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ABSTRACT

Program development evaluation should focus on articulating theoretical rationales for program design and activities. To assist the managers of 17 school-based delinquency prevention projects (School Action Effectiveness Study) in developing theories of action, the Program Development Evaluation (PDE) method was utilized. To construct the theories, program managers extracted and stated links between individual variables (causes, events, outcomes) explicitly mentioned in the PDE plan. These theories of action were content analyzed. Results showed that, over time, the theories became larger, with more central variables and more links between them. Most of the increase was due to elaboration of the intermediate portions of the theories. The theories also became more related to delinquency, but this change was largely attributable to the development of delinquency theories by project managers who had not orignially specified delinquency theories. Project managers appeared to develop theories in response to interventions that they already were committed to implementing. There was little evidence that theory produced substantial modification in most programs. The resultant theories were multi-causal and eclectic; traces of scientific theories could be found, but major differences, principally in size, were noted. Recommendations for future use of the PDE method include using it to design initial program interventions, and training implementors to use the model and to think in theoretical action terms. (BL)

# Delinquency Prevention Program Managers' Theories of Action: A Content Analysis

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# Delinquency Prevention Program Managers' Theories of Action: A Content Analysis

One of the integral components of sound program development consultation is an explicit focus upon theory (Gottfredson, 1982).[1] Program managers should be aided by program development specialists in articulating theoretical rationales for their programs and the various interventions that they are attempting to implement. By focusing on theory program managers are encouraged to think rationally about their programs, and critically assess the potential for any particular intervention to affect the problem that they are attempting to address. Presumably, if an intervention is not viewed as relevant to the identified theoretical causes of the problems that the project seeks to address, then that intervention would be modified or dropped. Similarly, should the project's theory identify important causes of the problem that the project is not addressing, additional interventions would be designed and implemented. The hope of such a program development effort is to focus a project manager upon implementing interventions that are specifically targeted at the causes of the problem the program aims to ameliorate.

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1 This paper benefited from the comments of Gary D. Gottfredson.

This paper discusses the theories generated by program managers in the School Action Effectiveness Study (SAES). The SAES is a federally funded evaluation of 17 school-based delinquency prevention projects. The evaluation team at Johns Hopkins University developed and implemented the Program Development Evaluation (PDE) method as a tool for guiding projects in the implementation, strengthening, and evaluation of their projects. The method is explained in detail in other sources (Gottfredson, 1982; Gottfredson et al., 1983).

As part of the PDE method, e attempted to aid program managers in developing action theories to explain the problems that they were trying to solve by their program. Due to the stated purpose of the federal initiative under which the projects were funded, the primary problem to be explained by the theories of action was delinquency.

The first part of my paper will discuss some ways in which the projects' theories changed over time as documented in the PDE plans. Part one of the paper has two purposes: describe how the theories changed, and perform an initial analysis of the success of the PDE method in elucidating and developing program managers' theories of action. Part 2 of the paper covers the theories of delinquency themselves. What do non-social scientists believe about delinquency? How do their theories differ from those suggested by social scientists?

## Part I: Theory and PDE

### Method

Using each project's PDE plan, its theory of action was diagrammed. Information about the theory was derived from statements of the problems each project was trying to address, the goals of the project, and the explicitly recorded theoretical statement. Only information contained in the PDE plan was used for the content analysis. Information that the project manager was unable or unwilling to articulate, or that the field worker in charge of the project misinterpreted, or failed to record, is not available. Therefore, in some cases, a project manager looking at the constructed theory might not entirely agree with it, nor might the particular field worker who was directly involved with the project feel that a particular constructed theory gives full justice to the project's actual theory of action. Nevertheless, one of the purposes of this paper is to evaluate the success of the PDE method as documented in the PDE plans. If a theory statement or causal link was not in the PDE plan, it was not included in the diagrammed theory.

To construct the theories, individual variables (causes, events, outcomes) explicitly mentioned in the PDE plan were extracted and the stated links between them drawn. As little interpretation as possible was laid on the data. If a relationship seemed "obvious," but was not explicity men-

tioned, or strongly implied by the context, it was not included. One of the goals of the PDE method was to make explicit the theoretical links between variables. Therefore, if a theoretical link was not stated in fairly direct terms, it was judged not to be part of the theory of action as recorded.

In the PDE process, the PDE plans are updated on a regular basis. In order to study changes in the theories over time, two PDE plans of each project were analyzed: the very first one, and the last one available at the time of the analysis (the PDE plans are still undergoing updating and revision as these projects operate). For most of the projects, the first PDE plan was developed during an initial planning conference held early in 1981. The last PDE plan, from July, 1983, should reflect changes that occurred throughout the one to two years the projects had been operating, and should particularly reflect changes in the plans resulting from feedback and program development conferences held in August of 1981 and 1982. In other words, the first PDE plan is a result of the projects' first exposure to the process, and in most cases, their first attempt at developing a theory for their project. The last PDE plan contains changes resulting from one to two years of evaluator pressure to focus on theory. Some idea of the projects' theories prior to any exposure to the PDE process may be found in their original grant proposals, but those thousands of pages of text are generally not explicit about theory.

Counts of five variables were made: the total number of variables contained in the theory of action, the number of direct theoretical "links" between variables posited by the theory, the number of "central" variables, defined as variables that were linked to three or more other variables, the number of direct links between delinquency and other variables, and the number of variables that preceeded in any causal chain, either directly or indirectly, delinquency (i.e., the number of variables that could be construed as causes of delinquency within the theory).

Results

Table 1 gives the results of repeated measures analyses of variance comparing the theories of action derived from the first PDE plan with those derived from the most recent plan. As can be seen, there was some increase in the total number of variables contained in each theory. The increase is not statistically significant, but the number of cases is quite small. Better evidence for increased elaboration of the theories over time is shown by an increase in the number of central variables, and in the number of direct links between variables. A preliminary conclusion then, is that the theories of action as recorded in the PDE plan became larger over the course of the project. More variables, and links between them were added. Yet, the most striking thing about this analysis is the sheer number of variables in the theo-

ries. The theories contain an average of 45 variables by the last PDE sheet, with a range of 13 to 84 variables. Part of the reason for the large size of the theories is that the theories of action are not just theories of delinquency. They might more precisely be called theories justifying alternative education, with some links to delinquency specified. Thus, many of the variables and causal chains have little or nothing to do with delinquency per se. It is hard to imagine many programs that could thoroughly address all of the theoretical variables the projects identified as important.

Insert Table 1 about here

The number of direct theoretical links to delinquency and the total number of variables causally prior to delinquency can also be found in Table 1. Both the number of direct links and the number of variables that can be construed as causes of delinquency increased significantly. Over time, more variables in the theory were stated to have a direct link to delinquency and a greater total number of variables were hypothesized as causes of delinquency. This is a potentially important finding. The projects were funded with the specific intent of preventing delinquency, and it would appear that the PDE process facilitated the projects' focus upon delinquency as an outcome variable of interest. This conclusion is also supported by the ratio of delin-

quency variables to the total number of variables. In the first set of PDE plans, 41% of the variables were related, directly or indirectly to delinquency. In the most recent set of plans, 61% were related to delinquency.

The last variable in Table 1 is a ratio designed to assess the complexity of the theories. How many direct links to the average variable are there? The ratio of total links to total variables indicates first that the complexity of the theories increased only slightly, and non-significantly over time. More important, the values of the ratio, 1.09 and 1.21, suggest that the theories are, in general, not highly interconnected. Although there are many variables in the theories, most are directly linked to only one other variable.

Four of the projects, despite pressure from the sponsor and ourselves, failed to elucidate a theory of delinquency in the first PDE plan. These projects either did not feel they were in the business of delinquency prevention, or the plans failed to reflect the theory that the project did hold. Table 2 gives the results of analyses on the dependent measures for only those 13 projects that spelled out a theory of delinquency in both sets of PDE plans. This analysis was undertaken in order to assess how much change in the importance of delinquency in the theories is simply the result of successfully recording theories of delinquency from all 17 projects in the most recent set of PDE plans.

Insert Table 2 about here

Total variables, central variables, and total links parallel the results for the first analysis--these projects' theories got larger. But they did not gain any more direct links to delinquency. Although there is a trend toward an increase in the number of variables that are causally prior to delinquency, the size or the difference is much smaller than when we include in the analysis projects that did not elucidate a theory of delinquency in the first set of PDE plans. The ratio of delinquency variables to total variables is much reduced in Table 2, and is no longer significant. These results suggest that the increase in the importance of delinquency from time 1 to time 2 found in Table 1 is largely due to the four projects that did not elaborate theories of delinquency in the first PDE plan doing so by the last plan. For the majority of the projects, the increase in size of the theories is mostly due to elaboration of those parts of the theories that are not directly linked to delinquency. Intermediate steps in the theories were elaborated, but few new direct causes of delinquency were added, and in fact, the causes stated remained essentially identical. Therefore, those projects that did construct a theory of delinquency in their first PDE plan, did not modify in any important way their beliefs about what causes delinquency as recorded in the most recent plan.

What are missed in these analyses are the 'projects' theories prior to any exposure to PDE. The first PDE plan is based on intensive pressure toward theory development and elaboration that was applied over a several day workshop. The biggest changes in the theories (and success of the PDE method) may have come during the development of the first PDE plan. Unfortunately, an idea of the projects' theories, "uncontaminated" by us, is not readily available. A theoretical justification for the program was not required prior to federal support. We do not believe that theories of delinquency would have been clearly stated by the projects without our intervention.

Discussion: Clinical Impressions.

The purpose of the first part of this paper was twofold: to document some ways in which theories of action change over the life of a project, and to evaluate our success in facilitating the development of theories of action. Simple counts of the number of variables, their links, and their links to delinquency suggests that the theories tend to get larger. As the project managers worked with their theories, thought about them, and were encouraged to make them as specific as possible, they began to add variables. But the project managers tended to elaborate those parts of the theories not directly related to delinquency. They elaborated intermediate steps. In the PDE method, projects iden-

tify objectives which are "the causal states that a project's theory says must occur for the desired outcome to occur" (Gottfredson et al., 1983, p. 10). They are those outcomes that the project is expected to design interventions to address. In terms of this analysis, objectives would generally be those causes directly linked to delinquency. What got elaborated in the theories were the theoretical variables prior to the objectives themselves. For example, lack of attachment to school may have been proposed as a cause of delinquency. What got elaborated were the factors that effect attachment to school.

Since interventions are generally targeted at the objectives, what appears to have been elaborated was the theoretical underpinnings of the inteventions that the project was implementing. It is our impression that while we were successful in getting the project to focus upon and verbalize a theory of action, we were less successful in getting the projects to utilize their theory to guide their program.

The project managers were very facile in developing theories for their project. They easily generated reasons for why this or that should occur, and why they were doing whatever they were doing. But the theories have an ad hoc quality to them. The theories largely consist of lists of variables that have a single link to some single intermediary variable, some of which, in turn, had a single link to

delinquency. What appear to have happened is that rather than generating a program from a theory of delinquency, a theory of delinquency was generated from a program.

Remember that the projects were involved in the PDE process only after they had been funded to run a particular program, and in most cases, only after they had already begun operating such a program. Project managers therefore developed theories to correspond to those interventions that they were already committed to implement. In some cases, these interventions may have been initially based on at least a vague theoretical rationale. It is probable, however, that the typical project manager has some tools that he wishes to apply. Much as researchers sometimes become enamored of a particular statistical procedure and attempt to apply it everywhere, program managers have things that they wish to do, and they will find some way of doing them. If need be, they can justify them "theoretically." These pet interventions may be ones they have participated in before, or that they heard were useful, or that they just have a gut feeling should help youth. Often, the intervention just happens to be something they know how to do, or is politically acceptable in their local environment. Attention seems to be focused on doing <u>something</u> about the problem, rather than doing something <u>thoughtful</u> about the problem.

We did not successfully implement the PDE method as intended. A clear application of the method would require a theoretical analyis of the problem prior to designing interventions to address it. Circumstances may have tended to reverse this process. Because interventions had already been chosen, we probably helped the projects justify these interventions. We hoped that, when necessary, the interventions would change to match the theories (and in some cases, did--the Charleston case is a good example--see Gottfredson, D. C., 1983). But what usually happened was that changes occurred in the theories, not in the interventions.

What we have learned is this: Program managers can generate theories, and do so readily. Over time, they will add causes and theoretical links that occur to them. What they are not so inclined to do is change their program if it does not match their theory, or only flows from relatively insignificant parts of their theory. Commitment to a chosen course of action is strong. Even in the face of evidence that their programs did not work, or were having negative effects, few real changes in programs occurred. Although we did have some successes in "tinkering" with programs, at the bottom line we were usually unsuccessful in dissuading projects from doing theoretically irrelevant interventions, or in pursuading them to develop new, more relevant interventions.

In practice, project managers that have a program on paper (or already operating) are under severe constraints to continue with the program as designed. Staff, with specific duties and skills have been hired, materials have been bought, approval has been acquired from the right persons, funding has been received contingent upon doing a certain procedure--all the groundwork has been laid. Managers are therefore politically and economically committed to a chosen course of action. This produces a strong desire on the part of the program manager to justify his or her program as it is. When the project manager's theory of action results in objectives that can not plausibly be achieved by the program as designed, the resultant dissonance is reduced by changing the theory, not the program. Theories, like attitudes, are much more amenable to cognitive modification than the behaviors that have preceeded them.

A second difficulty we ran into in applying PDE was the necessity of training staff in the midst of the application of the method. We were faced with the problem of convincing field staff of the importance of theory, and training them in how to facilitate its specification, concurrent with their actual implementation of the method. As in any application of a consultation technique, the staff should be highly trained before exposure to the field. Because the evaluation of the projects was not funded until the projects were underway, we were unable to put people in the field

sufficiently trained in the use of PDE. If the field staff had had more experience in theory-based program development, they might have been more directive in helping the projects develop and sharpen their theories. As it was, some of the field staff were content to merely record anything that came into the project managers' heads. The field staff often did not critically evaluate the theoretical statements, or encourage the project managers to consider what their theories of action implied.

What do the two identified problems--commitment to a chosen course of action, and insufficiently trained staff--say about Program Development Evaluation as a method for developing interventions targeted at the important causes of a problem? First, they suggest that the theory building portion of program development should proceed before the groundwork for the program is laid. Theoretical decisions should preceed intervention decisions. Like a large ship, once a program is operating it develops an inertia that is very difficult to deflect. Psychological, economic, and political factors all converge to thwart changes from the initial course of action. If theory is to be a genuine guide for program development, than it must be used from the beginning of the program planning process. It cannot easily be invoked after the program has begun functioning.

Second, organizational consultants that wish to use PDE as a theory-based approach to program development should be highly trained in its use, and personally committed to the importance of theory as a guide for program design and modification. The general inclination of project managers to de-emphasize theory can only be overcome through consistent, forceful attention. The successful implementor of PDE must be a strong advocate of the importance of theory, and have the skills to guide its use.

## Part II: The Delinquency Theories

### Method

The diagrammed theories of action were used to assign those parts of the theories that addressed delinquency to theoretical categories. As was the case with the simple counts of variables, as little interpretation as possible was placed upon the theories. Every direct link to delinquency was assigned to a theoretical category. In addition, "indirect" (more than one link) causes were taken into account if they had a pervasive effect on the theory, or if the clear intent of the theory as outlined was to posit some variable as a clear, although mediated cause of delinquency. For example, several of the theories made explicit causal connections between societal level variables such as poverty and delinquency, although the direct link to delinquency might lie through a lack of jobs and a need for money. The

aim of the content analysis was to as much as possible capture the "intent" of the theory of action in explaining delinquency. Obviously, I did more interpretation in this portion of the analysis than in the counts of variables and the links between them. This means that more judgement (and personal bias) may be found in these decisions than in the previous ones. Nevertheless, the exercise is useful to the extent that the coding process generally captures the spirit of the action theories.

An attempt was made to limit the theoretical causes to as small a number as possible. A literal assignment to a particular category was made if there was no indication that the theory wished to subsume some explicit cause under some higher order cause. On the other hand, if a set of propositions closely matched a more integrated notion, such as differential association theory (Sutherland, 1947) or social control theory (Hirschi, 1969), the higher-order theoretical cause was noted. Finally, a judgement was made as to the "primary" cause of delinquency as found in the action theory.

Categorization of the delinquency theories derived from the first PDE plan substantially mirrored those from the most recent PDE plan. Since the most recent plan contained delinquency theories for all of the projects, results of that assignment are presented in Table 3.

Insert Table 3 about here

Results and Discussion

The most striking thing about Table 2 is the eclectism shown by the projects. The average project's action theory addressed 4.12 of the sixteen derived causal categories. The projects, not constrained to follow any one particular theoretical orientation, did not. According to the action theories, delinquency is a complex, multi-causal problem.

A second finding is a strong positive correlation between the total number of variables in the theory and the number of delinquency categories to which that theory was assigned, $r=.65$, $p<.01$. The more variables in a theory, the more different causal categories of delinquency it addressed. But one of the grounds by which scientific theories are judged is parsimony--perhaps the most widely cited theory, social control theory (Hirschi, 1969) contains but five variables. Parsimony was certainly not a characteristic of the action theories. We have already seen how large the theories were. There were few attempts to integrate various direct causes into overall explanatory or underlying variables.

Related to the above point is the concrete nature of theories. The content analysis generated many more theories of delinquency than one would find in a typical discussion of scientific theories of delinquency. This was because of the concrete nature of most of the theoretical causes given

in the action theories. For example, "parenting" would probably be subsumed under most general theories of delinquency. Parenting would contribute to a lack of social control, or would be a source of deviant social learning, and so forth. But it is clear from several of the theories that "bad parents make bad kids" in a sort of direct way, unmediated by attachments to the social order or by complex learning and reinforcement formulas. Similarly, academic achievement, and bad peers, are often viewed as directly causing delinquency, without any (stated or implied) mediational links.

The concreteness of the theories is probably due to at least two factors. First, the program managers are practical people, not theorists. Their foremost concern is for doing something about the problem, not for explaining it. If peer relations are judged to be the problem, then an intervention is designed that might affect peer relations. Little time is spent being concerned about <u>why</u> peer relations are problematical (or what that would imply about a reasonable intervention). Secondly, the concreteness of the theories is also part and parcel of the problem of generating theories to justify that which you have already decided to do. If a project is attempting to do something about peer relations, than there is a strong temptation to decide that peer relations cause delinquency, especially when the project is being funded to prevent delinquency.

At the same time, most of the projects' theories contained some version or another of standard scientific theories of delinquency. Social control theory, particularly as outlined by Hirschi (1969) is probably the most empirically well supported theory of delinquency. Social control theory holds that people are constrained from uncontrolled (delinquent) behavior because of bonds to conventional society--they have "stakes in conformity." Five of the projects' theories of action could essentially be considered social control theories. Similarly, social inequality/Marxist theories (Greenberg, 1977) and social disorganization (Shaw and McKay, 1969) have their scientific counterparts, as do self-esteem (Kaplan, 1980; Gold, 1978), and personality theories (Glueck and Glueck, 1950). Differential association theory (Sutherland, 1947) receives a number of votes, principally because of the importance given to positive or negative role models by many of the projects. Most of the other theories of action can also be reasonably subsumed under one or the other current scientific theories. This is perhaps part of the problem we had as program development facilitators in working with the projects to develop theories for their programs: there are so many "reasonable" explanations for delinquency (both naive and scientific) that virtually anything anyone might attempt to do about delinquency can be justified under one theory or another. Whatever a project wanted to do, some plausible theoretical reason for it could usually be invoked.

One important difference between the theories of action and more formal theories is the practical theorists' interest in "idle time" theory. This is some version of the old saw "Idle hands are the devil's workshop," and often includes the notion that high youth unemployment contributes to delinquency because it allows youth to wander the streets with nothing to do. Six of the seventeen theories had an idle time component, and four of them were judged to be idle time theories. Yet, there is little current scientific support for idle time theory, and scant scientific credibility attached to it. The usual explanation offered by professional theorists is that delinquency, and crime in general, just does not take that much time to commit. One cannot force youth to play supervised basketball (or work a job) for 24 hours a day.[2]

Despite the beliefs of the scientific theorist, program managers appear to be convinced of the importance of keeping youth busy to keep them out of trouble. A recent McNeil-Leigher report (August 17, 1983) focused on community efforts to combat youth crime and interviewed persons from several U.S. cities that had delinquency prevention programs

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2 Scientific delinquency theorists could justify athletic programs to the extent that they gave youth a stake in conformity (getting in trouble would make you ineligible), or raised self-esteem ("I'm the best first baseman on the block--I don't have to hot-wire cars to feel good about myself"). Yet a direct causal relationship between having nothing to do and criminal behavior is not contained in any currently investigated scientific theory of delinquency.

operated by police departments. All agreed that the delinquency problem revolved around youth with nothing to do. All were running programs designed to engage youth in "constructive" activities (usually organized sports). The first thing most police departments do when they want to start a anti-delinquency project is organize a basketball league. It is probable that this is a case where the scientific and practial theorist can learn from one another. Either a pervasive myth exists about idle time resulting in delinquency, or behavioral scientists have missed the boat. It is time for the scientific community to critically examine the idle time theory. Although common sense psychology is not necessarily correct, it deserves careful attention.

Another difference between the theories of action and formal theories of delinquency is the lack of emphasis in the theories of action on labeling theory (Lemert, 1972). Formal labeling theorists assume that labeling a youth delinquent results in a delinquenct self-concept which leads to "secondary deviance." Only one of the seventeen projects offered labeling as a cause of delinquency. Several theorized that labeling might cause low self-esteem, or cause the child to be delt with more harshly, but only one stated that labeled children actually behave more disruptively as a direct result of the labeling. This is an example of a situation where the theories of action may be more sophisticated than the equivalent social science theories (Hirschi, 1975; Robins, 1975).

There were also no clear examples of social learning theory (c.f. Akers et al., 1977). Causal theories that specify how a behavior is learned, transmitted, and maintained and reinforced through time were beyond the level of specification of the theories that were developed.

An example of where the theories of action may be more comprehensive than most current formal theories of delinquency is in the area of maturation, or psycho-social development. Most formal delinquency theories have been developed by sociologists, or psychologists interested in specific personality variables. Developmental phenomena have not received much attention. Yet, three of the theories of action devote significant attention to developmental changes that may contribute to delinquency. Changes in relation with peers and parents are emphasized, along with notions about needs to assert independence and to try new things. Because age is a strong correlate of criminal behavior, the formal theorist may have much to learn from the practitioner.

Where the theories of action largely break down is in their sheer size. A multitude of causal explanations are offered; many refer to societal level causes about which the typical project can do little (racism, capitalism, community disorganization, societal breakdown of the family unit). Grandiose theories, flabby theories with lots of extraneous

variables, and theories that specify societal level interventions by a small local project, are probably of limited practical utility. One of the goals of the PDE process is to generate theories of action that project managers can use to make day-to-day management decisions about their program and its component interventions. Project managers that postulate a whole grab-bag of possible causes for delinquency, or attribute it to "the historically racist and classist American socio-economic system" may be right, but will have a difficult time deciding what might be done about the problem within the context of their program (unless their program is really targeted at these major problems).

## Summary

Analysis of the theories of action of seventeen delinquency prevention program managers as contained in their PDE plans suggests the following conclusions:

1. Over the course of the project, the theories became somewhat larger--they contained nonsignificantly more total variables, and significantly more central variables and more links between variables.

2. More links to delinquency were found in the theories over time, and more variables were linked directly or indirectly to delinquency, but this outcome was largely due to projects that did not have theories of delinquency at time 1 developing them by time 2.

3. The theories, although large, were loosely connected, with most variables being linked to only one other variable.

4. Expansion of the theories resulted from elaboration of the intermediate steps (the objectives) of the theories.

5. We do not as yet know how much the PDE process facilitated theory development as manifested in the very first PDE plan; few theoretical statements were contained in the project proposals.

6. Program managers are facile at generating theories of action, but the theories of action seem to be developed in response to the interventions the program manager is committed to implementing. There is little evidence that theories generated interventions, or that theories of action produced significant changes in already-functioning interventions.

7. Program managers are much more apt to change their theories than their programs if the programs have already been specified or launched.

8. Our field staff were not sufficiently trained in the application of PDE; they were often unsuccessful in facilitating managers' specification and utilization of theory.

9. Program managers' theories of action concerning delinquency are eclectic, and multi-causal.

10. The number of causes of delinquency specified grows as the size of the theory grows; little integration of concrete causes under general categories was evidenced.

11. Most theories of action were more concrete than typical scientific theories.

12. Most of the theories of action contained causal explanations that could be related to scientific theories.

13. Several theories of action hypothesized that idle time was a significant cause of delinquency, contrary to conventional scientific view.

14. Neither labeling theory nor social learning theory were emphasized as causes of delinquency by many of the theories of action, despite their popularity in professional ranks; psychological maturation was emphasized more than in scientific theories of delinquency.

14. The sheer size (and scope) of the theories of action make them difficult to translate into actual program interventions.

## Recommendations

1. The Program Development Evaluation method of program development should be tested in a context in which theory can be used to design the initial program interventions.

2. Users of PDE should reassess the practical possibilities of substantially changing social programs using a rational approach once the programs have been put in place and are functioning.

3. Implementors of PDE should be trained and experienced in its use. They should be personally committed to the importance of theory as a guide to program development.

4. Program managers should be encouraged to focus program development efforts on theories of action, i.e., implementable links to the problem to be addressed. This should be done in lieu of developing grandiose theories that have little contact with the day to day operation of the project.

5. Social and behavioral scientists should not dismiss the naive theories of practitioners. Especially in the field of delinquency, idle time theory deserves increased attention, empirical rejection, or integration into current theories of delinquency.

6. Psycho-social development warrents more attention in social psychological theories of deliquency

## References

Akers, R. L., Drohn, M. D., Lanza-Kaduce, L., & Radosevich, M. Social learning and deviant behavior: A specific test of a general theory. American Sociological Review, 1979, 44, 636-655.

Glueck, S, and Glueck, E. Unraveling Juvenile Delinquency, Cambridge, Commonwealth Fund, 1950.

Gold, M. Scholastic experiences, self-esteem, and delinquent behavior: a theory for alternative schools. Crime and Delinquency, 1978, 24, 290-308.

Gottfredson, D. C. Implementing a theory in a large-scale educational intervention. Paper presented at the ninety-first convention of the American Psychological Association, Anaheim, California, 1983.

Gottfredson, G. D. (Ed.) The School Action Effectiveness Study: First interim report. (Report No. 325) Baltimore: The Johns Hopkins Unversity, Center for Social Organization of Schools, 1982.

Gottfredson, G. D., Rickert, D. E., Jr., Gottfredson, D.C., and Advani, Nisha. Standards for Program Development Evaluation plans. (Report No. 341) Baltimore: The Johns Hopkins Unversity, Center for Social Organization of Schools, 1983.

Greenberg, D. F. Delinquency and the age structure of society. Contemporary Crisis, 1977, 189-223.

Hirschi, T. Causes of Delinquency, Berkeley, Califfornia: University of California Press, 1969.

Hirschi, T. Labelling theory and juvenile delinquency: An assessment of the evidence. In Grove, W. R., (Ed.), The Labelling of Deviance: Evaluating a Perspective. New York: Sage Publications, Inc., 1975.

Kaplan, H. B. Deviant Behavior in Defense of Self, New York: Academic Press, Inc., 1980.

Lemert, E. M. Human Deviance, Social Problems, and Social Control. Englewood Cliffs, N. J.: Prentice-Hall, 1972.

Robins, L. N. Alcoholism and labelling theory. In Grove, W. R., (Ed.), The Labelling of Deviance: Evaluating a Perspective. New York: Sage Publications, Inc., 1975.

Shaw, C. R., an McKay, H. D. Juvenile Delinquency and Urban Areas. revised edition. Chicago, Ill.: University of Chicago Press. 1969.

Sutherland, E. Principles of Criminology, 4th ed. Philadelphia: J. P. Lippincott Co., 1947.

Table 1

Changes in Variables and Their Relationships, Delinquency Prevention Program Managers' Theories of Action, All Projects (n=17)

| | First Theory | | Most Recent Theory | | |
|---|---|---|---|---|---|
| | M | SD | M | SD | p |
| Total variables | 36.18 | 21.50 | 45.12 | 20.98 | .14 |
| Central variables[1] | 7.41 | 4.68 | 10.18 | 5.46 | .05 |
| Total links[2] | 40.35 | 24.51 | 55.35 | 31.02 | .08 |
| Delinquency variables[3] | 16.35 | 16.31 | 28.94 | 19.11 | .01 |
| Delinquency links[4] | 4.76 | 3.95 | 7.06 | 4.52 | .02 |
| Delinquency variables/ total variables | .41 | .34 | .61 | .27 | .02 |
| Total links/total variables | 1.09 | .17 | 1.21 | .37 | .16 |

[1]Any variable linked to three or more other variables.
[2]Link: A hypothesized causal relationship between two variables.
[3]Variables linked directly or indirectly to delinquency.
[4]Number of direct links between delinquency and other variables.

Table 2

Changes in Variables and Their Relationships,
Delinquency Prevention Program Managers' Theories of Action,
Projects with Theories in First PDE Plan (N=13)

| | First Theory M | First Theory SD | Most Recent Theory M | Most Recent Theory SD | p |
|---|---|---|---|---|---|
| Total variables | 39.00 | 17.26 | 47.08 | 21.91 | .07 |
| Central variables[1] | 7.46 | 3.57 | 9.23 | 5.23 | .06 |
| Total links[2] | 44.15 | 20.94 | 52.31 | 25.54 | .08 |
| Delinquency variables[3] | 21.31 | 15.54 | 28.69 | 19.19 | .06 |
| Delinquency links[4] | 6.23 | 3.30 | 7.38 | 4.72 | .11 |
| Delinquency variables/ total variables | .53 | .30 | .58 | .28 | .26 |
| Total links/total variables | 1.11 | .18 | 1.09 | .15 | .46 |

[1]Any variable linked to three or more other variables.
[2]Link: A hypothesized causal relationship between two variables.
[3]Variables linked directly or indirectly to delinquency.
[4]Number of direct links between delinquency and other variables.

Table 3

Delinquency Prevention Program
Managers' Theories of Delinquency

| | Project Number | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Project: | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | Total | Primary total |
| Causal category | | | | | | | | | | | | | | | | | | | |
| Academic achievement | X | | | | | | | | | | P | | X | | | | | 3 | 1 |
| Differential association | | | X | | | X | P | X | | | | | | | X | | | 5 | 1 |
| Disciplinary practices of school | | | | P | | X | | | | | | | | | | | | 2 | 1 |
| Idle time/unemployment | X | | | | | | | | X | | | P | P | | P | P | | 6 | 4 |
| Inequality/Marxism | P[1] | | | | | | | | X | P | | | | | | | | 3 | 2 |
| Instrumental | | | X | | | | X | | | X | | | | | X | X | | 5 | 0 |
| Labeling[2] | | | | | | | | | | | | | | X | | | | 1 | 0 |
| Maturation | | | X | | | | | | X | | | | | X | | | | 3 | 0 |
| Parenting | | | | | | | | | X | | | | | X | X | X | | 4 | 0 |
| Peers | | | P | | | X | | | | X | | | | X | X | X | | 6 | 1 |
| Personality | X | | | | | X | | | | X | | | | P | X | X | | 6 | 1 |
| Self-esteem | | X | X | | | | | P | | | | | | | X | | | 4 | 1 |
| Social control | X | P | X | | P | P | | X | P | | X | | | X | X | X | P | 12 | 5 |
| Social disorganization | X | | | | | | | X | | | X | X | | | | | | 4 | 0 |
| Social learning[2] | | | | | | | | | | | | | | | | | | 0 | 0 |
| Subcultural | X | | X | | | | | | | X | | | | | | | | 3 | 0 |
| Substance abuse | | | | | | | | | | | | | | X | X | | | 2 | 0 |
| Miscellaneous | X | | | | | | | | | | | | | | X | X | | 3 | 0 |
| Total number of variables in theory | 55 | 25 | 61 | 44 | 20 | 35 | 22 | 55 | 66 | 63 | 71 | 13 | 31 | 62 | 28 | 84 | 31 | | |

Project numbers:

| | | |
|---|---|---|
| 1=Compton-CACYD | 7=East Harlem-AAEP | 13=Miami-ACE |
| 2=Pasadena-STATUS | 8=Puerto Rico-OC | 14=New Jersey-EIC-S |
| 3=Chicago-PCD | 9=Charleston-PATHE | 15=Plymouth-AEP |
| 4=Chicago-RETAIN | 10=Houston-GIS | 16=Milwaukee-JVS |
| 5=Kalamazoo-AEP | 11=Virgin Islands-AEP | 17=St. Paul-Together |
| 6=South Bronx-PREP | 12=Hayward-LCO | |

[1] Indicates that this causal category was judged to be of primary importance to that project's theory of action.
[2] Not put in "Miscellaneous" or dropped because of its scientific theoretical importance.