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The Skill Sets and Health Care Needs of Released Offenders

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Introduction

This review updates the previous literature on what we know about inmate needs and the programs designed to address those needs (Gaes, Flanagan, Motiuk, and Stewart, 1999). A more neutral terminology than inmate "deficits" or "needs" is used by referring to the different domains as "skill sets." A skill implies mastery and competence rather than a personal liability. Although this orientation to inmate skills is somewhat symbolic, it emphasizes the interaction of training or teaching in conjunction with the individual's proficiency and achievement. This is a small step away from the medical model toward a paradigm that emphasizes the role of the offender in his or her own successful reentry. This review also discusses the medical/mental health needs of releasing inmates and the barriers that are encountered both within the criminal justice system, and the community, as well as the barriers to productive prison programming. The skill and medical/mental health needs of releasing offenders are viewed as complementary and overlapping issues that require integration.

This paper is organized into six sections. In section I, we briefly review some of the literature on skill sets. We introduce a classification (taxonomy) of these skills as a way of providing a framework for understanding, assessing, and remediating skill deficiencies. In section II, we review the literature on in-prison programs that are designed to address these deficiencies. There have been a number of recent, systematic reviews that are more focused than previous meta-analyses of prison programs. We review the results of those research syntheses and incorporate them into the skill sets taxonomy. In the third section, drawing upon data from the Bureau of Prisons and a recently completed study by the National Commission on Correctional Health Care, we outline the health and mental health needs of returning prisoners. In section IV, we discuss the barriers to addressing inmate skill deficiencies and medical needs both from the perspective of criminal justice policies and from the perspective of the community. In section V, we consider the role of the prisoner as parent in the reintegration process. While this is only one of the many skills we will cover, we devote an entire section to this area because of its relevance to this conference. In the last section, we introduce a "self help" model that integrates concepts in both the medical and skill set literature. In this last section, we also recognize and discuss the limitations of the "what works" model that focuses on interventions that address primarily the propensity to commit crime. What is needed is a coherent theory that relates the skills/needs literature to other theories of crime that bring in social context, opportunity, and social embeddedness. Some of the life course literature in criminology is increasingly moving in that direction.

I. Defining and Assessing Skill Deficiencies of the Returning Prison Population

While there is no uniform way to categorize and define inmate skills, we propose a classification more as a heuristic than an attempt to finalize some taxonomy[1]. The framework in Table 1 includes the following categories: academic skills, vocational skills/correctional work, interpersonal skills, leisure time skills, cognitive skills, spirituality/ethical skills, daily living skills, wellness skills, mental health skills, and accountability skills. The definition for each of these skills appears in Table 1. A number of researchers would probably take issue with some of the categories appearing in Table 1. For example, does it really make sense to define mental health as a skill? Should spirituality/ethical practices be considered a skill? Shouldn't this be a private matter left up to the individual and his or her conscience? W e also include substance abuse and sexual predation in the mental health category although these problems could merit separate categorization. Nonetheless, we see this taxonomy as a starting point for defining skill sets that will ultimately lead to thorough assessment, intervention, and as a kind of ongoing "report card" of the level of an individual's abilities or skill to integrate back into the community.

By creating a taxonomy, we also have a way of relating research on the relationship between skills, or their lack thereof, and post-release outcomes. One such attempt to demonstrate this relationship was a summary of the literature on predictors of recidivism conducted by Gendreau, Little, and Goggin (1996)[2]. Table 2 contains the re-entry skills chart and data on risk factors from the Gendreau, Little, and Goggin (1996) paper. The "Predictors of Recidivism" column refers to the individual inmate characteristics that increase the likelihood of post-release recidivism. Gendreau et al., refer to these characteristics as risk factors and point out that "...the design of effective offender treatment programs is highly dependent on knowledge of the predictors of recidivism (p. 575)." To the extent possible, we have tried to place these predictors in the re-entry skills categories of Table 2 where they seem most appropriate. Thus, while parent or sibling criminality is a predictor of recidivism, we assume that one's past associations can be addressed by developing interpersonal skills that focus on prosocial values.

Based on the work by Andrews and Bonta (1998) that distinguish between dynamic and static predictors, there are two kinds of predictors in Table 2. The predictors indicated in bold are called dynamic and are theoretically amenable to treatment, training, and program interventions.

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[1] The classification scheme was developed by Patti Butterfield, Bureau of Prisons psychologist, who was working on a reengineering workgroup on inmate reintegration.

[2] The Gendreau et al., (1996) meta-analysis of the factors that predict recidivism summarized research from a number of studies in which a given predictor of recidivism was, but one, among many covariates. One of the problems in using such covariates in a meta-analysis is that it does not take account of the implication of other covariates in the equation. Thus, studies with different specifications may have different effect sizes by virtue of the covariate pattern.

In contrast, static predictors are not modifiable and are either historical, such as a person's past criminal behavior, or immutable individual characteristics such as age, sex, and race. Only historical static predictors are listed in Table 2, since such predictors usually suggest interventions that can interrupt a cycle of crime. For example, simply because someone may have a criminal history does not mean that one cannot overcome that proclivity by learning new skills.

The relationship between the predictors and recidivism is indicated by the correlation in Table 2. The value of r theoretically can vary from 0 to 1; however, because recidivism is usually measured as yes or no, r cannot reach 1.00, and its maximum value is probably much less than 1.0. Some of the predictor domains, such as attitudes supportive of a criminal lifestyle, we have listed under more than one skill, such as cognitive and accountability skills. Most of the relationships depicted in Table 2 are modest. The strongest predictors of recidivism are criminal history, prison misconduct, identification or close relationship with criminal peers, attitudes supportive of a criminal lifestyle, and lack of education or employment skills. We have left out of the table the risk scales, such as the Salient Factor Score (SFS) and Level of Supervision Inventory (LSI), considered by Gendreau, Little and Goggin. These scales are composites of many of the individual predictors already represented in the table. One of the weakest relationships was between mental health measures of anxiety, depression, neuroticism, and psychiatric symptomology and recidivism. Bonta, Law, and Hanson (1998) examined whether the predictors of criminal and violent recidivism were different for mentally disordered offenders as opposed to nondisordered offenders. Using meta-analytic techniques, they found that the predictors were the same.

Criminal history variables were the best predictors, and the clinical variables had the weakest relationship. Thus, although it appears future offending may be influenced by mental illness, the dominant factors are other actuarial and predisposing factors that are essentially the same whether or not one has a mental illness diagnosis.

While this modest taxonomy suggests a way of categorizing skills, it would be important to know the extent to which inmates lack such skills and the extent to which those who have a skill deficit are allowed to participate in programs that can help them achieve those skills. Systematic program participation data in prisons or jails are sparsely reported and rarely collected. The closest data collection that we have is the Inmate Survey conducted by the Bureau of Justice Statistics every 5 or 6 years. The survey uses an interview of inmates to discover important facts about their incarceration, their criminal and civil life prior to incarceration, and issues revolving around release. Lynch and Sabol (2001) used the 1991 and 1997 surveys to analyze inmate program participation and found "Most prisoners do not participate in inmate programs, such as education and vocational programs, and the rate of participation has declined over the years (Lynch and Sabol, 2001 p. 14)." About 13 percent of "soon-to-be-released" inmates reported

participating in a pre-release program in both 1991 and 1997. In 1997, 27 percent of soon-to-be-released inmates participated in vocational training programs while 31 percent had participated in these programs in 1991. In 1997, 35 percent of soon-to-be-released inmates participated in educational programs, while the percentage was 43 percent in 1991.

One essential element missing in these kind of analyses is an accurate, systematic, and consistent estimate of the level of need. Understanding the level of unmet need in skills development is more important than whether the percentage of inmates completing these programs is increasing or decreasing. Ideally, a baseline of skill sets listed in Table 1 would be assessed at prison intake and subsequently tracked and updated throughout incarceration. Not only might we measure and monitor inmate proficiencies in these skill sets, but we could chart the progress made by inmates over the course of their prison stay and just prior to release. An analog is school achievement. At what grade level do inmates enter prison? What is their progress throughout their prison stay? And what is their grade level at the time of release? This kind of monitoring and measurement not only helps inmates assess their level of achievement, it informs the institution and community case managers of the remaining work that needs to be done. It also serves as a kind of management barometer of how well prison program providers are achieving their goals.

Education assessment may lead the way. The 1992 National Adult Literacy Survey (NALS) evaluated a sample of state and federal prisoners in addition to a large community sample (Haigler, Harlow, O'Connor, and Campbell, 1994). The NALS results showed that 70 percent of prisoners scored at the two lowest levels of proficiency on the prose, document, and quantitative literacy scales. Approximately 50 percent of the general population performed at these two lowest levels. Assessments such as the NALS can provide a standardized way of monitoring literacy to inform educators on the progress they are making in improving literacy during a term of imprisonment. While some jurisdictions use standardized assessments for education level, there is no one barometer that provides a national look at the level of skill. Tests like the NALS may take some time to develop for some kinds of deficiencies, such as cognitive, interpersonal, and wellness skills. There are some skill sets for which there may never be a satisfactory assessment, such as ethical and leisure time deficiencies. But, in order to know how to improve our efforts at promoting criminal desistance, we must also know how the interventions are affecting the level of the underlying deficiency.

Addressing inmate skill needs does not in and of itself ensure inmate motivation to learn and change, nor does achieving certain skill levels guarantee post-release success. Social settings, economic, familial and neighborhood context, and peer relationships all affect the offender's opportunity and engagement in crime independent of the factors that affect propensity. The proposed taxonomy of skill sets begins to lay out a framework for understanding and hopefully addressing criminal propensity or the "psychology" of criminal conduct. The overall goal of

classifying skill sets is to decompose propensity to crime into some of its component parts as a starting point for changing criminal behavior without losing sight of the fact that prisoners are not the fractured representation of skills depicted in Table 1.

II. An Update on the What Works Literature and Recent Extensions to Cost-Benefit Considerations

A summary of recent meta-analyses on inmate interventions is outlined in Table 3, updating the last synopsis by Gaes, Flanagan, Motiuk, and Stewart (1999). Many of these meta-analyses were conducted by David Wilson, Doris Layton MacKenzie and their colleagues. These recent meta-analyses are more focused than previous ones. They tend to address a specific domain or skill set as we have outlined in Table 1. Prior meta-analyses tended to cross many of these domains (See Gaes et al., for a summary of those meta-analyses). The Wilson, MacKenzie meta-analyses have also been quite rigorous and more circumspect than some of the earlier research syntheses. The methodology of meta-analysis is evolving and increased rigor will lead to a more systematic and enriched understanding of these interventions. Nonetheless, the studies that form the basis for these research syntheses are still fraught with methodological problems. Meta-analyses that have been conducted since we last reviewed them in 1999 were done on effective programs for women (Dowden, and Andrews, 1999); treatment for violent offenders (Dowden and Andrews, 2000); treatment of sex offenders (Furby Weinrott, and Blackshaw, 1989; Gallagher, Wilson, Hirschfield, Coggeshall, and MacKenzie, 1999; Gallagher, Wilson, and MacKenzie, 2001; and Hall 1995), boot camps (Mackenzie, Wilson, and Kidder, In press); drug treatment programs (Pearson and Lipton, 1999); structured cognitive behavioral programs (Wilson, Allen, and Mackenzie, 2000); education, vocational training, and work programs (Pearson and Lipton, 1999; Wilson, Gallagher, and MacKenzie, 2000, and Wilson, Gallagher, Coggeshall, and MacKenzie, 1999); and a systematic coverage of many of these skill domains (Aos, Phipps, Barnoski, and Lieb, 2001). Some of these are not represented in Table 3 because they don't fit in very well. For example, the boot camp meta-analysis which found no impact of these programs is composed of many of the elements of Table 1 in addition to the regimentation and military style of the program. The Aos, Phipps, Barnoski, and Lieb (2001) meta-analysis is interspersed throughout the table and is considered in more depth below, because it was also combined with a rigorous cost-benefit analysis of the interventions.

For the meta-analyses that do fit into Table 3, we represented the effects sizes in their original format. However, we have also converted them into percentage recidivating during the post-release period. Effect sizes are typically represented as correlations (r), the difference in means measured in standard deviation units (Cohen's d), and in odds ratios. In 1999 (Gaes et al.), we concluded that the meta-analysis literature, in its entirety, indicated that programs had an average effect size of .10. Translating this into a more understandable metric, program

participants had a 45 percent likelihood of being arrested compared to a 55 percent likelihood for members of comparison groups.

Recent meta-analyses continue to show treatment effectiveness. This is generally true of academic instruction, vocational training, cognitive skills, sex offender programs, and substance abuse interventions. However, the results of these meta-analyses are not always definitive. For example, there are three meta-analyses of sex offender treatment and a fourth research review that differ in their conclusions. Hall's (1995) study found small effect sizes of sex offender treatment. Gallagher et al, (1999; 2001) were critical of Hall's meta-analysis because it was limited to studies completed after 1989. However, when Gallagher et al., (2001) examined the relationship between methods variables, treatment modality, and treatment effects, there was a confounding among the methods and treatment variables making it impossible to disentangle the relationships. The authors did find that the higher the method quality score of a study, the higher the effect size. Furthermore, the more likely there was subject level matching the lower the effect size. These results are contradictory indicating better methods produce both higher and lower effect sizes. Furby et al., (1989) reviews sex offender studies and has a lengthy discussion of problems in methodology. As these authors noted, "These methodological principles have been violated all too often in the empirical studies reviewed here, and the qualifications, which must then be placed on a study's results, are too rarely recognized, both by investigators and by consumers of their research." (Furby et al., p. 4).

Furby et al., discuss the following problems or characteristics of sex offender studies: often only inmates amenable to treatment were included in a study; large dropout rates were reported; dropout rates are often missing from studies; many studies did not distinguish among important subpopulations of sex offenders such as pedophiles, exhibitionists, and dangerous sex offenders and rapists; studies characterized homosexuality alone as a sexual misconduct event; treatment descriptions were vague and imprecise; one treatment center accounted for one third of the 7,000 treated men represented in these studies; four other treatment centers accounted for another 25 percent of the total sample of treated men; and, varying followup periods occurred within the same study.

Furby et al., were aware of meta-analytic techniques but chose not to use them for the following reasons:

> "...(a) the large number of studies in which the sample selection procedure was inadequately described; (b) the enormous variability in samples across those studies for which descriptions were adequate; (c) the large number of studies for which recidivism was inadequately described; (d) the variability within many studies in length of followup periods for different men. All of these factors make it difficult to establish comparability of studies, which is necessary for the combining of their results to be meaningful. Large differences in sample sizes and in types of treatment intervention exacerbate these problems" (Furby et al., 1989 p. 21)

Sex offending intervention is particularly difficult to deliver and assess. It is not surprising that there is no uniformity in the conclusions about the interventions. The purpose for introducing the controversy here is to point out that treatment syntheses, even with better analytic techniques, still require a close reading of the evidence. Nonetheless, it is easier to be sanguine than pessimistic about the possibility of institutional interventions.

While these studies point to the success of prison intervention programs, there has been little recognition and analysis of the external validity and generalizability of the studies. Most program interventions still depend on volunteer participants. In addition to the problem of selection bias inherent in these research designs, there is the problem of estimating how many inmates would or could be affected by these interventions. If only a small fraction of inmates will volunteer, and thus benefit from these interventions, it is easy to exaggerate the benefit to all inmates being released from our correctional systems. In fact, the paucity of existing data suggests that most inmates do not participate in programs before they are released. There is no reason to be particularly pessimistic about the possibility of the impact of in-prison programs on post-release success. However, research must still be conducted to measure or estimate the degree to which offenders who have skill deficits do or do not participate in programs. We then need to understand completion and dropout rates. This is a prerequisite to understanding the ultimate cost-benefit of program interventions. We discuss cost-benefit analysis as the next step in evaluating in-prison and community interventions.

Cost Benefit Analyses of Treatment Interventions

Cost-benefit analysis is the economic realization of a program. It equates all benefits and costs of an intervention with a dollar value. By converting benefits and costs to one dimension, we can evaluate whether there is a net benefit relative to the cost of that intervention. As Brown (2001) noted, cost-benefit or efficiency evaluations are missing from most program evaluations. The probable reason for this dearth of efficiency analyses is that it is no easy matter to assign monetary values to some of the outcomes of a program construed as intervention benefits. This is because many of these benefits are intangible. They are not traded in the marketplace (Laplante and Durham, 1983), and therefore, one has to impute their value. Recent work by Cohen and colleagues (Cohen, 1988; Cohen 1998; Cohen, Miller, and Rossman, 1994) has tried to explicate direct and indirect, and tangible and intangible costs of crime. Direct costs and benefits are those that can be anticipated, such as the salaries of teachers. Indirect costs and benefits are unplanned. Intangible victim costs, such as pain and suffering resulting from an attack, or crime avoidance behavior, such as no longer going out at night, are the most difficult of all costs to estimate.

In a recent article, Farrington, Petrosino, and Welsh (2001) discuss the importance of cost-benefit with regard to 9 program evaluations. Four of these studies priced outcomes other than recidivism. Several studies limited the analysis to criminal justice benefits, while others included

victim costs. Most of the studies were concerned primarily with community interventions. When attrition was reported, it was very large. Many of the research designs were weak. The Farrington, Petrosino, and Welsh (2001) paper suggests the importance of cost-benefit analysis; however, the papers they found were not particularly strong examples. On the other hand, there has been an effort by one research team to combine elements of meta-analyses with rigorous cost-benefit analyses.

Aos, Phipps, Barnoski, and Lieb of the Washington State Institute for Public Policy have undertaken this work. Their report was mandated by the Washington State Legislature directing "...the Washington State Institute for Public Policy (Institute) to evaluate the costs and benefits of certain juvenile and adult criminal justice policies, violence prevention programs, and other efforts to decrease particular "at-risk" behaviors of youth (Aos et al., 2001 p. 1)." The Institute used a meta-analysis to evaluate more than 400 research studies conducted in the United States and Canada. But analysts took the effort one step farther and produced a cost-benefit evaluation of these juvenile and adult interventions. The analysts evaluated primary, secondary, and tertiary interventions. Primary prevention refers to the strategies that stop or preclude criminality. Secondary prevention refers to strategies that are adopted after there are indications or markers that imply a problem will occur if these secondary intervention techniques are not successful. Tertiary prevention comes after a problem has occurred, and the intervention strategies are intended to limit the damage or rehabilitate the individual so that the problem does not recur. While the report covers programs that address early childhood, middle childhood and adolescence, these were primary prevention programs intended to divert youth from the criminal justice system. In this review, we will focus on the juvenile and adult offender programs. These are tertiary prevention programs that attempt to deter individuals from returning to crime once released from the criminal justice system.

The cost-benefit analysis adds an additional perspective to program evaluation. From the taxpayer's perspective, were the savings in "...downstream criminal justice costs" (Aos et al., 2001 p. 2) more than the costs of the program? As the authors of this report note, for the most part, they were not analyzing program evaluations that had been conducted in the State of Washington. They were assessing primarily programs that had been conducted elsewhere; however, the dollar values of costs and benefits were those expected to occur in Washington.

Aos et al., state that they took a "...conservative approach..." to the cost-benefit analyses by deflating the value of effects associated with evaluations that had weak research designs. Although the Institute started with over 400 studies, about a fourth did not meet the minimum research design criteria and were not included in the cost-benefit analysis. There is disagreement among meta-analysis theoreticians as to whether strong and weak studies should be used in a meta-analysis. Some advocate that the meta-analysis should incorporate all of the studies and then compare the average effect sizes for strong and weak studies. Others argue that the weak

studies are meaningless and would only contaminate the assessment of the particular research domain. The reader should be aware that the results of the meta-analysis can change based on the inclusion/exclusion of poorly designed studies. Analyzing results based on both approaches is warranted and allows the scientific community to assess the validity of the conclusions and appropriately weigh policy implications.

The authors present their results as a dollar spent on programs versus the number of dollars saved (returned) or the number of dollars lost (wasted). Thus, even if a program leads to a reduction in criminality (positive average effect size), if it costs a great deal relative to its crime reduction benefits, it may not be economical.

The authors regard their analysis strategy as one that is similar to a "...financial analysis an investment advisor uses to study rates of return on mutual funds, bonds, real estate, commodities, or other investment options (Aos et al., 2001 p. 1)." One of the many interesting results of this strategy is that it suggests to the policymaker alternate issues and implications. For example, consider the Institute's five general findings:

- Some Good Investment Options Exist – there were some juvenile offender programs that had very high returns on investment. For these programs the average return on a dollar was $20.
- Some Bad Investment Options Exist – There were programs with positive effect sizes but still offered a net loss on the returns of investment.
- A Program That Can Achieve Even Relatively Small Reductions in Crime Can Be Cost Beneficial – Even programs that have modest intervention results (small effect sizes) can have an attractive bottom line on investment return.
- Programs Should Be Evaluated – There are many programs that have not been evaluated and since some or even many of these may not work, they continue to absorb tax payer money and divert money from successful programs. As Aos et al., note, evaluations are not free. Perhaps the cost of evaluations should be entered into the cost benefit equation.
- A Portfolio Approach is Recommended – Because of problems with the program evaluation literature, there is "...a degree of uncertainty" (Aos et el., 2001 p. 7) to the economic estimates of the Institute's report. The analysts discuss a "portfolio approach" to investing in programs and warn against using too few program approaches. Thus, a jurisdiction can use proven programs as well as promising programs. In this regard, Aos et al., do suggest that even good programs may not be implemented correctly.

We believe that there are many other factors that elevate uncertainty. There are jurisdictional differences in the quality of staff implementing programs; the characteristics of inmates in these programs may vary from one jurisdiction to another; the organizational context in which these

programs are conducted can vary across jurisdictions; and the release context of a jurisdiction can vary and may make program success more or less probable.

The economic perspective adds a policy dimension that has been missing from most of the program evaluation literature. It does, however, raise the level of uncertainty for policymakers. Programs must now be viewed in the context of assumptions about program content, program effect sizes, program costs, downstream criminal justice costs, and victim costs. All of these assumptions also depend on sources of contamination from program implementation, organizational endorsement, and other contextual implications associated with the level of post-release supervision, opportunity, and other social dimensions of the ex-offenders post-release community. While it is true that all of these dimensions complicate the analysis, they have always been there, although often unrecognized or disregarded. Thus, the Institute's program analysis strategy engages the research community and policymakers in a more deliberate and systematic appraisal of the value of an intervention.

The Institute's report presented data on four domains: early childhood programs (8 studies), middle childhood and adolescent (non-juvenile offender) programs (6 studies), juvenile offender programs (85 studies), and adult offender programs (157 studies). Each of these areas was further subdivided into more specific intervention domains. For example, there were 21 subdomains in the adult correctional program areas. While we will not discuss the non-criminal justice prevention programs, the average highest economic benefits, according to this report, actually result from juvenile programs conducted within the criminal justice setting. Table 4 indicates the average effect sizes reported by the Institute for each of the subdomains they listed under juvenile and adult offender programs.

The authors of the report describe the technical details of their methods in Chapter III. Unlike most meta-analyses of intervention studies, the Institute would combine treatment completers and dropouts to get an unbiased assessment of treatment effects. If a study only reported treatment completers, then that study received the second lowest quality rating. Where possible, the Institute coders used the multivariate outcome rather than the raw unadjusted outcome. Effect sizes were adjusted to remove bias (Hedges, 1981) and the effect sizes were also adjusted based on the quality of the research design. The research quality was based on a 5 point scale: 5 represents the highest quality; a 1 represents the lowest quality. The Institute did not include a study in their analysis if it received a value of 1. Studies receiving a value of 2 did not enter the cost-benefit calculations. Studies receiving a quality rating of 3 were discounted by a factor of 0.5. Studies with a rating of 4 received a 0.25 discount, and studies with a rating of 5 received no discount. In addition to that discount, the Institute also added a discount for programs instituted by researchers or program developers. This so called "non-real world" discount, represented on page 41 of the report, was noted as 25 percent, a factor of 0.75. However, on page 81 of the report, Table IV-C , the authors list model parameters and indicate

that the non-real world programs discount was 50 percent, a factor of .50. On page 109 of Table IV-K, one of the studies depicted in this table indicates an effect size of .30, a design score of 5 (no discount), and a researcher role of 1 indicating researcher participation. The discounted effect size for this study was .15 implying that the Institute's analysis included a 50 percent discount for non-real world programs. The rational for this discount is that the Institute researchers believe programs implemented and evaluated by program developers do not achieve the same magnitude of effect once they are implemented by line staff. The authors do not suggest that researchers and developers who evaluate a study may also subtly influence the outcomes of studies quite unintentionally, although this issue has been raised by Gaes et al. (1999).

The inverse variance method of weighting was used to calculate the average effect size. Confidence intervals were computed and the Q test for homogeneity of variance was calculated. We have added the 95 percent confidence intervals and the Q statistic test results to Table 4. These come from the original report's Table IV-A. We have reoriented the data because in most meta-analyses, an effect size showing a positive benefit is usually recorded as a positive effect size. The Institute chose the opposite way to represent the data, and to reduce confusion for the reader, we have transposed the effect sizes.

As can be seen in the last two columns of Table 4, many of the 95 percent confidence intervals span 0. This means that we cannot be sure that the average effect size is different from 0. Furthermore, many of the Q statistics indicate heterogeneity of variance among the effect sizes. When this happens, analysts are supposed to use a random effects model to represent this heterogeneity or at least use other factors to test why different studies have such disparate effect sizes. It is also interesting to note that the results of the Institute's meta-analysis contradict other meta-analysis results in some domains. For example, the cognitive skills average effect sizes were not significant in the Aos et al., analysis, but were in the analysis by Wilson, Allen, and MacKenzie (2000). One of the reasons that the results of the Institute's meta-analysis diverges from other meta-analyses is the discounting Aos et al., use prior to computing the average effect sizes.

The authors of this report should be commended for providing a table for every assumption and parameter used in their models. This includes a detailed set of tables listing every single study used in the meta-analysis (Table IV-K) indicating the design score, researcher role, number of program participants, number of comparison participants, number of years of follow up, the type of crime outcome, the effect size, the discounted effect size, the statistical significance of the study, and, in some cases, data on the mean differences in the number of offenses between program and comparison subjects. Table IV-L shows all of the data used to evaluate the economics of a program subdomain.

For each program listed in Table 4, the Institute computed the per capita net direct cost. It is a net cost because some programs displace other programs that no longer have to be funded. Some programs have a negative net cost because they are cheaper to run than the ordinary criminal justice program. For example, boot camps are cheaper than normal incarceration for juveniles and adults because the participants spend much less time in a boot camp than they would in a normal correctional regime.

The downstream costs/savings were also calculated. To do this the Institute researchers had to estimate the "long-run pattern of criminality" (Aos et al., 2001, p. 44) of released offenders. The theory behind these assumptions was that if a program has an effect on recidivism, then it is important to know the long run impact in order to calculate costs and benefits over time. The Institute was able to do this because analysts there have been measuring long term felony re-conviction rates for different criminal subpopulations within the State of Washington. These data are reported in Table IV-B separately for adults and juveniles. The adult data also is reported separately for offenders leaving prison and those placed on community supervision. The Institute analysts then applied the discounted effect sizes to these long term re-conviction trends to be able to calculate the long term re-convictions of program and comparison participants. As Aos et al., note, most program evaluations report short term effects. Thus, one has to assume that the form of the recidivism functions represented by the long term recidivism data is not somehow modified by the program intervention. Although the Institute does account for program effect decay over time within the cost benefit portion of the model.

The discounted weighted average effect sizes and the long term re-conviction estimates we have described constitute steps 1 and 2 in a five-part estimation process. The first two steps are used to estimate, according to the analysts, " ...the number of crimes that can be avoided with a program over a long time frame (Aos et al., 2001 p. 46)." In the model, the analysts estimate avoided crime, arrests, or convictions. Then in steps 3,4, and 5 they calculate and compare program costs and benefits. The cost benefit amounts appear in the last three columns of Table 4 and come from Table 1 in the original report. Two cost- benefit analyses are provided. The first incorporates only the direct costs and benefits (savings) of a program. The latter incorporates victim effects. The costs of the programs are based on the marginal operating and capital costs of a program in the State of Washington (the column labeled "Net Direct Cost of the Program Per Participant" in Table 4). The benefits accrue from reductions in the marginal operating and capital costs of criminal justice resources including: police and sheriffs' offices, superior courts, county prosecutors, juvenile detention, juvenile probation, juvenile institutions, adult jails, adult prisons, and adult supervision. The crime victims cost savings were taken from Miller, Cohen, and Wiersema (1996) who defined monetary costs and quality of life costs. Monetary costs include medical expenses, property damages, and reduction in future earnings incurred by crime victims. Quality of life costs put an estimate on the pain and suffering of crime victims. These are the most controversial elements of the cost-benefit analysis. In the Miller, Cohen, and

Wiersema analysis, these were based on jury awards. When Aos et al., report the net benefits of a program, they provide a lower bound based on the taxpayer benefits only (the criminal justice costs– the column labeled "Lower End of Range" in Table 4) and an upper bound based on the taxpayer and victim benefits (the column labeled "Upper End of Range in Table 4). For example, in-prison vocational training costs $1,960 per participant. The net benefit based on taxpayer expenses of this program was $2,835 per participant, and the net benefit that includes victim costs was $12,017. As can be seen in Table 4, some of the net benefits are very large. Multi-systemic therapy for juveniles cost the taxpayer $4,743 per participant; however, the taxpayer's net savings is $31, 161 per participant in downstream criminal justice costs and if you include victim benefits, the combined savings is $131, 918 per participant.

The Aos et al., methodology is the most comprehensive evaluation of juvenile and prison interventions that we have come across. It combines some of the best elements of meta-analysis with a solid framework for cost-benefit methods. While the Aos et al., methodology is a model for future cost-benefit analyses for prison and community-based programs, as a research community we will have to decide how to treat study discounting. We will also have to consider what to do about costs when the underlying research meta-analysis indicates a lack of statistical significance and possible study heterogeneity. The purist will argue that in order to proceed with the cost-benefit portion, the effect sizes ought to be significant. This may be appropriate in intervention domains where there is a clear conclusion about the effect sizes. But, there are a number of program intervention domains where the conclusions are, at best, ambiguous and the cost-benefit may still be worthwhile. Finally, some consensus on benefits will have to be reached, especially on how we treat intangible victim costs.

III. The Medical/Mental Health Needs of Released Offenders

The National Institute of Justice (NIJ) in collaboration with the National Commission on Correctional Health Care (NCCHC) has completed a congressionally-mandated study, entitled "The Health Status of Soon-to-Be-Released Inmates." Key data from the report are compiled in Table 5 and suggest that the prevalence of certain infectious diseases, mental health disorders, and substance abuse problems in inmate populations is remarkably greater than that of the overall U.S. population. The report argues that U.S. correctional systems serve as a strategic venue for diagnostic, treatment, and prevention initiatives for populations in need of health services that otherwise elude traditional public health providers.

The potential for enhanced control of communicable diseases in the U.S. is evident. Serodiagnostic studies and tuberculin skin test data from a number of correctional systems indicate that the vast majority of inmates enter prisons already infected with *M. tuberculosis*, HIV, HCV, and hepatitis B virus (HBV), thus providing an opportunity for detection and intervention prior to release. The recent success of U.S. TB control efforts is, in part, the result

of correctional programs that have aggressively identified and treated inmates with active TB disease and latent TB infection as they passed through U.S. jails and prisons. The NIJ and NCCHC report helps quantify the potential scope of correctional involvement in controlling communicable diseases. The report estimates that 98,500 to145,000 inmates with human immunodeficiency virus (HIV) infection were released from prisons and jails in 1996, representing 13.1 to 19.3 percent of all HIV-infected persons living in the United States; and that between 29 to 32 percent of the estimated 4.5 million individuals with hepatitis C viral (HCV) infection spent time in a correctional institution during 1996. These remarkable turnover rates support a public health role for U.S. jails and prisons that involves not only containing infectious diseases, but also decreasing future transmission to others through prevention efforts with infected inmates prior to release. The NIJ and NCCHC report also recognizes mental illness and substance abuse as two of the most prevalent health conditions affecting inmate populations as summarized in Table 5. Additional data from the Bureau of Justice Statistics Special Report, *Mental Health Treatment in State Prisons, 2000* (Beck and Maruschak, 2000) has reported that 1.6 percent of all inmates received 24-hour care in a special housing or psychiatric unit, and that 13 percent received mental health therapy or counseling. Perhaps the most critical review of prevalence data on mental illness in correctional populations is that of Diamond, Wang, Holzer, Thomas, and Cruser (2000). They identify weaknesses in certain studies that have depended on self report, record reviews, and other non-standard diagnostic techniques. The stronger studies use diagnostic assessments with clear definitions and known reliabilities. These diagnostic instruments included the Diagnostic Interview Schedule III (DIS; Robins and Helzer, 1985), the Psychiatric Epidemiology Research Interview (PERI; Dohrenwend, Shrout, Egri, and Mendelsohn, 1980), and the Structured Clinical Interview for the DSM (SCID; Spitzer, Williams, Gibbon, and First, 1990). Diamond et al., compared the results of the individual studies conducted within the prison systems to the Epidemiological Catchment Area program (ECA; Robins and Regier, 1991), a large community-based study of mental illness. The studies using diagnostic instruments like the DIS, PERI, and SCID generally found higher lifetime and current prevalence rates of many psychiatric disorders in the prisoner population relative to the community study. For example, Neighbors et al., (1987) used the DIS to assess mental disorders in the Michigan Department of Corrections. Lifetime rates for all disorders were higher among Michigan prisoners than the community. For almost all disorders that were measured, such as depression, dysthymia, schizophrenia, and bipolar disorders, the lifetime prevalence rates were much higher among the prisoners in Ohio, California, Michigan, and Canada, jurisdictions where sound diagnostic measures were used, than the lifetime prevalence rate in the ECA sample.

Despite the availability of prevalence reports on mental illness in correctional populations, the number of inmates with mental illnesses pending release is rarely reported. In a review of 43,187 inmates released from a sentence who were not deported or detained in other jurisdictions

during 2000, the Bureau of Prisons Office of Research identified 1,135 releasees, or 2.63 percent, with a diagnosed mental disorder. In this evaluation inmates with the following conditions were considered mentally ill: bipolar disorder, delusional disorder, presenile dementia, depression – major/nonpsychotic, depression – major/psychotic, mania, organic mental disorders, schizo-affective disorder, schizophrenia/delusional, schizophreniform. The estimate does not include released inmates with mental illnesses that were undiagnosed at the time of release.

The large number of inmates released to the community with contagious diseases, chronic medical and mental health problems, and histories of substance abuse will require coping skills to maintain long term health. There is an important overlap in the health/mental health needs of released offenders and the skill deficits outlined in Table 1. Many of the skill sets depicted in Table 1 refer to self-regulating behaviors, the ability to limit and control impulsive behavior, and the facility to think through and anticipate the consequences of one's actions. The risk-taking behavior that is implicated by failing to learn to control impulsive behavior overlaps with some of the same behavior associated with infectious disease. For example, intravenous drug use is an example of a behavior that, if it could be controlled by acquiring new skills, would decrease the probability of the transmission of blood borne infectious diseases. The proposed skill sets outlined in Table 1 provide a useful construct for release planning programs for those inmates with serious health problems. Although the health status and previously acquired skills are unique for every inmate, most patients generally benefit from taking greater responsibility for their own health, improving communication with their primary care provider, establishing personal wellness goals, regulating impulsive and risk taking behaviors, and improving interpersonal skills that strengthen family and social support systems (see especially Sbarboro, 1990 on medication compliance). Those inmates with histories of chronic addiction and mental illness require particularly intensive and targeted skill building efforts due to the complexity of these problems and their known association with criminal behavior. Including inmates with serious health problems in proven skill-building programs will not only promote the long term health of released offenders, but is also an effective strategy for improving the public health of our Nation.

IV. External and Internal Barriers to In-prison Preparation and Successful Transitions?

In addition to enhancing inmate skills, removing barriers to needed resources and services is also essential for improving community reentry for high risk inmate populations. Barriers, both external and internal to the correctional environment, must be bridged.

External Barriers to Health Care Provision for Releasing Offenders

In a special issue of *Crime and Delinquency*, Hammett and colleagues outline the following 5 important research areas that should be studied and developed to improve the medical needs of reentering inmates (Hammett, Roberts, and Kennedy, 2001): (1) discharge planning, community linkages, continuity of care; (2) adherence to treatment regimens among releasees with mental and medical problems; (3) availability of transitional and permanent housing among releasees with mental and medical problems; (4) quick access of ex-offenders to medicaid, Aids drug assistance, and other benefit programs; and (5) needs of dually and triply diagnosed individuals being released from correctional facilities.

Most jurisdictions and communities have marginally addressed the important issue of forging linkages between in-prison and community-based health service providers. Model programs in the State of Rhode Island, Hampden County, Massachusetts, and New York City are highlighted in the NIJ/NCCHC report as well as in Hammett et al., (2001). These programs are successful because of strong cooperation between community health care providers and prison and jail administrators. In their most integrated incarnation, the same local health care workers deliver medical care to inmates during incarceration and on a long term basis after release.

Successful programs linking at-risk inmates to necessary health care and support services are exceptions rather than the norm, largely because of agency, policy, and logistical barriers that affect discharge planning and continuity of care. The logistical barriers are formidable. Inmates often hail from different jurisdictions and are frequently housed in remote locations far from their homes. Ensuring chronically ill inmates access to resources and support services in distant communities requires inordinate planning and coordination. Prisons house inmates from many different jurisdictions. Thus, there is an enormous management problem of ensuring that a specific prisoner's medical needs are addressed in the community to which he or she will return. Inmates in most states and federal prisons receive direct medical care from onsite prison providers through public funding that is appropriated specifically for prison health care. Consequently, inmates are usually ineligible for federally funded dollars for health care maintenance after release (Ryan White Funds for HIV infected inmates may soon be an exception).

Maintaining continuity of medical care is most critical for inmates with serious health needs. Minimal interruptions in treatment for the most unstable medical conditions can even be life threatening and in certain situations may have significant public health consequences. For example, treatment interruptions in the management of TB disease and HIV infection may lead to resistant infections that are transmitted to other persons. Obtaining fiscal resources for such patients is critical. Released offenders may not have ready access to third party benefits such as Social Security Insurance, Medicaid, or the AIDS Drug Assistance Program (ADAP); and most offenders do not have a source of private medical insurance. Qualification for public funds can

be difficult and tedious. Even with aggressive discharge planning, certain offenders will not qualify for either private or publicly funded medical insurance and fall to the bottom rung of available medical care, typically Community Health Care networks and local emergency rooms.

Perhaps the most basic need of released offenders is affordable housing (Hammett, et al., p. 401). Returning offenders are frequently faced with a short supply of available housing and are unable to establish a stable "home base" that would help ensure continued medical treatment and community reintegration.

Overcoming these external barriers to continuity of care for released offenders is daunting but not insolvable. Telemedicine holds the promise of providing community medical practitioners with the ability and opportunity to contact and even evaluate offenders before they are released. Increasingly federal funding of community-based health care requires formal linkages to correctional systems. Certain jurisdictions are allowing offenders to "pre-qualify" for public health insurance benefits in anticipation of release.

The largest impediment to continuity of care, however, is the lack of interagency communication and collaboration and institutional compartmentalization. Historically, prison administrators focus primarily on safely housing inmates under their custody. Parole and other post-release supervision agencies view their role narrowly as monitoring the offenders under their custody. Community service providers do not enroll ex-offenders until, somehow, they come to their attention. It is the cross-jurisdictional, cross-agency cooperation that has to be nurtured and developed. Recognition of the problem, as they say in drug treatment, is the first step to recovery or, in this case, solutions.

The Impact of Criminal Justice Policies on In-prison Preparation

One of the primary barriers to providing sufficient skills is that correctional systems have two somewhat complementary but also antagonistic purposes – insuring the safety of the public, prisoners, and staff and promoting skills that foster reentry. These goals are complementary when prisoners' programs provide a constructive environment compatible with day-to-day security needs. Thus, keeping prisoners occupied and focused on their long term goals to reintegrate into society can have a dramatic impact on the safety and security of the institution. Unfortunately, because the bar has been set so high for most correctional systems, prison order is often viewed as the primary mission. There is almost a zero tolerance for escapes, homicides, and other threatening events. This leads to an emphasis on regimentation, close monitoring, and highly structured environments that are not conducive to giving inmates opportunities for self-regulation and self control. These structured environments also often lead to a clash in staff subcultures between the program providers and the security sentinels.

To make this concrete, consider the following two examples. In the first example, medical staff are trying to encourage a prisoner to monitor and control her diabetes. The inmate is encouraged to monitor her blood glucose levels and to inject insulin by herself. But needles in a prison environment are to be tightly controlled. Thus, there is a conflict between providing a reentry skill that should become a habit and the institutional necessity for control of a contraband item. Now consider the inmate who wants to acquire internet skills. But, he is not permitted to use the internet for fear of misusing it to commit a crime. These may seem like simple mundane activities that have solutions, and typically there are solutions. But there is always the tension between those staff who specialize in prison order, the security staff, and those staff who specialize in promoting prisoner skills, the programming staff. Ann Chih Lin has discussed this tension in the context of prison program implementation. Her thesis is that program implementation in a prison depends on the collective efforts and good will of the line staff. Those staff include both those who deliver the programs and those who are responsible for day-to-day operations of the prison, mostly security staff. Lin's ethnography examines the structure of program implementation framing the problem as an extension of the concept of the "street level bureaucrat." In his classic, *Street Level Bureaucracy* (1980), Michael Lipsky argued that line staff, rather than policymakers or agency directors, actually make policy. "They exercise wide discretion in decisions about citizens with whom they interact. Then, when taken in concert, their individual actions add up to agency behavior" (Lipsky 1980: 13).

Ann Lin's insight is that successful program implementation depends on the attitudes and the cultural context of the entire prison, both inmates and staff. Her analysis suggests that there are two dimensions of prison culture: prison centered needs and institutional values. Prison centered needs enhance the management of an institution. To the extent prison programs promote, or are complementary to, the primary needs of a prison, both the administration and the line staff will accept those programs. As Ann and others have noted, the primary need of a prison is for order. Prisons must be safe for both inmates and staff. Rules and routines help to establish expectations about behavior.

The second dimension, institutional values, has two poles. At one end is an institution where the overriding ethos is for staff to support one another – the notion of staff solidarity. At the other pole of this dimension is an institution where staff and inmate communication are emphasized. In the former culture, the administration backs up staff even when they are wrong. Staff solidarity is a shorthand for a culture that features an "us versus them" mentality. In a staff solidarity culture, "...for many staff, the two actions – backing each other and running to help when a colleagues's life is threatened– are morally equivalent. Any relaxation of solidarity leads to a slippery slope. There must never be any doubt about where one's loyalty lies." (Lin 2000, p. 51)

Alternatively, In a culture of communication, staff interact with inmates by openly trying to understand the inmate point of view, by encouraging inmate participation in programs, by seeking to understand the inmate's dilemma. These are, of course, idealized abstractions. Because prisons are about order, there will always be a sense of staff solidarity, us against them. But, it does not take long for both staff and inmates to learn that communication and problem solving can preclude violent interactions, defusing situations before they get out of control.

Ann Lin has used these two dimensions to characterize and categorize 5 institutions, four federal and one State facility, to which she made site visits. "Successful Implementation" occurs in institutions where the institutional culture endorsed communication and programs met the needs of the institution. In that institution she observed variety and flexibility of programs; staff that encouraged program participation; an emphasis on staff-prisoner communication; and an acknowledgment by staff that the institution had a reputation of excellence which encouraged staff to support programs. In the institution where she observed "Neglected Implementation," even though there was a culture of communication, programs did not meet prison centered needs. In this prison, too few inmates were enrolled in programs to make a contribution to prison order; programs seemed like an extra burden; however, because there was a history of quality programs at the prison and the relationships between staff and prisoners was good, there was still a tolerance for program innovation. The institution with "Subverted Implementation" was one in which programs met the needs of the prison; however, the prison culture emphasized solidarity. In such a prison, staff maximize program enrollment to solve the problem of prisoner supervision; however, prisoners resent staff and are not interested in programs. Because of the emphasis on staff solidarity, staff modify programs to serve institutional needs rather than inmate needs. In "Abandoned Implementation," there is a culture of solidarity and the prison programs do not meet prison centered needs. In such an institution, staff emphasize solidarity among themselves and social distance from prisoners. The reputation of excellent custody means program staff have no leverage to ask for changes that might benefit programs, and prisoners avoid participation out of resentment of staff.

Ann Lin's analysis gives us a theoretical model to understand and minimize the barriers to successful in-prison programming and to providing an opportunity to bring community providers into the institution. If administrators can promote a culture which embraces prison programs that promote prison order, the tension between the guards, on the one hand, and the educators, psychologists, doctors, and counselors on the other, may be minimized.

V. Involving Families While Prisoners Are Still in Prison.

One of the dimensions that we outlined in our skill set taxonomy was interpersonal skills. This includes the prisoner's interaction with family and children. In order to understand the scope of the problem when it comes to incarcerated parents and their children, we first review

the data that is available, mostly from a Bureau of Justice Statistics report. We then examine the few studies that evaluate parenting programs and discuss an article in which the authors tried to lay out some of the parenting issues, especially as they apply to incarcerated men.

The Role of Families

According to a Special Report from the Bureau of Justice Statistics (Mumola, 2000), in 1999 of the Nation's 72 million minor children, 2.1 percent had a parent in a State or Federal prison. This represented 721,500 parents (667,900 fathers and 53,600 mothers), and about 1.5 million children. These data were based on the 1997 Survey of Inmates in State and Federal Correctional Facilities. Only 23 percent of parents in State prison were married at the time of the BJS interview, 28 percent were divorced or separated, and 48 percent had never been married. Among Federal prisoner-parents, 36 percent said they were married, 25 percent divorced or separated, and 38 percent had never been married.

The child's caregiver during their period of incarceration was primarily the child's other parent who was not in prison. However, as one might expect, this was much more true of male incarcerated parents than female prisoners. We have replicated one of the original tables from the BJS report showing who the caregiver for the child was during the parent's imprisonment. This is represented in Table 6. Among State male inmate parents, the child's caregiver was primarily the other parent (89.6 percent), followed by the grandparent (13.3 percent), other relatives (4.9 percent), friends/others (4.9 percent), and foster home or agency (2.4 percent). These numbers do not add up to 100 percent because some inmates reported multiple children living with multiple providers. This pattern of caregiving was similar for Federal male imprisoned parents. For incarcerated women parents, the differences were quite dramatic. The child's caregiver while these women were in prison was primarily the grandparent (52.9 percent for State inmates, 44.9 percent for Federal inmates).

In the month prior to their arrest, 35.6 percent of male State inmate parents and 47.2 percent of male Federal inmate parents claimed they lived with their children. For women these percentages were 58.5 percent (State female parents) and 73.4 percent (Federal female parents) respectively. The BJS report shows that only 19.6 percent of State inmate parents and 32.2 percent of Federal inmate parents lived with their children in a two-parent household.

The BJS survey also assessed the extent to which inmate parents remained in contact with their children during their period of incarceration. Overall, 10.1 percent of the incarcerated parents said they kept in contact with their children on a daily basis; 31.2 percent kept in contact at least once a week; 22.2 percent kept in contact once a month;. 16.1 percent less than once a month; and, 20.4 percent had no contact with their children. The primary method of contact was mail, closely followed by telephone, and least of all by personal contact. Females were more

likely to keep in contact than males, and Federal inmates were more likely to keep in contact than State inmate parents. We have replicated the source of this information from the BJS publication in Table 7. These data provide a glimpse into the compelling need for prison systems to try to enhance the communication between incarcerated parents and their children. The majority of State inmate males (60.3 percent) have very infrequent contact with their children (once a month or less). A large plurality of Federal inmates (42 percent) have infrequent contact with their children. Even among female incarcerated parents, 39.9 percent of State and 30.3 percent of Federal inmates had contact with their children once a month or less. Personal visits, not surprisingly, are not very common. Overall, among all incarcerated parents, 92.6 percent see their children at least once a month or less. In fact, 56.6 percent had never seen their children. A study by Hairston (1995), found that most incarcerated men were not married to, and had no ongoing relationship with, the mother of their children. So we should recognize that part of the problem in the parent-child dyad, especially for men, is that there is no ongoing relationship between the parent and child to foster familial, social support.

Inmate parents, on average, expect to serve 80 months in prison; however, 42.2 percent expected to serve less than 4 years. Because the BJS survey is a cross-section of inmates, the data emphasize longer sentences because prisoners with shorter lengths of stay move through the system more quickly. Nonetheless, there were 20.2 percent of incarcerated parents who expected to serve at least 10 years in prison, typically having limited contact with their children as they mature into adults. Furthermore, there is some indication that the incarcerated parents have to have their own needs attended to as well. Over 75 percent had reported a prior conviction, 56 percent a prior incarceration, 58.1 percent reported using drugs in the month before their arrest, and 33.6 percent reported using drugs at the time of their arrest. Non-parents were slightly less likely to report using drugs. Mothers reported more serious drug use than fathers and were more likely to commit a crime to acquire drugs. There were 29 percent of females and 19.0 percent of males reporting intravenous drug use and 32.2 percent of women and 18.5 percent of men claimed they committed an offense to acquire money for drugs. Furthermore, 25 percent of incarcerated parents reported behavior consistent with a history of alcohol dependence. To further emphasize the needs of these parents, the BJS data indicate that 70.9 percent were employed in the month prior to their arrest, 46 percent reported income of at least $1,000 in the month prior to their arrest (mostly wages, or transfer payments -- 72.8%, but also illegal sources – 27.2%) , and 9.2 percent has been homeless in the last year (women more than men).

To summarize these data, it appears that there are quite a few incarcerated parents, whose child's welfare, if they are a man, depends on the other parent, and whose welfare depends primarily on the grandparents, if they are a woman. Their contact with their children is limited, especially for men. Their financial resources are meager, and their skill deficits are great. In addition to attending to their individual skill deficits, many correctional systems offer parenting programs. Unfortunately there is no evidence that we are aware of that shows what proportion of

inmate parents are able to participate in these programs. There is also no meta-analysis that indicates the degree to which the programs that promote parenting or normative family interaction demonstrate effects on the parent-child relation, the parent, or the child. There is no meta-analysis that we could locate that showed the effect of parenting on post-release recidivism much less the quality of the parent child interaction. There is evidence that marital stability and family relationships decrease the likelihood of post-release recidivism and desistance from crime (Harer, 1987; Laub, Nagin, and Sampson, 1998; Pelissier, B.,Wallace, S., O'Neil, J. A., Gaes, G. G., Camp, S., Rhodes, W., and Saylor, W.G., 2000; Rhodes, W., Pelissier, B., Gaes, G. G., Saylor, W., Camp, S., and Wallace, S., 2001). But few studies focus on the effect of parenting programs on the post-release outcomes of the incarcerated parents.

We found a few studies and two reviews of the in-prison parenting programming literature (Lanier, 2001; Magaletta and Herbst, 2001). Marsh, (1983) found that a parenting program in the Idaho State Correctional Institution improved parent communication and child management. Hairston and Lockett (1987) examined a parenting intervention intended to reduce neglect and abuse of children after the incarcerated parent's release. However, the authors were unable to establish whether there was any program effect. Lanier and Fisher (1990) described a parenting program based on support meetings, seminars, and a parenting education course; however, the program collapsed before it could be evaluated. Genisio (1996) used anecdotal reports to demonstrate that a book-reading program to improve the relationships between father and child was a success. Harrison (1997) found that parent training led to improved child-rearing attitudes. Landreth and Lobaugh (1998) evaluated "filial therapy" effects. These researchers found that the intervention resulted in a greater acceptance by their children than control group fathers. The intervention group fathers had fewer problems with their child's behavior and the self-concepts of these children were significantly higher. Wilczak and Markstrom (1999) investigated the impact of parenting education on self-reported measures of satisfaction and knowledge.

Magaletta and Herbst (2001) discuss the chaotic family structure of many incarcerated men. They take a psychological, therapeutic perspective that focuses on the father and the child. They also offer practical suggestions on improving the quality and amount of contact through the use of videotapes and televideo. These authors caution, however, that televideo interactions can benefit from structure just as a contact visit should be structured. Magaletta and Herbst refer to resources that are already available to enhance these remote kinds of visits including letter writing. These authors also point out that families may hide bad news from the incarcerated parent to avoid further distress. Yet, the incarcerated parent eventually learns of the news often in a distorted fashion and the communication may be more distressing in its filtered form. Magaletta and Herbst (2001) suggest a four step process based on cognitive skills that help address some of the problems that arise between incarcerated parents and their children summarized as admission/grieving, confrontation/disclosure, forgiveness/reconciliation, and restoration/healing.

It appears that what little evidence there is supports the effectiveness of parenting programs in improving the parent child relationship for those that can participate. However, while there are theoretical reasons to expect that the enhancement of the parent role should increase the parent's post-release success, there is no systematic evidence to support that supposition. In fact, there is no assessment either of the extent to which such programming is available, or the level of prisoner participation. While parenting is an effort to bring the inmate's family into the institution, there is also a role for bringing other resources from the community into the prison. At the same time corrections officials and inmates must be looking forward to preparation for release, corrections officials and the community service providers must be looking backward from the community context into the institution.

VI. A Self Help Model and an Agenda for Future Theory and Research

A Self Help Model of Behavior

If there is a prerequisite skill among all of the skills, it is the concept of accountability. We defined this as assuming responsibility for one's own behaviors and recognizing and accepting the short-term and long-term consequences of one's actions. We define this as a skill, even though it may be more appropriately thought of as a requisite disposition. This extends to health care as well. To the extent inmates can be taught to monitor their own health and become informed citizens in their own care and maintenance, this encourages the formation of a disposition to pursue a life style that is inconsistent with substance abuse and other deleterious habits and behaviors. Furthermore, by making the inmate an advocate of his or her health maintenance, we encourage inmates to link to community resources and community providers. Within the context of health decisions, the inmate can enhance the quality of his or her own health care by becoming an informed resource for the community health care provider. This may extend to other positive life style choices. We call this the "Self Help" model of behavior.

The "Self Help" model is also consistent with a strength-based reentry philosophy (Maruna and Lebel, 2001) which emphasizes the individual as an asset to his or her community. Maruna and Lebel (2001) contrast the strength-based model to the current themes of supervision/control and welfare/service. According to the control/service model (Maruna and Lebel refer to this as a narrative), the inmate builds his skills under the direction and supervision of service provision agents while he or she is being monitored by control agents. The control agents are security officers inside of prison and probation or parole officers under post-release supervision. However, Maruna and LeBel characterize these approaches as contradictory, or incompatible. The supervision/welfare model locates the locus of responsibility on those monitoring the inmates behavior and those providing treatment or services. The strength-based model locates the locus of control in the individual. According to Maruna and LeBel (2001), the message of the

needs model is "You have problems and need our help." While the message of the strengths model is "You are needed in your community." (Maruna and LeBel, 2001, p. 16). The reason Maruna and LeBel argue that these two models are incompatible is that the essential problem ex-offenders face on reentry is the stigma associated with the conviction. Skill deficits or needs defined by social control agents, according to this approach, reinforce that stigmatization.

Without trying to referee the choice of one model over the other, we see components of both models as important. The control/service model says the community and agents of control have a plan for reintegration that recognizes the offender's strengths and weaknesses. The strength-based model recognizes the potential contribution the ex-offender can make to the community.

Future Directions for Assessment and Interventions

As the "What Works" literature has re-emerged, resurrected by meta-analyses of program evaluations (Cullen and Gendreau, 2001; MacKenzie, 2000), we should recognize the limitations of this orientation to the psychology of criminal behavior (Andrews and Bonta, 1998). There is plenty of room for further development of theories based upon a psychological model to improve assessment and enhance programs. But this work ought to be embedded within a broader framework that recognizes social context. The work by Laub and Sampson (2001), Uggen and Massoglia (2001), Bushway, Piquero, Broidy, Cauffman, and Mazerolle (2001), and Nagin (1999) on the life course of criminality is an exciting step in that direction. Desistance from criminality is recognized as the process by which the individual begins and ends a criminal career. That career can be very brief or quite long. Moffit's (1993) theory of "adolescent limited" and "life course persistent" criminality is one step in the recognition of a developmental theory that includes psychology and social context. We envision future theoretical developments that integrate a taxonomy of skill deficiencies with a developmental theory of how these deficiencies arise, a life course model of how propensity can change over time, and an understanding of the social institutions and other social contexts that make this possible. There is a great deal of work yet to do on these theoretical developments at the same time other criminal justice researchers try to figure out how to change policy and make successful reintegration work.

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Table 1. Definitions of Individual Skill Sets

Re-Entry Skills	Definitions/Outcomes
Academic Skills	Participates and progresses in educational activities commensurate with ability and occupation to serve as foundational skills for other re-entry skills. Reads, writes and utilizes basic arithmetic at a level necessary to function in a correctional environment and in society.
Vocational Skills/ Correctional Work	Acquires and maintains employment in order to fulfill financial obligations, engage in purposeful activity, develop abilities useful in the acquisition and maintenance of post-release employment and pursuit of career goals.
Interpersonal Skills (Parenting, Normative Relationships)	Relates appropriately and effectively with staff, peers, visitors, family, coworkers, neighbors, and members of the community observing basic social conventions and rules. Maintains healthy family and community ties. Avoids negative interpersonal influences.
Leisure Time Skills	Engages in meaningful recreational activities and hobbies making positive use of free time and facilitating stress management and favorable peer affiliations.
Cognitive Skills	Engages in accurate self-appraisal and goal setting. Solves problems effectively, maintains self-control and displays pro-social values.
Spirituality/Ethical Skills	Displays capacity for self-reflection and consideration of meaning in life in relation to a particular faith or personal philosophy.
Daily Living Skills	Displays independent living skills commensurate with institution or community opportunities to include maintenance of a clean residence, a responsible budget to include a savings account, meal preparation, appropriate personal hygiene and appearance and proper etiquette. Obtains and maintains a legal residence and any necessary transportation. Obeys institution rules and regulations and local, state and federal laws.
Wellness Skills "Self-Help Model"	Maintains physical well-being through health promotion and disease prevention strategies such as a healthy lifestyle and habits and routine medical care. Obtains necessary treatment for acute and chronic medical conditions.
Mental Health Skills (Substance Abuse, Sexual Predation)	Maintains sound mental health through avoidance of substance abuse/dependence and other self-destructive behaviors and through use of effective coping techniques. Participates in appropriate medication and/or treatment regime as necessary to address any acute or chronic mental health issues.
Accountability Skills	Assumes responsibility for own behaviors. Recognizes and accepts the short-term and long-term consequences of actions.

Table 2. The Relationship Between Skill Sets and Post-Release Success/Failure

Re-Entry Skills	**Predictors of Recidivism (Bold Indicates Dynamic Risk Predictors Others are Static Predictors)**
Academic Skills	Lack of Education or Employment Skills (67 studies, average r = .18) Intellectual Functioning (32 studies, average r = .07)
Vocational Skills/ Correctional Work	Lack of Education or Employment Skills (67 studies, average r = .18)
Interpersonal Skills (Parenting, Normative Relationships)	Conflicts with Family and Significant Others (28 studies, average r = .15) Parent or Sibling Criminality (35 studies, average r = .12) Family Rearing Practices (31 studies, average r = .15) Separation from Parents, Broken Home (41 studies, average r = .10)
Leisure Time Skills	Identification/ Close relationship with Criminal Peers (27 studies, average r = .18)
Cognitive Skills	Attitudes Supportive of a Criminal Lifestyle (67 studies, average r = .18) Anti-social Personality (63 studies, average r = .18) Identification/ Close relationship with Criminal Peers (27 studies, average r = .18) Adult Criminal History and Prison Misconduct (64 studies, average r = .18) History of Antisocial Behavior Prior to Adulthood (119 studies, average r = .13)
Spirituality/Ethical Skills	
Daily Living Skills	
Wellness Skills	
Mental Health Skills	Anxiety, Depression, Neuroticism, Psychiatric Symptomatology (66 studies, average r = .05) Substance Abuse (60 studies, average r = .14)
Accountability Skills	Attitudes Supportive of a Criminal Lifestyle (67 studies, average r = .18) Anti-social Personality (63 studies, average r = .18) Adult Criminal History and Prison Misconduct (64 studies, average r = .18) History of Antisocial Behavior Prior to Adulthood (119 studies, average r = .13)

Table 3. The Relationship Between Interventions Designed to Address Specific Skill Sets and Post-Release Success/Failure.[1]

Re-Entry Skills	Meta-Analyses Results
Academic Skills	Wilson, David B., Catherine A. Gallagher, and Doris L. MacKenzie (2000) For the adult basic education and General Equivalency Diploma programs, the odds were 1.44 and the contrast between program and comparison groups was 41 percent versus 50 percent Post-secondary education, odds = 1.74, program = 37 percent, comparison = 50 percent Pearson, Frank S. and Douglas S. Lipton (1999) Literacy Training/Reading Education, 4 studies, r=.06, Not Significant, Authors conclude that one cannot do a credible test of these programs until better studies are done Literacy and GED studies, 8 studies, r=.10, program = 45 percent, comparison = 55 percent College Course Work, 12 studies, r =.03, No Effect Aos et al., 2001 In-Prison Adult Basic Education, 3 studies, effect size = .11
Vocational Skills	Wilson, David B., Catherine A. Gallagher, and Doris L. MacKenzie (2000) Vocational training, odds = 1.55, program = 39 percent, comparison = 50 percent Aos et al., 2001 In-Prison Vocational Education, 2 studies, effect size = .13, program = 43.5 percent, comparison = 56.5 percent
Correctional Work (Job Training, Job Seeking, Job Placement Programs)	Wilson, David B., Catherine A. Gallagher, and Doris L. MacKenzie (2000) Correctional work, odds = 1.48, program = 40 percent, comparison = 50 percent; and multi-component/other, odds = 1.39, program = 43 percent, comparison = 50 percent. The weighted odds ratios were not significantly different from zero. But there were only 4 comparisons in the correctional work category and 5 comparisons in the multi component/other category Aos et al., (2001) Correctional Industries Programs, 3 studies, effect size = .08, program = 46 percent, comparison = 54 percent Pearson, Frank S. and Douglas S. Lipton (1999) Job Seeking and Job Training programs, 26 studies, r=.03, Not Significant
Interpersonal Skills (Parenting, Normative Relationships)	The cognitive skills results should apply here; however, no meta-analyses on parenting or deganging programs)
Leisure Time Skills	
Cognitive Skills	Wilson, David B., Leana C. Allen, and Doris L. Mackenzie (2000) Avg. Effect Size d=.36. This means that the treatment group recidivates at about 36 percent and the comparison group at 50

Re-Entry Skills	Meta-Analyses Results
	percent.
Spirituality/Ethical Skills	No meta-analysis to date. Several studies have been conducted; however, they are rather methodologically weak.
Daily Living Skills	
Wellness Skills	
Mental Health Skills	Gallagher, Catherine A., David B. Wilson, and Doris L. MacKenzie (2001) Sex offender studies: found 22 studies having 25 independent effect sizes, avg. d=.43. The treatment group on average had a sexual recidivism rate at about 12 percent and the comparison group at 22 percent. Aos et al., 2001 Cognitive-Behavioral Sex Offender Treatment, 7 studies, effect size = .11, program = 44.5 percent, comparison 55.5 percent Pearson, Frank S. and Douglas S. Lipton (1999) Drug abuse studies: only the TC average effect size reached significance. The average correlation was .13. This translates to a failure rate of 43.5 percent for TC treatment groups and 56.5 percent for comparison groups. Outpatient counseling and boot camp drug treatments were not effective Aos et al., 2001 In-Prison Therapeutic Community, With Community Aftercare, 11 studies, effect size = .08, program = 46 percent, comparison = 54 percent In-prison Non-Residential Substance abuse Treatment, 5 studies, effect size = .09, program = 45.5 percent, comparison = 54.5 percent
Accountability Skills	

1. This re-entry skills table has been reformatted to included the results of meta-analyses into the table. The effects sizes have been represented in their original format as well as the percentage recidivating during the post-release period. Effect sizes are typically represented as correlations (r), the difference in means measured in standard deviation units (Cohen's d), and in odds ratios.

Table 4. Results from the Aos et al, cost benefit analysis.

	Number of Program Effects in the Statistical Summary	Average Effect Size (Positive Effect Size Means Lower Crime)	95% Confidence Intervals (Table VI-A) Confidence Interval Spans 0 = Y, or Negative Impact of Program = Y		Homogeneity Test Q (Table VI-A) * signifies P<.05 indicating heterogeneity	Net Direct Cost of the Program Per Participant (Table I)	Net Benefits Per Participant (i.e. Benefits minus Costs) (Table I)	
							Lower End of Range: Taxpayer Benefits Only	Upper End of Range: Taxpayer and Crime Victim Benefits
Juvenile Offender Programs								
Specific "Off the Shelf" Programs								
Multi-Systemic Therapy	3	0.31	.111 to .517		1.91	$4,743	$31,661	$131,918
Functional Family Therapy	7	0.25	.067 to .442		2.31	$2,161	$14,149	$59,067
Aggression Replacement Training	4	0.18	-.097 to .457	Y	0.26	$738	$8,287	$33,143
Multidimensional Treatment Foster care	2	0.37	-.006 to .746	Y	0.14	$2,052	$21,836	$87,622
Adolescent Diversion program	5	0.27	.133 to .413		16.8*	$1,138	$5,720	$27,212
General Types of Treatment Programs								
Diversion with Services(vs. regular juvenile court processing)	13	0.05	.006 to .090		3.24	-$127	$1,470	$5,679
Intensive Probation (vs. Regular probation caseloads)	7	0.05	-.073 to .168	Y	4.28	$2,234	$176	$6,812
Intensive Probation (as alternative to incarceration)	6	0.00	-.095 to .099	Y	4.89	-$18,478	$18,586	$18,854
Intensive Parole Supervision (vs. Regular parole caseloads)	7	0.04	-.075 to .156	Y	4.20	$2,635	-$117	$6,128
Coordinated Services	4	0.14	-.048 to .326	Y	1.66	$603	$3,131	$14,831
Scared Straight Type Programs	8	-0.13	-.249 to -.007	Y	6.38	$51	-$6,532	-$24,531
Other Family-Based Therapy Approaches	6	0.17	.031 to .200		.06	$1,537	$7,113	$30,936
Juvenile Sex Offender Treatment	5	0.12	-.081 to .328	Y	2.76	$9,920	-$3,119	$23,602
Juvenile Boot Camps	10	0.10	-.181 to -.018	Y	16.88*	-$15,424	$10,360	-$3,587
Adult Offender Programs								
Adult Offender Drug Treatment Programs (compared to no								

	Number of Program Effects in the Statistical Summary	Average Effect Size (Positive Effect Size Means Lower Crime)	95% Confidence Intervals (Table VI-A) Confidence Interval Spans 0 = Y, or Negative Impact of Program = Y		Homogeneity Test Q (Table VI-A) * signifies P<.05 indicating heterogeneity	Net Direct Cost of the Program Per Participant (Table I)	Net Benefits Per Participant (i.e. Benefits minus Costs) (Table I)	
							Lower End of Range: Taxpayer Benefits Only	Upper End of Range: Taxpayer and Crime Victim Benefits
treatment)								
In-Prison Therapeutic Community, No Community Aftercare	5	0.05	-.043 to .138	Y	1.27	$2,604	-$899	$2,365
In-Prison Therapeutic Community, With Community Aftercare	11	0.08	.031 to .128		5.77	$3,100	-$243	$5,230
Non-Prison TC (as addition to an existing community residential facility)	2	0.17	-.021 to .363	Y	0.18	$2,013	$4,110	$15,836
In-prison Non-Residential Substance abuse Treatment	5	0.09	.024 to .153		2.94	$1,500	$1,672	$7,748
Drug Courts	27	0.08	.032 to .119		23.08	$2,562	-$109	$4,691
Case Management Substance Abuse Programs	12	0.03	-.021 to .089	Y	37.14*	$2,204	-$1,050	$1,230
Community-Based Substance Abuse Programs	3	0.07	-.024 to .169	Y	1.09	$2,198	$237	$5,048
Drug Treatment Programs in Jails	7	0.05	-.05 to .145	Y	4.21	$1,172	$373	$3,361
Adult Sex-Offender Treatment Programs								
Cognitive-Behavioral Sex Offender Treatment	7	0.11	.013 to .200		3.11	$6,246	-$778	$19,354
Adult Offender Intermediate Sanctions								
Intensive Supervision (Surveillance Oriented)	19	0.03	-.032 to .097	Y	19.5	$3,296	-$2,250	-384
Intensive Supervision (Treatment Oriented)	6	0.10	-.004 to .212	Y	0.37	$3,811	-$459	$5,520
Intensive Supervision: Diversion from Prison	3	0.00	-.153 to .162	Y	1.41	-$5,925	$6,083	$6,386
Adult Boot Camps	11	0.00	-.058 to .062	Y	4.64	-$9,725	$9,822	$10,011
Adult Boot Camps–As partial diversion from prison	11	0.00	–		--	-$3,380	$3,477	$3,666
Cognitive-Behavioral Programs								
Moral Reconation Therapy	8	0.08	-.012 to .167	Y	4.44	$310	$2,471	$7,797

	Number of Program Effects in the Statistical Summary	Average Effect Size (Positive Effect Size Means Lower Crime)	95% Confidence Intervals (Table VI-A) Confidence Interval Spans 0 = Y, or Negative Impact of Program = Y		Homogeneity Test Q (Table VI-A) * signifies P<.05 indicating heterogeneity	Net Direct Cost of the Program Per Participant (Table I)	Net Benefits Per Participant (i.e. Benefits minus Costs) (Table I)	
							Lower End of Range: Taxpayer Benefits Only	Upper End of Range: Taxpayer and Crime Victim Benefits
Reasoning and Rehabilitation	6	0.07	-.011 to .159	Y	3.15	$308	$2,202	$7,104
Other Programs								
Work Release Programs (vs. In-prison incarceration)	2	0.03	-.184 to .237	Y	0.58	$456	$507	$2,351
Job Counseling/Search for Inmates Leaving Prison	6	0.04	-.006 to .084	Y	4.03	$772	$625	$3,300
In-Prison Adult Basic Education	3	0.11	0.00 to .214		0.39	$1,972	$1,852	$9,176
In-Prison Vocational Education	2	0.13	.061 to .207		.02	$1,960	$2,835	$12,017
Correctional Industries Programs	3	0.08	.045 to .124		2.18	$1,800	$1,147	$9,413

Table 5. Summary information on disease among inmates from "The Health Status of Soon-To-Be-Released Inmates" and other sources.

Disease	Estimates of Prevalence Within Correctional Institutions (CI's), Both Prisons and Jails and Among Inmates Who Have Been Released	Relation to U.S. Population
Communicable Disease (see notes 1, 2, and 3)		
"Selected Communicable Diseases"		In 1996, 3% of U.S. population spent time in a CI; however, 12 to 35 percent of total number of people with these selected communicable diseases in the U.S. passed through a CI during 1996
AIDS	Prevalence in Prisons & Jails: 0.5 %; 8,900 inmates with AIDS in CI's	Prevalence in U.S. Population: 0.9%; 229,000 individuals. Released inmates in 1996, represented 17% of all 229,000 U.S. AIDS patients.
	38,500 inmates released from CI's with AIDS	
HIV	Prevalence in Prisons: 2.3 to 2.9%; Prevalence in Jails: 1.2 to 1.8%; 35,000 to 47,000 inmates infected within CI's	Prevalence in U.S. Population: 0.3%; 750,000 total in U.S. In 1996, Represented 13.1 to 19.3 % of all U.S. HIV positive individuals.
	98,500 to 145,000 HIV-positive inmates released from CI's	
Sexually Transmitted Diseases (Syphilis, Chlamydia, Gonorrhea)	Prevalence of Syphilis in Prisons and Jails:2.6 to 4.3%; Prevalence of Chlamydia in Prisons and Jails:2.4%; Prevalence of Gonorrhea in Prisons and Jails:1.0%; 107,000 to 137,000 infected with STD's inside CI's	
	465,000 to 595,000 inmates released from CI's	
Current or Chronic Hepatitis B Infection	Prevalence in Prisons & Jails:2.0%; 36,000 inmates in CI's	In 1996, between 12.4 to 15.5% of all individuals with current or chronic Hepatitis B infection in U.S. spent time in a CI .
	155,000 inmates released from CI's	
Hepatitis C	Prevalence in Prisons & Jails: 17-18.6%; 303,000 to 332,000 inside CI's	In 1996, between 29 to 32% of estimated 4.5 million individuals with Hepatitis C infection in U.S. spent time in a CI
	1.3 to 1.4 million inmates released from CI's	

Disease	Estimates of Prevalence Within Correctional Institutions (CI's), Both Prisons and Jails and Among Inmates Who Have Been Released	Relation to U.S. Population
Tuberculosis (TB) Diseases	Prevalence in Prisons: 0.04%; Prevalence in Jails: 0.17% 1,400 inmates in CI's	In 1996, there were12,200 cases of TB disease among people who had spent time in a CI – represented 35% of active TB cases in the U.S.
	12,000 inmates released from CI's	
Tuberculosis (TB) Infection	Prevalence in Prisons: 7.4%; Prevalence in Jails: 7.3%; 130,000 inmates tested positive for latent TB	
	566,000 inmates released from CI's	
Chronic Disease (see notes 2,3,and 4)		
Asthma	Prevalence:8.5% ; 140,738 cases	Prevalence in Total U.S. Pop.:7.8%
Diabetes	Prevalence: 4.8%; 73,947 cases	Prevalence in Total U.S. Pop.:7.0%
Hypertension	Prevalence: 18.3%; 283,105 cases	Prevalence in Total U.S. Pop.:24.5%
Mental Health (See notes 5,6, and 7)		
Schizophrenia/ Other Psychotic Disorders	Six Month Prevalence, Jails: 1.0-1.1% (4,955-5,589 Inmates) Lifetime Prevalence, State Prisons: 2.3-3.9% (22,994-39,262 Inmates) Lifetime Prevalence, Federal Prisons: 0.8-2.5% (763-2,326 Inmates) Ohio – 1.5%; Calif. – 3.4%; Michigan – 2.8%; Canada – 4.4%	Six Month Prevalence, U.S. Pop: 0.4% Lifetime Prevalence, U.S. Pop: .8% Total ECA – 1.5%[8]
Major Depressions	Six Month Prevalence, Jails: 7.9-15.2% (39,690-76,229 Inmates) Lifetime Prevalence, State Prisons: 13.1-18.6% (132,619-188,259 Inmates) Lifetime Prevalence, Federal Prisons: 13.5-15.7 (12,378-14,363 Inmates) Ohio – 12.7%; Calif. – 7.3%; Michigan – 11.3%; Canada – 13.6%	Six Month Prevalence, U.S. Pop: 8.4% Lifetime Prevalence, U.S. Pop: 18.1% Total ECA – 6.4%
Anxiety Disorders	Six Month Prevalence, Jails: 14.01-20.0% (70,613-100,098 Inmates) Lifetime Prevalence, State Prisons: 22.0-30.1% (222,147-303,936 Inmates) Lifetime Prevalence, Federal Prisons: 18.2-23.0% (16,638-21,079 Inmates)	
	Six Month Prevalence, Jails: 1.5-2.6% (7,755-12,920 Inmates)	Six Month Prevalence, U.S. Pop: 1.0%

Disease	Estimates of Prevalence Within Correctional Institutions (CI's), Both Prisons and Jails and Among Inmates Who Have Been Released	Relation to U.S. Population
Bipolar (Manic) Disorder	Lifetime Prevalence, State Prisons: 2.1-4.3% (21,468-43,708 Inmates) Lifetime Prevalence, Federal Prisons: 1.5-2.7% (1,393-2,475 Inmates) Ohio – 2.8%; Calif. – 2.9%; Michigan – 2.7%; Canada – 1.6%	Lifetime Prevalence, U.S. Pop: 1.5% Total ECA – 1.5%
Post-Traumatic Stress Disorder	Six Month Prevalence, Jails: 4.0-8.3% (19,770-41,509 Inmates) Lifetime Prevalence, State Prisons: 6.2-11.7% (62,388-118,071 Inmates) Lifetime Prevalence, Federal Prisons: 4.9-6.8% (4,466-6,257 Inmates)	Six Month Prevalence, U.S. Pop: 3.4% Lifetime Prevalence, U.S. Pop: 7.2%
Dysthymia (Less Severe Depression)	Six Month Prevalence, Jails: 2.7-4.2% (13,644-21,040 Inmates) Lifetime Prevalence, State Prisons: 8.4-13.4% (85,018-135,121 Inmates) Lifetime Prevalence, Federal Prisons: 6.8-11.6% (6,253-10,652 Inmates) Ohio – NA; Calif. – 3.8%; Michigan – 6.4%; Canada – 7.9%	Six Month Prevalence, U.S. Pop: 2.0% Lifetime Prevalence, U.S. Pop: 7.1% Total ECA – 3.3%
Alcohol Abuse/Dependence	Ohio – NA; Calif. – 55.1%; Michigan – 46.5%; Canada – 47.4%	Total ECA – 2.6%
Drug Abuse/Dependence	Ohio – NA; Calif. – 50.9%; Michigan – NA; Canada – 41.6%	Total ECA – 13.8%

1. Source: The Health Status of Soon-to-Be-Released Inmates, Vol 1, National Institute of Justice, 2001 (Table 4-1). Most of the estimates in this table are from the commissioned paper by Hammett, T.M., P. Harmon, and W. Rhodes. "The Burden of Infectious Diseases Among Inmates and Releasees from Correctional Facilities," paper submitted to the National Commission on Correctional Health Care, Chicago, Illinois, 1999.
2. Communicable disease estimates within prison and jails: applied national prevalence estimates to total number of inmates in prisons and jails on June 30, 1997.
3. Communicable disease estimates among persons released from prisons and jails: applied national prevalence estimates to total number of unduplicated inmates released from prisons and jails during 1996.
4. Source: The Health Status of Soon-to-Be-Released Inmates, Vol 1, National Institute of Justice, 2001 (Table 4-2). Most of the estimates in this table are from the commissioned paper by Hornung, C.A., R.B. Greifinger, and S. Gadre, " A Projection model of the Prevalence of Selected Chronic Diseases in the Inmate Population, paper submitted to the National Commission on Correctional Health Care, Chicago, Illinois, 1999.
5. Source: The Health Status of Soon-to-Be-Released Inmates, Vol 1, National Institute of Justice, 2001 (Table 4-3). Most of the estimates in this table are from the commissioned paper by Veysey, B.M. and G. Bichler-Robertson, "Prevalence Estimates of Psychiatric Disorders in Correctional Settings", paper submitted to the National Commission on Correctional Health Care, Chicago, Illinois, 1999.
6. Estimates for 1995
7. The mental illness estimates for specific state jurisdictions are from Diamond et al., 2000, Table 3.
8. Total ECA Sample refers to the community-based epidemiological study of mental illness, the Epidemiological Catchment Area program (Romins and Reiger, 1991). The sample size for that study was 19,182.

Table 6 Child's Caregiver During the Inmate-Parents Period of Incarceration[1]

Child's Current Caregiver	Percent of Inmate Parents, 1997					
	State			Federal		
	Total	Males	Females	Total	Males	Females
Other parent of Child	85.0%	89.6%	28.0%	87.6%	91.7%	30.7%
Grandparent of Child	16.3	13.3	52.9	12.2	9.8	44.9
Other Relatives	6.4	4.9	25.7	6.2	4.2	33.9
Foster Home or Agency	2.4	1.8	9.6	1.3	1.1	3.2
Friends, Others	5.3	4.9	10.4	6.8	6.4	11.9

1. Source Mumola, 2001 p. 3 Table 4

Table 7. Frequency of telephone, mail, and personal contact with children by parents in State or Federal prison, 1997[1]

Frequency and Type of Contact with Children	Percent of Inmate Parents, 1997					
	State			Federal		
	Total	Male	Female	Total	Male	Female
Any Type of Contact						
Daily or Almost daily	10.1%	9.5%	17.8%	15.1%	14.6%	21.1%
At Least Once a Week	31.2	30.3	42.4	43.7	43.4	48.5
At Least Once a Month	22.2	22.6	18.0	23.8	23.9	22.0
Less Than Once a Month	16.1	16.6	9.7	10.0	10.3	5.0
Never	20.4	21.1	12.2	7.5	7.8	3.3
Telephone						
Daily or Almost daily	6.6%	6.2%	11.3%	13.0%	12.8%	15.0%
At Least Once a Week	19.8	19.2	27.0	36.3	35.9	41.2
At Least Once a Month	16.5	16.6	15.3	23.2	23.1	24.9
Less Than Once a Month	15.4	15.5	13.8	11.3	11.4	9.2
Never	41.8	42.5	32.6	16.2	16.7	9.7
Mail						
Daily or Almost daily	4.8%	4.4%	9.6%	4.3%	3.9%	9.5%
At Least Once a Week	23.2	22.2	35.6	30.4	30.0	35.9
At Least Once a Month	23.1	23.3	20.6	30.4	30.5	27.8
Less Than Once a Month	18.2	18.6	13.2	18.9	19.2	14.5
Never	30.8	31.6	21.0	16.1	16.4	12.3
Personal Visits						
Daily or Almost daily	0.8%	0.7%	1.1%	0.4%	0.3%	0.9%
At Least Once a Week	6.6	6.5	8.0	7.1	7.1	6.6
At Least Once a Month	13.9	13.8	14.7	15.1	15.3	12.0
Less Than Once a Month	22.2	22.2	22.1	33.4	33.0	38.5
Never	56.6	56.8	54.1	44.1	44.2	42.0

1 Source: Mumola, 2000 p. 5, Table 6.