*, 1977). Furthermore, their future time perspective is shorter than that of nondelinquents (*cf.* Barndt and Johnson, 1955; Brock and Del Guidice, 1963; Matulef, 1967; Stein, Sarbin and Kulik, 1968; Barabasz, 1968/69; Black and Gregson, 1973).

There are, however, contradicting results: Lösel (1975) found no difference in delay capacity when comparing delinquents and nondelinquents using self-reported delinquency. Schneidermann (1964), Howenstine (1969) and Megargee *et al.* (1970) showed that delinquents are oriented more to the future than to the past. (Note: Megargee *et al.* (1970) did not use a control group of nondelinquents.)

The relationship between future orientation and delay as one important aspect of actual behaviour has often been analysed theoretically (*cf.* Mischel, 1974; Heckhausen, 1967, 1977), but empirically a direct relationship seems to be difficult to establish (*cf.* Trommsdorff *et al.*, 1978; Trommsdorff, Haag and List, 1979).

The above-cited studies vary in their measurement of impulsiveness (motor inhibition tests, questionnaires, decision for hypothetical and real rewards) and future orientation (projective techniques or structured questionnaires measuring either the extent or cohesiveness of future orientation, or attitudes towards different dimensions of time). In addition, different populations of delinquents were studied: inmates with different sentence lengths, noninstitutionalized delinquents, or non-labelled delinquents (i.e. persons with self-reported

delinquency). These methodological inconsistencies make it difficult to draw a clear picture of the future orientation of delinquents. If we accept the idea that delinquency and its related behavioural and cognitive-motivational variables are not to be understood simply as personality traits, but rather as the end product of certain specific social-learning experiences which are likely to change during a person's life, it is important to focus on those events in life which might constitute these learning experiences, such as the experience of being delinquent, of institutionalization, and of length of institutionalization (Goffman, 1968; Hohmeier, 1969; Landau, 1977).

The present study explores the effects of delinquency and institutionalization on future orientation. Future orientation seems to be an especially relevant variable for the study of delinquency: Deviation may occur with regard to such middle-class values as the pursuit of a realistic and an extended future orientation, and the readiness to postpone immediate rewards; thus, delinquency should be related to a certain way of judging and evaluating one's future.

The concept of future orientation

According to Lewin (1948), future orientation is part of the person's time perspective and determines his/her action. 'The life-space of an individual, far from being limited to what he considers the present situation, includes the future, the present, and also the past. Actions, emotions, and certainly the morale of an individual at any instant depends upon his total time perspective' (Lewin, 1948, p. 104). The future-oriented part of time perspective comprises hopes, wishes, expectations, aspirations and plans and could thus be conceptualized as the way one anticipates and evaluates the future. The cognitive and evaluative aspects of future orientation should vary according to the thematic content of one's concerns (*cf.* Trommsdorff and Lamm, 1975; Trommsdorff *et al.*, 1978).

Future orientation (or future time perspective) has usually been measured as the length of (future) time perceived by a person. However, this index is only one component of the cognitive structure of future orientation. A less structured future orientation can also imply that the person has little interest in and is hardly concerned with the future, that is, he/she thinks less often and in a less differentiated way about the future. These variables are elements of the factor 'cognitive structure of future orientation'.

Another cognitive aspect of future orientation is the way in which a person anticipates the causes of possible developments in the future (i.e. whether he/she believes in internal or external control of the future and, using attribution theory, whether stable or unstable factors are responsible for the future). Depending on one's belief in either internal or external control of future developments, one could feel more or less powerless, alienated from, or responsible for one's acts (*cf.* Rotter, 1966). Belief in internal or external control can determine achievement-oriented and other motivated behaviour and successful goal attainment (Phares, 1976). This variable has scarcely been studied as an aspect of future orientation, but instead, as a personality variable of various generalized expectancies of one's environment. In the same fashion, attribution theory focuses on cognitive preoccupations concerning one's present

outcomes, but not, at least so far, on the *anticipated* causes of future developments (*cf.* Harvey, Ickes and Kidd, 1976).

In addition to the cognitive aspects of future orientation, the affective and motivational aspect must be considered. This affective and motivational aspect is the positive or negative evaluation of one's future, which is important from the point of view of the behavioural relevance of future orientation. The optimism or pessimism of future orientation, however, cannot be studied without controlling for the subjective evaluation of a person's present situation.

Finally, the cognitive and affective aspects of future orientation have to be studied with respect to the content of the concerns, in other words, the thematic focus of future orientation in specific areas of life.

One goal of the present study was to analyse differences in future orientation among social groups by differentiating among several aspects of future orientation—cognitive and affective aspects which are related to different life areas.

Future orientation of delinquents

According to the personality and learning theories, delinquents are less concerned with the future consequences of present actions and therefore less future-oriented than nondelinquents. Friedlander (1947), a proponent of the psychoanalytic approach, characterizes the delinquent as an impulsive person whose actions are based on the (immediate) pleasure principle rather than the reality principle. According to social-learning theories, delinquents (as compared to nondelinquents) are insufficiently socialized with regard to time-specific social norms and values. Thus they have failed to develop the ability to control their impulses (Glueck and Glueck, 1950; Siegman, 1961) and to differentiate and integrate temporal systems; their future orientation is less extended, their actions are less future-oriented (*cf.* Stein, Sarbin and Kulik, 1968), and they are less realistic (Landau, 1976). As mentioned earlier, certain empirical findings partially contradict these assumptions (*cf.* Megargee *et al.*, 1970).

A further implication of the general view of delinquents being less completely socialized and more alienated persons than nondelinquents is that as a result they should perceive little possibility to personally influence their own lives and, in the same line, they feel little responsibility for their actions. This leads to the hypothesis that delinquents are more likely than nondelinquents to believe that not they themselves but rather external forces are responsible for the outcome of future developments. This hypothesis is in line with Rotter's (1966) original theory of locus of control according to which persons perceiving themselves to be under the control of powerful others can be described as believing in external control.

There is some evidence in the literature on future orientation that the way and the extent to which future orientation is structured is not independent of the way causes of future developments are attributed (*cf.* Trommsdorff *et al.*, 1978). Thus far, studies on female delinquents (as compared to nondelinquent females) have shown that delinquents believe more in external than internal control (Duke and Fenhagen, 1975) and expect their future to be more externally controlled (*cf.* Trommsdorff *et al.*, 1979).

Delinquents, who rather expect more than nondelinquents to be under the

control of powerful others, should concentrate their concerns more on their private and less on their public future (the public future probably being viewed as too complex and abstract). According to Duke and Nowicki (1972), the more a person is externally oriented, the more he/she prefers to maintain social distance from others. In terms of social distance theory (*cf.* Platt, Eisenman and DeGross, 1969), such persons should be less able to structure non-personal events.

As far as other thematic aspects of future orientation are concerned, no specific hypotheses can be formulated at this time because theories of delinquency have yet to be adequately elaborated.

The present study was designed not only to *test* certain hypotheses but also to *generate* hypotheses which could and should be tested in further research. The following hypotheses were tested:

Hypothesis 1. The future orientation of delinquents is less clearly structured than that of nondelinquents (i.e. the future is less important, is less extended, and there is less activity in seeking information on the future).

Hypothesis 2. Delinquents judge (a) their present more negatively and (b) their future more positively than nondelinquents.

Hypothesis 3. Delinquents expect future developments to be dependent on external influences to a greater extent than non-delinquents.

Hypothesis 4. Delinquents are less concerned with the public future and more concerned with their personal future than nondelinquents.

Future orientation of institutionalized persons

Institutions such as prisons and army camps can be described as 'total' institutions (Goffman, 1968) which require the individual to change his/her entire life-style and to accept the specific interpersonal and organizational norms of these institutions. The process of learning new rules that are necessary for emotional and physical survival (and for obtaining certain privileges) in the institution is part of a socialization process which ends only when the person is released from the particular institution. Following release, however, new problems must be dealt with and re-socialization is required. These problems and experiences are part of reintegration into society, for example by taking up the responsibilities which had been removed during institutionalization.

Of course, the prison inmate has to learn different regulations than the soldier. In addition, the degree of deprivation is probably less extreme for the soldier than for the prison inmate. Finally—although both have been protected from everyday problems during their institutionalization—re-entering the normal social world following release should be much easier for soldiers than for inmates. The prison inmate has to cope with society's reactions to his imprisonment. He also finds himself in a world in which he cannot use the behaviour learned in prison. Thus, stigmatization and the 'unlearning' of formerly correct (safe) behaviour when re-entering society constitute severe problems for the former inmate which are hardly relevant for the soldier following release. However, both groups probably anticipate problematic aspects of their future following release, but may also think about their future to compensate for deprivation during institutionalization. Thus, a one-directional

hypothesis for differences in future orientation (structure and content) could not be formulated.

Different reactions to different types and periods of institutionalization in delinquent and nondelinquent groups should be expected. These experiences presumably influence and change the future orientation of the institutionalized and noninstitutionalized differently.

Several authors have pointed out the rather pathological time experience of prisoners who have been sentenced to life imprisonment or who do not know the precise length of their imprisonment. They live in the present, become passive and apathetic and construct an artificial time sequence for themselves (cf. Galtung, 1961; Gibbens, 1961; Cohen and Taylor, 1972).

Landau (1969) was the first to systematically study the effect of length of imprisonment on future time perspective. He studied prisoners with life sentences and asked them, among other things, to indicate their age for ten events that could happen to them in the future. He found that the date of release was a significant boundary for the inmate's future orientation; the nearer the date of release, the less extended the future orientation.

This finding is in line with the more descriptive studies of Farber (1944) and Morris and Morris (1963) according to which the inmate is incapable of planning for the future. In another study, Megargee *et al.* (1970) found a positive evaluation of the future, but no effect of institutionalization on youthful prison inmates.

Landau (1969) and Megargee *et al.* (1970) did not control for the possible combined effects of institutionalization and delinquency. With this in mind, Landau conducted further studies (1975; 1976) controlling for each of these variables by comparing institutionalized delinquents (prison inmates), noninstitutionalized delinquents (delinquents on probation), institutionalized nondelinquents (soldiers), and noninstitutionalized nondelinquents (vocational students). The general finding of Landau (1975) was that in either type of institutionalization (prison and military) future orientation is limited to the time of release. Landau (1976) also found that institutionalized persons perceived their present more negatively than noninstitutionalized persons. They were also more present-oriented than the noninstitutionalized persons, and the salience of their future (measured as the number of future items a person had thought about during the previous two weeks) was lower.

According to these theoretical notions and empirical findings the following *hypotheses* were tested by comparing the future orientation of institutionalized and noninstitutionalized delinquents:

Hypothesis 5. The future orientation of institutionalized persons is less clearly structured than that of noninstitutionalized persons (i.e. the future is less important, is less extended, and there is less activity in seeking information on the future).

Hypothesis 6. Institutionalized persons judge (a) their present more negatively and (b) their future more positively than noninstitutionalized persons.

METHOD

Subjects

Two hundred and forty male subjects between 17 and 24 years of age participated in the study. The institutionalized delinquents ($N = 90$) were inmates in a juvenile prison; the sentences ranged from 12 to 18 months in length. Though these sentences are much shorter than in the above-cited studies, we had to choose this condition in order to find a reasonably comparable control group of institutionalized nondelinquents. The majority of the delinquents had been convicted for larceny and for the first time. Three groups were selected using as criterion the particular phase of institutionalization: 30 subjects were in their first third, 30 subjects in their second, and 30 subjects in their final third of imprisonment. The control group for the institutionalized delinquents were soldiers in an army camp ($N = 90$) who had to serve for 15 months. This group was likewise divided into three subgroups (first, second and final third of institutionalization, $N = 30$ each). The control groups for each of these institutionalized groups were noninstitutionalized delinquents (delinquents on probation; $N = 30$) and noninstitutionalized nondelinquents (workers; $N = 30$). Both control groups had had the experience of institutionalization (in prison or in army camp). The groups were homogenous in age, education (eighth grade) and occupational level (non-skilled workers).

The study was carried out in groups no larger than 10 subjects, in the rooms in which the subjects ordinarily lived, worked or congregated. All subjects participated voluntarily and received a small payment (DM 10,-- or cigarettes and coffee).

Measures

Importance

Subjects were first asked to spend 20 min writing down their hopes and fears (10 min for the hopes, 10 min for the fears). The sequence for hopes and fears was varied randomly. Two independent ratings were used to categorize the noted concerns (hopes and fears) into several categories (*cf.* Cantril, 1965) (private concerns: self fulfilment, family and interpersonal relationships, occupation, financial position, physical condition; public concerns: economic and political affairs) (interrater reliability: $r = 0.93$). The percentage of noted concerns for each life area was transformed with \log/\sin for the analyses of variance. Because the frequencies of concerns in the public area were rather small, subcategories were not used.

Attribution of control

Subjects indicated for each of the noted hopes and fears whether its realization was dependent on actions of the subject him-/herself or on external conditions. The percentage of items under internal control was used as the measure of expected personal control (again transformation of the data with \log/\sin). Since delinquents hardly mentioned any public concerns, only data for private concerns are reported here.

Judgment of present, past, and future well-being

Subjects had to judge the total of their hopes and the total of their fears on an 11-point scale (ladder of life, *cf.* Cantril, 1965) for (a) the present, (b) five years ago, (c) five years from now, (d) twenty years from now (0 = extremely poor 10 = extremely good position).

In the second part of the study subjects first answered a 10-item questionnaire consisting of general statements about the future (e.g. item 1: 'My relationship to my family'; item 9: 'My interpersonal relationships'). These items represented general concerns which had proved salient for adolescents in a pretest. For each of the ten domains, subjects indicated the quality of their future life on an 11-point scale (ladder of life) for four points in time (see above). The ten statements were grouped according to the categories of the private area (see above). The subjective evaluation for each of these categories was used as a measure for the judgment of the present, past, near and distant future.

Extension

In the third part of the study, subjects answered two structured questionnaires. One of these was a 30-item 'Life Events Inventory'¹ which consists of specific future states of being. (These had been listed as important concerns by adolescents in a pretest.) Half of the items were formulated as negative, the other half as positive events (e.g. item 4: 'My family life is disharmonious'; item 20: 'I am very well liked by my colleagues'). Among other questions, subjects indicated for each item how old they thought they would be when the particular item finally occurred in the future. The actual age of the subject was subtracted from the indicated expected age; thus a measure of anticipated temporal distance was obtained for each of the 30 items. The items were categorized according to the above-mentioned categories for noted hopes and fears. The score for the most extended item of each category was used for further analysis (after excluding items judged as extremely uncertain; see below). Thus, we used only one item per category. (Using the mean value of extension of all items in each category, the results remain the same.)

(We also attempted to measure extension by asking subjects to indicate their assumed age at the time of occurrence of their noted hopes and fears. Unfortunately the number of missing data in this case was too large to permit analysis.)

Optimism

For each of the 30 items in the 'Life Events Inventory', subjects were also asked to indicate the probability and desirability of occurrence (11-point scale: 0 = extremely uncertain, 10 = extremely certain; 0 = extremely undesirable, 10 = extremely desirable). Only those items with either (a) a low score (0-4) or (b) a high score (6-10) on *both* probability and desirability of occurrence were selected for further analysis. In the first case, optimism was measured by the number of negative events expected to occur with low probability (failure avoidance); in the second case, optimism was measured by the number of desirable events expected to occur with high probability (attainment of success).

¹The 'Life Events Inventory' can be obtained from the authors upon request.

After the 30 items were grouped into the above-mentioned categories, these two scores of optimism were computed.

Interest in personal and public future

In the final part of the study, subjects were asked to indicate how often they had dealt with (thought about, talked about etc.) their future during the previous three months. The response categories were as follows: 1 = several times a day; 2 = once a day; 3 = several times a week; 4 = once a week; 5 = several times a month; 6 = once a month; 7 = as good as never. These categories were used to rate the following activities: talking, reading (in newspapers or books), listening to radio or watching television, and thinking about the future.

Summary of procedure

Subjects first noted their hopes and fears, then indicated the year of occurrence, their position (on ladder-of-life scale), and who/what would be the cause of these developments. They then answered the structured 1.0-item questionnaire judging the present, past, and future quality of each item (ladder of life). Following the 30-item questionnaire (Life Events Inventory), subjects finally answered the questions about how frequently they concerned themselves with the future.

Data analysis

For the data analysis only subjects without missing data were processed. In the literature, future orientation is mostly conceptualized as a 'one-dimensional', global variable; results are often contradictory, and could be related to specific thematically differentiated components of future orientation (*cf.* Trommsdorff and Lamm, 1975). Therefore, one main goal of our study was to measure the concept of future orientation in a more differentiated way, and also, to test our hypotheses in respect to various, thematically different aspects of future orientation. By this reasoning, we decided to use a quite differentiated range of life domains. This was the basis of (a) the categories of the content analysis applied to the listed hopes and fears (first part of the instrument) and (b) the structured questions (second part of the instrument). Assuming that not all subjects would list such hopes or fears which fall into all of our pre-established content categories, we had to solve this problem by either narrowing the range of thematically different content categories, or by eliminating all those subjects for whom one or more of our content categories was not relevant. Consistent with our goal to conceptualize future orientation in an as differentiated way as possible, we decided to choose the second alternative. Subjective relevance of our theoretically relevant content categories was assumed to be established when the subjects listed hopes *or* fears (in the first part of the unstructured questionnaire) which—according to the decision of two independent raters—fall into the specific content category. Since the structured questions corresponded thematically to these content categories, these questions were considered not to represent subjectively relevant domains of life for those subjects who did not list hopes or fears in this specific category. These subjects were then eliminated from further analysis. As a consequence of this decision in favour of a

differentiated analysis of future orientation, missing data occurred in both—the delinquent and nondelinquent—groups to a relatively large but comparable extent (about 50 per cent); thus, comparisons between the final samples of delinquents and nondelinquents seem justified. The bias of data created by the sampling procedure (which was accepted here on account of theoretical reasons) applies to both groups and will be referred to again when discussing the findings. The remaining number of cases (subjects) was 105 (47 delinquents; 58 nondelinquents) (Institutionalized delinquents: 1st third— $N = 7$, 2nd third— $N = 17$, 3rd third— $N = 7$; noninstitutionalized delinquents: $N = 16$; institutionalized nondelinquents: 1st third— $N = 18$, 2nd third— $N = 13$, 3rd third— $N = 12$; noninstitutionalized nondelinquents: $N = 16$). t -Tests for independent samples, analyses of variance, and the amount of explained partial variance for the F -values (η^2 , cf. Cohen, 1973) were computed; the factors being ‘delinquency’ (F_D) with two levels (delinquents and nondelinquents) and ‘institutionalization’ (F_I) with four levels (1st, 2nd and 3rd third of institutionalization; noninstitutionalization—that is previously, but no longer institutionalized persons).

RESULTS

Effects of delinquency (main effects)

Importance

The percentage of noted hopes and fears for different areas of life—an indicator for importance—differed in the expected direction (hypothesis 4). Delinquents noted a higher percentage of hopes and fears in the private and a lower percentage in the public area than nondelinquents (hopes: $F = 39.29$, $df = 1/97$, $p < 0.001$, $\eta^2 = 28.83$; $F = 39.54$, $df = 1/97$, $p < 0.001$, $\eta^2 = 28.96$; fears: $F = 70.03$, $df = 1/97$, $p < 0.001$, $\eta^2 = 41.93$; $F = 70.25$, $df = 1/97$, $p < 0.001$, $\eta^2 = 42.00$).

The percentage of hopes for self fulfilment was lower and for physical well-being was higher for nondelinquents than for delinquents ($F = 76.23$ and $F = 16.06$ respectively, $df = 1/97$, $p < 0.001$) (see Table 1).

Attribution

Contrary to hypothesis 3, delinquents believed more in internal control of their hopes and fears ($F = 14.20$, $\eta^2 = 12.77$; $F = 23.88$, $\eta^2 = 19.76$; $df = 1/97$, $p < 0.001$) (see Table 2).

Extension

In most categories, delinquents had a significantly less extended future orientation than nondelinquents (hypothesis 1) (see Table 2).

Judgment of well-being

(a) Present: As predicted by hypothesis 2a, delinquents judged their present situation as significantly less positive than nondelinquents (hopes and fears for

Table 1. Percentage of hopes and fears for different life domains (importance) (Means and standard deviations)

Percentage of Hopes†	Delinquents			Nondelinquents			F-values*	Partial η^2
	1st	2nd	3rd	1st	2nd	3rd		
Private life total	100.0 (0.0)	100.0 (0.0)	100.0 (0.0)	65.3 (28.0)	71.3 (44.0)	64.3 (28.7)	$F_0 = 39.29\ddagger$	28.83
Self fulfilment	50.4 (30.2)	52.2 (31.7)	52.3 (24.1)	5.6 (12.3)	7.8 (16.0)	12.2 (9.7)	$F_0 = 76.23\ddagger$	44.01
Family life	12.0 (12.0)	24.1 (19.4)	20.0 (14.4)	23.0 (13.6)	24.1 (23.6)	17.2 (17.6)	n.s.	
Occupation	33.9 (35.7)	8.6 (8.9)	17.9 (13.9)	18.9 (19.1)	12.8 (15.2)	13.1 (11.9)	$F_1 = 3.80\ddagger$	10.52
Economic position	3.9 (6.9)	10.1 (20.2)	9.4 (16.1)	10.2 (13.3)	17.1 (16.6)	8.0 (10.7)	n.s.	
Physical well-being	0.0 (0.0)	5.1 (11.2)	0.0 (0.0)	7.7 (10.6)	9.6 (13.5)	13.1 (7.6)	$F_0 = 16.06\ddagger$	14.20
Public life total	0.0 (0.0)	0.0 (0.0)	0.0 (0.0)	34.7 (28.0)	28.8 (44.0)	35.8 (28.7)	$F_0 = 39.54\ddagger$	28.96
Fears†								
Private life total	97.6 (6.4)	98.8 (3.3)	98.0 (5.3)	43.1 (37.4)	62.8 (38.6)	24.3 (29.3)	$F_0 = 70.03\ddagger$	41.93
Self development	73.9 (27.0)	56.8 (21.8)	57.0 (20.0)	8.3 (20.0)	11.6 (15.3)	2.2 (4.0)	$F_1 = 4.33\ddagger$ $F_0 = 138.26\ddagger$	11.82 58.77
Family life	4.7 (9.4)	22.3 (21.9)	16.5 (12.4)	13.4 (20.5)	18.5 (18.0)	15.5 (22.1)	$F_1 = 3.17\ddagger$ $F_0^{\text{DI}} = 2.86\ddagger$	8.92 8.12
Occupation	6.0 (10.5)	5.6 (8.1)	7.8 (11.0)	8.4 (13.2)	9.7 (14.0)	1.5 (3.6)	$F_1 = 2.76\ddagger$	7.88
Economic position	4.7 (12.5)	5.3 (13.7)	6.6 (12.2)	3.4 (9.4)	12.4 (19.2)	2.1 (7.2)	n.s.	
Physical well-being	8.3 (18.6)	8.9 (18.3)	10.0 (19.7)	8.9 (13.1)	10.6 (12.2)	12.3 (6.8)	n.s.	
Public life total	2.4 (6.4)	1.2 (3.3)	2.0 (5.3)	57.0 (37.4)	37.3 (38.6)	75.8 (29.2)	$F_0 = 70.25\ddagger$ $F_1 = 4.33\ddagger$	42.00 11.81

*Only significant F-values are noted, F_0 : factor 'delinquency'; F_1 : factor 'institutionalized'; F_0^{DI} : interaction between factors 'delinquency' and 'institutionalized'.

†Noted hopes/fears for several life domains, adding up to 100 per cent. The percentages do not add up to exactly 100 per cent due to rounding errors. ‡ $p < 0.05$. § $p < 0.001$.

Table 2. Attribution of personal control and extension of future orientation (Means and standard deviations)

	Delinquents			Nondelinquents			Partial η^2
	1st	2nd	3rd	Institutionalized	2nd	3rd	
Anticipated personal control†							
Hopes	49.6 (25.4)	58.1 (32.5)	82.7 (17.7)	62.2 (22.2)	46.2 (27.3)	33.4 (20.0)	$F_D = 14.20\ \ $ $F_{DI} = 4.08\ \ $ $F_D = 23.88\ \ $
Fears	35.7 (39.1)	48.9 (23.3)	60.4 (35.8)	38.6 (36.2)	15.7 (16.8)	7.3 (13.2)	17.7 (11.0)
Extension‡							
Self fulfillment	24.29 (15.85)	23.88 (23.05)	26.14 (22.76)	40.63 (21.40)	42.89 (21.10)	46.00 (23.52)	$F_D = 10.24\ \ $ $F_D = 14.21\ \ $ $F_I = 2.98\ \ $ $F_{DI} = 8.72\ \ $
Family life	10.29 (8.67)	11.94 (11.92)	10.43 (5.80)	28.06 (24.51)	26.83 (18.24)	22.25 (16.01)	32.75 (19.54)
Occupation	14.00 (10.02)	8.88 (8.84)	11.14 (10.01)	26.50 (22.40)	18.06 (13.05)	33.33 (26.45)	20.13 (13.93)
Economic position	10.71 (6.02)	14.12 (13.55)	11.57 (7.72)	24.13 (14.34)	17.72 (10.13)	11.42 (6.95)	22.94 (12.38)
Physical well-being	24.29 (18.38)	44.59 (20.07)	41.86 (19.01)	52.50 (14.00)	56.28 (9.89)	63.00 (8.00)	54.00 (10.15)
							$F_D = 43.40\ \ $ $F_I = 4.91\ \ $ $F_{DI} = 5.68\ \ $

*Only significant F -values are noted. F_D : factor 'delinquency'; F_I : factor 'institutionalized'; F_{DI} : interaction between factors 'delinquency' and 'institutionalized'.

†Anticipation of personal control over developments in private and public domains of life: percentage of events listed as under personal control (events under external control add up to 100 per cent).

‡Indicated number of years until certain future events (30 items of Life Events Inventory) would occur.

§ $p < 0.05$. || $p < 0.01$. ¶ $p < 0.001$.

general life situation as well as for specific areas of life) ($p < 0.001$) (see Tables 3 and 4). (b) Past: Delinquents judged their past physical condition as more positive than nondelinquents ($F = 9.46$, $df = 1/97$, $p < 0.01$, $\eta^2 = 8.88$). (c) Future: Contrary to hypothesis 2b, delinquents viewed their future with respect to interpersonal relationships as less positive than nondelinquents (near future: $F = 17.09$, $df = 1/97$, $p < 0.001$, $\eta^2 = 14.98$; distant future: $F = 7.62$, $df = 1/97$, $p < 0.01$, $\eta^2 = 7.62$) (see Table 4).

Optimism

The overall optimism regarding desired future events was lower for delinquents than for nondelinquents (contrary to hypothesis 2b): Delinquents expected fewer desired events to occur ($F = 4.93$, $df = 1/97$, $p < 0.05$, $\eta^2 = 4.84$). This difference was also significant for optimism in the family life area ($F = 7.73$, $df = 1/97$, $p < 0.01$, $\eta^2 = 7.38$). Undesirable events which had a low probability of occurrence were expected less by delinquents than by nondelinquents for the area of self fulfilment ($F = 5.02$, $df = 1/97$, $p < 0.05$, $\eta^2 = 4.92$); more of these events were expected by delinquents in the family life area ($F = 4.21$, $df = 1/97$, $p < 0.05$, $\eta^2 = 4.16$) (see Table 5).

Interest in personal and public future

As expected (hypothesis 1), delinquents showed significantly less interest in the personal and public future than nondelinquents: they talked less and read less about the future, and they were less well-informed (by radio and/or television) about future developments (see Table 6).

Effects of institutionalization

In the following, *t*-tests for independent samples are reported, comparing the mean of the three periods of institutionalization against the mean for the noninstitutionalized (two-tailed tests).

Importance

As expected (hypothesis 5), the importance of several private concerns was higher for institutionalized than for noninstitutionalized persons. However, these effects only occurred for the group of delinquents. The percentage of noted fears for the total private and public life and for self development were higher for institutionalized than for noninstitutionalized delinquents ($t = 4.22$, 4.22 and 2.50 respectively, $df = 45$, $p < 0.05$) (see Table 1).

Extension

The future orientation of the institutionalized delinquents in the areas of family life, economic position, and physical well-being was *less* extended than that of the noninstitutionalized delinquents (hypothesis 5) ($t = 3.24$, 2.92 and 2.34 respectively, $df = 45$, $p < 0.01$). Institutionalized nondelinquents had a *more* extended future orientation in the area of physical well-being than noninstitutionalized controls ($t = 2.39$, $df = 56$, $p < 0.05$) (see Table 2).

Table 3. Judgment on present, past and future personal well-being: hopes and fears* (Means and standard deviations)

General life situation	Delinquents						Nondelinquents						Partial η^2				
	Institutionalized			Noninstitutionalized			Institutionalized			Noninstitutionalized							
	1st	2nd	3rd	1st	2nd	3rd	1st	2nd	3rd	1st	2nd	3rd					
Hopes																	
Present	1.86 (2.61)	4.29 (2.89)	1.29 (2.21)	5.31 (1.74)	5.72 (2.72)	3.58 (3.45)	6.42 (1.38)	6.25 (1.65)	$F_D = 21.01$ §	$F_I = 4.50$ †	$F_{DI} = 6.88$ §	17.80	12.22	17.55			
5 years ago	6.86 (1.95)	5.88 (2.32)	6.14 (3.24)	4.94 (3.96)	5.17 (3.03)	5.92 (1.68)	5.67 (2.31)	6.13 (2.36)	n.s.	n.s.	n.s.						
5 years from now	7.57 (3.46)	7.35 (2.06)	6.57 (1.90)	7.75 (1.44)	7.44 (2.28)	7.00 (1.91)	7.67 (1.44)	6.69 (1.40)	n.s.	n.s.	n.s.						
20 years from now	8.14 (2.27)	8.71 (2.02)	7.00 (3.83)	8.50 (2.97)	7.39 (2.40)	7.67 (2.77)	7.08 (2.23)	8.00 (1.79)	n.s.	n.s.	n.s.						
Fears																	
Present	1.57 (1.90)	2.12 (2.32)	3.43 (3.74)	5.25 (2.72)	5.78 (2.26)	4.58 (3.75)	5.58 (1.31)	6.88 (2.85)	$F_D = 22.37$ §	$F_I = 6.09$ §	$F_{DI} = 6.88$ §	18.74	15.85				
5 years ago	5.14 (2.04)	7.06 (2.22)	6.86 (2.41)	6.50 (3.46)	6.72 (2.30)	6.58 (2.07)	6.25 (2.05)	6.69 (2.12)	n.s.	n.s.	n.s.						
5 years from now	4.86 (1.68)	5.82 (2.19)	5.43 (2.88)	6.19 (3.35)	4.78 (1.83)	6.08 (2.27)	5.00 (1.41)	5.31 (1.96)	n.s.	n.s.	n.s.						
20 years from now	5.86 (1.86)	7.71 (2.44)	5.57 (3.31)	5.69 (4.38)	4.28 (2.95)	5.00 (2.70)	4.83 (3.04)	5.13 (2.25)	n.s.	n.s.	n.s.						

*Judgment of noted hopes and fears on an 11-point scale (0 = extremely bad ... 10 = extremely good position).

†Only significant F -values are noted. F_D : factor 'delinquency'; F_I : factor 'institutionalized'; F_{DI} : interaction between factors 'delinquency' and 'institutionalized'.‡ $p < 0.001$. § $p < 0.001$.

Judgment of well-being

Present: As expected (hypothesis 6a) institutionalized delinquents judged their present situation with respect to their general life situation for hopes and fears less positively than noninstitutionalized delinquents ($t = 2.96$ and 3.55 respectively, $df = 45$, $p < 0.01$). They also judged their present situation with respect to self fulfilment and family life less positively ($t = 5.63$ and 4.27 respectively, $df = 45$, $p < 0.001$). The area of present family life was also judged as less positive by institutionalized nondelinquents ($t = 2.02$, $df = 56$, $p < 0.05$) (see Tables 3 and 4). However, institutionalized nondelinquents judged their interpersonal relationships in the present as more positive than noninstitutionalized persons ($t = 3.10$, $df = 56$, $p < 0.01$) (see Tables 3 and 4).

Interest in personal and public future

No significant effects occurred here (see Table 6).

Optimism

Undesirable future events were more frequently assigned a low probability of occurrence by institutionalized than by noninstitutionalized delinquents (general optimism and optimism for self fulfilment: $t = 2.01$ and 2.11 respectively, $df = 56$, $p < 0.05$) (see Table 5). Thus, our hypothesis (hypothesis 6b) that institutionalized persons are more optimistic was only partially confirmed.

Effects of length of institutionalization on delinquents and nondelinquents

In the following, interactions between institutionalization and delinquency are reported and analysed by simple effects (F_s); in addition, *post hoc* comparisons were calculated to test the effect of length of institutionalization (they are only reported when $p < 0.05$) (*cf.* Hays, 1970, p. 485). (If in the following, we use the term 'increase' or 'decrease' from one time segment to another, this will be for stylistic reasons only; it should be kept in mind that these are no longitudinal comparisons.)

Importance (post hoc comparisons)

In the second third of institutionalization, the hopes and fears of delinquents and nondelinquents increased in several private life domains. For delinquents, the percentage of hopes for family life increased ($p < 0.05$), the percentage of fears for self development decreased ($p < 0.05$), and of fears for occupation increased ($p < 0.05$) during institutionalization (see Table 1). For nondelinquents hopes as well as fears for the private domain increased from first to second third of institutionalization ($p < 0.05$).

Attribution

As for noninstitutionalized persons, nondelinquents believed less in internal control of their hopes than delinquents ($F_s = 8.64$, $df = 1/97$, $p < 0.01$). In the third period of institutionalization, nondelinquents believed less in internal control

Table 4. Judgment on present, past and future personal well-being: 10 life situations* (Means and standard deviations)

	Delinquents			Nondelinquents			F-values†	Partial r^2	
	Institutionalized			Institutionalized					
	1st	2nd	3rd	1st	2nd	3rd			
Present situation: now									
Self fulfillment	1.67 (1.67)	3.08 (1.62)	2.52 (1.78)	5.73 (1.89)	5.13 (3.48)	4.92 (2.70)	6.19 (1.74)	5.96 (1.82)	$F_D = 23.73\parallel$ $F_I = 5.79\parallel$ $F_{DI} = 3.13\ddagger$
Family life	2.29 (2.59)	2.82 (1.82)	2.71 (1.58)	5.35 (2.04)	5.06 (1.98)	4.83 (2.61)	5.83 (1.94)	6.44 (1.59)	$F_D = 28.85\parallel$ $F_I = 7.38\parallel$ $F_D = 12.43\parallel$
Occupation	6.14 (3.24)	5.24 (3.33)	5.71 (2.21)	7.50 (2.90)	7.78 (1.52)	7.42 (2.31)	8.92 (1.31)	7.69 (2.21)	
Physical condition	2.29 (1.82)	3.82 (1.48)	3.50 (1.73)	6.66 (2.89)	8.03 (2.10)	8.38 (1.07)	8.21 (2.10)	6.84 (2.11)	$F_D = 80.65\parallel$ $F_{DI} = 10.24\parallel$
Interpersonal relations	4.71 (3.73)	6.06 (3.33)	6.86 (2.41)	4.75 (3.68)	7.94 (2.73)	7.75 (2.49)	8.58 (1.38)	6.06 (1.57)	$F_D = 11.83\parallel$ $F_I = 2.99\ddagger$
Past situation: 5 years ago									
Self fulfillment	5.81 (2.12)	5.24 (2.23)	5.43 (2.64)	4.31 (2.37)	5.76 (1.66)	5.14 (1.43)	5.67 (1.88)	4.81 (1.88)	n.s.
Family life	6.33 (2.43)	6.14 (1.94)	6.24 (1.65)	4.98 (2.90)	5.44 (1.13)	6.03 (1.46)	6.11 (1.13)	5.27 (1.46)	n.s.
Occupation	7.43 (3.74)	7.71 (2.08)	6.43 (3.55)	5.50 (3.29)	7.33 (2.28)	8.00 (1.48)	7.75 (2.45)	6.50 (1.75)	$F_I = 2.92\ddagger$
Physical condition	7.43 (2.73)	7.68 (1.81)	7.86 (1.52)	7.00 (1.97)	5.72 (1.72)	6.75 (1.36)	7.08 (1.66)	5.59 (2.22)	$F_D = 9.46\S$
Interpersonal relations	6.86 (3.76)	7.00 (2.87)	6.29 (3.77)	5.25 (3.47)	6.22 (2.58)	5.83 (3.24)	7.17 (2.55)	7.38 (2.31)	n.s.

Future situation: in 5 years										
Self fulfilment	6.62 (2.40)	7.86 (1.55)	8.84 (1.84)	8.67 (1.19)	8.31 (1.13)	8.50 (0.96)	8.42 (0.88)	6.88 (1.37)	$F_{DI} = 7.58\parallel$	18.99
Family life	7.24 (1.93)	7.88 (1.26)	7.76 (1.78)	8.08 (1.36)	7.74 (1.01)	8.11 (1.09)	7.89 (1.08)	7.17 (1.15)	n.s.	
Occupation	7.57 (2.51)	8.65 (1.46)	8.00 (2.89)	8.81 (1.83)	8.50 (1.47)	8.42 (1.24)	9.08 (0.90)	7.56 (1.86)	n.s.	
Physical condition	8.14 (1.63)	8.12 (1.57)	7.64 (2.19)	8.53 (1.49)	8.69 (1.28)	9.33 (0.58)	8.79 (1.23)	7.16 (1.69)	$F_{DI} = 4.91\ddagger$	13.19
Interpersonal relations	5.71 (2.21)	6.41 (2.90)	5.00 (3.83)	6.38 (2.87)	8.11 (2.25)	9.08 (0.79)	8.25 (1.91)	6.13 (1.31)	$F_D = 17.09\parallel$ $F_{DI} = 3.03\ddagger$	14.98 8.57
Future situation: in 20 years										
Self fulfilment	7.05 (2.13)	8.59 (1.63)	8.71 (1.84)	8.98 (1.39)	8.55 (1.14)	8.78 (0.87)	8.19 (1.40)	7.13 (1.42)	$F_{DI} = 6.06\parallel$	15.79
Family life	8.05 (2.07)	8.77 (1.22)	7.86 (1.55)	8.98 (0.98)	8.24 (1.21)	8.30 (1.05)	8.19 (1.51)	7.69 (1.36)	n.s.	
Occupation	7.57 (2.51)	8.88 (1.50)	7.71 (2.75)	8.69 (1.99)	8.17 (2.04)	8.33 (1.44)	9.17 (0.72)	7.63 (1.82)	n.s.	
Physical condition	7.43 (3.01)	7.47 (1.98)	7.29 (2.14)	8.78 (2.00)	7.58 (2.03)	8.46 (1.10)	7.96 (1.63)	6.41 (1.42)	$F_{DI} = 4.78\ddagger$	12.88
Interpersonal relations	6.57 (2.51)	6.88 (3.10)	6.00 (2.52)	8.00 (2.71)	8.33 (1.78)	9.25 (0.87)	8.33 (1.56)	6.63 (1.78)	$F_D = 7.62\ddagger$ $F_{DI} = 4.69\ddagger$	7.29 12.67

*Judgment on 10 situations of personal well-being on an 11-point scale (0 = extremely bad . . . 10 = extremely good position).

†Only significant F -values are noted. F_D : factor 'delinquency'; F_I : factor 'institutionalization'; F_{DI} : interaction between factors 'delinquency' and 'institutionalization'.

‡ $p < 0.05$. § $p < 0.01$. || $p < 0.001$.

Table 5. Optimism in several life domains (Means and standard deviations)

	Delinquents			Nondelinquents			Noninstitutionalized workers	Partial η^2	
	Institutionalized	Institutionalized	Noninstitutionalized	1st	2nd	3rd			F-values*
General optimism†									
low probability and desirability	4.57 (3.10)	7.29 (2.34)	9.57 (4.16)	7.31 (2.96)	6.94 (2.75)	8.25 (2.63)	5.88 (3.12)	$F_1 = 4.08§$	11.22
high probability and desirability	5.43 (4.43)	6.47 (2.87)	8.14 (1.86)	9.00 (4.13)	9.17 (2.85)	8.83 (3.04)	7.13 (3.10)	$F_D = 4.93†$ $F_{DI} = 3.95§$	4.84 10.89
Optimism in specific life domains†									
Self fulfillment									
low probability and desirability	1.71 (1.38)	3.24 (1.48)	5.14 (2.04)	3.56 (1.71)	4.00 (1.46)	4.92 (1.24)	3.38 (1.93)	$F_D = 5.02†$ $F_1 = 5.09§$ $F_{DI} = 4.69§$	4.92 13.61 12.67
high probability and desirability	2.08 (1.90)	2.65 (1.27)	3.29 (1.60)	4.38 (2.28)	3.67 (1.50)	3.17 (1.59)	3.19 (1.56)	n.s.	
Family life									
low probability and desirability	1.14 (1.21)	1.06 (0.90)	1.29 (1.11)	1.19 (0.75)	0.72 (0.57)	0.83 (0.83)	0.81 (0.75)	$F_D = 4.21†$	4.16
high probability and desirability	1.61 (1.11)	1.82 (1.07)	2.71 (0.49)	2.31 (1.45)	2.94 (0.80)	3.00 (0.74)	2.13 (1.15)	$F_D = 7.73§$ $F_{DI} = 3.03†$	7.38 8.57

Occupation	1.15	1.76	2.14	1.50	1.28	1.33	1.75	1.06	n.s.
low probability and desirability	(1.38)	(1.15)	(1.57)	(0.89)	(0.89)	(0.98)	(1.14)	(0.85)	
high probability and desirability	0.95	1.29	1.14	1.44	1.39	1.75	1.92	1.19	n.s.
	(1.41)	(1.26)	(0.90)	(1.15)	(0.85)	(1.06)	(0.79)	(0.83)	
Economic position	0.14	0.47	0.43	0.38	0.56	0.33	0.50	0.31	n.s.
low probability and desirability	(0.38)	(0.51)	(0.53)	(0.50)	(0.51)	(0.49)	(0.52)	(0.48)	
high probability and desirability	0.61	0.59	0.86	0.63	0.94	0.75	0.92	0.56	n.s.
	(0.76)	(0.51)	(0.38)	(0.72)	(0.54)	(0.45)	(0.29)	(0.51)	
Physical well-being	0.43	0.76	0.57	0.69	0.39	0.83	0.33	0.31	n.s.
low probability and desirability	(0.53)	(0.66)	(0.53)	(0.60)	(0.50)	(0.39)	(0.49)	(0.48)	
high probability and desirability	0.19	0.12	0.14	0.25	0.22	0.17	0.08	0.06	n.s.
	(0.49)	(0.33)	(0.38)	(0.58)	(0.43)	(0.39)	(0.29)	(0.25)	

*Only significant F -values are noted. F_D : factor 'delinquency'; F_I : factor 'institutionalization'; F_{DI} : interaction between factors 'delinquency' and 'institutionalization'.

†Number of items (of 30-item Life Events Inventory) with either low-low (0-4) or high-high (6-10) probability and desirability (scale ranging from 0...10; items with neutral position = 5 were excluded).

‡ $p < 0.05$ § $p < 0.01$.

Table 6. Information-seeking activities regarding the personal and public future (interest) (Means and standard deviation)

	Delinquents			Nondelinquents			F-values*	Partial η^2		
	1st	2nd	3rd	Institutionalized	Noninstitutionalized	1st			2nd	3rd
Interest in personal future†										
Talking	3.57 (2.51)	1.88 (1.32)	3.43 (1.99)	3.50 (2.66)	2.33 (1.19)	1.42 (0.79)	1.33 (0.65)	2.38 (1.54)	$F_D = 12.76\parallel$	11.62
Reading	4.00 (2.38)	2.41 (2.00)	3.86 (2.61)	4.44 (2.34)	2.94 (1.73)	2.50 (0.80)	2.58 (1.68)	3.13 (2.19)	$F_I = 3.73\ddagger$	10.35
TV or radio	3.86 (2.48)	2.76 (2.05)	4.43 (2.70)	3.38 (2.45)	3.11 (1.78)	2.08 (1.24)	2.00 (1.28)	3.00 (1.97)	$F_D = 4.64\ddagger$	4.57
Thinking about	1.86 (1.07)	1.82 (1.33)	1.43 (0.79)	2.13 (1.67)	1.44 (0.78)	1.83 (1.80)	1.25 (0.62)	1.94 (1.44)	$F_D = 6.54\ddagger$	6.31
Interest in public future†										
Talking	3.14 (2.19)	2.53 (1.46)	4.86 (2.48)	3.31 (2.09)	2.72 (1.67)	2.92 (2.02)	1.42 (1.00)	2.13 (1.50)	$F_D = 10.07\S$	9.40
Reading	3.29 (2.21)	3.29 (2.28)	4.43 (2.57)	3.13 (2.13)	2.67 (1.53)	2.92 (1.62)	1.83 (0.72)	2.38 (1.54)	$F_{DI} = 4.47\S$	12.15
TV or radio	3.43 (2.70)	3.47 (2.50)	4.43 (2.76)	2.44 (1.63)	2.83 (1.25)	2.25 (1.36)	1.75 (1.14)	1.81 (0.98)	$F_D = 7.99\S$	7.61
Thinking about	4.00 (2.38)	4.00 (2.15)	4.43 (2.76)	3.75 (2.32)	2.33 (1.50)	3.17 (1.95)	1.33 (0.65)	3.25 (1.98)	$F_D = 12.05\parallel$	11.05
									$F_D = 13.78\parallel$	12.44

*Only significant F-values are noted. F_D : factor 'delinquency'; F_I : factor 'institutionalization'; F_{DI} : interaction between factors 'delinquency' and 'institutionalization'.

†High values indicate low interest, low values indicate high interest (1 = several times each day . . . 7 = as much as never).

‡ $p < 0.05$. § $p < 0.01$. ¶ $p < 0.001$.

than delinquents ($F_s = 16.64$, $df = 1/97$, $p < 0.01$, explained variance: $\eta^2 = 11.21$) (see Table 2). *Post hoc* comparisons showed that institutionalized delinquents increased their belief in internal control from first to second third, soldiers increased their belief in internal control only for fears but decreased their belief in internal control for their hopes in the second third ($p < 0.05$).

Extension

As for physical well-being, institutionalized delinquents had a less extended future orientation in all periods of institutionalization than nondelinquents ($F_s = 26.32$; $F_s = 12.17$; $F_s = 13.88$ respectively, $df = 1/97$, $p < 0.01$, $\eta^2 = 14.93$). In the second or third part of institutionalization, the future orientation was more extended than in the first part for both delinquents and nondelinquents ($p < 0.05$). *Post hoc* comparisons also showed that for institutionalized delinquents, extension in the occupational area dropped in the second third of their imprisonment ($p < 0.05$) while it increased during the same period for institutionalized nondelinquents ($p < 0.05$). Concerns for the economic area were highest in the second period of institutionalization for both institutionalized groups ($p < 0.05$).

In the second third of their institutionalization, the concerns of nondelinquents for their family life were the most and in the last third the least extended ($p < 0.05$), while the concerns of delinquents (which were less extended than those of nondelinquents) did not change in extension (Table 2).

Judgment of well-being

Institutionalized delinquents judged their present situation with respect to self fulfilment more negatively than nondelinquents in all three periods of institutionalization ($F_s = 11.74$; $F_s = 4.62$; $F_s = 11.74$ respectively, $df = 1/97$, $p < 0.05$); however, only 8.83 per cent of the variance could be explained by this interaction. Especially, in the first third of imprisonment, institutionalized delinquents viewed their situation most negatively ($p < 0.05$); in the second period of institutionalization delinquents viewed it relatively less negatively ($p < 0.05$). Institutionalized nondelinquents in their second third of institutionalization viewed their present situation more negatively as compared to those in their first and final thirds ($p < 0.05$) (see Table 4).

Great differences were manifest in judgments on physical well-being, which was seen more negatively by institutionalized delinquents than by nondelinquents in all three periods of institutionalization ($F = 47.45$; $F_s = 34.99$; $F_s = 21.57$ respectively, $df = 1/97$, $p < 0.01$, $\eta^2 = 24.06$).

Institutionalized delinquents perceived the *near* and *distant future* in the areas of self fulfilment, physical well-being and interpersonal relationships less positively than nondelinquents and noninstitutionalized delinquents. Institutionalized nondelinquents viewed their future in this respect more positively than any of the other groups ($p < 0.01$) (see Table 4). Institutionalized persons viewed their *near* and *distant future* with respect to interpersonal relations more negatively at the end than in the middle of their institutionalization ($p < 0.05$).

Optimism

Institutionalized delinquents and nondelinquents were more optimistic with respect to the future in the last as compared to the first third of their institutionalization (low probability of undesirable events, $p < 0.05$; high probability of desirable events, $p < 0.05$). Institutionalized delinquents were less optimistic (high probability of desirable events) than institutionalized nondelinquents in the first two periods of institutionalization ($F_s = 7.17$; $F_s = 4.03$ respectively, $df = 1/97$, $p < 0.05$, $\eta^2 = 10.89$). A similar trend for optimism occurred in the first and second part of institutionalization in the areas of family life ($F_s = 6.96$ and $F_s = 7.41$ respectively, $df = 1/97$, $p < 0.01$, $\eta^2 = 8.57$), and self fulfilment ($F_s = 10.39$ and $F_s = 7.82$ respectively, $df = 1/97$, $p < 0.01$, $\eta^2 = 12.67$) (see Table 5).

Interest in personal and public future

Institutionalized nondelinquents talked more about the public future than prison inmates especially in the third period of institutionalization ($F_s = 16.89$, $df = 1/97$, $p < 0.01$).

Institutionalized persons were more interested in their future (talked, read, and heard more about the future) in the second third of imprisonment than in the first third ($p < 0.05$); in the final third their interest decreased. Nondelinquents became increasingly more interested in their personal and in the public future during their institutionalization (increase from first to second and from first to third periods: $p < 0.05$), while institutionalized delinquents decreased their interest in the future from the second to the last period of institutionalization ($p < 0.05$) (see Table 6).

DISCUSSION

The major finding of this study is that delinquency and institutionalization both constitute specific areas of experience which affect the person's future orientation markedly. Future orientation of delinquents is affected by institutionalization in a different way than the future orientation of nondelinquents. The future orientation of both groups is different from noninstitutionalized persons. Furthermore, future orientation turned out to be a complex phenomenon which should be analysed according to various thematic and cognitive-affective aspects in order to describe differences in future orientation between different social groups more adequately.

Impact of delinquency on future orientation

Structure

Results on the relevance of concerns for the future and the cognitive structuring of the future (percentage of noted hopes and fears, extension, activities involving information seeking) all indicate that delinquents are less concerned about the

future and have fewer concerns for the public future than nondelinquents. They are concerned almost exclusively with their personal future; if they cognitively structure the future at all they are most concerned with very personal problems such as self fulfilment. They are more fearful than nondelinquents in this special area of life.

Our results support the traditional view that delinquents are less future-oriented than nondelinquents. Thus, the question arises once again, of whether a shortened and less structured future orientation—especially in socially relevant areas—constitutes a condition for becoming delinquent. Little interest in the future presents difficulties in evaluating the possible long-term consequences of present behaviour, such that the long-range negative utility of an envisaged delinquent act is presumably not taken into consideration. However, the present study was neither designed to answer this question nor to show that a less structured future orientation is just a consequence, or a correlate of delinquency. This question will have to be answered in future research, studying delinquency longitudinally, and controlling for 'labelled' delinquency and future orientation over time.

Looking at our results, further questions arise with respect to differences in future orientation between delinquent and nondelinquent groups. The percentage of variance explained by the factor 'delinquency' seems sufficient for the variables in question here, when taking into account that results from field research are influenced by several variables which could be controlled in the laboratory. Especially the structuring of fears in the area of self fulfilment differentiates significantly between the two groups, the amount of variance explained by a partial η^2 exceeding 50 per cent. It should be noted, however, that especially for these variables, the standard deviations are quite high. Furthermore, the sampling procedure restricts the interpretation of our results to some degree: It should be remembered here that—on account of theoretical reasons—we only used those subjects in our analysis who listed hopes and fears which fall into all of our thematically different categories.

When comparing delinquents and nondelinquents (which were selected on the basis of the sampling procedure), it can be shown that delinquents hardly have any concerns for the public life and structure their private life in many areas less extensively than nondelinquents. They are concerned almost exclusively with their personal future, and here mostly with very personal problems such as self fulfilment. However, the question can be raised whether those subjects who have not been analysed here on account of our sampling procedure (missing data) have a significantly differently structured future orientation than the delinquents or nondelinquents who were included in our analysis. In order to follow this line of reasoning, a different hypothesis would have to be formulated on the basis of a less differentiated conceptualization of future orientation. As quite a number of subgroups would have to be analysed, this problem should be taken into consideration in a further investigation.

Attribution

Contrary to our hypothesis, delinquents (as compared to nondelinquents) expected the causes of future developments (hopes and fears) to be in their own

person. Even when controlling for public concerns (which are rarely mentioned by delinquents and which are usually judged to be externally controlled) this difference remains significant. Contrary to the findings of Duke and Fenhagen (1975) and Trommsdorff *et al.* (1979) on delinquent girls, male delinquents are more internally controlled.

We can only speculate in trying to interpret this unexpected finding. Presumably, delinquents have learned during institutionalization that they have to accept their past failure, accept guilt for their past behaviour and thus generalize this guilt feeling into the future. However, this interpretation implies that delinquents are more failure-oriented and fear future developments. But data on the evaluation of their future state of being (measured in terms of their hopes and fears) reflect no difference between delinquents and nondelinquents in optimism (The more pessimistic judgments of delinquents on the 'Life Events Inventory' are of less relevance here since the reported data on attribution relate to the noted hopes and fears.) For delinquents, attribution of internal control is also linked to expected success.

One may also assume that expectation of internal control may reflect the belief of institutionalized delinquents that following release they will have to confront reintegration into society without much help from others. The strictly regulated time in prison being over, they will have to plan and be responsible for themselves.

This interpretation is supported when taking into consideration the data of the effect of institutionalization. Institutionalized delinquents have the most pronounced expectation of their future life being under their personal rather than external control (in the final third of imprisonment). More information on the nature of expected responsibility and control of desired and undesired outcomes would certainly help to better understand the different attributional tendencies in delinquents and nondelinquents.

Judgment of present and future state of being

As predicted, delinquents evaluate their present situation in all areas of life less positively than nondelinquents. Contrary to our prediction, delinquents expect their future (on the 'Life Events Inventory') to be more negative than nondelinquents in most areas of life. Furthermore, their general optimism is lower than that of nondelinquents.

This finding contradicts the traditional view that delinquents judge their future too optimistically; this was usually interpreted as an indicator of irrationalism and wishful thinking tendencies in delinquents (*cf.* Landau, 1975).

Megargee *et al.* (1970) and Landau (1975) have shown that delinquents judge their future as the most positive time of their lives. However, Megargee *et al.* (1970) did not use, as did Landau (1975), a control group. Both authors only asked for a general evaluation of present, past, and future. This unstructured view of a general future may indeed stimulate a wishful thinking response; that should not, however, be misinterpreted as an indicator for general wishful thinking. When persons are asked to judge their future state of being in specific areas of life, responses presumably are much less coloured by wishful thinking.

This kind of question may stimulate the respondents to think more realistically about certain aspects of the future; here delinquents come to the conclusion more often than nondelinquents that their future will not be at all positive. This interpretation and critique of the over-interpretation and use of rather inadequate measurements by Mergaree *et al.* (1970) and Landau (1975) is further supported by our findings that no significant difference between delinquents and nondelinquents occurs when only the general future state of being was judged (all noted hopes and fears).

As compared to the past and present, the future is seen as more positive in all groups. However, delinquents are more sensitive to negative developments which they must confront in many areas of life following release, especially in the areas of interpersonal relationships, physical health, and self fulfilment. On the other hand, they judge their future in the family domain as more positive. This shows that it is necessary to differentiate among various measures of optimism. When studying optimism as a combined judgment of probability and desirability of events, it turns out that negative events could be judged more optimistically and positive events less optimistically (delinquents in the areas of family life and interpersonal relationships). This finding also can be taken as an indication that subjects did not answer according to a response set but differentiated their responses, and that delinquents are very well capable of differentiating among different areas of life and different degrees of probable future occurrence.

The finding that delinquents are less optimistic than nondelinquents in judging specific areas of life is in line with the interpretation of Black and Gregson (1973) according to whom delinquents have an unsatisfying past and present and thus conclude that their future will hardly fulfil their wishes. We would not go so far as Black and Gregson (1973) and describe delinquents as persons who have not developed a sense of 'becoming', who find little purpose in life and who do not anticipate significant positive changes in the future. On the contrary, our data make it clear that the delinquents who participated in our study believe in positive developments in the future but they see considerable difficulties in realizing desired and avoiding undesired developments. This suggests a sceptical and rather realistic orientation towards the future.

Conclusion

According to our findings, the future orientation of delinquents is less structured, more oriented to private concerns, more internally controlled and on the whole less optimistic than that of nondelinquents. Possibly, their specific situation makes institutionalized delinquents turn rather to the events lying ahead and in their personal control. Overall, the stereotype of delinquents as being less future-oriented must be modified in light of our data. The notion that the future orientation of delinquents is less realistic than that of nondelinquents seems especially false, a product of inadequate measurements and stereotyped theorizing.

Impact of institutionalization on delinquency

Structure

The general hypothesis that institutionalized persons have a less structured future orientation as compared to noninstitutionalized persons was only partially confirmed. Institutionalized delinquents structure their fears in general more extensively, they are less optimistic about their future, and they have a less extended future orientation in the family and economic areas than noninstitutionalized delinquents.

These findings demonstrate that the future orientation of institutionalized delinquents does not generally end at the time of their release, nor does it generally serve to compensate for the deprivation during institutionalization. The fact that they think more about private fears in several areas demonstrates clearly that inmates anticipate serious problems for the future which they try to cope with by structuring these aspects. Inmates realistically expect that they will have to start anew, will have to reintegrate and achieve acceptance and success.

Judgment of present and future state of being

The general hypothesis that institutionalized persons judge their present less positively and their future more positively than noninstitutionalized persons has been generally supported.

Institutionalization appears to be a negative factor in most areas of life mainly for delinquents. The institutionalized rather overestimate the positive aspects of their past and view their present rather negatively—with one exception: institutionalized nondelinquents judge their interpersonal relationships more positively than noninstitutionalized persons. Soldiers obviously develop strong interpersonal relationships with their respective peers. These are based on common experiences and the loosening of other (external) relationships. Furthermore, the expectations and demands of the institution may be more easily dealt with if one is supported by one's peers. The building of a strong subgroup within the institution thus can help deal with psychological strain.

For institutionalized delinquents the future problems are more severe than for soldiers. This is reflected in their future orientation and judgment of their future in several areas of life. Self fulfilment, physical condition and interpersonal relations are perceived as developing less positively following release by delinquents than by soldiers. Furthermore, delinquents are less certain that positive developments will occur in their personal life.

In contrast to inmates, soldiers can much more easily reintegrate into the normal way of living, and need not expect discrimination and deprivation as compared to inmates when their institutionalization is completed. For both, the future partly mirrors the present. This explains why in several areas of life some differences between institutionalized delinquents and nondelinquents remain the same even though the future is expected to improve their life conditions in most areas.

These findings also support our above-mentioned view that delinquents can hardly be regarded as pursuing 'wishful thinking' tendencies. They anticipate

negative developments in their future and are aware that they have to face serious problems and undesirable experiences in the future after being released.

While inmates consider reintegration into normal life as difficult and something which they are not certain of achieving, their peers on probation are much more certain that they will be successful. Successful experiences of reintegration have probably increased their confidence and have helped to structure the future more extensively. Being cut off from normal experiences probably is no appropriate means of adequately preparing inmates to deal (successfully) with their future problems.

Effect of duration of institutionalization on future orientation

The experience of institutionalization, as far as time perspective is concerned, acquires psychological meaning only if it is expected to, and does, continue. The present and future looks different to the institutionalized person when entering the institution than when half or most of the confinement period has been completed. The effect of the 'total' institution in its different periods should be different for delinquents because they are more deprived of a normal life style than soldiers. This is confirmed by our data in general.

However, as will be remembered, our institutionalized persons have been institutionalized for only about one year; this period of time might not have the quality to experience a subjectively 'non-ending' deprivation; such an experience presumably prevails among the long-sentenced subjects being studied in the literature on future orientation of institutionalized delinquents (*cf.* Megargee *et al.*, 1970). Furthermore, periods of long-term institutionalization probably affect the way one anticipates and evaluates one's future quite differently than when being institutionalized only for a year. The rather realistic approach to the future which could be demonstrated for our delinquents might be the effect of the rather short sentences. These sentences do not give them the drastic experience of total institutionalization and do not keep them from losing contact with reality. This interpretation should be empirically investigated in further studies by comparing groups of prisoners with different length of sentence, even when we have to renounce adequate control groups of institutionalized nondelinquents.

For delinquents, structuring of the future decreases in the second third of institutionalization: They structure their hopes for their occupational future to a lesser extent and select less information on the future. The occupational hopes of soldiers are also less structured in the second third of institutionalization. On the other hand, fears concerning their (the soldier's) family and personal relationships increase in the second third of institutionalization. Soldiers extend their future orientation in these areas in the second third of their institutionalization relatively more.

The second third of institutionalization presumably brings about changes in the problems such persons have to deal with. They are now more acquainted with the new rules and regulations, and problems associated with the end of institutionalization become more dominant. In many components of future orientation the duration of institutionalization significantly influences many

aspects of future orientation; however, a clear-cut trend of this influence is difficult to establish.

On the whole, the present study reveals that future orientation depends on one's present and past experiences, which in turn are influenced considerably by being labelled as delinquent or by being institutionalized. During the period of institutionalization, a person's future orientation may change in many aspects. Certain aspects of institutionalization acquire increasing importance, for example, relationships to one's peers; the loss of these relationships is a threat which increases when release is close.

Other aspects of life one is deprived of during institutionalization—such as privacy, means for self fulfilment, occupational success, and economic independence—enter into hopes for the future. The end of institutionalization is experienced in this respect as an end to the frustrations resulting from these deprivations. However, delinquents have to fear difficulties in attaining desired developments in these areas of life; thus they look towards the future less optimistically than nondelinquents.

Construct of future orientation

Finally a comment should be made as to the instruments measuring future orientation. When subjects made judgments on their personal hopes and fears (open interviews), these responses were not identical to judgments on pre-structured future developments (10 general states of being; 30-item 'Life Events Inventory'). For this reason, significant differences in certain components of future orientation were only found for one of these instruments. Lessing (1972) came to similar results.

Depending on the theoretical relevance of the variables measured, the projective or the structured method is more adequate. When different ways of structuring future areas of life are to be dealt with, the projective techniques should be used. When the question involves the comparison of individual responses to the same stimuli such as given future events, the structured questionnaires are more adequate.

This study demonstrates that future orientation is a useful construct in differentiating among persons with different life styles. Differences between delinquents and nondelinquents are not as simple as often stated in the traditional literature on delinquency. Delinquents clearly cannot be characterized as unrealistic, although their future orientation is less structured, less extended and more concerned with private areas of life. They view the negative parts of their future rather clearly. This focussing more than nondelinquents on undesirable developments presumably is a consequence of their special status as delinquents trying to become reintegrated into society.

The question of the extent to which future orientation is a personality characteristic that determines a person's actions was not to be answered here. The present study was designed to examine whether future orientation is a stable personality trait, or can change dramatically during one's life time, depending on the subjective quality of one's experiences.

Should future orientation really turn out to be a partial determinant of decision-making—an assumption which is theoretically and empirically sound

(cf. Raynor, 1974; Heckhausen, 1977)—further knowledge will be needed concerning the characteristics of future orientation relevant for delinquent behaviour and concerning variables which may change one's future orientation.

General implications

This study may have reinforced some of the stereotypes of delinquency but hopefully it has also shown that it is necessary to differentiate among several aspects of future orientation, that global descriptions of less future orientation in delinquents are not justified, and that situational variables (e.g., institutionalization and its duration) can help to explain variations in future orientation. Even when taking into account the peculiarity of our sample, one may conclude that delinquency and institutionalization are important factors explaining variations in future orientation.

Several implications could be drawn from this study for counselling programmes. Delinquents seem able to cope with serious problems in prison concerning self fulfilment, physical constitution and family life. One goal of rehabilitation programmes could be to focus on these problem areas that occur during imprisonment. Counselling programmes should, in addition to immediate problems, also take into account the future problems arising for inmates after their release. These problems reside primarily in the areas of personal relationships and psychological and physiological well-being. Programmes focussing on these aspects could serve to facilitate reintegration into society by dealing with the increasing fears of inmates of being on their own after release without help and support.

If counselling and therapy can be effective in establishing a greater awareness of a satisfying future and the steps necessary for its achievement in inmates, the main problem would remain to induce delinquents to perceive and anticipate causal links between present behaviour and future consequences in order to better achieve their goals and cope with feared developments. To this end, it would be necessary to feel responsible for one's actions but not feel left alone with one's problems, and to believe in positive aspects of the future and one's ability in bringing about goal attainment.

REFERENCES

- Barabasz, A. F. (1968/69). 'Time constriction in delinquent and non-delinquent girls', *Adolescence*, **3**: 435-440.
- Barndt, R. J. and Johnson, D. M. (1955). 'Time orientation in delinquents', *Journal of Abnormal and Social Psychology*, **51**: 343-345.
- Becker, H. S. (1963). *Outsiders: Studies in the Sociology of Deviance*, The Free Press, Glencoe.
- Black, W. A. and Gregson, R. A. (1973). 'Time perspective, purpose in life, extraversion and neuroticism in New Zealand prisoners', *British Journal of Social and Clinical Psychology*, **12**: 50-60.
- Brock, T. C. and Del Guidice, C. (1963). 'Stealing and temporal orientation', *Journal of Abnormal and Social Psychology*, **66**: 91-94.
- Cantril, H. (1965). *The Pattern of Human Concerns*, Rutgers University Press, New Brunswick, New Jersey.

- Clemmer, D. (1940). *The Prison Community*, Christopher Publishing Co., Boston.
- Cohen, A. K. (1955). *Delinquent Boys: The Culture of the Gang*, The Free Press, Glencoe.
- Cohen, S. and Taylor, L. (1972). *Psychological Survival*, Penguin, Harmsworth.
- Cohen, S. (1973). 'Eta-squared and partial eta-squared in fixed factor ANOVA designs', *Educational and Psychological Measurement*, **33**: 107-112.
- Duke, M. P. and Fenhagen, E. (1975). 'Self-parental alienation and locus of control in delinquent girls', *Journal of Genetic Psychology*, **127**: 103-107.
- Duke, M. P. and Nowicki, S. (1972). 'A new measure and social learning model for interpersonal distance', *Journal of Experimental Research in Personality*, **6**: 119-132.
- Farber, M. L. (1944). 'Suffering and time perspective of the prisoner', *University of Iowa Studies in Child Welfare*, **20**: 153-227.
- Friedlander, K. (1947). *Psycho-analytic Approach to Juvenile Delinquency*, Kegan Paul, London.
- Galtung, J. (1961). 'Prison: Organization of dilemma'. In: Cressey, D. R. (Ed.), *The Prison: Studies in Institutional Organization and Change*, Holt, Rinehart & Winston, New York.
- Gibbens, T. C. N. (1961). 'The prisoner's view of time—by a former prisoner of war', *The Prison Journal*, **41**: 46-49.
- Glueck, S. and Glueck, E. (1950). *Unraveling Juvenile Delinquency*, Harvard University Press, Cambridge.
- Goffman, E. (1968). *Asylums*, Penguin, Harmsworth.
- Harvey, J. H., Ickes, W. J. and Kidd, R. F. (Eds.) (1976). *New Directions in Attribution Research*, Vol. 1, Wiley, New York.
- Hays, W. L. (1970). *Statistics*, Holt, Rinehart & Winston, London/New York.
- Heckhausen, H. (1967). *The Anatomy of Achievement Motivation*, Academic Press, New York.
- Heckhausen, H. (1977). *Motivation and its Constructs: A Cognitive Model*, unpublished paper, Ruhr-Universität, Bochum.
- Hohmeier, J. (1969). 'Die soziale Situation des Strafgefangenen: Deprivationen der Haft und ihre Folgen', *Monatsschrift für Kriminologie*, **6/7**: 292-304.
- Hormuth, S., Lamm, H., Michelitsch, I., Scheuermann, H., Trommsdorff, G. and Vögele, I. (1977) 'Impulskontrolle und einige Persönlichkeitscharakteristika bei delinquenten und nichtdelinquenten Jugendlichen', *Psychologische Beiträge*, **19**: 340-354.
- Howenstine, R. J. (1969). 'Future time perspective and its relation to the effects of external stimulation and activity upon time estimation in delinquent and non-delinquent male adolescents', *Dissertation Abstracts International*, **30-B**: 848.
- Landau, S. F. (1969). 'The effect of length of imprisonment and subjective distance from release on future time perspective and time estimation of prisoners', *Scripta Hierosolymitana (Studies in Criminology)*, **21**: 182-223.
- Landau, S. F. (1975). 'Future time perspective of delinquents and nondelinquents: The effect of institutionalization', *Criminal Justice and Behavior*, **2**: 22-36.
- Landau, S. F. (1976). 'Delinquency, institutionalization, and time orientation', *Journal of Consulting and Clinical Psychology*, **44**: 745-759.
- Landau, S. F. (1977). 'Temporal experience of the criminal'. In: Landau, S. F. and Sebba, L. (Eds.), *Criminology in Perspective*, Lexington Books, Lexington, Mass./Toronto.
- Lessing, E. E. (1972). 'Extension of personal future time perspective, age, and life satisfaction of children and adolescents', *Developmental Psychology*, **6**: 457-468.
- Lewin, K. (1948). 'Time perspective and morale'. In: Lewin, K. (Ed.), *Resolving Social Conflicts*, Harper & Brothers, New York.
- Lösel, F. (1975). *Handlungskontrolle und Jugenddelinquenz*, Stuttgart, Enke.
- Matulef, N. J. (1967). 'Future time perspective and personality characteristics of male adolescents, delinquents and non-delinquents', *Dissertation Abstracts International*, **28**: 1204-1205.
- Megargee, E. J., Cooper-Price, A., Frohwirth, R. and Levine, R. (1970). 'Time orientation of youthful prison inmates', *Journal of Counseling Psychology*, **17**: 8-14.

- Merton, R. K. (1957). *Social Theory and Social Structure*, The Free Press, Glencoe.
- Mischel, W. (1974). 'Processes in delay of gratification'. In: Berkowitz, L. (Ed.), *Advances in Experimental Social Psychology*, Vol. 7, Academic Press, New York.
- Mischel, W. and Gilligan, C. (1964). 'Delay of gratification, motivation for the prohibited gratification and responses to the temptation', *Journal of Abnormal and Social Psychology*, **69**: 411-417.
- Morris, T. and Morris, P. (1963). *Pentonville: A Sociological Study of an English Prison*, Routledge & Kegan Paul, London.
- Phares, E. J. (1976). *Locus of Control in Personality*, General Learning Press, New Jersey.
- Platt, J. J., Eisenman, R. and DeGross, E. (1969). 'Birth order and sex differences in future time perspective', *Developmental Psychology*, **1**: 70.
- Quay, H. C. (1965). 'Personality and delinquency'. In: Quay, C. (Ed.), *Juvenile Delinquency*, Van Nostrand, Princeton, New Jersey.
- Raynor, J. O. (1974). 'Future orientation in the study of achievement motivation'. In: Atkinson, J. W. and Raynor, J. O. (Eds), *Motivation and Achievement*, Wiley, New York.
- Rosenquist, C. M. and Megargee, E. J. (1969). *Delinquency in Three Cultures*, University of Texas Press, Austin.
- Rotter, J. B. (1966). 'Generalized expectancies for internal control of reinforcement', *Psychological Monographs*, **80** (1), Whole No. 609.
- Sack, F. (1968). 'Neue Perspektiven in der Kriminologie'. In: Sack, F. and König, R. (Eds), *Kriminologie und Strafverfahren*, Enke, Stuttgart.
- Schneidermann, D. F. (1964). *The Time Sense of Delinquents*. Unpublished doctoral dissertation, Boston University Graduate School.
- Siegan, A. W. (1961). 'The relationship between future time perspective, time estimation, and impulse control in a group of young offenders and in a control group', *Journal of Consulting Psychology*, **25**: 470-475.
- Stein, K. B., Sarbin, T. R. and Kulik, J. A. (1968). 'Future time perspective: Its relation to socialization process and the delinquent role', *Journal of Consulting and Clinical Psychology*, **32**: 257-264.
- Trommsdorff, G. and Lamm, H. (1975). 'An analysis of future orientation and some of its social determinants'. In: Fraser, J. T. and Lawrence, N. (Eds), *The Study of Time*, Vol. II, Springer, New York/Heidelberg.
- Trommsdorff, G., Burger, C., Fücksle, T. and Lamm, H. (1978). *Erziehung für die Zukunft*, Schwann, Düsseldorf.
- Trommsdorff, G., Haag, C. and List, R. (1979). 'Zukunftsorientierung und Risikobereitschaft bei weiblichen Delinquenten', *Kölner Zeitschrift für Soziologie und Sozialpsychologie*, **31**: 732-745.

RÉSUMÉ

L'étude présentée ici est une analyse—fondée sur une théorie de l'apprentissage social—de la relation entre la délinquance, le fait d'être enfermé et l'attitude à l'égard du futur. Des adolescents au nombre de 240 (enfermés ou en liberté, délinquants ou nondélinquants) ont répondu à des questions ouvertes et des questions fermées sur leurs anticipations et leurs évaluations du futur. On a utilisé des analyses de variance et des tests t pour nos données qui, en partie, ont confirmé les hypothèses : les délinquants organisent leur futur d'une manière moins différenciée, leur futur est moins étendu et il est plus déterminé par eux-mêmes que par l'extérieur; cela est particulièrement net pour les délinquants enfermés. Toutefois les délinquants élaborent plus leurs peurs (pessimisme) concernant leur avenir que les nondélinquants. L'attitude à l'égard du futur pour différents domaines de la vie (profession, famille, vie privée, etc.) varie avec le temps d'enfermement. Ces résultats ne sont pas en accord avec la conception dominante selon laquelle les délinquants ont une attitude non réaliste à l'égard du futur. Il semble

bien plutôt que les délinquants emprisonnés s'attendent à des événements 'négatifs' peu de temps après leur libération.

Les résultats doivent être interprétés avec précaution eu égard à la nature de l'échantillon et à la durée, brève, de l'enfermement. Il faut voir aussi que notre méthode pour mesurer l'orientation à l'égard du futur sur plusieurs dimensions a été peu pratiquée jusqu'ici. Nous croyons toutefois que notre conceptualisation en termes de dimensions multiples est théoriquement fructueuse.

ZUSAMMENFASSUNG

In der hier vorliegenden Untersuchung wurden—ausgehend von Ansätzen der sozialen Lerntheorie—Zusammenhänge zwischen Zukunftsorientierung einerseits und Delinquenz und Institutionalisierung andererseits untersucht. 240 männliche Jugendliche (institutionalisierte und nichtinstitutionalisierte Delinquente und Nichtdelinquente) beantworteten offene und strukturierte Fragen hinsichtlich ihrer Zukunftserwartungen und -bewertungen. Die durch Varianzanalysen und *t*-Tests ausgewerteten Daten bestätigen z.T. die Hypothesen: Delinquente strukturierten ihre Zukunft weniger differenziert und langfristig und eher internal als Nichtdelinquente; dies traf insbesondere für die institutionalisierten Delinquenten zu. Delinquente strukturierten jedoch ihre Befürchtungen hinsichtlich Selbstverwirklichung stärker als Nichtdelinquente. Je nach Dauer der Institutionalisierung variiert die Zukunftsorientierung in verschiedenen Lebensbereichen. Diese Ergebnisse bestätigen nicht die in der Literatur vorherrschende Annahme einer unrealistischen Zukunftsorientierung von Delinquenten; hier zeigte sich vielmehr, daß institutionalisierte Delinquente eher negative zukünftige Ereignisse antizipieren, deren Auftreten sie für die Zeit nach ihrer Entlassung befürchten. Allerdings müssen die vorliegenden Befunde aufgrund der besonderen Stichprobe und der kurzen Institutionalisierungsdauer relativiert werden. Auch ist die hier verwendete Methode der differenzierten Erfassung von Zukunftsorientierung in der Literatur nicht üblich. Jedoch hat sich hier die Konzeptualisierung der Zukunftsorientierung als mehrdimensionales thematisch differenziertes Konstrukt als fruchtbar erwiesen.

Author's address:

Dr Gisela Trommsdorff, Institut für Erziehungswissenschaft der Technischen Hochschule Aachen, Eilfschornsteinstr. 11, D-5100 Aachen, Federal Republic of Germany.