



FORSCHUNGSBERICHTE Nr. 74

**The Consequences of Prisonization for Juveniles -
A Theoretical and Methodological Framework for Research**

JuSt-Bericht Nr. 2

Werner Greve

1998

Kriminologisches Forschungsinstitut Niedersachsen e.V. (KfN)
Lützerodestraße 9 • 30161 Hannover
Tel. (05 11) 3 48 36-0 • Fax (05 11) 3 48 36-10
<http://sun1.rrzn.uni-hannover.de/n5x5link.de>
e-mail: [kfn @ kfn.uni-hannover.de](mailto:kfn@kfn.uni-hannover.de)

Juvenile justice embodies a strange mixture of ideals and realities, of different (and divergent) purposes and intentions, and of heterogeneous, often incompatible perspectives. Care or correction, encouragement or punishment, education or therapy, protection or intervention, support or deterrence — any approach toward treating juvenile delinquency and crime has its complementary counterpart. A certain decision may be viewed from one side of the political spectrum as containing too little punishment, while for others the very same intervention may be too harsh. This heterogeneity is mirrored in confused public opinion on these issues (Krisberg & Austin, 1993).

And yet, as Krisberg and Austin aptly state (1993, p. 4), the juvenile justice system ought almost by definition to be guided by a developmental perspective. The very fact that specialized laws apply to the juvenile court system (and have done so for nearly a century; for Germany, cf. Dörner, 1991) implies an underlying belief that juvenile and adolescent offenders should be treated differently from adults. Their responsibility for their own actions (including criminal ones) is different, and so are their need for protection, education and care. One important consequence is that juveniles are kept out of adult jail and lockups. Though there has been much critical discussion as to precisely where the line should be drawn between adolescence and adulthood, there is a firm consensus that the distinction does need to be made (fuzzy boundaries do not make the differentiation itself untenable as long as non-controversial examples can be found *on both sides*).

At the same time, crime rates are on the increase, and juveniles are the cause of this trend (on Germany, e.g. Pfeiffer, Brettfeld, Delzer & Link, 1996, Pfeiffer, Delzer, Enzmann & Wetzels, 1998; on European countries see Pfeiffer, 1998; on the USA e.g. Loeber & Farrington, 1998; Coie & Dodge, 1998; Loeber & Hay, 1997; Loeber & Stouthamer-Loeber, 1998; Tracy, Wolfgang & Figlio, 1990; Wilson & Howell, 1994). Even if a second glance does show that police statistics probably tend to exaggerate the problem (for Germany: Pfeiffer, Delzer, Enzmann & Wetzels, 1998) and that the victims are mainly juveniles too (for Germany: Pfeiffer, Brettfeld, Delzer & Link, 1996), public opinion (i.e., the opinion of non-juvenile citizens) demands that society should respond. There is a growing view that tough reactions are appropriate, that punishment should take precedence over treatment, and sanctions over education. While the juvenile justice system has traditionally tended to emphasize the aim of rehabilitating young offenders to protect them from punishment, retribution and stigma-

tization, the institution of youth incarceration is still alive. Indeed, juveniles are now being incarcerated in increasing numbers, and the general public does not appear to be very concerned about this (to put it mildly). On the contrary, protection of the community, punishment and retribution appear to be in the ascendancy, and to be gaining acceptance as legitimate primary objectives of the juvenile courts (Tate, Repucci & Mulvery, 1995). As a consequence, even locking up children and juveniles is back on the political agenda, for many people at least. If any reasons are given at all, those most often cited are ‘just deserts’ and ‘deterrence’,¹ but neither argument holds much water with respect to juveniles, no matter whether judged on a theoretical or empirical basis (Krisberg & Howell, 1998).

No one disagrees with the fact that juveniles are not adults. They are all entitled to (but unfortunately do not always get) education and a proper upbringing. Yet if they *haven't* had this, they cannot be considered fully responsible, if at all, for what they do. It is *our* responsibility as adults to provide this education and upbringing: as their parents, teachers, other social counterparts, and politicians (including policymakers on crime). But there is no point in *punishing* a person unless (s)he is responsible, so how can we be allowed to lock up our *juveniles*? (So much for the “just deserts” line of argument). The typical response to this is that incarceration is justified in terms of its efficacy for the young people themselves or for the social community. Yet all we have learnt about this to date shows that the deterrent effect on *other people* is highly in doubt for juvenile delinquency in particular (Schumann & Kaulitzki, 1991; Schneider, 1990). Certainly, too, there is every reason to doubt that incarceration has a deterrent effect on the young offenders themselves. A glance at the statistics suggests it does not. Figures issued by the federal attorney general in Germany (Generalbundesanwalt, 1990), for example, showed that 77% of juveniles initially sentenced in 1984 had again been fined or received custodial sentences within five years (the corresponding figure for adults is 51%). Despite variations from one study to another (Kerner,

¹ I leave aside the aspect of protecting the society throughout the following for mainly two reasons. First, this is not an aspect of psychological research (which is my point of view here). Second, security is best served if delinquent juveniles are prevented from committing further crimes, that is if the treatment the society applies to them has the intended effect.

Dolde & Mey, 1996; Snyder, 1998; see section 2 below for a more detailed discussion), this does not say much for the “deterrence” line of argument for youth incarceration.

One point on which experts do appear to broadly agree is that delinquent acts committed by young people in the vast majority of cases manifest an attitude typical of their stage of development, which seeks to challenge the rules laid down by the adult world they are expected to grow up into. In other words these acts, albeit in a sometimes extreme form, express a process in which people are developing their personal and social identities. Even if such a thing as a “noxious tendency” truly exists in some young people (this is the precondition for incarcerating a young person written into the German Juvenile Court Act), it will be the cause for delinquent behavior only in exceptional cases. Moreover, pure punishment, but especially custodial punishment, will hardly be the appropriate reaction in *either* of these cases. It is unlikely to counteract whatever “tendency” has been claimed, and the critical phase in a juvenile’s development would pass off just as readily without applying punishment, probably leaving less scars as a result. For there is no denying that real-world conditions in German juvenile penal institutions (Dünkel, 1990) do not measure up to what would be desirable, or even, quite often, to what is just plain necessary. So what purpose can it possibly serve to wield such a big stick when it would be enough to issue a severe warning or when a sensitive approach offering individual help may be needed?

Actually, we know extremely little about a juvenile inmate’s subjective experience and perceptions of incarceration. We similarly know little about its immediate impact, in terms of recidivism or of subsequent social integration. Already twenty years ago, Malmquist (1978) came to a similar conclusion: “The implication is that detention of juveniles has been on the basis of providing treatments which either do not exist or are invalid. (...) Our knowledge of rehabilitating delinquents is so meager, as confirmed by investigations and results, that we are utilizing techniques on a trial and error basis.” (p. 791).

We need to address two issues in particular if we wish to see our subject more clearly. Firstly, before reflecting on the *impact* of incarceration we ought to find out more about *whom* we are sentencing to this punishment. That leads us down the road to a relatively general theory of delinquency (juvenile or otherwise): How should we view deviance and criminal behavior by juveniles, and how should we set about explaining it? What circumstances tend to promote or

impede it? We cannot judge whether incarceration would be indicated for certain offenders or offenses (given specific personal or social circumstances) unless we have a general theory of how criminality develops. Even recidivist delinquency is, generally speaking, just a special case of delinquency, so if past punishment does not play any part in explaining it, or in explaining desistance from committing later crimes, the punishment itself loses one of its key justifications.

Secondly, what do we actually do to people when we lock them up? What effects does “prisonization” have in general, and especially what impact on juveniles? If we intervene as drastically as this in a person’s development, we ought not *only* to examine the intervention’s impact on recidivism, but also to take other, possibly negative, consequences into account. After all, when a new drug is licensed it is tested not just for its proven efficacy but also for potential risks and side-effects.

This paper initially discusses the two starting points touched on above (juvenile delinquency and the effects of incarceration) in the light of the literature (sections 1 and 2). If we intend to address the combined issue – i.e., the incarceration of delinquent juveniles – empirically, we first need to focus on more specific issues selected by means of a general theoretical approach. So the second part of the paper aims to sketch a theoretical framework from a developmental point of view and to distill out three core concepts for that purpose, namely coping, identity and action (section 3). Finally, this will lead on to an outline of the methodological consequences that it is essential to take into account when making detailed empirical inquiries into the issues set out here (section 4).

1 Juvenile delinquency: Individual disorder or developmental pattern?

Although we have extensive literature available to us on juvenile delinquency and crime (e.g. Coie & Dodge, 1998; Loeber & Hay, 1997; Moffitt, 1993; Pepler & Rubin, 1991), there is still consensus only on a small number of points. One obvious reason for that is that “juveniles” cannot be defined as a homogeneous group, and no more can “delinquency” be established as a homogeneous category, whether in criminological or, still less, in psychological terms (cf. Goffman, 1963). Public order offenses, those against property, and violent or sexual offenses all need to be judged in different ways, while crimes of status (i.e., acts that would not have been illegal if the offenders had already reached adulthood) form yet another category in their own right. The picture is more diverse still once we take account of individual and situational conditions (e.g. personal goals, normative convictions, restrictions on action, individual competencies, etc.) and of social factors (a person’s financial situation, education, social attachment, etc.). Consequently, numerous correlates for juvenile delinquency have been established over time. The work of Glueck and Glueck (e.g., 1950) became famous in this respect: With the declared aim of breaking away from one-sided views of delinquency, they took many different aspects into account, ranging from the parental home via leisure activities to a person’s physique (Sampson & Laub, 1993).

Unfortunately, the theoretical grounding for these numerous crime correlates is often uncertain. For example, poor performance at school could be: a) one cause of delinquent behavior (e.g., because the latter is performed in order to maintain esteem within a peer group), b) an ancillary condition for delinquency to occur (e.g., because temptations are perceived differently against a backdrop of acute dissatisfaction with school), c) a result of delinquent behavior (e.g., because a youth is distracted, or his/her time and intellectual resources are committed to other things), d) like the delinquency itself, the result of *other* conditions such as an unfavorable social environment at home, or else, most probably e) a combination of all of these. Equally, it is often quite unclear whether a “crime-generating” factor is structural (e.g. poverty) or procedural (e.g. attachment): If their poverty makes parents less capable of nurturing family attachment, the operation of a structural factor would actually be mediated by a procedural one (Sampson & Laub, 1993). The basic problem, then, is that empirical findings are inadequately integrated into a theoretical framework.

In a preliminary approach, at least three perspectives can be distinguished in the theoretical treatment of crime in general, and juvenile crime in particular (Loeber & Hay, 1994). First, from a developmental perspective biographical and ontogenetic conditions of juvenile delinquency are investigated. Second, from a social perspective situational cues and social circumstances of the emergence of youth criminality are focused on. Third, a differential perspective looks for the areas of individual vulnerability and for the dispositions that actually allow biographical or social conditions to engender criminal action.

1.1 Deviance as a consequence and/or manifestation of developmental processes

Developmental approaches toward explaining juvenile crime (for a recent overview, cf. Coie & Dodge, 1998; Farrington, 1995) can be roughly divided into two main lines of argument. Particularly in criminological literature, in the first of these, juvenile delinquency tends to be seen as manifesting a developmental *phase* which, though ubiquitous, is confined to a short time period. Accordingly, this perspective focuses on the discontinuity of juvenile delinquency. In contrast, the second line of argument inquires into individual ontogenetic (biographical) conditions giving rise to criminal behavior. In the latter view, crime is not a manifestation but a result of developmental processes. Thus, this perspective focuses on the continuity of deviance and delinquency.

In their careful discussion, Huizinga, Esbensen and Weiher (1991) argue that there is some evidence that it may be "appropriate and, perhaps, necessary to pay greater attention to the possibility of typological diversity" (p. 104). Typologies, even crude ones, may provide a first valuable step toward acknowledging the central tenets of explaining crime: (1) considerable evidence of persisting conduct problems over the life course, (2) wide diversity and change with age, and (3) wide variety from one person to another (Loeber & Hay, 1994). Accordingly, Moffitt (1993, 1997) has put forward an approach that integrates these two viewpoints by distinguishing between two *types* of delinquents: "... antisocial behavior is remarkably stable across time and circumstance for some persons but decidedly unstable for most other people" (Moffitt, 1993, p. 676). She thus distinguishes between "life-course-persistent offenders" and "adolescence-limited offenders" (Magnusson, Klinteberg & Stattin, 1994, call these types "persistent" and "juvenile" offenders, respectively). Yet another distinction, between long-term and short-term escalation (Loeber & Hay, 1997) highlights the

process element in both of the ways in which delinquency can be engendered. In similar vein, Blumstein, Farrington and Moitra (1985) differentiate between “desisters” and “persisters”. When such a typological approach is taken, the existence of multiple roads to delinquency comes to the fore. In particular, Moffitt (1993) argues both theoretically and empirically from a developmental point of view that we need *different* developmental explanatory approaches for different types of offenders not only with respect to differences in the duration and history of delinquency, but also because one should expect different developmental patterns with respect to escalation, differentiation or desistance. This is an important point since criminologists sometimes have tackled the necessity of developmental explanations at all (Gottfredson & Hirschi, 1986; cf. also Greenberg, 1991).

However, from a more systematic point of view, the taxonomic dimension of (a) persistence *versus* desistance and (b) early onset *versus* late onset are logically independent from each other (although they may be *empirically* highly correlated; cf. also Moffitt, Caspi, Dickson, Silva & Stanton, 1996). Thus, a two-dimensional taxonomy follows from a combination of both aspects (table 1).

Table 1: Four types of offenders in a two-dimensional taxonomy

	persisters	desisters
early onset	<i>persistent offenders</i>	conduct disorders in childhood
late onset	late career criminals	<i>adolescence-limited offenders</i>

However, even this four-type-taxonomy of offenders clearly needs further differentiation. First, even for adolescence-limited offenders the duration of their delinquency period may vary between one deviant act and years of serious delinquency. These differences surely ask for very different psychological explanations and, accordingly, different interventions. Second, desisting from (further) crimes has many faces: It can be either entirely or partially, and, if partially, it can be a kind of deceleration, de-escalation or specialization (Le Blanc &

Loeber, 1998). In a recent study, Nagin, Farrington and Moffitt (1995; cf. also Loeber & Hay, 1997) found that a subgroup of the “adolescent-limited offenders” still showed delinquent and even antisocial behavior at age 32 (self-reported). One possible interpretation is that these people are engaged in what might be termed “circumscribed deviance” (Nagin, Farrington & Moffitt, 1995, p. 132). They appear to restrict their deviance to forms of behavior less likely to result in official sanctions or to disrupt intimate relationships. Their offenses, however, are *non-trivial* ones such as drunk driving, fighting in public, burglary and theft. What’s more, these offenses are not officially recorded. That is, for these offenders the recording, not the offending, is “adolescence-limited”. Furthermore, “late” onset is a very broad category. One has to bear in mind that there are cases in which the first offense was committed in middle or even late adulthood (e.g., this holds for most of the “white collar” crimes). In most cases, however, adolescence-onset (Moffitt, Caspi, Dickson, Silva & Stanton, 1996) would be an adequate description. Fourth, even for persistent offenders different dynamics of development are conceivable. To put it simply, *progressive* delinquency implies an aggravating development (e.g., from theft to murder), whereas *regressive* delinquency implies a decreasing seriousness of deviance (e.g., repeated recidivism, but with a „lower degree“ each time). A closer look reveals, however, that this distinction is still an oversimplification: Acceleration (increasing frequency), stabilization (increasing continuity), and diversification (of crime categories) may be subtypes of aggravation which vary independently (Le Blanc & Loeber, 1998).

For any pragmatical use, however, the two-type-typology may be sufficient, in particular due to the fact that “persistence” and “early onset” are highly correlated. Thus, I shall shortly discuss both “types” and the empirical evidence supporting them.

(I) Juvenile offenders

There is indeed plenty of evidence suggesting that juvenile delinquency remains a “passing phase” in what would be considered “normal” cases. This is particularly borne out by the fact that juvenile delinquency appears to be a ubiquitous phenomenon (i.e. normal in a statistical sense): Almost every male juvenile has acted in breach of some formal or legal regulation at

some time.² In this view, it is almost inevitable that young people who are developing their own personal identities, who are getting to grips with the social and societal norms by which we live together —i.e. who are looking for signs of where their social environment “draws the line” for their own personal action— will not just run up against explicit and informal social norms but will also occasionally transgress them. “Common opinion holds that breaking adult rules is a normal occurrence during adolescence. Yet common opinion also views such behavior as a sign of maladjustment” (McCord, 1990, p. 414).

Additionally, an “aging out” effect of juvenile delinquency is equally well corroborated. Both police records of crime and the statistics on convictions for criminal offenses are at by far their highest levels in the juvenile age groups, and the curve soon quickly falls off again in the young-adult age group, with offenses returning by age 30 to the level reported for 15-year-olds, and continuing on down thereafter (e.g., Blumstein, Cohen & Farrington, 1988; Gottfredson & Hirschi, 1983, 1986; Kerner, 1989; Moffitt, 1993; Smith, 1995). Studies looking into undetected deviance regularly show a similar picture (Coie & Dodge, 1998; for Germany, e.g. Villmow & Stephan, 1983). Thus it appears that, in the majority of cases, a combination of greater maturity (including perhaps a growing individual awareness of having done wrong) and informal sanctions applied by parents, teachers or friends are sufficient to prevent further transgression of the socially drawn limits. In addition, the patterns of incentives and opportunities available change as people grow into new life situations and face new developmental tasks in adulthood (“waning motivation and shifting contingencies”; Moffitt, 1993, p. 690; cf. Moffitt, 1997). However, another largely unresolved issue is *why* the majority of juvenile offenders do eventually desist, even those who have encountered the penal system including prison. Sampson and Laub (1993) propose that as people age so does the level of social control (cf. also Gottfredson & Hirschi, 1994) that raises the threshold of delinquency to an extent that only (a few) persistent offenders will now cross it.

² This paper will not dwell on the issue of gender differences in delinquency and violence (cf. Coie & Dodge, 1998; Pepler & Slaby, 1994). The consequences of youth incarceration are less significant with regard to female delinquency for the simple reason that young women are rarely put in jail. According to Germany’s penal statistics, just 129 of the 4,980 juveniles held in custody as of March 31, 1995 were female.

(II) Persistent offenders

Actually, only a very small proportion of juveniles are responsible for committing the vast bulk of offenses, especially more serious ones (Kerner, 1989; Patterson, Capaldi & Bank, 1991; Wilson & Howell, 1994; Wolfgang, Figlio & Sellin, 1972; Wolfgang, Thornberry & Figlio, 1987; Tracy, Wolfgang & Figlio, 1990). Variance in the incidence of juvenile crime is not only great, but evidently also bimodally distributed: that would support Moffitt's pragmatical two-type typology. Evidently, a small number of juveniles and young adults break the law so frequently and so seriously that the authorities concerned find it unavoidable to punish them severely on repeated occasions. In the event, very few juveniles are actually sentenced to incarceration (in Germany, 1990 1.3% of the juveniles and 2.8% of the adolescents confronted with the Juvenile Court are sentenced to prison; Kreuzer, 1993). However, those juveniles who *are* incarcerated are most likely to belong in this group of persistent offenders (Lösel, 1995). However, the conversion does not hold: Chronic offenders in particular have proved notoriously difficult to detect in the "dark figure" of crime (Cernkovich, Giordano & Pugh, 1985).

The large number of findings to the effect that deviance and the willingness to use violence are highly stable, and that they are highly predictable from personal characteristics in early life (e.g. Caspi, Elder & Herbener, 1990; Eron & Huesman, 1990; Farrington, 1991, 1995, 1997; Farrington, Loeber & van Kammen, 1990; Le Blanc & Loeber, 1998; Loeber & Stouthamer-Loeber, 1998; Thornberry, 1997; Stattin & Magnusson, 1991; White, Moffitt, Earls, Robins & Silva, 1990), suggest that one ought in these cases to be looking for *specific* individual developmental conditions, not seeking any explanation for persistent offending in *general* developmental patterns. Le Blanc (1990) distinguishes two general processes by which persistent offending can develop, namely activation and escalation. Activation focuses on the stimulation of offending at the outset and how its persistence is assured, whereas escalation refers to an age-related sequence of delinquent activity growing increasingly serious over time. However, very few studies have examined developmental sequences of delinquency with respect to the (possible) impact of earlier reactions to earlier forms of deviance (cf. Huizinga, 1995).

One aspect of the concentration on „career criminals“ (early onset, high persistent) was the hope (or, as Gottfredson & Hirschi, 1986, claim, the illusion) that their early identification and selective incapacitation would protect the society from their delinquency. It seems worth noting, however, that this is not my primary interest nor my personal opinion. The question I am dealing with throughout this chapter is to ask for the consequences of a certain type of intervention, that is, of incarceration during adolescence for which kind of delinquents. Any typology, even the pragmatical two-type version, is pertinent to the question of what impact incarceration might have on the development of young people, since if we follow Moffitt’s approach we shall need to use different theories to explain the consequences of restrictive punishments of deviant and criminal behavior for these two different categories of offenders. Yet even approaches that are explicitly developmental have so far paid too little attention to the impact of sanctions in general and incarceration in particular. While a good deal of scientific effort has been devoted to the explanation of recidivism and of criminal “careers” (cf. Gottfredson & Hirschi, 1986; Blumstein, Cohen & Farrington, 1988), most of these studies do not refer explicitly to juvenile delinquency, and certainly not to the developmental consequences of incarceration for *juveniles* in particular.

This leads to a somewhat different perspective. Criminal behavior may not just be a manifestation and consequence of developmental processes, but may equally well condition them or trigger them off. Deviance can, as Montada (1995) aptly termed it, turn out to be a “developmental accident”. The institutional punishment of delinquent behavior, in particular, will normally have consequences for the further development of the juveniles concerned. So it is crucial to know how such formal sanctions impact on the young offender as a person. For example, although being arrested by the police does not lead on to conviction in the majority of cases (Wolfgang et al., 1972), the experience can nevertheless have a considerable effect. However, it is rather less clear what sort of consequences the experience has for what sort of people (Keane, Gillis & Hagan, 1989).

1.2 Situational and social conditions of juvenile delinquency

However, a developmental approach runs an inherent risk of underestimating the significance both of later critical life events and of the institutions of social control (whether formal or informal, such as implicit social norms) even during adulthood. Particularly the fact that

sometimes quite radical short-term quantitative and qualitative changes occur in levels of youth crime cannot be readily explained using a developmental perspective focusing on individual patterns or conditions. Social shifts of this nature cannot be explained by pointing out that the behavior is a passing phase or a manifestation of the dynamism of individual developmental processes.

Actually, the majority of theories in use by criminologists focusing on social circumstances said to favor the emergence of criminality (some go so far as to claim that a developmental — and longitudinal— perspective is unnecessary; Hirschi & Gottfredson, 1983). A typical example of a social perspective is the anomie theory derived from Merton’s work (Adler & Laufer, 1995): The crime-engendering factor investigated in this case is the discrepancy between the objectives and norms preached by society on the one hand and the means of achieving or fulfilling them on the other. The general theory of crime (Gottfredson & Hirschi, 1994) also focuses on social control, though from what could be termed an opposing viewpoint. According to this approach, a “general” tendency toward delinquency (based on the promise of short-term gains) needs to be counteracted by social control, and criminal behavior will occur if such control is lacking or too weak.

One further aspect for this means of explaining delinquent behavior from a social point of view are differences in opportunity structures: a big city, for example, offers a different set of criminal options and incentives from those that will be found in a rural environment. Within the same metropolitan area, too, when different ethnic or social groups live close by (and in conflict with) one another or when the regional economic situation is tough (with local pockets of unemployment and of welfare dependence) this can lower the threshold to criminality. There is indeed evidence to suggest that the “social toxicity” of closely defined neighborhoods (Garbarino, 1995; Garbarino et al., 1996) tends to act as a form of multiplier to the normal readiness of juveniles to behave delinquently (Garbarino, 1995, speaks trenchant of “war zones”).

However, delinquent and criminal behavior occurs in concrete situations. Even if we take both the developmental conditions and the social influential factors favoring delinquency into account to explain the variance in criminality, we will still get no further if we find individuals acting differently in spite of having the same structural surrounding conditions.

This raises the issue of what factors encourage criminal action in the here-and-now, that is micro-dynamics of the criminal act. Evidently, situational factors and especially each actor's subjective perception and evaluation of these factors also need to be brought into the picture. Theoretical approaches within the broad orbit of rational choice and routine activity theories are explicitly geared to these current dynamics (Clarke & Felson, 1993; Cornish & Clarke, 1986; I shall return to this aspect in section 3).

Yet any approach focusing solely on social conditions will also be incapable of producing a satisfactory explanation, since the theory will not just have to explain why certain juveniles act delinquently but also why others *do not*. In all social contexts, there are always some juveniles who do not become delinquent, even in spite of growing up in a difficult environment. The anomic discrepancy or the effectiveness of social control used as explanatory factors will vary both from person to person (particularly depending on their own *particular* social positions, such as their standard of education and financial resources) and from situation to situation (when differing objectives and norms will be to the fore). A good example of such variations is the finding that when parents separate it tends to have a negative effect on children from homes with middle to high incomes, whereas a positive effect on subsequent integration has been identified for low-income children (Farrington, 1994). Numerous social approaches are indeed liable to the objection that they fail to take into account marginal individual factors and hence the possible interactive effects between certain conditions relating to the person and others relating to his/her situation. Social control theory (for a critical account, see e.g. Agnew, 1985) will eventually find that it has to consider variables at a personal level to explain differences at the interindividual level. Interactive effects make the picture still more complex: Discrepancies between means and ends or deficiencies in social control do not generally change in the same way for all people — some will experience them much more keenly than others.

So it makes sense to integrate a developmental with a social contextual approach. Typically, interaction effects will provide an explanation for the delinquency recorded. Consider the following: In a group of juveniles, it is fair to regard delinquency as a *consequence* of certain social attachments and norms. This could be described as “social delinquency”. Cairns and Cairns (1991) observed that an acceptance of norms that embrace violence appears to be an actual “entry requirement” for some, aggressive peer groups. So crimes against property, too,

may frequently be connected with proving oneself as a member of a peer group (“doing dares”). Yet on the other hand, for other juveniles delinquency may manifest the very fact that they lack social attachment or social competences (examples being the violent escalation of social conflicts, the use of drugs as a palliative, drifting into prostitution, etc.), and this would be better described as “non-social delinquency”. The developmental background to offenses that are phenotypically identical as a justification for incarceration (e.g. a theft that could just as well have been a dare as a need to finance a drug habit) is thus important to know, especially when considering the impact incarceration will have. In the former case, removing a young person from his/her social context may well be an intervention strategy worth considering, with some prospect of success, while in the latter, locking a person up together with other “loners” might if anything just amplify a young person’s sense of isolation.

1.3 Personal vulnerability and resilience

Yet even a combination of a social with a developmental perspective fails to completely explain the specific behavior of specific people, since there will always be interindividual variance even when both groups of explanatory factors are taken into consideration. Some juveniles who have grown up in unfavorable social circumstances, who are currently at odds with the norms of the adult world, who are deprived of the chance of fulfilling their needs or attaining prescribed goals because they are not allowed to acquire the means of doing so, and who are currently exposed to temptation, still do *not* act criminally. The number of such people may vary (and indeed may grow very small under extreme social conditions), yet this is an undeniable phenomenon. So that leads us to another question, namely whether there are risk and protective factors that vary from one individual to another and also influence the probability of delinquent behavior beyond the conditions already cited (Freitas & Downey, 1998; Lösel & Bliesner, 1990, 1994).

Once the spotlight is turned on differential factors as an explanation for delinquency and crime, these again can be fundamentally divided into two groups. The first of these, on closer examination, simply constitutes a “coagulation” or the sediment of a person’s ontogenesis: His/her personal biography will make the person more susceptible or more immune to particular sets of circumstances (temptations, incentive structures, social situations). So this aspect of a differential psychological perspective merely points the way back to the

ontogenetic approach. However, there is some plausibility to the idea that part of the interindividual variance will be attributable to dispositions and vulnerabilities that cannot be completely explained in terms of individual biographies but are signs of substantial personal distinctions or characteristics. As well as the increasing evidence of high predictability of later delinquency on the basis of characteristics observed early in life (temperament, hyperactivity), newer findings also suggest that certain basic aspects of personality also influence its development, and possibly therefore also the risk of becoming delinquent (e.g. Gendreau, Madden & Leipziger, 1980; Caspi et al., 1994). Indeed, several findings also point up the predictive uses of examining biological and neuropsychological aspects (e.g. Coie & Dodge, 1998; Moffitt, 1990, 1993; Moffitt, Lynam & Silva, 1994; Plomin, Nitz & Rowe, 1990; Rutter, 1996).

The significance of these dispositional differences (as regards temperament, aggression, the tolerance of ambiguity, intelligence, etc.) contribute toward the predictability of delinquency in particular cases or in general can be left open at this stage. However, two points seem worth noting explicitly. On the one hand, we have to keep in mind the possibility of identifying these kinds of predictors of criminality. This has implications for the way we design and interpret empirical studies. On the other hand, however, admitting the possibility of these “hard-wired” factors in the generation of crime does *not* imply that we have to give up on interventive and preventive measures. After all, even in-born disabilities can be corrected or compensated for in many ways (e.g., optical training or spectacles will help if a person has poor eyesight). Above all, the discussion of biological fundamentals ought not to turn into ideological debates or lead to the dispensation of unilateral judgments, for admitting the existence even of genetic dispositions does not by any means imply a denial of self-regulating processes or social and environmental influences (for a thorough treatment, see Brandstädter, 1998; I shall return to this aspect in section 3 below). The frequently changing “cycles” of youth crime (as at present, too) are another factor that helps to put biological explanatory models of criminal behavior into proportion. Even if it did prove possible to securely identify biological predictors for people who behave delinquently or criminally under current social circumstances (e.g., youth unemployment, tendencies to migration, etc.), plainly the same predictors would *not* have been activated under *different* social circumstances (otherwise we would need to assume that the whole population underwent a “biological quantum leap” some 20 years ago).

2 Incarceration as a developmental intervention: Necessary channeling or dysfunctional restriction?

Common sense, everyday experience and human history all teach us that even institutions founded on the highest ideals can easily become inhumane, and particularly that locking up delinquent boys together may very easily turn out to be counterproductive. However, there is little doubt that we shall continue to do so, knowing no other way of preventing the worst among the juvenile delinquents from offending again. “Incarcerated children will be with us for the foreseeable future, even if their incarceration does not achieve their rehabilitation, but actually increases their depredations upon release, and notwithstanding how miserable it makes them to be locked up.” (Gold & Osgood, 1992, p. 1).

This section will first set out some fundamental data on the current picture in youth imprisonment, as manifested in Germany (for USA see, e.g. Gold & Osgood, 1992; Krisberg & Austin, 1993; Krisberg & Howell, 1998; Loeber & Stouthamer-Loeber, 1998). This will be followed up by a summary of the current state of research into the consequences of incarceration. These two sets of information will establish the background for the arguments put forward in subsequent sections to demonstrate that a developmental perspective on youth incarceration is both necessary and appropriate from a theoretical viewpoint and fruitful from an empirical one.

2.1 Youth incarceration in Germany: Current conditions and trends

Germany has both the largest population (80 million) and the largest economy in Western Europe. It is federally structured, comprising 16 *Länder* (states or provinces), of which eleven are in former West Germany and five in former East Germany. Despite overall crime levels well below those of the United States (Zimring & Hawkins, 1997), there is increasing concern about crime, in particular about juvenile delinquency, both in Germany and throughout Western Europe (Pfeiffer, 1998). However, German criminal justice contrasts sharply with the American system in a number of important respects (Feeney, 1998). For example, Germany has a single national criminal code, a single national code of criminal procedure, and it also has lower sentences for all crimes (in particular, there is no death penalty).

The treatment of juveniles also differs in many respects. Juveniles in Germany (14–17 years old) are dealt with by a dedicated system of juvenile criminal justice. Older adolescents (18–21 years old) are presumed to be adults and therefore held fully responsible. However, if an offender's state of development is judged to be "adolescent" or the crime involved is classed as "typical of adolescence", Sec. 105 of the Juvenile Courts Law (*Jugendgerichtsgesetz* — JGG) provides for these young adults to be prosecuted as if they had been juveniles at the time they offended. In practice, the treatment of older adolescents as adults is the exception rather than the rule (Albrecht, 1997). The penalty ranges set out in the adult penal code do not apply to juveniles, nor do day fines or adult imprisonment. Juvenile court sanctions consist of "educational" measures (e.g. community service, participating in victim-offender mediation, etc.), "disciplinary" measures (e.g. short-term detention [*Arrest*] of up to four weeks), and youth imprisonment for a minimum of six months and maximum of five years (the sentence may be extended to ten years for very serious crimes, so the system does not completely neglect the seriousness of the offense and the guilt issue). In adult criminal law, the basic statute on sentencing requires the punishment to be in proportion to the guilt of the offender and the seriousness of the offense, whereas for juvenile offenders the purpose of incarceration is deemed to be assisting the adolescents "to lead a socially responsible life without coming into conflict with the law" (JGG, Sec. 91). In line with this purpose of rehabilitation, youth imprisonment is explicitly declared to be the "last resort" for the juvenile courts. If an offender is deemed to have "noxious tendencies" or has committed a serious crime, this sentence can be pronounced if the milder forms of punishment provided by the JGG are felt to be inadequate (JGG, Secs. 17 II, 5 II). In practice, youth imprisonment is prescribed in approx. 5% of all judgments passed *under the terms of the JGG*. As of March 31, 1997, federal statistics showed approximately 5,700 juveniles and adolescents working out their sentences in juvenile and adult prisons (*Statistisches Bundesamt* press release 86/98, March 17, 1998). However, this official statistic considerably underestimates the number of young people actually given sentences, as many of them spend a relatively short time in prison due to factors such as deduction of pre-trial detention or release on parole. The average duration of incarceration is still below one year for offenders sentenced in Germany, and less than 10% of sentenced young offenders spend more than 2 years in prison. The age of all inmates in juvenile prisons averages approximately 18 years (see e.g. Dolde & Grübl, 1996; Maetze, 1996), which already puts it above the upper limit of the age group actually categorized as juveniles.

The juveniles incarcerated in these institutions are in many respects, as again recently emphasized by Kerner (1996), an unrepresentative selection out of the overall population in their age group. Kerner and Janssen (1996, 144ff.) report that one third of the juveniles incarcerated have lost one or both of their parents, another one third's parents had a difficult marriage or were divorced, more than one third had done badly at or dropped out of school, and almost 90% lacked any occupational training.

Beyond that, youth incarceration in Germany in practice is an extraordinarily heterogeneous area. Even the buildings and sites that are used vary a great deal, from loosely arranged groups of buildings and open space designed with education in mind at one end of the spectrum to crumbling square stone blocks at the other extreme. The variations in the social environments are still greater, both between and within institutions. For example, in many places in former West Germany the proportion of inmates from foreign ethnic groups is now over 60% (Dolde & Grübl, 1996) whereas non-Germans imprisoned in juvenile institutions in eastern Germany are still relatively uncommon. In this sense, the average figure (prison statistics say about 32% in 1995) for the number of non-German nationals says little about the situation on the ground. There are also often very substantial variations in the schooling, occupational support, counseling and treatment available in the institutions, as also in leisure activities and special training courses (such as training in non-violence) (Dünkel & Meyer, 1985; Kerner, 1982). Evidently, an increasingly critical aspect of juvenile prison life is now widespread drug-taking. Though serious estimates of what is really happening are lacking, it is becoming more and more likely that even juvenile inmates will encounter drug abuse and be drawn into it themselves.

National research on the efficacy and efficiency of youth incarceration has been inadequate to date. Empirical results tend to suggest that it is of dubious value (for a recent overview see Kerner, Dolde & Mey, 1996). One particularly disturbing finding, replicated many times over, is that more than three quarters of the juveniles or adolescents that have once been incarcerated subsequently reoffend. Statistics published by the federal attorney general's office in 1990 showed that 77% of the juveniles who had been in prison in 1984 were again fined or given custodial sentences within the next five years. In a large follow-up study over a period of 15 years (Haapanen, 1990; cited after Krisberg & Howell, 1998) it was found that up to 96% of incarcerated juveniles were arrested again in their adult years. Caution is

required, though, as the figures depend both on how recidivism is defined and on which period is examined (cf. also Snyder, 1998). A considerable proportion of recidivism occurs within a short time after release (Berckhauer & Hasenpusch, 1982; Maetze, 1996). The rate of recidivism in the *Generalbundesanwalt* statistics calculated for 20–25-year-olds was approximately 50%, and for 25–30-year-olds it was about 35% (Lösel, 1995, p. 90; cf. Kerner, Dolde & Mey, 1996). Moreover, using prevalence rates a criterion may overlook “suppression effects” of decreasing frequency and seriousness of reoffenses (Krisberg & Howell, 1998). However, even more conservative estimates still suggest that about half of the juveniles and adolescents completing a custodial sentence will return to prison at least once (e.g. Dolde & Grübl, 1996; Maetze, 1996), and that up to one third of those initially sentenced will stay in this spiral of crime and punishment for a long period (Kerner & Janssen, 1996).

2.2 The impact of imprisonment: Recidivism as a focus of research

Thus, prisons often seem to fail. Indeed, this supposition was what kicked off the debate, at least as far as youth incarceration is concerned. Unfortunately, this perspective has resulted in an investigative bias (McGuire & Priestley, 1995). The social and scientific work in this area, however, is dominated by the aim of prevention of serious and chronic offenders. Accordingly, the investigation of the effects and consequences of youth incarceration (a way of tertiary prevention, at best) remains marginally both in research activities and in scientific and political discussions. One obvious presupposition for this is the suggestion, that prison will *not* work. Although this assumption seems at first glance probable, and although a century of criminological debate seems highly to support it, the empirical evidence is meagre enough. Contrary to a defeatist, or even cynical, view widespread in the 1970s that *nothing* works (Lab & Whitehead, 1988; Whitehead & Lab, 1989), there is now growing evidence that specific intervention programs can produce positive outcomes (Lösel, 1995). However, although coming to generally positive conclusions on efficacy, Garrett (1985) found that the size of the perceived effect partly depended on how rigorous the study design had been, diminishing in proportion (p. 294). Garrett’s analysis (1985) clearly points up the need to differentiate the treatment given to juveniles in qualitative terms (theoretical background, performance, etc.). Furthermore, studies and meta-studies alike (Andrews et al., 1990; Garret, 1985; Lipsey, 1992a, b, 1995; Lipsey & Wilson, 1998; Lösel, 1995) seldom, if ever, explicitly refer to the impact of youth incarceration at all, not to speak of any possible

positive effects for the juveniles themselves. Even if one believes the pessimistic estimate of about 70% recidivism in juvenile prisons in Germany, that still leaves 30% of the former inmates who have resisted reoffending. (This is not a trivial observation; a drug for treating cancer or AIDS that had a 30% efficacy rate would be welcomed as a miracle cure; cf. Lösel 1995). Looked at in that way, meta-analyses tell us little about the impact and effectiveness of any particular “treatment” such as incarceration, which is a very heterogeneous category in itself. Accordingly, Krisberg and Howell (1998) conclude that “given the enormous fiscal and human consequences of various sanctioning programs, it is tragic that our research base is so slender.” (p. 364)

Given these restrictions, three generally applicable groups of risk factors for failing to maintain good conduct are repeatedly documented in criminological studies: the situation in the person’s family of origin (a “broken home”), or the complete lack of a family (children brought up in care), the lack of any occupational training or (a stronger predictor) of school education, and multiple or early experience with punishment (cf. also Farrington, 1991; Kerner, Dolde & Mey, 1996; Loeber & Hay, 1994). Conversely, a detainee’s release into stable social conditions, especially into an intact family environment, is a protective factor.

However, theory-led studies have not been undertaken very often, even with regard to recidivism. Two different assumptions —almost mutually contradictory— have been the main contenders in guiding research. One is the “deterrence perspective”, that the intimidating nature of prison, either as a future threat or a past unpleasant experience, ought to reduce the probability of subsequent delinquent behavior. In an opposing view, labeling theory (e.g. Becker, 1963, Lemert, 1967) focuses on social stigmatization (Goffman, 1963/1992) as the response made by a person’s social environment to some primary variance (not normally explained any further in the model), the stigmatization making secondary deviance *more probable* as a consequence.

Neither theoretical model has yet been convincingly backed up by empirical evidence (Thomas & Bishop, 1984; Schneider, 1990). This particularly applies to any automaticity of stigmatizing and the negative impact of such labeling. Even findings showing that, among people who are convicted to a renewed term of imprisonment, there is an increasing proportion of variance is explained by prior sentences (Herrmann & Kerner, 1988) need to be

interpreted with caution. It is important to take into account that, when the research concentrates on officially available data, there will be certain aspects —perhaps particularly strong predictors — that cannot be built into the analysis due to a lack of reliable or valid information on the individuals involved (this constraint evidently applies to most of the surveys available; cf. Dünkel & Geng, 1993; Kerner, 1996). In particular, it is difficult to draw a line between a situation in which earlier offenses and convictions influence later offenses, and one in which *both* sets of offenses actually depend *jointly* on other factors (Nagin & Paternoster, 1991). It is possible that, once people have reoffended more than once or twice, the predictive power of earlier sentence may be increased (or rather, external influences such as social circumstances will work less well as a predictor) simply because there is an increased likelihood that the people involved are “life-course-persistent offenders” whose tendency toward deviance cannot be explained in terms either of previous convictions or of their current social circumstances, but only in terms of interpersonal differences. Indeed, that would reveal the increased significance of a criminal record as a predictor for future convictions as an artifact: If the people concerned do belong to the persistent-offender type, punishment will have *no effect* on them. Evidently, in these findings the selectivity and the effect of punishment has been conflated with the need or reason for it. There are also empirical indications that the “prior-prison effect” often disappears once a small number of socio-demographic conditions are controlled for; in particular, the type of sanction applied then appears to lose any effect as a predictor (Kerner, 1996).

Furthermore, the hypothesis of “labeling” and hence “crime-generating” effects of imprisonment often overlooks the well supported finding that the vast majority of people who are clearly seen to offend and are punished later *cease* to show criminal tendencies, at the latest when they enter middle age (e.g., Moffitt, 1993; Loeber, 1997; see above, section 1). So the institutional reaction to crime, particularly incarceration, does not appear to have a lasting impact on most people in forming criminal careers in that sense (Brown, Miller & Jenkins, 1989; Kerner, 1989; Tracy, Wolfgang & Figlio, 1990). Thus, regardless of the high recidivism rate in the period immediately after release, there is a discernible trend for offenders to gradually “grow out of” delinquency, at least with respect to officially registered delicts (Dünkel, 1990; Kerner & Janssen, 1983). Thus, the supposed negative impacts of stigmatization and interventions leading to a criminal record at least do not show up in any direct cause-effect correlation. In fact, more recent longitudinal data also fail to support an

unconditional criminalization hypothesis. Tracy, Wolfgang and Figlio (1990) found when replicating the Philadelphia cohort study (Wolfgang, Figlio & Sellin, 1972) that convictions among the more recent cohort (whose members had also committed more serious crimes) were *more likely* to reduce the probability of recidivism than among the cohort originally studied (cf. also Brown, Miller & Jenkins, 1989; Kerner, 1989). There again, as Farrington (1992) recently stressed, we so far know little as to why even a supposedly chronic or chronicized propensity to commit crimes among repeat offenders or “career criminals” often comes to an end somewhere in middle age. This is a question that has only recently attracted greater attention (Loeber & Farrington, 1998).

As mentioned above, the theory of deterrence can be considered diametrically opposed to labeling theory, since it postulates that the negative experience of tough measures to punish delinquent behavior will *reduce* the likelihood of a person repeating delinquent or criminal behavior. However, in its unqualified form, deterrence theory is just as implausible as an unqualified labeling approach. For punishment to be effective, a lot of preconditions need to be met: The punishment should be inevitable, and should immediately follow the undesired behavior, it should be directly associated with the undesired behavior in the offender’s mind and, finally, the offender would need to have alternative behavioral options available which ought to be reinforced. Quite evidently, these conditions are rarely fulfilled in real-life criminal justice systems (McGuire & Priestley, 1995, p. 13). Schneider (1990) found in an experimental study with 876 serious juvenile offenders in six juvenile courts (mean age: 15.8) that “incarcerated juveniles, when compared with those who were randomly assigned into restitution, were more remorseful, believed their sanctions were less fair, were more certain of being caught, but paradoxically rated the expected punishment as less severe than did the restitution youths” (p. 90). Obviously, fear of incarceration diminishes once people have experienced it. Remorse and a sense of citizenship are the best predictors of resilience to recidivism, and incarceration encourages remorse. Accordingly, the study identified a reducing effect by incarceration, and indeed the effect was as large as that of restitution (Schneider, 1990, p. 80). Her overall finding was that punishment increases the *intention* to refrain from crime, though as a general effect the propensity to commit crimes does not reduce as a function of the youths’ perceptions of the certainty or severity of punishment. Gold and Osgood (1992) made a longitudinal study with more than 300 juvenile participants aged 12.6–17.9 years (mean: 16.0), and found that the conditions under which youths became delinquent

had hardly been altered at all during or as a result of incarceration. Evidently, it is difficult to practice pro-social forms of behavior while in prison, even if the young people say individually that they support the idea; the keen need to establish a counter-culture coupled with group pressure are major forces working the other way, particularly as the nature of the institution virtually prevents any private social interactions that are not under surveillance. According to these data, beset juveniles have an especially high resistance to any correctional influences exerted by the institution, one reason being that they are not integrated into peer groups. In a recent study, Winner et al. (1997) examine the consequences on recidivism, if juvenile delinquents are transferred to adult criminal court, showing that in general transfer contributes to faster and more frequent reoffenses of these juveniles (but reduces reoffending for the subgroup of property felons).

The mixed empirical evidence (for an overview cf. Gold & Osgood, 1992; Greve & Hosser, 1998) is probably also due, besides the ubiquitous problems of measurement, design and analysis, to the fact that prison subculture obviously has its strengths as well as its weaknesses. However, a number of deficiencies inherent in the studies themselves have now come to light. In particular, although a lot of presumptions, backed up by a certain amount of evidence, cite the negative influence incarceration will have on social behavior *during* the time when convicts are institutionalized, there are few studies providing any evidence of this impairment *after their release*. It is especially disappointing in this context that few studies have concentrated on the sets of problems specific to juveniles. Studies on the deterrent effects of youth incarceration (e.g., Schneider, 1990 as mentioned earlier) have shown small reducing effects, if any. This raises two questions: Firstly, there can be no doubt that a subgroup of these juveniles *will have been* deterred from recidivism by incarceration. Apart from its magnitude, the characteristics of this subgroup are of particular interest. In what respects do these young people differ from others who reoffend? Are certain aspects of the punishment or of the juveniles themselves the key variables, or is some interaction of the two responsible? Since there is no prospect in the present day or in the foreseeable future that youth incarceration will be reduced to zero, this question attains great practical importance. Secondly, if incarceration does not noticeably reduce recidivism for the majority of offenders, what effects *does* it produce? Does it make matters even worse, as many authors claim (e.g. from a labeling perspective)? If so, the legitimation of prison sentencing needs to be reconsidered, as its supposedly therapeutic effects will be wrongly regarded as such.

2.3 Beyond recidivism: Psychic consequences of incarceration

One major problem with effectiveness ratings of any kind of treatment is the criterion of evaluation. The most prominent outcome variable used in these studies is recidivism. Even Krisberg and Howell's (1998) critical and comprehensive review refers to reoffending and recidivism as (unquestioned) criterion for treatment success or failure. To be sure, I don't want to tackle the claim that reoffending is a central aspect of effectiveness of correctional treatment, but I criticize the practice using it as the only or most important one. Moreover, recidivism is difficult enough to assess. In particular, most studies refer to official data to measure recidivism and are subject to the known limitations of these data (Krisberg & Howell, 1998). Most studies take prevalence rates as criterion, ignoring that incidence rates could reveal a „suppression effect“ of decreasing frequency and seriousness of reoffenses. Despite the limitations of prevalence data: what timescale ought to be chosen: six months, one year, five years, even ten years? It is quite possible that some forms of intervention need time to work. Worse still, the measurement of recidivism is far from reliable, quite apart from issues of its validity (Lösel, 1995). Official recidivism (defined, for example, as reincarceration) is surely just the tip of the iceberg of anti-social behavior, or indeed is just one segment of reoffending. It is quite conceivable and also plausible that, in many cases, deviance will shift away from the “broad daylight” of officially recorded areas into other social spheres and will then either be isolated in particular behavioral fields (Nagin, Farrington & Moffitt, 1995) or largely remain hidden from view (as in the case of violence within families), or else it will have other kinds of behavioral impacts that do not constitute criminal acts (e.g., affecting aspects of social and economic attachment).

Apart from that, it is not enough to examine delinquency alone: What about the side-effects? To take an extreme case, consider a true life sentence (or even death penalty). If measured purely in terms of recidivism, this is a *very* effective measure, but that does not qualify it as the most appropriate correctional treatment for juvenile delinquents. Concentrating on recidivism ignores the other negative consequences and side-effects a form of treatment can have, such as depression, suicide, stigmatization, etc. or also positive ones such as deterrence, awareness of wrong, remorse, etc. Identity and self-esteem, personal well-being, psychopathology, social integration, employment: These are among the aspects that could, and should, also be taken into consideration when evaluating the “effects” of particular

correctional treatment. We also need to consider psychological impacts beyond the forms of damage and pathologies that are measurable in a narrower, clinical sense. These include restraints on personal objectives, changes in development options, and *de facto* changes in acting and social competences.

Thus, even though a number of studies have been made of the effects of imprisonment (starting with Clemmer, 1958, Sykes, 1958) we still know very little about the personal impact it has on inmates, in particular on juveniles (Greve & Hosser, 1998). As it is, though, the majority of studies focus either entirely on the, usually adult, prisoners or entirely on the prisons. Apart from the fact that interactions between the two are rarely considered, most prisonization research does not have any dynamic perspective, particularly as regards developmental dynamics. Accordingly, research on prison(ization) has so far been dominated by two general perspectives (Gold & Osgood, 1992; Zamble & Proporino, 1988).

The first of these, the *institution model*, emphasizes institutional pressures, and problems generated by the conditions and the very experience of imprisonment such as stigmatization, depersonalization, alienation, coercion and others. It seems very plausible to preclassify prisons as strange locations, since they deprive their inmates of liberty, autonomy, heterosexuality, personal security, social heterogeneity, etc. Equally, it is plausible to assume these conditions will have a telling impact on the inmates. The institution model assumes that the impact will consist in prisoners identifying with the subculture of the prison, as manifested in mutual solidarity, a negative, hostile attitude toward the institution itself and its objectives of resocialization, or a positive attitude toward crime. As discussed in the previous section, however, a model focusing entirely on inmates' current social context will inevitably fall short of a complete explanation, since it neglects the wide variety of personal conditions the people affected by this main impact have brought into the prison with them. Gold and Osgood (1992) argue that the institution model overestimates the transinstitutional homogeneity of prison culture. Equally, it is a plain fact that inmates vary in their responses and the ways the institution affects them. So the second line of approach, the *importation model*, highlights the differing, and usually problematic, pre-prison socialization of the inmates and their resulting deviance in many social and psychological respects (e.g., Alpert, 1979). These include the inmates' self-concepts, their normative orientations and values, their social competences and deficits, and their intellectual capacities.

In the event, neither line of approach is particularly well corroborated. The mixed results obtained on the effects of imprisonment on inmates' identity, self-image and self-esteem provide a good example of the shortcomings of current research. A number of studies, mainly with adult prisoners, found that their self-confidence and self-esteem declined during their sentence (Brown, 1971; Hepburn & Stratton, 1977; McKinney, Miller, Beier & Bohannon, 1978; Norris, 1977), while other authors were either unable to identify any effect or indeed found converse ones (Atchley & McCabe, 1968; Bennett, 1974; Cairns & Cairns, 1994; Zamble & Porporino 1988; cf. also Harter, 1990; Evans, Copus, Sullenberger & Hodgkinson, 1996). Wheeler (1961) argues that the development over time of a prisoner's stay could provide one explanation: He/she would be most likely to lose self-esteem, so this argument goes, during the last third of the sentence, in anticipation of others' (or society's) expectations. However, it would appear equally plausible to presume that self-esteem would decline more strongly in the early phase of imprisonment, before gradually increasing again as an inmate grows used to everyday prison life and subculture. On the one hand, it is clear that some of the ways in which inmates cope with their hostile environment are "self-destructive ways of adaptation" (Toch, 1992, p. XV) but, on the other, one cannot deny that these processes of adaptation are often the key to ensuring survival *in prison*. Accordingly, the inmate's self-esteem would fall sharply until after the prisoner's release when he/she came face to face with the norms and feedback of society at large (now suddenly relevant again). Accordingly, most studies testing Wheeler's findings have not been able to confirm them (cf. Atchley & McCabe, 1968; also Bennett, 1974; Bukstel & Kilmann, 1980). Yet even *if* incarceration *would* bring about a general reduction in self-esteem, that must not necessarily be negative for the person's social behavior or good legal conduct after release. In a study by Wormith (1984), for example, high self-esteem actually turns out to be a *positive* predictor of the probability of recidivism. Although conventional wisdom has regarded low self-esteem as an important cause of violence (Rosenberg & Rosenberg, 1978), the opposite view is theoretically viable and supported by empirical evidence (Wells & Rankin, 1983). Baumeister, Smart and Boden (1996) convincingly argue that the proper interpretation ought to address not the actual degree of self-esteem but the degree of threat to that self-esteem. In many ways, people with high self-esteem are in greater danger of receiving threatening feedback from others and hence more prone to violence.

Accordingly, Oyserman and Markus (1990) raise the criticism that most attempts to investigate the role of self-concept as an explanation for delinquency (naturally also including reoffending) have focused on self-esteem, although it has not emerged as a powerful predictor. In their study, 238 youths (aged 13-16) who were delinquent to varying degrees were asked to describe their *possible* selves. Although there were similarities between the hoped-for selves of delinquents and non-delinquents, there were major differences in their expected or feared selves. While the (officially) non-delinquent youths' expectations and fears were relatively "balanced", the balance was lacking for most of the delinquents. According to their data, self-esteem again does not predict delinquency. A high level of self-confidence coupled with a higher readiness to act criminally for other reasons may have a negative influence on social behavior; yet on the other hand, prisoners who remain relatively little influenced by the inmates' specific behavioral code may benefit from having higher self-esteem — for example, it may help them to resist future temptation to perform a criminal act (Wormith, 1984).

3 Developmental perspectives on youth incarceration: A framework for research

Developmental criminology (Loeber & Le Blanc, 1990; Le Blanc & Loeber, 1998) focuses on dynamic perspectives on continuity and stability of deviance throughout the life. Manifestations of deviancy and delinquency in the course of individuals lives may change although the underlying propensity may remain stable. Life transitions, changing contexts, waning resources or diminishing opportunities instead of developmental changes within the offender may explain that he desisted from offending beyond adolescence. Although, as has been shown in section 2, a developmental perspective on juvenile delinquency has been established for some time (Loeber & Hay, 1997) and findings are also now available from numerous longitudinal studies of this field (Thornberry, 1997), in fact most of the longitudinal studies as well as theoretical approaches focus mainly on the origins of aggression and delinquency. Very seldom, however, they focus on the effectiveness or the consequences of *reactions* to violence and delinquency, and still more seldom one addresses the consequences of a particular type of sanction. Above all, nearly none of the studies on the consequences of incarceration have addressed this issue specifically from a developmental perspective. Even the very careful review by Coie and Dodge (1998) of the literature on the development of aggression, which focuses on juvenile aggression, hardly ever mentioned the impact of official sanctions (including incarceration) on subsequent offending. Youth incarceration, however, is almost by definition a (harsh kind of) developmental intervention. Thus, its impact and consequences have to be evaluated from a developmental point of view. A necessary presupposition for that endeavor is a theoretical framework into which this perspective could be integrated. In this section, I attempt to sketch such a framework and to discuss three theoretical foci, which could help to integrate the arguments and results discussed in the previous sections.

3.1 Development as adaptive actions by different people in changing contexts: Toward theoretical integration

Human development is not simply a uniformly operating, irreversible sequence of different stages and phases, but a process that individuals themselves actively influence in substantial

ways (Ford & Lerner, 1992). This may be termed as the actional perspective on human development (Brandstädter, 1998). In this view, individuals can be regarded as “co-producers of their development” (Featherman & Lerner, 1985), shaping and altering their scope for action within the framework set by their actual and perceived opportunities and thus substantially steering their path through life. In this view, not only the objective framework set for a person’s development (the opportunities and restraints created by his/her environment and his/her own competences and deficiencies) but especially his/her own developmental goals play an important part. Both temporally and in terms of content, individuals structure their development by assigning themselves “developmental tasks” (Havighurst, 1948). According to this approach, we can distinguish three kinds of task.

The first of these, biological tasks, play a particularly prominent part in guiding our development in early childhood, and again in old age. During youth and adolescence, the prime biological task is that of reaching puberty, with its associated radical physical and psychological changes.

The second, social developmental tasks, guide human development by posing both explicit and implicit demands. This applies to a considerable degree during the years of youth (Peterson, 1988; Peterson & Leffert, 1995). For example, during school education or early occupational training, which are a fundamental social task in and of themselves, young people are given numerous explicit tasks to perform (e.g. passing exams). Partly explicitly (e.g., as expressed by laws) but especially also implicitly, adolescents come face to face with the need to learn and comply with the social rules of living together. Characteristic features of adolescence are both the necessity *and* the opportunity to change social contexts. On the one hand, young people need to ease themselves free from their parental home and from the emotional and social attachments within their family, while at the same time developing and consolidating their personal autonomy and independence. On the other, they simultaneously need to get themselves integrated into the social community (including founding one’s own family and committing to a professional career), which means learning about and recognizing the rules and norms that operate there. At times, e.g. when bidding to establish personal, social or occupational status, this can involve conflict situations, but the conflicts too should normally be worked out within the rules (mainly implicit rules) of the social community. Indeed, there are often even rules determining where the rules may occasionally be broken, or

where attempts can be made to change them; however, the dividing line between creatively transgressing the rules and a deviant or pathological disregard for social limits can be a fuzzy one, and cannot be determined independently of the context. This is the development task which delinquent juveniles, particularly those given custodial sentences, have evidently not managed to cope with successfully.

The third category of developmental tasks are the personal objectives already touched upon. The capacity to set oneself personal goals and to pursue them is itself subject to a variety of conditions, some of which are biological (e.g. cognitive development), some social (e.g. perception and objective availability of options, education/training and competences), and some individual yet again. Puberty triggers off new objectives, needs and wishes; the need to choose a career means we have to develop new personal objectives, and so on. Social tasks, too, link back to personal decisions: E.g., the requirement for a person to adapt to the specific environment of a prison is – at least partly – the consequence of his/her personal behavior (which has failed in the past to conform sufficiently to social norms).

During adolescence, difficulties are ever likely to occur while coping with these numerous, sometimes conflicting developmental tasks, and they are indeed ubiquitous. In particular, problem behavior such as drug and alcohol (ab)use, smoking, sexual behavior and delinquency can be regarded as means of coping with these difficulties, and at the same time seen as purposive and self-regulating (Silbereisen Noack & Eyferth, 1986; Silbereisen & Noack, 1988; Petersen, 1988; Petersen & Leffert, 1994). An important consequence of this argument when developing a theoretical framework for research on the impact of youth incarceration is that the identity-stabilizing functions of delinquency have to be taken into account alongside the functional and actional character of juvenile deviance.

However, this kind of perspective risks overlooking the fact that, quite apart from the general and specific restraints on development, critical life events can also exert a vital influence on personal development, by posing accidental developmental tasks. Such specific restraints and influences are likely to be an important explanatory factor for the delinquent behavior of deviant children and juveniles (cf. various papers in Thornberry, 1997). Conversely, specific restraints (e.g., stemming from educational deficiencies) will themselves be influenced by individual behavioral patterns. This holds even for more “hard-wired” individual differences.

As mentioned in section 1, differences in temperament among very small children can pose very different kinds of challenges to the behavior and competences of their parents: If these challenges are more than the parents can cope with, this can contribute to restrictive or other unfavorable developmental conditions for the child at later stages. The concept of active genotype→environment covariation (Scarr, 1988; Scarr & McCartney, 1983) provides a theory to cover this aspect of the reciprocal influence between a genotype, its environment, and the resulting phenotype. (Without wishing to preach to the converted, it is worth pointing out that, in an explanatory context, conceptual reasons alone prevent any use of the terms “guilt” or “fault”).

Dynamic-interactional views on adolescent development (Brandtstädter, 1998; Ford & Lerner, 1992; Lerner, 1982; Lerner & Lerner, 1989) share the belief that characteristics of the individual both *influence* and *are influenced by* the psychosocial context within which they are expressed. It is “... this bidirectional relation between organismic individuality and the context that moderates any link between the organismic changes of early adolescence and other, individual behaviors and developments.” (Lerner & Lerner, 1989, p. 74). Lerner (1982, 1985) has specified three ways in which an adolescent may act as a (co)producer of his/her own development. Firstly, (s)he may generate a different form of stimulus to others, perhaps by changing certain characteristics of his/her physical or behavioral individuality. Secondly, developmental changes in the adolescent individual may result in his/her processing the physical and social environment differently: (s)he may perceive this environment differently, reflect differently upon it, and hence respond differently to this experienced world. Thirdly, the adolescent *acts* differently by selecting persons and situations, by influencing and shaping them, and by actively behaving and thus creating new situational circumstances for others as well as for him- or herself. The “goodness of fit” (Lerner, 1985) thus becomes an important dimension in evaluating the developmental success of adolescence. Yet this “fit”, by definition, always relates to a particular adolescent’s social environment in a particular phase of life. If this environment is a prison, the demands made on him/her will be very different from those made in a school class or a soccer team.

One of the major features of the second decade in our lives is that it is a phase of individual and social consolidation (Petersen & Leffert, 1995). The various developmental tasks addressed during adolescence can all be seen as parts of the meta-task of preparing for

adulthood (Crockett & Crouter, 1995). Coping with physical changes and sexual maturation, developing interpersonal skills (e.g. for relationships with the opposite sex), acquiring education and, in particular, forming a personal and social identity — these are not just the storms to be weathered during adolescence but they are vitally bound up with laying the groundwork for successfully solving the tasks and meeting the demands of adult life. Since even minor decisions during this period of transition may entail long-term risks, any act of intervention into these decisions and developmental processes has to be handled with extreme care. So youth incarceration, being a massive intervention into, and restraint upon, juvenile development ought to be meticulously legitimated by the socializing agents responsible for it. Prison can be characterized as a set of developmental demands falling into a number of categories as follows: (1) Attitudes, values, expectations and stereotypes carried by the (adult) personnel. Some of these are officially laid down, others are passed on from individual to individual, and others still are very implicit, such that the socializing agents themselves may not be conscious of them. (2) Behavioral settings of the prison community (particularly shaped by the formal rules within the institution). (3) Environmental characteristics of the setting, which is obviously an important aspect of prisons (e.g., an extremely small amount of personal space with no definite control over privacy, etc.). This is the background that has to be considered as we ask to what extent a custodial sentence for juveniles can impede or support the developmental tasks they need to cope with in this phase of life. For example, the possibility that deficiencies (e.g. in education) could be positively counteracted needs to be weighed against the risk of setbacks in other areas (e.g. the aspect of developing social competence or autonomy). The declared intent of juvenile punishment, i.e. the correction of certain deleterious developments, even if it would be fulfilled by this measure, is hardly enough to justify the price of other deleterious developments (of which it may be the cause) and developmental deficiencies.

Thus, the “developmental intervention” of incarcerating deviant juveniles runs into a dilemma which can be outlined as follows. Two major tasks to be fulfilled during adolescence are the achievement of both social autonomy and social integration. These are difficult tasks, susceptible to failure as they require a person to find and consolidate his or her own social and personal identities. Moreover, testing (and thus occasionally transgressing) social limits is part and parcel of coping with these tasks, especially as it also assists young people in developing their personal autonomy. The development of autonomy, in particular, entails a need to

experience greater freedom of choice in order to exercise self-direction. At the same time, that entails an increasing risk that the freedom will be misused. Anyone crossing these boundaries beyond a tolerable amount will have sanctions applied against him/her. This is a sound principle if the community wishes to convey or maintain a credible picture of how seriously it takes a particular boundary. Even incarceration, the toughest of the sanctions applied against juveniles, is intended to help them deal with and resolve this development task. Yet it attempts to do so not only by restricting autonomy in the extreme, sometimes weaving a cocoon of helplessness, but also by limiting the inmates' options for social interaction and precluding them from social integration. Apart from a small number of professional agents of socialization, the only other people available in a penal institution are other deviant young men. The significance of peers in socialization processes has been stressed many times (Patterson, Capaldi & Blan, 1991). Under these circumstances, how can we expect these young people to competently develop their autonomy and simultaneously achieve social integration? This difficulty is a major dilemma faced by the concept of youth incarceration. On the one hand, the delinquents who are given custodial sentences obviously have misused the freedom they were allowed. Yet on the other, strictly curbing their personal freedom deprives these people of the opportunities to practice and exercise social and development skills that, in many cases, they evidently already lack.

3.2 Theoretical foci for research on the consequences of youth incarceration: Coping, identity and action

Though this transactional perspective on human development, as being structured by biological, social and personal developmental tasks provides a useful framework, this still needs to be sharpened up for particular empirical foci. For this purpose, the present subsection will concentrate on the three concepts of coping, identity and action.

(1) Coping and development in adolescence: Two sides of a single coin

Adolescence is a period of transition which is rarely straightforward, and usually perplexing and disquieting both for the juveniles themselves and for the adults around them. Thus both groups need to cope with it, in their own ways (Compas, 1995; Hauser & Bowlds, 1990, p. 388). Coping is conceived as a process (in contrast to an enduring trait or disposition as

well as to an current state) which refers to the person's management of challenging, threatening or harmful demands being made upon them (in contrast to the *mastery* of such demands; see e.g. Montada, Filipp & M. Lerner, 1992). The concept is a neutral one which includes active, "problem-focused" efforts as well as re-active ("emotion-focsed") adaptations (Lazarus & Folkman, 1984). The demands needing to be coped with are, in general, discrepancies between an actual ("IS") and a required state of affairs ("OUGHT") which are considered so great that they tax or exceed a person's available resources (Brandtstädter, 1998; Lazarus, 1991). Coping, then, falls into two fundamental categories. On the one hand, it involves *active efforts* to, hopefully, make a crisis pass off more favorably: The person acts to address problems and to narrow the gap between the actual and desired state, thus eliminating the aversion they experience. On the other hand, coping may be constituted by the *acceptance* of and *adaptation* to unfavorable events that are felt to be inevitable; this acceptance also allows a person to recover a feeling of well-being or contentment.

So one crucial factor determining which coping response we exhibit in a certain situation is how we subjectively perceive or assess the controllability of the critical situation or threat. In earlier discussions, the term "coping" was also used to cover "defensive" mechanisms such as "denial" (Haan, 1977). However, if this IS-OUGHT-taxonomy is applied it is no longer possible to conceive of purely defensive reactions to the tribulations of a crisis as coping in the narrower sense of the word. Rather, they are an ancillary (negative) condition of coping: Only *perceived* demands or threats can be, and have to be, coped with.

The coping concept lends itself to being the first theoretical focus for investigating the consequences of youth incarceration, for a number of reasons. First of all, a penal institution—as a restrictive developmental condition generating aversion—quite obviously constitutes a challenge with crisis qualities, that the juveniles imprisoned in it must find a way of coping with. It goes without saying that the personal and social coping resources they have available play a key role in how inmates deal with this intervention and restriction on their development, and hence substantially influence the intervention's consequences.

In addition, it is fair to assume that the deviance or delinquency that has caused juveniles to be imprisoned in the first place is itself a manifestation that they have applied coping strategies to their intra- or interpersonal conflicts that are considered socially inappropriate (Brezina,

1996; Silbereisen & Noack, 1988). In the majority of violent acts, the root cause of the escalation can normally be found in a lack of competence in avoiding or resolving conflict (provocation, dares, intimidation, the assertion of power, etc.). Meanwhile, *intrapersonal* conflicts and discrepancies will often underlie crimes of property (tolerance of ambiguity, delayed gratification, personal means of compensating for unfulfilled desires, etc.). It will only be possible for a young person to reliably “grow out” of deviance if (s)he develops some alternative, more adaptable coping resources and strategies. Indeed, the more or less functional significance of individual coping responses to one’s own deviance and the consequent sanctions (“neutralization”) was discussed in quite early approaches to prisonization (cf. Sykes & Matza, 1957).

Beyond that, adolescence in general can be treated as a period of disturbance and of coping with such disturbance (Olbrich, 1990). “Successful adaptation always involves appropriate coordination between our changing selves and our changing contexts. But it is in adolescence, and particularly early adolescence ..., that such adaptational stresses may be most critical, due to their simultaneity and multidimensionality” (Lerner, 1982, p. 361). Le Blanc and Loeber (1998) argue that juveniles are confronted with major life transitions – such as shifting from parents to partners, from school to work, from obedience to autonomy – which build a explanatory background for the explanation of juvenile delinquency. In this regard, little attention has been paid to date to the observation—a mundane one in truth—that almost all juveniles do cope very successfully with these adolescent developmental tasks and challenges. *All of us* have, as they say, “been there”. What’s more, juveniles rarely receive support from adults, and they seldom request it. As discussed in section 1, the vast majority of delinquents, too, and even those convicted and incarcerated, do eventually manage to deal with these crisis-like challenges: Almost all of them disappear from the official statistics on delinquency once they pass the age of 30 (Coie & Dodge, 1998). That turns our attention once more to the issue of what protective and resilience factors (Freitas & Downey, 1998; Garmezy, 1994) help people to master their developmental tasks under critical conditions. Yet, very little of the literature on stress resistance has examined how resilient juveniles cope with their specific challenges and difficulties (Compas, 1998; Freitas & Downey, 1998; Hauser & Bowlds, 1990). This is one of the key questions in the area we are addressing here: What are the conditions or competences that protect those juveniles who do *not* commit crimes again? Is resilience in this respect a general protection or does it work by shifting the risks and damages

to other areas of the psychic and social life? To be sure: resilience is not an explanatory factor in itself, but rather raises a particularly fascinating problem. Especially with an eye toward prevention, this issue has immediate practical importance and usefulness as we address the consequences of incarceration.

Going yet another step farther, human development in general can be regarded as a hierarchical, interactive sequence of micro- and macroscopic coping processes. Skinner and Edge (1998) recently argue that coping and development seem inherently inter-connected. No account of development is complete without a consideration of how individuals adapt to adversity and master challenges. Developmental tasks are either problematic or challenging discrepancies between the (perceived) current reality and a normative standard (e.g., ideal self, personal goal or value etc.). Coping focuses the very question of how an individual deals with a particular set of demands. Moreover, while current coping processes are shaped by developmental conditions, coping reactions can also act as forces in creating future development. However, despite this multi-dimensional cross-reference, coping and development have historically been studied with separate lines of research (Skinner & Edge, 1998). The distinction between short-term or current adaptive processes (“coping”) and long-term or diachronic adaptation (“development”) appears all the more arbitrary and all the fuzzier, the more closely a specific change is observed. Resolving subjective, problematic discrepancies between the IS and the OUGHT also acts as the “motor” of development in classic developmental theories (Piaget); at the same time, the two basic processes of assimilation and accommodation are also crucial when coping with current, critical challenges (Brandtstädter, 1989, 1998; Brandtstädter & Greve, 1994; Brandtstädter & Renner, 1990, 1992; Brandtstädter, Wentura & Greve, 1993).

(2) Self and identity as a motor and criterion for successful coping and development

Establishing a stable, integrative identity is one of the central developmental tasks in a person’s youth: “ ‘In search of self’ defines a major drama that unfolds on center stage during adolescence, with a complicated cast of characters who do not speak with a single voice.” (Harter, 1990, p. 353; cf. Petersen, 1988; Petersen & Leffert, 1995; Silbereisen & Noack, 1988). In order to have a fair opportunity to pursue self-discovery and identity formation, adolescents need a “psychological moratorium” (e.g., Marcia, 1980), a period of

time in which they are not burdened down by excessive responsibilities or obligations (Harter, 1990). But of course, they also eventually have to leave this “state” behind them (Waterman, 1993). At the same time, whatever adaptations, upheavals, transitions and other changes they go through (i.e., in whatever way they develop), it is important that they should maintain and experience a feeling of biographical continuity (i.e., identity in its literal sense of “sameness”) (Brandstädter & Greve, 1994).

However, there is still no general theoretical framework for this purpose, even though the “self” has been the classic focus of empirical psychology since the time of James (1890). But at least there are several points on which a consensus could potentially be established (Banaji & Prentice, 1994; Baumeister, 1995; Brown, 1991; Markus & Wurf, 1987). The first of these is the distinction between *content* and *processes* (e.g. Filipp & Klauer, 1985). To begin with, the multi-faceted *content* features of the self (self-image, self-concept) provide very concrete “handles” for empirically recording and structuring personal identity. Then, by systematically considering the *processes* operating upon the content features we can move beyond collecting data on a descriptive or merely correlative basis by focusing on the dynamic qualities not just of the development of personal identity but also of its stabilization and “defense” (Markus & Wurf, 1987).). A second point of potential consensus is the contrast and comparison of real (realized) and possible selves (Markus & Nurius, 1986). As pointed out in section 2, a balance between the two, or rather the lack of it, is probably a predictor for explaining delinquency (Oyserman & Markus, 1990). Third, the distinction between descriptive and evaluative perspectives on the self is of special importance here. Any person can describe him/herself in terms of the past, present and future: This is how I am, this is how I used to be, and this is how I (possibly) will be. At the same time, each of these facets can also be viewed from an evaluative stance: This is how I want to be, ought to be, would like to be. The discrepancy between “real” and “desired” or “ideal” selves has been regarded as the basis of self-esteem since James (1890).

It is particularly appropriate to focus on the concept of the self and personal identity if one is seeking to reflect on how juvenile people who are in a sensitive phase of their development will get to grips with a restrictive environment or with a socially or personally generated crisis. This is a perspective from which it is especially worthwhile to apply the concepts of coping and the self in combination, since the situations or events we need to cope with are

often (usually, in fact) a threat, in the broad sense of the expression, to the self. Conversely, processes involving the self can frequently also be interpreted as coping processes (Brandstädter & Greve, 1994). However, with respect to juveniles and adolescents the two concepts have rarely been discussed together (Jackson & Bosma, 1990), and particularly rarely from a developmental viewpoint. The constraints imposed by incarceration on juveniles' development are not all they have to cope with: They must also deal with society's demand that they correct certain aspects of their own personal development and make up for certain deficiencies. Whether their coping strategies ultimately prove successful will again substantially be measured with reference to their personal identities. The key coping objectives—having the capacity to act, feeling at ease with one's own self, and achieving social integration—essentially depend on the stability of the self and on personal self-esteem (cf. also Brandstädter, Wentura & Greve, 1993; Brandstädter & Greve, 1994).

This viewpoint becomes especially relevant if the prior assumption is correct that adolescence represents a time of special upheaval. As suggested in section 1, one cannot preclude from the outset the possibility that offenses punished by juvenile incarceration have their roots in the offenders' testing the norms and orientations of the adult world, and in the search for personal identity. The search for (and also the lack of) norms and behavioral standards acceptable to *the young person him/herself* may still have been a conditioning factor in his/her criminal actions even if an important part is played by a previous criminal "career", current social circumstances (peer group, anomic temptation, lack of social control, etc.) or by other personal factors (e.g. persistent tendencies of offending). Although psychological studies have been done to investigate whether changes in identity (self-attitude or self-esteem) are a consequence and/or a cause of deviance (Kaplan, 1980), this is nevertheless yet another area in which little attempt has been made to apply a theoretical orientation appropriate to modern-day research on self-concepts.

Finally, a focus on the development of the self at a juvenile age also offers an interesting and promising link to earlier research on prisonization. Ever since Goffman's work on stigmatization (1961, 1963), a presumption that the transformation and deformation of the self-image of inmates could provide the key to the question of the impact of incarceration has informed a substantial portion of the ongoing discussion. Following up on the work published by Goffman (1963), Becker (1963) and Lemert (1967), labeling theory became especially

prominent in the field, with its contention that anyone labeled “criminal” by his/her social environment would be more likely to reoffend or to embark on a criminal career, and certainly would find it more difficult to maintain good conduct on probation (Schneider, 1990). The idea certainly has a plausible ring to it that people who are perceived, branded and treated as criminals by those around them will increasingly “believe” this themselves, i.e. that they will integrate these labels into their self-image and will ultimately tend to act accordingly. Especially when this underlying idea is viewed more subtly by taking, say, the social circumstances of criminal behavior into account, there is a lot to suggest that the hypothesis is well worth putting to the test. However, as mentioned in the previous section, the knowledge available on the consequences of incarceration for the personal identity of prisoners tends to be rather non-specific, and is only theoretically integrated in exceptional cases.

(3) *Delinquency as action in context*

However, as mentioned in section 2, the (common) theory of deterrence can be considered diametrically opposed to labeling theory (Schneider, 1990). The contrast between these two approaches leads us back to the beginning. Personal development and the factors spurring it are intertwined in many different ways with individual actions and decisions. A crime is always a concrete *action* labeled or perceived as such, that is, it always involves a person *doing* something. „The fact that criminal actions are performed intentionally distinguishes them from accidental actions and from those performed as a consequence of mental illness.“ (McCord, 1992, p. 115). Acts of recidivism, too, are still *acts* for all that. The rational choice approach to explaining delinquent behavior makes this aspect the focus of its theoretical concept (Cornish & Clarke, 1986), though the approach is rarely applied expressly to juvenile delinquency in particular. The basic philosophy in this case is that a criminal act at its core, like any other form of action, is a function of the actor’s expectations (“what will happen if I do/don’t do that?”) and his/her subjective evaluation of the anticipated effects (“is this what I *want*?”). There must be some reason for committing an offense since nobody steals inadvertently or against his/her will (indeed, conceptually we have to say that, if the act was inadvertent we cannot call it stealing in the narrow sense). Of course, with many acts of violence or crimes against property the dynamics of the situation at the time may play a calamitous part (situational cues and needs, social pressure, etc.; it seems that shop-lifting is often a good example of this). However, this qualification does not fundamentally alter the

status of these offenses as *actions*, it is just that individual cases arise in which the offender does hardly have any choice *given* his expectancies and preferences under this certain (perceived) circumstances. Moreover, this qualification certainly does not apply to planned offenses such as robberies, though.

In an action-theoretical concept based around a person's goals or ends, three aspects of the subjective perception of the situation form the core of theoretical attention (cf., e.g., Ajzen, 1996; for more extensive treatment, see Brandstädter, 1998). (1) The main direction of a person's actions is prescribed by his/her conception of and orientation to values and norms: "What do I want to achieve or avoid, what ought I to do or not to do?" Against the background of an actional development perspective, not only very short-term goals but also longer-term development goals and identity projects (or the lack of these) are to be considered. (2) Subjective expectations govern the choice of means and strategies used for action: "Which option will be effective, which will be more efficient than others, and which options will have what side-effects, desired or otherwise, for me or for others?" (3) Personal convictions as to what is or is not controllable will filter out the options subjectively available: "Which strategies can I handle, which risks can I monitor, and which consequences can I control?" One of the crucial points here is that the range of possibilities a person subjectively perceives is often smaller than the scope actually available for his/her actions; developing as a person also means recognizing the options that are available.

This simultaneously suggests the conceptual bridge to the coping concept discussed above: The difficulties we need to cope with are the critical challenges and demands that we subjectively perceive to be beyond our (current) means of response. Likewise, coping with such crises can *also* be facilitated or supported by positive action, focusing, as it were, on the IS-side of the problem. However, positive action is not the only coping response. To the contrary: adaptational dynamics altering the OUGHT-side of the threatening discrepancy are essentially *subpersonal* processes (Brandstädter, 1998). In both cases, though, the perception and evaluation of the personal self is the fulcrum on which the particular chosen strategy or reaction will turn. Is this challenge a threat to me? Can I cope with this situation? Can I bear this provocation, or this defeat? Is this how I want to be? All of the questions touched upon in the underlying intra- or interpersonal conflicts (not necessarily asked explicitly, let alone consciously answered) refer back to one's own self.

There is a wealth of questions and hypotheses implicit in such an actional perspective, amenable to direct empirical examination. What predictive value do a person's characteristics, propensities and competences or deficiencies – and their subjective perception and assessment, respectively – have for future criminal action? What special part do his/her personal and social identities play in this? In particular, can the specificity of criminal action to a certain phase in life (“adolescence-limited crime”) be lent any plausibility by age-correlated changes in action-related probabilities? What specific part is played by experiences of and during incarceration? How do prisonizational experiences influence a person's characteristics, convictions and capabilities? What effects will it have on his/her onward development, identity and social attachment? At all times, it is important to pay due consideration to the determinative part played by “exogenous” factors relating both directly to the person (educational status, work experience, etc.) and to his/her current social situation (debts, level of earnings, etc.) and social context (family, relationships, and also institutional ties such as probation systems).

4 Empirical challenges: Methodological implications for research

Surely one good explanation for the lack of empirical studies targeted specifically on the consequences of incarceration for juvenile offenders is the fact that the methodological implications of the arguments and findings addressed in the preceding sections will call not only for a wide range of variables to be assessed (according to the arguments in the previous sections) but, in particular ask for a very sophisticated design if the study is extensive. In this section, I shall stake out the reference points for an appropriate design in this light (cf. fig. 1), by presenting a sequence of thoughts or outlines, possible objections to them, and how a proper methodology might respond to these.

(1) *Cross-sectional comparison*. An initial, simple straightforward approach to studying the effects of incarceration on juveniles would be to compare different simultaneously recruited samples. In its simplest form, this method would involve an assessment of three samples: The first group (C1) would have been released from custody a few months previously; the second (C2), would have a slightly younger mean age and would be just approaching release from incarceration; members of the third (C3), again slightly younger on average, would have just begun serving their custodial sentences. A *cross-sectional survey* of this kind (conducted at a single point in time, t_1), provides a rough *estimate* of the impact of incarceration: The comparison between cohorts C2 and C3 allows us to estimate what changes have occurred during incarceration (“*prison**”), and comparing C1 and C2 provides a corresponding estimate of the stability of these changes following the juveniles’ release (“*probation**”).

(2) *Longitudinal extension*. The problem is that, in making this estimate, the *true* effect of incarceration, or of maintained good conduct after release, is confounded with the differences arising *regardless of these changes* among the individuals surveyed, since all variance in cross-sectional designs is variance between persons. Any differences found in these cross-sectional analyses can only be interpreted as a manifestation of *developmental changes* on the assumption that no systematic differences exist between the individuals and the cohorts surveyed (or in other words, that all three samples of delinquent juveniles have been drawn from the same homogeneous population). In reality, some of the differences displayed (in a proportion that is difficult to estimate) will not be attributable to the *intrapersonal* variance arising out of incarceration but to *interpersonal* variance not related to it in any way. The

important point here is that we can expect on theoretical grounds to find systematic differences between different cohorts. Quite obviously, as discussed earlier, changes will not just occur in the “cycles” and shifting ancillary conditions of youth crime, but also in the social and structural environment (unemployment, welfare payment levels, tensions involving immigrants, the political climate). Still more important, though, is that the qualitative aspects of incarceration as a “treatment” also change frequently and rapidly. A juvenile just leaving a penal institution in 1998 after serving a two-year sentence may have experienced it as a much different place in a variety of respects from what another will find when he begins his own two-year term there. There have been substantial changes in levels of drug abuse, the proportion of non-national inmates, and in the therapy and training on offer in German juvenile prisons during the past few years; in many of them, the sheer number of inmates has almost doubled while staffing levels are virtually unchanged. Finally, the legal environment can also change quickly, either as it applies to individual institutions (security regulations, etc.), or to particular federal states (which differ substantially in their personnel and financial resources), or again in the form of new national legislation. Given this overall background, cohort effects are very likely to occur in the developmental context of penal institutions, and to do so in relatively short timeframes.

To counter this objection, the cross-sectional design needs to be extended by adding at least one more recording point at a new time, t_2 , to provide a *longitudinal* comparison. This plea is, of course, not new, and has been made frequently in more recent developmental papers on delinquency and crime (e.g., Loeber & Farrington, 1994; Loeber, Stouthamer-Loeber, van Kammen & Farrington, 1991; Lösel, 1995). Longitudinal surveys are well able to justify the substantial input of research resources they require—in answer to their critics who see little substantial advantage over a cross-sectional design (e.g. Gottfredson & Hirschi, 1986)—because they offer considerable benefits in extra knowledge. In particular, longitudinal data recording (i.e., repeated measurements with the same persons) always appears the best route to take when testing causal hypotheses. (More detail will be given below on possible objections to traditional cohort and longitudinal designs).

In principle, extending a study by adding in a longitudinal survey is relatively simple: C2 (the cohort just coming up toward release at t_1) should be surveyed again a few months later, while C3 (just starting their prison terms at t_1) should be surveyed again shortly before their release.

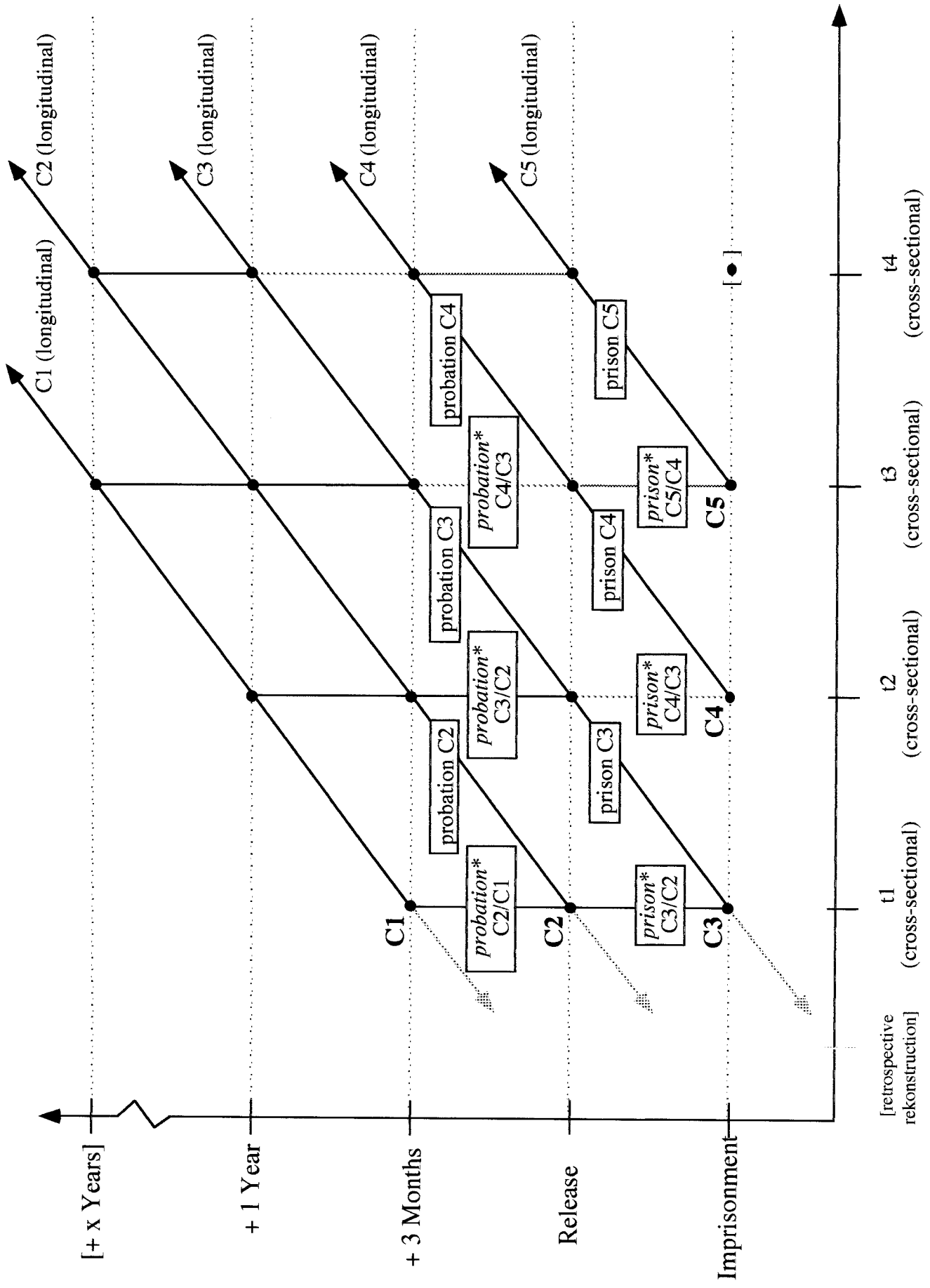


Figure 1 Design for a developmental study on youth prisonization (cf. Greve & Hosser, 1996)

Assuming a reliable set of instruments for measuring them, the changes undergone by C3 during incarceration can now be precisely determined (“prison C3”). Similarly, the stability of the prison impact following release can also be empirically determined for C2 (“probation C2”). A longitudinal design is the only kind which offers valid information on *intraindividual developments and changes*.

(3) *Cross-sequential enhancement*. However, the above enhancement only partly puts paid to the objection that cohort effects may distort the outcome. On the one hand, we would have firm measurements available, rather than just estimates, for the changes during incarceration in cohort C3 and the stability of these changes for cohort C2, but on the other it is quite possible that the two samples may come from different populations, for the reasons sketched above, in respect of both confinement conditions (“treatment” variation) and the social context out of which they are removed or into which they are released. The crux is that C2 and C3 have passed through their incarceration phase at different times. Data recorded in a once-only longitudinal section may themselves only be used to estimate *generally applicable* developmental changes under the restrictive assumption that there are no fundamental systematic differences between any two age cohorts and the historical circumstances surrounding their incarceration or release. For the reasons already stated, this is in fact a dubious assumption.

To tackle this problem methodologically, two more enhancement steps are necessary. To begin with, a third data-recording point (t_3) needs to be included, when C3 can be surveyed again, this time several months after the inmates are released. In addition, a new cohort (C4) needs to be recruited at t_2 , whose members have just started their incarceration terms at t_2 , and will be surveyed again at t_3 , shortly before their release. The information gathered from C3 and C4 at t_3 allows us to do two things. Firstly, we can *measure* intraindividual changes in the juvenile delinquents in cohort C4 during their prison term (from t_2 to t_3 ; “prison C4”), just as we did for C3 from t_1 to t_2 . Secondly, we can compare the incarceration (“prison”) effects for cohorts C3 and C4. Exactly the same two considerations apply to the measurements of stability (“probation”), this time for cohorts C2 ($t_1 \rightarrow t_2$) and C3 ($t_2 \rightarrow t_3$). Not until we make *these* comparisons do we really get at the information we are looking for. They allow us to assess intraindividual changes during incarceration and the stability of those changes after release —beyond particular groups of people and contexts— by, as it were, “netting out” the

effects. These *structural equivalencies* in the development courses of different cohorts with the same socialization conditions are particularly interesting for developmental psychologists and criminologists. To put it the other way round, only those incarceration effects shown by C3 and C4 *in common* can be interpreted as *generally applicable* development effects (i.e., not influenced by varying situational differences). At the same time, the *differences* between C3 and C4 in the effects they show during their incarceration terms act as pointers to “historic” and situational, contextual effects which may well be just as interesting from a criminological viewpoint (this will be especially true if known systematic differences have arisen between the specific data-recording times, e.g. a legislative change, or an identifiable change in specific confinement conditions).

This enhancement, then, combines the advantages of cross-sectional and longitudinal analysis to form a cross-sequential design. Farrington (1992, p. 533) recently made a compelling case for the use of this design to investigate “criminal careers” (cf. also Farrington, Ohlin & Wilson, 1986, esp. pp. 151ff.).

(4) *Problems with longitudinal designs.* Longitudinal analyses raise a number of practical and theoretical problems of their own. One of the largest of the theoretical ones is what effects might be generated by repeated recording. Probably the most important practical problem is the fact that systematic drop-outs will occur among the participants — a problem that can prove quite serious when dealing with deviant and delinquent young people. Although it will naturally be possible to reach all of the juveniles a second time as long as they are still in custody, even then it is likely that some of them may refuse to take part the second time round. But of course the main problem arises when we seek to survey the same people after their release: Some will not wish to participate any more, and others will be impossible to trace (on these difficulties, cf. Cairns & Cairns, 1994). There would be good grounds for suspecting that the juveniles dropping out of the study in this way could differ from the participants still in the longitudinal comparison in certain key aspects (undetected offenses, social circumstances, psychological stability, normative reorientation, social integration, etc.). These potential difficulties pose substantial demands on the practical and social organization of the study.

One substantial advantage of this “sequential strategy” (Baltes, Lindenberger & Staudinger, 1998, cf. p. 1051) combining cohort-sequential, time-sequential and cross-sequential analyses (cf. Schaie, 1983, p. 9) is that it at least allows one to estimate what effects have been generated by these sources of error. At the point in time shortly before inmates are released, there will not only be two longitudinal differential data sets available on the effects of incarceration, but also three *cross-sectional* estimates (“*prison**”) obtained by comparing *different* cohorts in each case. In one instance (C2), the cohort will not have been surveyed for the first time until the end of the imprisonment term.

As a further precaution to counter methodological objections, it would be advisable to further extend the survey in two directions. Firstly, at least one additional cohort (C5) ought to be recruited at t_3 and followed up on a longitudinal basis, in order to provide a long-term control for historic contextual effects. Secondly, *all* of the cohorts participating in the survey should be followed up over a relatively long period, i.e. not just a matter of months after their release but also (say) one and two years after release. Each new cohort and each new data-recording time added into the survey will indemnify the findings more effectively against historic cohort effects creeping in, because the total number of people surveyed who have come through the developmental situation under examination—but who have different personal (data) characteristics and experienced different conditions at the time—will steadily increase.

(5) *Heterogeneity of prison cultures.* Bearing in mind the research on prison subcultures sketched out in section 2, additional methodological steps will also be needed to ensure that an identified causal factor behind particular changes in the survey participants does not stem from specific conditions, stable over the long term, in *one specific* penal institution. To counter this objection, it is important to ensure there are not only diachronic but also synchronic variations in the conditions of confinement. That not only means it is necessary to systematically record and take account of changes in the conditions prevailing *within* particular correctional institutions, but also differences *between* institutions, so if possible inmates from a number of institutions should be included in the survey. Three aspects in particular need to be reviewed: the type of penal regime (e.g. a “therapeutic” or “surveillance” regime), and the composition of the prison population, firstly in social terms (patterns of criminality, urban or rural catchment area, ethnic origin of inmates) and secondly in terms of age groups.

(6) *The selectivity of the justice system: The need for contrast groups.* In principle, this study design makes it possible to separate analytically the effects relating to individual differences, points of measurement, and intraindividual development: *Generally applicable* development aspects both during and after incarceration, and also cohort and contextual effects can all be identified. Nevertheless, even if all the enhancements are incorporated into the design this still will not ensure that the changes and developments occurring during and after incarceration (across a number of different institutional contexts) really are a consequence of incarceration as such. The component that is really missing as a means of verifying incarceration effects is a *control group* (with this problem in mind, Lösel, 1995, is one author who has called for a combination of longitudinal and experimental designs). To further eliminate processes of change that would be similarly likely to occur outside an “incarceration” context, as a general accompaniment of the maturing process, it is necessary to contrast the samples surveyed with another group which, though comparable with the core sample in terms of the initial personal and developmental situation, consists of people *not* subjected to the experience of incarceration. In a strict sense, it will always be virtually impossible to attain a genuinely *experimental* (randomized) design, for a combination of legal and ethical reasons. One approximation to this design, however, would be to simultaneously record data, using identical methods, from a group of juveniles and adolescents who, though found guilty of comparable crimes by a juvenile court, have only been put on probation and not given a custodial sentence. In Germany, the system has deliberately been set up to allow juvenile court judges a relatively large amount of discretion when awarding sentences (Hupfeld, 1996). This means that, provided the samples are large enough, it should be possible to identify enough young people who have been given suspended sentences *only* because they had a different judge, and who are otherwise comparable in terms of their social situations and delinquency (also including their previous criminal records). This chiefly ought to work well in the large field of property crimes, where judges’ discretionary scope is broad.

(7) *Selectivity of the incarcerated sample.* Another objection of a fundamental nature must also be considered. Whenever institutionally punished groups are investigated —especially in prisons— it will be impossible in retrospect to separate whatever selection processes have intervened with a filtering influence *after* or beyond the criminal offense as such from the original, personal factors giving rise to the crime. In other words, crime-relevant and selectivity-influencing factors are mutually entwined, with no possibility of controlling for this.

One aspect of the problem is the fact that people from lower social strata are overrepresented, relative to their share in the overall population, among those caught for committing detected crimes, and still more so among those awarded prison sentences, but we do not have any reliable guide as to whether the same disproportion holds when it comes to offenders who are charged but not convicted, or to those who are never caught in the first place. Above all, though, there is no reliable information available as to how much the group of incarcerated juveniles is subject to systematic selection based on personal qualities or circumstances (identity profiles, coping resources, areas of vulnerability, value and norm orientations, etc.). If, in addition to the aspects already discussed, a study also aims to clarify what different effects the developmental conditions of a prison have on different people, assessments of the interindividual variance between convicted young delinquents will need to be supplemented by details of the variance between convicted and non-convicted juveniles (the latter also including non-delinquents). To achieve this, the social and particularly the psychological *initial conditions* found for the surveyed groups of convicted, incarcerated juvenile delinquents must be compared with the assessment of a representative (non-selected) comparative sample of juveniles. This will offer the only way of identifying deviant aspects in the convicted youths *at the start of their incarceration*, that are pertinent to the central *explanatory* variables.

5 Consequences of incarceration in adolescence: Theoretical and empirical questions from a developmental perspective

The only really safe answer when asked whether one factor or another has an effect on offending or violent behavior is: “It depends.” That immediately prompts the question “Depends on what?”. Although this is still an open question in many respects, it cannot be reiterated often enough that any simple (main-effect) answer is both incomplete and misleading. This is important because the political and public debate is quick and hot-tempered, and is liable to draw weighty conclusions from flimsy premises.

There are two core points which should have emerged from the arguments discussed in this chapter. Firstly, even today there is still a lack of integrative psychological research on the consequences of incarceration for adolescent development (i.e. the process of preparing to lead a productive, adaptable adult life). A developmental perspective offers the only way of integrating the various explanatory perspectives on youth crime sketched in section 1 with other approaches to the effects of “treatment” on deviance and delinquency, to form a common framework. There remains a good deal to be done, including further theoretical work, but I have endeavored to set out some reference points and foci for this purpose in section 3.

Secondly, youth incarceration can only be legitimated *at all* if it can be empirically demonstrated, using a developmental approach, that incarceration does—at least in certain cases and under certain ancillary conditions—make a positive contribution toward promoting juvenile development. For Germany’s juvenile justice system in particular, educative effectiveness constitutes the explicit grounds and justification for *all* types of reaction or sanction covered by the Juvenile Courts Law (JGG). If it should turn out that incarceration is an ineffective treatment (rather like an ineffective medicine or drug), or indeed if serious indications of undesired or harmful side-effects are crystallized by further findings, society will need to think again about subjecting young people to this treatment.

However, while criminologists continue their serious debate on the “nothing-works” hypothesis, naive psychological theories, political ideologies (driven by —perceived— public opinion, especially during election campaigns) have had a far greater influence on juvenile

justice policy than have careful research studies (Krisberg & Austin, 1993). Although there is a remarkable degree of agreement on the need to remove children from jails, especially from adult jails, the opinions on youth incarceration are changing. In the 1998 federal election campaign in Germany, both of the major parties (and, of course, many minor political groups) seriously discussed the possibility of lowering the age limit for the application of the Juvenile Courts Law from 14 to 12 years, thus implying the possibility of a 12-year-old child being incarcerated. Given that the upper age limit for detention in a *Jugendanstalt* (juvenile penal institution) in Germany is 24 years, that would imply an age range of up to 12 years *within a single* institution. Yet one of the main reasons for removing juveniles from adult prisons in the first place was the realization and acceptance that juveniles need to be protected from other (older, stronger, and probably more violent) inmates. The absurd consequence of such a change in the law would be the need for a new category of “juvenile juvenile prisons” or, more bluntly, children’s prisons. Given what we know today about the causes of delinquency and the consequences of incarceration, this is not the right way forward. This empirical argument may be answered by a punitive position stating that the offender *deserves* his/her punishment even if it *does* produce little benefit or even negative effects — but an objection of this kind cannot hold with respect to juvenile and adolescent offenders. Children are not responsible for their offenses, at least not to the same degree as adults are. Moreover, we adults (parents, teachers and others) *are* responsible for their development, their education, and their welfare — so, in almost every case, we are responsible for their offenses, too. This insight, however, is not exactly brandnew: „... whatever the immediate act may be that brings a child into a juvenile court, the issues presented are, in essence, problems involving rather than criminal responsibility, guilt, or punishment.“ (Glueck & Glueck, 1950, p.3)

References

- Adler, F. & Laufer, W.S. (Eds.) (1995). *The legacy of anomie theorie* (Advances in criminological theory, Vol. 6). New Brunswick, NJ: Transaction.
- Agnew, R. (1985). Social control theory and delinquency: A longitudinal test. *Criminology*, 23, 47-61.
- Ajzen, I. (1996). The social psychology of decision making. In E.T. Higgins & A.W. Kruglanski (Eds.), *Social Psychology. Handbook of basic principles* (pp. 297-325). New York: Guilford Press.
- Albrecht, H.-J. (1997). Sentencing and punishment in Germany. In M. Tonry & K. Hatlestad (Eds.), *Sentencing reform in overcrowded times. A comparative perspective* (pp. 181-187). New York: Oxford University Press.
- Alpert, G.P. (1979). Patterns of Change in Prisonization. A Longitudinal Analysis. *Criminal Justice and Behavior*, 6, 159-174.
- Andrews, D.A., Zinger, I., Hoge, R.D., Bonta, J., Gendreau, P. & Cullen, F.T. (1990). Does correctional treatment work? A clinically relevant and psychological informed meta-analysis. *Criminology*, 28, 369-404.
- Atchley, R.C. & McCabe, M.P. (1968). Socialization in Correctional Communities: A Replication. *American Sociological Review*, 33, 774-785.
- Baltes, P.B., Lindenberger, U. & Staudinger, U.M. (1998). Life-span theory in developmental psychology. In Lerner, R.M. (Ed.), *Theoretical models of human development* (Vol. 1 of Damon, W. (Ed. in chief), *Handbook of child development*; pp. 1029-1143). New York: Wiley.
- Banaji, M.R. & Prentice, D.A. (1994). The self in social contexts. *Annual Review of Psychology*, 45, 297-332.
- Baumeister, R.F. (1995). Self and identity: An introduction. In A. Tesser (Ed.), *Advanced social psychology* (pp. 50-98). New York: McGraw-Hill.
- Baumeister, R.F., Smart, L. & Boden, J.M. (1996). Relation of threatened egotism to violence and aggression: The dark side of high self esteem. *Psychological Review*, 103, 5-33.
- Becker, H.S. (1963/1973). *Outsiders. Studies in the sociology of deviance*. New York: Free Press.
- Bennett, L.A. (1974). The Application of Self-Esteem Measures in a Correctional Setting: II. Changes in Self-Esteem during Incarceration. *Journal of Research in Crime and Delinquency*, 1, 9-15.
- Berckhauer, F. und Hasenpusch, B. (1982). Legalbewährung nach Strafvollzug. Zur Rückfälligkeit der 1974 aus dem niedersächsischen Strafvollzug Entlassenen. In H.-D. Schwind und G. Steinhilper (Hrsg.), *Modelle zur Kriminalitätsvorbeugung und Resozialisierung* (S. 281-333). Heidelberg: Kriminalistik Verlag.
- Blumstein, A., Cohen, J. & Farrington, D.P. (1988), Criminal career research: Its value for criminology. *Criminology*, 26, 1-35.
- Blumstein, A., Farrington, D.P. & Moitra, S. (1985): Delinquency careers: Innocents, desisters, and persisters. in M. Tonry und N. Morris (Eds.), *Crime and justice: An annual review of research* (Vol. 6, pp. 187-219). Chicago: University of Chicago Press.
- Bonta, J. & Gendreau, P. (1990). Reexamining the cruel and unusual punishment of prison life. *Law and Human Behavior*, 14, 347-372.
- Bosma H. & Jackson, S. (Eds.) (1990). *Coping and self-concept in adolescence*. Berlin: Springer.
- Brandtstädter, J. (1989). Personal self-regulation of development: Cross-sequential analyses of development-related control beliefs and emotions. *Developmental Psychology*, 25, 96-108.
- Brandtstädter, J. (1998). Action perspectives on human development. In Lerner, R.M. (Ed.), *Theoretical models of human development* (Vol. 1 of Damon, W. (Ed. in chief), *Handbook of child development*; pp. 807-863). New York: Wiley.
- Brandtstädter, J. & Greve, W. (1994). The aging self: Stabilizing and protective processes. *Developmental Review*, 14, 52-80.
- Brandtstädter, J., Wentura, D., & Greve, W. (1993). Adaptive resources of the aging self: Outlines of an emergent perspective. *International Journal of Behavioral Development*, 16, 323-349.
- Brandtstädter, J. & Renner, G. (1990). Tenacious goal pursuit and flexible goal adjustment: Explication and age-related analysis of assimilative and accommodative strategies of coping. *Psychology and Aging*, 5, 58-67.
- Brandtstädter, J. & Renner, G. (1992). Coping with discrepancies between aspirations and achievements in adult development: A dual-process model. In L. Montada, S.-H. Filipp & M. Lerner (Eds.), *Life crises and experiences of loss in adulthood* (pp. 301-319). Hilldale, NJ: Erlbaum.
- Brezina, T. (1996). Adapting to strain: An examination of delinquent coping responses. *Criminology*, 34, 39-61.
- Brown, J.D. (1991). Accuracy and bias in self-knowledge. In C.R. Snyder & D.R. Forsyth (Eds.), *Handbook of social and clinical psychology* (pp. 158-196). New York: Pergamon.

- Brown, R.L.S. (1971). Changes in views of self and parents among a group of first time incarcerated delinquent girls (Doctoral dissertation, University of Oklahoma 1970). *Dissertation Abstracts International* 31: 4328B.
- Brown, W.K., Miller, T.P. & Jenkins, R.L. (1989). The fallacy of radical nonintervention. *Annals of Clinical Psychiatry*, 1, 55-57.
- Bukstel, L.H. & Kilmann, P.R. (1980). Psychological Effects of Imprisonment on Confined Individuals. *Psychological Bulletin*, 88, 469-493.
- Cairns, R.B. & Cairns, B.D. (1991). Social cognition and social networks: A developmental perspective. In D.J. Pepler & K.H. Rubin (Eds.), *The development and treatment of childhood aggression* (pp. 249-278). Hillsdale, NJ: Erlbaum.
- Cairns, R.B. & Cairns, B.D. (1994). *Lifelines and risks. Pathways of youth in our time*. New York: Harvester Wheatshead.
- Caspi, A., Elder, G.H., & Herbener, E.S. (1990). Childhood personality and the prediction of life-course patterns. In L.N. Robins & M. Rutter (Eds.), *Straight and devious pathways from childhood to adulthood* (pp. 13-35). Cambridge, MA: Cambridge University Press.
- Cernkovich, S.A., Giordano, P.C. & Pugh, M.D. (1985). Chronic offenders: The missing cases in self-report delinquency research. *Journal of Criminal Law & Criminology*, 76, 705-732.
- Clarke, R.V. & Felson, M. (Eds.) (1993). *Routine activity and rational choice* (Advances in criminological theory, Vol. 5). New Brunswick, NJ: Transaction.
- Clemmer, D. (1958). *The prison community*. New York: Holt, Rinehart & Winston.
- Coie, J.D. & Dodge, K.A. (1998). Aggression and antisocial behavior. In Eisenberg, N. (Ed.), *Social, emotional, and personality development* (W. Damon, Ed.-in-Chief, *Handbook of child psychology*, Vol. 3, pp. 779-862). New York: Wiley.
- Compas, B.E. (1995). Promoting successful coping during adolescence. In M. Rutter (Ed.), *Psychosocial disturbances in young people* (pp. 247-273). Cambridge (UK): Cambridge University Press.
- Compas, B.E. (1998). An agenda for coping research and theory: Basic and applied developmental issues. *International Journal of Behavioral Development*, 22, 231-237.
- Cornish, D.B. & Clarke, R.V. (Eds.) (1986). *The reasoning criminal. Rational choice perspectives on offending*. New York: Springer.
- Crockett, L.J. & Crouter, A.C. (1995). Pathways through adolescence: An overview. In L.J. Crockett & A.C. Crouter (Eds.), *Pathways through adolescence* (pp.1-12). Mahwah, NJ: Lawrence Erlbaum.
- Dolde, G. & Grübl, G. (1996). Jugendstrafvollzug in Baden-Württemberg. Untersuchungen zur Biographie, zum Vollzugsverlauf und zur Rückfälligkeit von ehemaligen Jugendstrafgefangenen. In H.-J. Kerner, G. Dolde & H.-G. Mey (Hrsg.), *Jugendstrafvollzug und Bewährung. Analysen zum Vollzugsverlauf und zur Rückfallentwicklung* (S. 221-356). Bonn: Forum Verlag Godesberg.
- Dörner, C. (1991). *Erziehung durch Strafe. Die Geschichte des Jugendstrafvollzugs 1871 – 1945*. Weinheim: Juventa.
- Dünkel, F. (1990). *Freiheitsentzug für junge Rechtsbrecher*. Bonn: Forum Verlag Godesberg.
- Dünkel, F. & Geng, B. (1994). Rückfall und Bewährung von Karrieretätern nach Entlassung aus dem sozialtherapeutischen Behandlungsvollzug und aus dem Regelvollzug. In M. Steller, K.-P. Dahle & M. Basque (Hrsg.), *Straftäterbehandlung* (S. 35-59). Pfaffenweiler: Centaurus.
- Dünkel, F. & Meyer, K. (1985). Die Reform von Jugendstrafe und Jugendstrafvollzug. Gegenstandsbereiche und Ziele eines internationalen Vergleichs. In F. Dünkel & K. Meyer, *Jugendstrafe und Jugendstrafvollzug. Stationäre Maßnahmen der Jugendkriminalrechtspflege im Internationalen Vergleich*. Band 1. Freiburg: Eigenverlag May-Planck-Institut für ausländisches und internationales Strafrecht.
- Eron, L.D. & Huesman, L.R. (1990). The stability of aggressive behavior – even unto the third generation. In M. Lewis & S.M. Miller (Eds.), *Handbook of developmental psychopathology* (pp. 147-156). New York: Plenum Press.
- Evans, R.C., Copus, G., Sullenberger, T. & Hodgkinson, P. (1996). A cross-cultural comparison of the self-concepts of imprisoned young offenders by country, race, and parentyl state. *International Journal of Comparative and applied Criminal Justice*, 20, 157-176.
- Farrington, D.P. (1991). Childhood aggression and adult violence: Early precursors and later-life outcomes. In D.J. Pepler & K.H. Rubin (Eds.), *The development and treatment of childhood aggression* (pp. 5-29). Hillsdale, NJ: Erlbaum.
- Farrington, D.P. (1992). Criminal career research in the United Kingdom. *British Journal of Criminology*, 32, 521-536.
- Farrington, D.P. (1994). Interactions between individual and contextual factors in the development of offending. In R.K. Silbereisen & E. Todt (Eds.), *Adolescence in context. The interplay of family, school, peers, and work in adjustment* (pp. 366-389). New York: Springer.

- Farrington, D.P. (1995). The challenge of teenage antisocial behavior.? In M. Rutter (Ed.); *Psychosocial disturbances in young people* (pp. 83-130). Cambridge (UK): Cambridge University Press.
- Farrington, D.P. (1997). Early prediction of violent and nonviolent youthful offending. *European Journal of Criminal Policy and Research*, 5, 51-66.
- Farrington, D.P., Loeber, R., & van Kammmen, W.B. (1990). Long-term crminal outcomes of hyperactivity-impulsivity-attention deficit and conduct problems in childhood. In L.N. Robins & M. Rutter (Eds.), *Straight and devious pathways from childhood to adulthood* (pp. 62-81). Cambridge, MA: Cambridge University Press.
- Farrington, D.P., Ohlin, L.E. & Wilson, J.Q. (1986), *Understanding and controlling crime. Toward a new research strategy*. New York: Springer.
- Featherman, D.L. & Lerner, R.M. (1985). Ontogenesis and sociogenesis: Probleatics for theory and research about development and socialization across the life-span. *American Sociological Review*, 50, 659-676.
- Feeney, F. (1998). *German and american prosecutions*. An approach to statistical comparison. U.S. Department of Justice, Bureau of Justice Statistics (BJS Discussion Paper).
- Filipp, S.-H. & Klauer, T. (1985). Conceptions of self over the life-span: Reflections on the dialectics of change. In M.M. Baltes & P.B. Baltes (Eds.), *The psychology of aging and control* (pp.167-205). Hillsdale, NJ: Erlbaum.
- Ford, D.H. & Lerner, R.M. (1992) *Developmental systems theory. An integrative approach*. Newbury Park, CA: Sage.
- Freitas, A.L. & Downey, G. (1998). Resilience: A dynamic perspective. *International Journal of Behavioral Development*, 22, 263-285.
- Garbarino, J. (1995). The american war zone: What children can tell us about living with violence. *Journal of Developmental and Behavioral Pediatrics*, 16, 431-435.
- Garbarino, J., Dubrow, N., Kostelny, K. & Pardo, C. (1996). *Children in danger: Coping with the consequences of community violence*. San Francisco: Jossey-Bass.
- Garmezy, N. (1994). Reflections and commentary on risk, resilience, and development. In Haggerty, R.J., Sherrod, L.R., Garmezy, N. & Rutter, M. (Eds.), *Stress, risk, and resilience in children and adolescents* (pp. 1-18). Cambridge (UK): Cambridge University Press.
- Garrett, C.J. (1985). Effects of residential treatment on adjudicated delinquents: A meta-analysis. *Journal of Research in Crime and Delinquency*, 22, 287-308.
- Gendreau, P., Madden, P.G. & Leipziger, M. (1980). Predicting recidivism with social history information and a comparison of their predictive value with psychometric variables. *Canadian Journal of Criminology*, 22, 328-336.
- Glueck, S. & Glueck, E. (1950). *Unraveling juvenile delinquency*. New York: The Commonwealth Fund.
- Goffman, E. (1961). *Asylums*. Garden City, NY: Anchor.
- Goffman, E. (1963). *Stigma. Notes on the management of spoiled identity*. Englewood Cliffs, NJ: prentice-Hall.
- Gold, M. & Osgood, D.W. (1992). *Personality and peer influence in juvenile corrections*. Westport, CT: Greenwood.
- Goodstein, L. (1979). Inmate Adjustment to Prison and the transition to Community Life. *Journal of Research in Crime and Delinquency*, 16, 246-272.
- Gottfredson, M. & Hirschi, T. (1986). The true value of lambda would appear to be zero: An essay on career criminals, criminal careers, selective incapacitaion, cohort studies, and related topics. *Criminology*, 24, 213-234.
- Gottfredson, M.R. & Hirschi, T. (1994). A general theory of adolescent problem behavior: Problems and prospects. In R.D. Ketterlinus & M.E. Lamb (Eds.), *Adolescent problem behaviors. Issues and research* (pp. 41-56). Hillsdale, NJ: Lawrence Erlbaum.
- Greenberg, D.F. (1991). Modeling criminal careers. *Criminology*, 29, 17-46
- Greve, W. & Hosser, D. (1996). Strafhaft als Entwicklungskrise. Die Bedeutung einer Gefängnisstrafe im Leben Jugendlicher: Konturen einer Forschungsfrage. In C. Pfeiffer & W. Greve (Hrsg.), *Forschungsthema Kriminalität* (S. 215-246). Baden-Baden: Nomos.
- Greve, W. & Hosser, D. (1998). Psychische und soziale Folgen einer Jugendstrafe: Forschungsstand und Desiderate. *Monatsschrift für Kriminologie und Strafrechtsreform*, 81, 83-103.
- Haan, N. (1977). *Coping and defending*. New York: Academic Press.
- Harter, S. (1990). Self and identity development. In S.S. Feldman & G.R. Elliot (Eds.), *At the threshold. The developing adolescent* (pp. 352-387). Cambridge, MA: Harvard University Press.
- Hauser, S.T. & Bowlds, M.K. (1990). Stress, coping, and adaptation. In S.S. Feldman & G.R. Elliot (Eds.), *At the threshold. The developing adolescent* (pp. 388-413). Cambridge, MA: Harvard University Press.
- Havighurst, R.J. (1948/1972). *Developmental tasks and education (3rd Ed.)*. New York: Longman.

- Hepburn, J.R. & Stratton, J.R. (1977), Total institutions and inmate self-esteem. *British Journal of Criminology*, 17, 237-249.
- Herrmann, D. & Kerner, H.-J. (1988). Die Eigendynamik der Rückfallkriminalität. *Kölner Zeitschrift für Soziologie und Sozialpsychologie*, 40, 485-504.
- Hirschi, T. & Gottfredson, M. (1983). Age and the explanation of crime. *American Journal of Sociology*, 89, 552-584.
- Huizinga, D. (1995). Developmental sequences in delinquency: Dynamic typologies. In L.J. Crockett & A.C. Crouter (Eds.), *Pathways through adolescence* (pp.15-34). Mahwah, NJ: Lawrence Erlbaum.
- Huizinga, D., Esbensen, F.-A. & Weiher, A.W. (1991). Are there multiple paths to delinquency? *Journal of Criminal Law and Criminology*, 82, 83-118.
- Hupfeld, J. (1996). *Jugendrichterliches Handeln*. Baden-Baden: Nomos.
- Jackson, S. & Bosma, H. (1990). Coping and self in adolescence. In H. Bosma & S. Jackson (Eds.), *Coping and self-concept in adolescence* (pp. 1-11). New York: Springer.
- James, W. (1890/1950). *The principles of psychology* (authorized edition). New York: Dover.
- Kaplan, H.B. (1980). *Deviant behavior in defense of self*. New York: Academic Press.
- Keane, C., Gillis, A.R. & Hagan, J. (1989). Deterrence and amplification of juvenile delinquency by police contact. *British Journal of Criminology*, 29, 336-352.
- Kerner, H.-J. (1982). Hilfe und Betreuung im Normalvollzug. In G. Kaiser, H.-J. Kerner & H. Schöch, Strafvollzug. Ein Lehrbuch. 3. Aufl. Heidelberg: Müller.
- Kerner, H.-J. (1989). Jugendkriminalität, Mehrfachtäterschaft und Verlauf. *Bewährungshilfe*, 36, 202-220.
- Kerner, H.-J. (1996). Erfolgsbeurteilung nach Strafvollzug. Ein Teil des umfassenderen Problems vergleichender kriminologischer Sanktionsforschung. In H.-J. Kerner, G. Dolde & H.-G. Mey (Hrsg.), *Jugendstrafvollzug und Bewährung. Analysen zum Vollzugsverlauf und zur Rückfallentwicklung* (S. 3-95). Bonn: Forum Verlag Godesberg
- Kerner, H.-J., Dolde, G. & Mey, H.-G. (Hrsg.) (1996). *Jugendstrafvollzug und Bewährung. Analysen zum Vollzugsverlauf und zur Rückfallentwicklung*. Bonn: Forum Verlag Godesberg.
- Kerner, H.-J. & Janssen, H. (1983). Rückfall nach Jugendstrafvollzug – Betrachtungen unter dem Gesichtspunkt von Lebenslauf und krimineller Karriere. In H.-J. Kerner, H. Göppinger & F. Streng (Hrsg.), *Kriminologie – Psychiatrie – Strafrecht. Festschrift für Heinz Lefrenz* (S. 211-232). Heidelberg: C.F.Müller Juristischer Verlag.
- Kerner, H.-J. & Janssen, H. (1996). Langfristverlauf im Zusammenspiel von soziobiographischer Belastung und krimineller Karriere. In H.-J. Kerner, G. Dolde & H.-G. Mey (Hrsg.), *Jugendstrafvollzug und Bewährung. Analysen zum Vollzugsverlauf und zur Rückfallentwicklung* (S. 139-218). Bonn: Forum Verlag Godesberg.
- Kreuzer, A. (1993). Jugendkriminalität. In G. Kaiser, H.-J. Kerner, F. Sack & H. Schellhoss (Hrsg.), *Kleines kriminologisches Wörterbuch* (S. 182-191). Heidelberg: C.F. Müller Juristischer Verlag.
- Krisberg, B. & Austin, J.F. (1993). *Reinventing juvenile justice*. Newbury Park, CA: Sage.
- Krisberg, B. & Howell, J.C. (1998). The impact of the juvenile justice system and prospects for graduated sanctions in a comprehensive strategy. In R. Loeber & D.P. Farrington (Eds.), *Serious and violent juvenile offenders. Risk factors and successful interventions* (pp. 346-366). Thousand Oaks, CA: Sage.
- Lab, S.P & Whitehead, J.T. (1988). An analysis of juvenile correctional treatment. *Crime and Delinquency*, 34, 60-83.
- Lazarus, R.S. (1991). *Emotion and adaptation*. New York: Oxford University Press.
- Lazarus, R.S. & Folkman, S. (1984). *Stress, appraisal, and coping*. New York: Springer.
- Le Blanc, M. (1990). Two processes of the development of persistent offending: Activation and escalation. In L.N. Robins & M. Rutter (Eds.), *Straight and devious pathways from childhood to adulthood* (pp. 82-100). Cambridge, MA: Cambridge University Press.
- Le Blanc, M. & Loeber, R. (1998). Developmental criminology updated. In M. Tonry (Ed.), *Crime and justice. A review of research* (Vol. 23, pp. 115-198.) Chicago: Chicago University Press.
- Lemert, E. (1967). *Human deviance, social problems and social control*. Englewood Cliffs, NJ: Prentice-Hall.
- Lerner, R.M. (1982). Children and adolescents as producers of their own development. *Developmental Review*, 2, 342-370.
- Lerner, R.M. (1985). Adolescent maturational changes and psychosocial development: A dynamic interactional perspective. *Journal of Youth and Adolescence*, 14, 355-372.
- Lerner, R.M. & Lerner, J.V. (1989). Organismic and social-contextual bases of development: The sample case of early adolescence. In W. Damon (Ed.), *Child development today and tomorrow* (pp. 69-85). San Francisco: Jossey-Bass.

- Lipsey, M.W. (1992a). Juvenile delinquency treatment: A meta-analytic inquiry into the variability of effects. In T. Cook et al. (Eds.), *Meta-analysis for explanation: A casebook* (pp. 63-127). New York: Russell Sage Foundation.
- Lipsey, M.W. (1992b). The effect of treatment on juvenile delinquents: results from a meta-analysis. In F. Lösel, T. Bliesner & D. Bender (Eds.), *Psychology and Law: International perspectives* (pp.131-143). Berlin: de Gruyter.
- Lipsey, M.W. (1995). What do we learn from 400 research studies on the effectiveness of treatment with juvenile delinquents?. In J. McGuire (Ed.), *What works: Reducing reoffending* (pp. 63-78). Chichester (UK): Wiley.
- Lipsey, M.W. & Wilson, D.B. (1998). Effective intervention for serious juvenile offenders. A synthesis of research. In R. Loeber & D.P. Farrington (Eds.), *Serious and violent juvenile offenders. Risk factors and successful interventions* (pp. 313-345). Thousand Oaks, CA: Sage.
- Loeber, R. & Farrington, D.P. (Eds.) (1998). *Serious and violent juvenile offenders. Risk factors and successful interventions*. Thousand Oaks, CA: Sage.
- Loeber, R. & Hay, D.F. (1994). Developmental approaches to aggression and conduct problems. In M. Rutter & D.F. Hay (Eds.), *Development through life. A handbook for clinicians* (pp. 488-516). Oxford: Blackwell.
- Loeber, R. & Hay, D. (1997). Key issues in the development of aggression and violence from childhood to early adulthood. *Annual Review of Psychology*, 48, 371-410.
- Loeber, R. & Le Blanc, M. (1990). Toward a developmental criminology. In M. Tonry & N. Morris (Eds.), *Crime and justice. A review of research* (Vol. 12, pp. 375-473). Chicago: University of Chicago Press.
- Loeber, R. & Stoethamer-Loeber, M. (1998). Development of juvenile aggression and violence. Some common misconceptions and controversies. *American Psychologist*, 53, 242-259.
- Loeber, R., Stouthamer-Loeber, M., van Kammen, W. & Farrington, D.P (1991). Initiation, escalation and desistance in juvenile offending and their correlates. *Journal of Criminal Law and Criminology*, 82, 36-82.
- Lösel, F. (1995). The efficacy of correctional treatment: A review and synthesis of meta-evaluations. In J. McGuire (Ed.), *What works: Reducing reoffending* (pp. 79-111). Chichester (UK): Wiley.
- Lösel, F. & Bliesner, T. (1990). Resilience in adolescence: A study on the generalizability of protective factors. In Hurrelmann, K. & Lösel, F. (Eds.), *Health hazards in adolescence* (pp. 299-320). Berlin/New York: de Gruyter.
- Lösel, F. & Bliesner, T. (1994). Some High-risk adolescents do not develop conduct problems: A study of protective factors. *International Journal of Behavioral Development*, 17, 753-777.
- Maetze, W. (1996). Der Entlassungsjahrgang 1981 aus dem Jugendstrafvollzug in Nordrhein-Westfalen mit seiner Legalbewährung im Überblick. In H.-J. Kerner, G. Dolde & H.-G. Mey (Hrsg.), *Jugendstrafvollzug und Bewährung. Analysen zum Vollzugsverlauf und zur Rückfallentwicklung* (S. 359-387). Bonn: Forum Verlag Godesberg.
- Magnusson, D., af Klinteberg, B., & Stattin, H. (1994). Juvenile and persistent offenders: Behavioral and physiological characteristics. In R.D. Ketterlinus & M.E. Lamb (Eds.), *Adolescent problem behaviors. Issues and research* (pp. 81-91). Hillsdale, NJ: Lawrence Erlbaum.
- Malmquist, C.P. (1978). *Handbook of adolescence*. New York: Aronson.
- Marcia, J.E. (1980). Identity in adolescence. In J. Adelson (Ed.), *Handbook of adolescent psychology* (pp. 159-187). New York: Wiley.
- Markus, H. & Nurius, P. (1986). Possible selves. *American Psychologist*, 41, 954-969.
- Markus, H. & Wurf, E. (1987). The dynamic self: A social psychological perspective. *Annual Review of Psychology*, 38, 299-337.
- McCord, J. (1990). Problem behaviors. In S.S. Feldman & G.R. Elliot (Eds.), *At the threshold. The developing adolescent* (pp. 414-430). Cambridge, MA: Harvard University Press.
- McCord, J. (1992). Understanding motivations: Considering Altruism and Aggression. In J. McCord (Ed.), *Facts, frameworks, and forecasts* (Advances in criminological theory, Vol. 3; pp. 115-135). New Brunswick, NJ: Transaction.
- McGuire, J. & Priestley, P. (1995). Reviewing 'what works': Past, present and future. In J. McGuire (Ed.), *What works: Reducing reoffending* (pp. 3-34). Chichester (UK): Wiley.
- McKinney, F., Miller, D.J., Beier, L. & Bohannon, S.R. (1978). Self-concept, Delinquency, and positive Peer Culture. *Criminology*, 4, 529-538.
- Moffitt, T.E. (1990). The neuropsychology of juvenile delinquency: A critical review. In M. Tonry & N. Morris (Eds.), *Crime and justice. A review of research* (Vol. 12, pp. 99-169). Chicago: University of Chicago Press.
- Moffitt, T.E. (1993). Adolescence-limited and life-course-persistent antisocial behavior: A developmental taxonomy. *Psychological Review*, 100, 674-701.

- Moffitt, T.E. (1997). Adolescence-limited and life-course-persistent offending: A complementary pair of developmental theories. In T.P. Thornberry (Ed.), *Developmental theories of crime* (pp. 11-54). New Brunswick (UK): Transaction.
- Moffitt, T.E., Caspi, A., Dickson, N., Silva, P. & Stanton, W. (1996). Childhood-onset versus adolescent-onset antisocial conduct problems in males: Natural history from ages 3 to 18 years. *Development and Psychopathology*, 8, 399-424.
- Moffitt, T.E., Lynam, D.R. und Silva, P.A. (1994). Neuropsychological tests predicting persistent male delinquency. *Criminology*, 32, 277-300.
- Montada, L. (1995). Delinquenz. In R. Oerter & L. Montada (Hrsg.), *Entwicklungspsychologie* (S. 1024-1036). Weinheim: PVU.
- Montada, L., Filipp, S.-H. & Lerner, M.J. (Eds.) (1992). *Life-crises and experiences of loss in adulthood*. Hillsdale, NJ: Erlbaum.
- Nagin, D.S., Farrington, D.P. & Moffitt, T.E. (1995). Life-course trajectories of different types of offenders. *Criminology*, 33, 111-139.
- Nagin, D.S. & Paternoster, R. (1991). On the relationship of past to future participation in delinquency. *Criminology*, 29, 163-189.
- Norris, M. (1977). Use of a repertory grid in investigating change in trainees at a detention center. *British Journal of Criminology*, 17, 274-279.
- Olbrich, E. (1990). Coping and development. In H. Bosma & S. Jackson (Eds.), *Coping and self-concept in adolescence* (pp. 35-47). New York: Springer.
- Oyserman, D. & Markus, H.R. (1990). Possible selves and delinquency. *Journal of Personality and Social Psychology*, 59, 112-125.
- Patterson, G.R., Capaldi, D. & Bank, L. (1991). An early starter model for predicting delinquency. In D.J. Pepler & K.H. Rubin (Eds.), *The development and treatment of childhood aggression* (pp. 139-168). Hillsdale, NJ: Erlbaum.
- Pepler, D.J. & Rubin, K.H. (Eds.) (1991). *The development and treatment of childhood aggression*. Hillsdale, NJ: Erlbaum.
- Pepler, D.J. & Slaby, R.G. (1994). Theoretical and developmental perspectives on youth and violence.. In L.D. Eron, J.H. Gentry & P. Schlegel (Eds.), *Reason to hope. A psychosocial perspective on violence and youth* (pp. 27-58). Washington, DC: APA.
- Petersen, A.C. (1988). Adolescent development. *Annual Review of Psychology*, 39, 583-607.
- Petersen, A.C. & Leffert, N. (1995). What is special about adolescence? In M. Rutter (Ed.); *Psychosocial disturbances in young people* (pp. 3-36). Cambridge (UK): Cambridge University Press.
- Pfeiffer, C. (1998). Juvenile crime and violence in Europe. In M. Tonry (Ed.), *Crime and justice. A review of research* (pp. 255-328). Chicago: University of Chicago Press.
- Pfeiffer, C., Brettfeld, K., Delzer, I. & Link, G. (1996). Steigt die Jugendkriminalität wirklich? In C. Pfeiffer & W. Greve (Hrsg.), *Forschungsthema Kriminalität. Festschrift für Heinz Barth* (S. 19-53). Baden-Baden: Nomos.
- Pfeiffer, C., Delzer, I., Enzmann, D. & Wetzels, P. (1998). *Ausgrenzung, Gewalt und Kriminalität im Leben junger Menschen. Kinder und Jugendliche als Täter und Opfer*. DVJJ-Sonderdruck zum 24. Dt. Jugendgerichtstag, 18.-22.9.1998, Hamburg.
- Plomin, R., Nitz, K. & Rowe, D.C. (1990). Behavior genetics and aggressive behavior in childhood. In M. Lewis & S.M. Miller (Eds.), *Handbook of developmental psychopathology* (pp. 119-133). New York: Plenum Press.
- Rosenberg, F.R. & Rosenberg, M. (1978). Self-esteem and delinquency. *Journal of Youth and Adolescence*, 7, 279-291.
- Rutter, M. (Ed.) (1996). *Genetics of criminal and antisocial behavior*. Chichester, UK: Wiley.
- Sampson, R.J. & Laub, J.H. (1993). *Crime in the making. Pathways and turning points through life*. Cambridge, MA: Harvard University Press.
- Scarr, S. (1988). How genotypes and environments combine: Development and individual differences. In N. Bolger, A.Caspi, G. Downey & M. Moorhouse (Eds.), *Person and context: Developmental processes* (pp. 217-243). Cambridge: Cambridge University Press.
- Scarr, S. & McCartney, K. (1983). How people make their own environments: A theory of genotype -> environment effects. *Child Development*, 54, 424-435.
- Schaie, K.W. (1983). What can we learn from the longitudinal study of adult psychological development? In K.W. Schaie (Ed.), *Longitudinal Studies of adult psychological development* (pp. 1-29). New York: Guilford.
- Schneider, A.L. (1990). *Deterrence and juvenile crime*. New York: Springer.

- Schumann, K.F. & Kaulitzki, R. (1991). Limits of general deterrence: The case of juvenile delinquency. In K. Sessar & H.-J. Kerner (Eds.), *Developments in crime and crime control research. German studies on victims, offenders, and the public* (pp. 1-21). New York: Springer.
- Silbereisen, R.K. Noack, P. & Eyferth, K. (1986). Place for development: Adolescents, leisure settings, and developmental tasks. In R.K. Silbereisen, K.Eyferth & G. Rudinger (Eds.), *Development as action in context* (pp. 87-108). New York: Springer.
- Silbereisen, R.K. & Noack, P. (1988): On the constructive role of problem behavior in adolescence. In N Bolger, A.Caspi, G. Downey & M. Moorhouse (Eds.), *Person and context: Developmental processes* (pp. 152-180). Cambridge: Cambridge University Press.
- Skinner, E. & Edge, K. (1998). Reflections on coping and development across the lifespan.. *International Journal of Behavioral Development*, 22, 357-366.
- Smith, D.J. (1995). Towards explaining patterns and trends in youth crime. In M. Rutter (Ed.); *Psychosocial disturbances in young people* (pp. 166-). Cambridge (UK): Cambridge University Press.
- Snyder, H.N. (1998). Serious, violent, and chronic juvenile offenders – an assessment of the extent of and trends in officially recognized serious criminal behavior in delinquent population. In R. Loeber & D.P. Farrington (Eds.), *Serious and violent juvenile offenders. Risk factors and successful interventions* (pp. 428-444). Thousand Oaks, CA: Sage.
- Stattin, H. & Magnusson, D. (1991). Stability and change in criminal behavior up to age 30. *British Journal of Criminology*, 31, 327-346.
- Sykes, G.M. (1958). *The society of captives. A study of a maximum security prison*. Princeton: Princeton University Press.
- Sykes, G. & Matza, D. (1957). Techniques of neutralization: A theory of delinquency. *American Sociological Review*, 22, 664-670.
- Tate, D.C., Reppucci, N.D. & Mulvey, E.P. (1995). Violent juvenile offenders. Treatment effectiveness and implications for future action. *American Psychologist*, 50, 777-781.
- Thomas, C.W. & Bishop, D.M. (1984). The effect of formal and informal sanctions on delinquency: A longitudinal comparison of labeling and deterrence theories. *Journal of Criminal Law and Criminology*, 75, 1222-1245.
- Thornberry, T.P. (Ed.) (1997). *Developmental theories of crime and delinquency* (Advances in criminological theory, Vol. 7). New Brunswick, NJ: Transaction.
- Toch, H. (1992). *Living in prison. The ecology of survival* (2nd rev. Ed.). Washington, DC: American Psychological Association.
- Tracy, P.E., Wolfgang, M.E. & Figlio, R.M. (1990). *Delinquency careers in two birth cohorts*. New York: Plenum.
- Villmow, B. und Stephan, E. (1983). *Jugendkriminalität in einer Gemeinde*. Freiburg: Max-Planck-Institut für ausländisches und internationales Strafrecht.
- Waterman, A.S. (1993). Developmental perspectives on identity formation: From adolescence to adulthood. In J.E. Marcia, A.S. Waterman, D.R. Matteson, S.L. Archer & J.L. Orlowsky (Eds.), *Ego identity* (pp. 42-68). New York: Springer.
- Wells, L.E. & Rankin, J.H. (1983). Self-concept as a mediating factor in delinquency. *Social Psychology Quarterly*, 46, 11-22.
- White, J.L., Moffitt, T.E., Earls, F., Robins, L. & Silva, P.A. (1990). How early can we tell? Predictors of childhood conduct disorder and adolescent delinquency. *Crimonology*, 28, 507-533.
- Whitehead, J.T. & Lab, S.P. (1989). A meta-analysis of juvenile correctional treatment. *Journal of Research in Crime and Delinquency*, 26, 276-295.
- Winner, L., Lanza-Kaduce, L., Bishop, D.M. & Frazier, C.E. (1997). The transfer of juveniles to criminal court: Reexamining recidivism over the long term. *Crime and Delinquency*, 43, 548-563.
- Wolfgang, M.E., Figlio, R.M. und Sellin, T. (1972). *Delinquency in a birth cohort*. Chicago: University of Chicago Press.
- Wolfgang, M.E., Thornberry, T.P. und Figlio, R.M. (1987). *From boy to man, from delinquency to crime*. Chicago: University of Chicago Press.
- Wilson, J.J. und Howell, J.C. (1994). Serious and violent juvenile crime: A comprehensive strategy. *Juvenile and Family Court Journal*, 45, 3-14.
- Wormith, J.S., (1984) Attitude and Behavior Change of Correctional Clientele. A Three Year Follow-Up. *Criminology*, 22, 595-618.
- Zamble, E. & Porporino, F.J. (1988). *Coping, behavior, and adaptation in prison inmates*. New York: Springer.
- Zimring, F.E. & Hawkins, G. (1997). *Crime is not the problem. Lethal violence in America*. New York: Oxford University Press.