THE IMPORTANCE OF ECOLOGICAL CONTEXT FOR CORRECTIONAL TREATMENT PROGRAMS

By

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THE IMPORTANCE OF ECOLOGICAL CONTEXT FOR

CORRECTIONAL TREATMENT PROGRAMS

Abstract

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The recent resurgence of support for offender rehabilitation as a guiding correctional philosophy has led to an increased emphasis on correctional program integrity. Treatment programs are now being evaluated and tailored in accordance with the principles of effective intervention, and research indicates that treatment program integrity is strongly linked with the magnitude of a program's "treatment effects." What is not known, however, is the extent to which ecological characteristics such as level of concentrated disadvantage influence treatment program quality. The failure to evaluate treatment programs in conjunction with the contexts in which they operate may cause us to miss important structural components associated with "what works" in offender rehabilitation. The present dissertation seeks to fill this gap in the literature by examining the impact of environmental characteristics on treatment program integrity and corresponding success in reducing recidivism.

TABLE OF CONTENTS

ACKNOWLEDGEMENTS	iii
ABSTRACT	iv
LIST OF TABLES	ix
CHAPTERS	
1. STATEMENT OF THE PROBLEM	12
RECIDIVISM IN CONTEXT	16
The Focus on Offender	17
Martinson's Legacy	18
Treatment Integrity	21
Structural Characteristics of Recidivism	25
RESEARCH STRATEGY	29
PLAN OF THE DISSERTATION	31
2. CORRECTIONAL TREATMENT AND MACRO-LEVEL CRIMINOLOGICAL THEORY	22
	55
CORRECTIONAL TREATMENT	35
THE ARRIVAL OF THE PENITENTIARY	39
THE PROGRESSIVE MOVEMENT	42
THE PROFESSIONALIZATION OF REHABILITATION	46
NOTHING WORKS	48
The Failure of Reform	49
The Martinson Study and Fallout	51
WHAT WORKS	55
The Contribution of Meta-Analysis	57
The Principles of Effective Intervention	61
The Correctional Program Assessment Inventory	61
	04

MACRO-LEVEL CRIMINOLOGICAL THEORY	69
THE RISE AND FALL OF ECOLOGICAL THEORY	72
THE RESURGENCE OF MACRO-LEVEL CRIMINOLOGICAL THEORY	77
New Models	79
New Paths	82
New Variables	85
THE ECOLOGICAL CONTEXT OF RECIDIVISM	89
The Effect of Individuals on Communities	92
The Effect of Communities on Individuals	93
THE SYSTEMIC MODEL OF CRIME AND OFFENDER REHABILITATION	N 96
CONCLUSIONS	100
RESEARCH METHODS	103
THE CURRENT STUDY	104
DATA	106
Structural Characteristics in Nonmetropolitan Areas	110
MEASURES	111
Program Ouality	111
Program Implementation	112
Client Pre-Service Assessment	113
Program Characteristics	115
Staff Characteristics	117
Evaluation	119
Other	121
Total CPAI	122
Program Effectiveness	124
Structural Characteristics	130
Concentrated Disadvantage	131
Concentrated Affluence	132
Concentrated Immigration	136
Residential Stability	136
Change Scores	137
ANALYTIC STRATEGY	140

3.

4.	RESULTS	143
	THE IMPACT OF STRUCTURAL CHARACTERISTICS ON PROGRAM	
	EFFECTIVENESS	144
	1990 Census Figures	145
	Change Scores	148
	Direct Effect Conclusions	152
	THE IMPACT OF STRUCTURAL CHARACTERISTICS ON PROGRAM	
	INTEGRITY	153
	1990 Census Figures	154
	Change Scores	157
	WLS Regression Models	161
	Indirect Effect Conclusions	168
	THE IMPACT OF PROGRAM INTEGRITY ON PROGRAM EFFECTIVEN	ESS
	ACROSS DIFFERENT CONTEXTS	169
	1990 Census Figures	170
	Interaction Effect Conclusions	175
	QUALITATIVE ANALYSIS OF FOUR PROGRAMS	176
	ALTERNATIVES AGENCY	179
	Program Characteristics	179
	CPAI Characteristics	181
	County Characteristics	182
	Conclusions	185
	HARBOR LIGHT	186
	Program Characteristics	187
	CPAI Characteristics	188
	Conclusion	188
	Comparison between Alternatives Agency and Harbor Light	189
	VETERAN'S HALL	191
	Program Characteristics	192
	CPAI Characteristics	193
	County Characteristics	193
	Conclusion	195
	BOOTH HOUSE	197
	Program Characteristics	197

CPAI Characteristics	
County Characteristics	199
Conclusion	202
Comparison between Veteran's Hall and Booth House	
CONCLUSION	205
5. CONCLUSIONS	209
OFFENDER REHABILITATION IN A MACRO-LEVEL CONTEXT	212
Place Matters	213
Structural Characteristics and Institutional Efficacy	
The Importance of Ecological Change	219
Unexpected Findings	221
IMPLICATIONS FOR THEORIES OF CRIME AND CORRECTIONS	226
IMPLICATIONS FOR FUTURE RESEARCH	
POLICY IMPLICATIONS	
Criminal Justice Policy Initiatives	
Social Policy Initiatives	
REFERENCES	
APPENDICES	
A. PROGRAM DIRECTOR QUESTIONNAIRE	274
B. PROGRAM DIRECTOR INTERVIEW	
C. ABBREVIATED CPAI	
D. DEFINITIONS OF CPAI ITEMS	

LIST OF TABLES

Table 3.1. Descriptive Statistics, Correlations, and Alpha Reliabilities for CPAI Program Implementation Items 114
Table 3.2. Descriptive Statistics, Correlations, and Alpha Reliabilities for CPAI Pre-Service Client Assessment Items116
Table 3.3. Descriptive Statistics, Correlations, and Alpha Reliabilities for CPAI Program Characteristics Items
Table 3.4. Descriptive Statistics, Correlations, and Alpha Reliabilities for CPAI Staff Characteristics Items. 120
Table 3.5. Descriptive Statistics, Correlations, and Alpha Reliabilities for CPAIEvaluation Items120
Table 3.6. Descriptive Statistics, Correlations, and Alpha Reliabilities for CPAI Other Items 123
Table 3.7. Descriptive Statistics, Correlations, and Alpha Reliabilities for CPAI Total Score (33 items)
Table 3.8. Descriptive Statistics for Treatment and Comparison Groups
Table 3.9. Descriptive Statistics for Treatment Effect 126
Table 3.10. Logged Odds Ratios and Weights 129
Table 3.11. Descriptive Statistics for 1990 Structural Variables
Table 3.12. Factor and Reliability Analysis of Structural Measures – (N = 38)
Table 3.13. Factor and Reliability Analysis of Structural Measures – (N = 37)
Table 3.14. Descriptive Statistics for 2000 Structural Variables
Table 3.15. Descriptive Statistics for Change Score Variables 139
Table 4.1. Correlations Between Treatment Effects and Disadvantage/Affluence Indicators, 1990 Census
Table 4.2. Correlations Between Treatment Effects and Immigration/Stability Indicators,1990 Census147

Table 4.3.Correlations Between Treatment Effect and Disadvantage/AffluenceIndicators, Change Scores
Table 4.4.CorrelationsBetweenTreatmentEffectsandImmigration/StabilityIndicators, Change Scores149
Table 4.5. Correlations Between CPAI and Disadvantage/Affluence Indicators, 1990 Census 155
Table 4.6. Correlations Between CPAI and Immigration/Stability Indicators, 1990 Census 155
Table 4.7. Correlations Between CPAI and Disadvantage/Affluence Indicators, Change Scores 159
Table 4.8. Correlations Between CPAI and Immigration/Stability Indicators, Change Scores 159
Table 4.9. Weighted Least Squares Regression of Treatment Effects on Change in Foreign Born (N = 38)
Table 4.10. Weighted Least Squares Regression of Treatment Effects on Change in Foreign Born (N = 37)
Table 4.11. Weighted Least Squares Regression of Treatment Effects on Change in Foreign Born (N = 38)
Table 4.12. Weighted Least Squares Regression of Treatment Effects on Change in Foreign Born (N = 37)
Table 4.13. Weighted Least Squares Regression of Treatment Effects on Change in Affluent Families (N = 38)
Table 4.14. Weighted Least Squares Regression of Treatment Effects on Change in Affluent Families (N = 37)
Table 4.15. Weighted Least Squares Regression of Treatment Effects on InteractionBetween CPAI and % Foreign Born (N = 38)171
Table 4.16. Weighted Least Squares Regression of Treatment Effects on InteractionBetween CPAI and % Foreign Born (N = 37)171
Table 4.17. Weighted Least Squares Regression of Treatment Effects on InteractionBetween CPAI and Immigration Index (N = 38)173

Table 4.18.	Weighted Least Squares	Regression	of Treatment	Effects on	Interaction
Between CP	AI and Immigration Index	(N = 37)			
	C C				
Table 4.19.	Weighted Least Squares	Regression	of Treatment	Effects on	Interaction
Between CP	AI and % Black (N = 37)				
Table 4.20. F	ive Strongest Correlates of	Treatment E	Effect from the	CPAI	

CHAPTER 1

STATEMENT OF THE PROBLEM

Over the last several decades, correctional policy in the United States has been guided primarily by the assumption that engaging in criminal behavior is an individual Rational choice and deterrence-based theories of crime have served as the choice. guiding paradigms for a criminal justice system intent on making the pains of criminal behavior outweigh the pleasures (Cullen, Pratt, Levrant, & Moon, 2002). Such a philosophy has led to the promotion of fear and punishment-oriented programs in addition to an unprecedented reliance on incarceration as a source of formal control. This focus on the individual has not, however, been limited to conservatives and those in favor of a punitive corrections system. A reemergence of support for correctional rehabilitation has also placed emphasis on understanding the individual correlates and risks associated with criminal behavior (Andrews, Zinger, et al., 1990a; Gendreau, Little, & Goggin, 1996). Accordingly, correctional interventions have reinforced the idea that crime is either a result of faulty decision making or individual pathologies – or both. The corresponding programs therefore concentrate on reforming the individual, with the social and community contexts that he or she will be returning to being regarded as empirically unimportant (Andrews & Bonta, 2003).

The problem with this hyper-individualistic understanding of criminal behavior (and its corresponding rectification) is that it is inconsistent with the growing level of

12

empirical support for macro-level explanations of crime in recent years (Kubrin & Weitzer, 2003; Pratt & Cullen, 2005). As but one example, social disorganization theory in particular has been expanded in a variety of different directions since the classic work of Shaw and McKay (1942). The relationship between structural characteristics and crime/disorder has been found to work through measures of general strain (Agnew, 1999), cognitive ability (McGloin & Pratt, 2003), the presence of male role models (Parker & Reckdenwald, 2008), definitions favorable to crime (Heimer, 1997), the level and form of neighborhood organization (Elliott, et al., 1996; Simcha-Fagan & Schwartz, 1986), neighborhood cohesion (Bursik, 1999; Markowitz, Bellair, Liska, & Liu, 2001; c.f. Warner & Rountree, 1997), unsupervised teen groups (Lowenkamp, Cullen, & Pratt, 2003; Sampson & Groves, 1989; c.f. Veysey & Messner, 1999), levels of self-control (Pratt, Turner, & Piquero, 2004), and level of social interaction with neighbors (Bellair, 1997). To be sure, a recent meta-analysis of 214 studies producing a total of 1,984 effect size estimates found strong support for theories based in the social disorganization and resource/economic deprivation traditions (Pratt & Cullen, 2005). In short, macro theories of crime play an important, if not prominent, role in explaining why individuals engage in crime through a variety of routes. Why is it, then, that these theories do not play a larger role in explaining why criminals *re*-offend?

To date, the bulk of the literature concerning why offenders continue or change their criminal ways is indeed focused at the individual level. Much of the desistance literature focuses on the ability of ex-offenders to invoke human agency in refraining from further criminal behavior (Laub & Sampson, 2003; Maruna, 2001). In this perspective, ex-offenders are able to look at their life history and quality of life and make the decision, on their own, that a conventional life promises a better future for themselves and their family. Research that does highlight the need for correctional intervention in the desistance process also emphasizes the individual in this transformation (Andrews, Zinger, et al., 1990a).

The renewed interest in the rehabilitation of offenders has been buoyed primarily by an understanding of the individual-level correlates of crime. In their theory of the psychology of criminal conduct, Andrews and Bonta (2003) identified what they refer to as the "Big Four" risk factors toward criminal behavior: antisocial attitudes, antisocial associates, antisocial personality and a history of antisocial behavior.¹ In what has been dubbed the "Canadian school of thought," these principles have been used to identify the components of appropriate treatment (Andrews et al., 1990). In particular, programs that attend to criminological needs based on the four factors mentioned above are likely to be successful. This is especially true for programs aimed at high-risk offenders, and for those that administer these treatments under the auspices of a social learning approach to behavior modification. These "principles of effective intervention" provide a blueprint for the creation of successful treatment programs (Gendreau, 1996). It is readily apparent, therefore, that the current

¹ Later editions would expand this to the "Big Eight" and include problems with family, problems with work or school, problems in adequately using leisure time, and substance abuse.

knowledge on successful offender treatment is largely informed by psychological principles and individual-level correlates of crime. Programs that are said to be high in treatment integrity—that is, they follow the principles of effective intervention—are more likely to produce sizeable reductions in recidivism (Lipsey & Cullen, 2007; Lowenkamp & Latessa, 2004, 2005b; Lowenkamp, Latessa, & Holsinger, 2006; Lowenkamp, Latessa, & Smith, 2006).

It is important to acknowledge that these are *treatment* theories, and not necessarily criminological theories (Cullen, Smith, Lowenkamp, & Latessa, 2009). Thus, these theories are not guilty of being reductionist in ignoring the macro-level correlates of crime. Great strides have been made in the rehabilitation and treatment literature over the last thirty years, and several benefits could be derived from making rehabilitation corrections' guiding paradigm (Cullen, 2007). Nevertheless, it is unwise to divorce theories of crime causation from theories of crime correction. Failure to place offender change in a broader criminological context can negatively impact current treatment knowledge in two major and complementing ways. First, treatment programs that are deemed effective in terms of reduced recidivism may be hastily substantiated. That is, ecological characteristics of an area may be driving success at the program level, and replication in dissimilar contexts may result in less than satisfactory results. Second, treatment programs that are deemed ineffective in terms of reduced recidivism may be hastily discarded. Ecological characteristics may be responsible for

increased recidivism even if those characteristics go unrecognized by the theory guiding the program.

RECIDIVISM IN CONTEXT

The use of recidivism rates is but one way to evaluate treatment program effectiveness. Other indicators such as the percent of offenders who complete the program or the percent of offenders who secure employment upon program completion could also provide valuable information about the effectiveness of certain treatment program modalities. Still other measures could indicate the program's impact on the community (e.g., reduced crime rates) or on the corrections industry (e.g., cost/benefit analyses) (see Maltz, 1984). Nevertheless, recidivism rates remain the most prominent measure for assessing correctional intervention performance (Gaes, Camp, Nelson, & Saylor, 2004). Mears and colleagues (2008) noted that recidivism research is indeed important for at least two reasons. First, it allows for assessment and modification of criminological theory based on an increased knowledge of the causes of crime. Second, and relatedly, findings from recidivism research can be used to inform efforts aimed at reducing postrelease offending. These purposes are particularly important not only for the current study, but for research on recidivism in general, as only quite recently have the merits of placing reoffending in a broader criminological context been realized.

The Focus on Offender

The traditional approach to correctional intervention for much of the 20th century was to focus on the offender only. An emphasis on penal welfare specifically was the guiding paradigm for corrections up until around the 1970s. In the early 1900s, individualized treatments were promoted in an attempt to cure offenders of the criminogenic influences that lead to crime in the first place (Cullen & Gilbert, 1982; Rothman, 1980). It was recognized that different individuals benefitted from different interventions, and that flexibility and discretion were vital for reducing reoffending. The implementation of indeterminate sentencing, probation, and parole allowed for a variety of options for the intensity and type of correctional intervention (Cullen & Gendreau, 2000). Rehabilitation was still prominently featured in the U.S. corrections system in the middle of the century. A more professional approach to treatment was emphasized and community treatment and reintegration back into the community were key components to corrections. It is important to note that macro-level theories of crime were not absent during this time period. In fact, ecological theories of crime enjoyed a fair degree of prominence during this era in corrections (see, for example, Merton, 1938; Shaw & McKay, 1942), yet despite their prevalence, rarely was much thought given to how these theories might apply to offender treatment and recidivism.

A shift in penal philosophy in the 1970s provided an even greater concentration on the offender as an individual in corrections. This focus was no longer a benevolent appreciation for individual differences in the causes and remedies of criminal behavior, but rather a desire to punish harshly without thought given to the unintended consequences for the offender and his or her family and community. In short, the philosophy of corrections went from penal welfare to penal harm (Clear, 1994). A variety of reasons have been identified by scholars for this transformation (see, for example, Pratt, 2009), but it is safe to say that these causes were mainly rooted in the social and political (rather than penal) realms (Beckett, 1997; Garland, 2001). Liberals desired a system that limited the ability of the state to both abuse inmates as well as engage in discriminatory decision making. Conservatives were in favor of a system that limited the ability of the state to shorten sentences and compromise the deterrence of criminal sanctions. Both sides, then, were in favor of determinate sentencing and abolishing parole (Cullen & Gendreau, 2000). A particularly damaging contribution to this shift in correctional thought was research indicating that correctional interventions were largely ineffective in reducing recidivism.

Martinson's Legacy

Over three decades ago, Robert Martinson's (1974) well-known report on what works in correctional reform led to the dismal conclusion that few (if any) interventions resulted in reductions in recidivism. The report combined often dissimilar treatment programs under broad headings such as "group counseling" and "medical treatment," and essentially concluded that none of these modalities were successful in changing offender behavior. While scholars were quick to point out that treatment can indeed be effective (Gendreau & Ross, 1979), and that a search for a magic bullet to reform obscured what actually worked, how, and for whom (Palmer, 1975), the political appeal of the Martinson report was unmatched by academic artillery. The impact of the initial report was so strong, that even a retraction by Martinson himself in 1979 did little to change the landscape of the tarnished perception of rehabilitation. Instead, academics, politicians, practitioners and the general public were constantly reminded of the sobering conclusion that "with few and isolated exceptions, the rehabilitative efforts that have been reported so far have had no appreciable effect on recidivism" (Martinson, 1974, p. 25).

The same debates were raised some 15 years later in a meta-analysis of juvenile correctional treatment by Whitehead and Lab (1989) that again stated that no one type of correctional intervention was likely to positively impact recidivism. More specifically, non-system diversion programs, system diversion programs, probation/parole/community corrections programs, institutionalized/residential programs, and "specialty programs" (e.g., Outward Bound, Scared Straight) were unlikely to modify criminal attitudes and behaviors and in some cases worsened them. Again, the charge was made that the grouping of programs was done in a haphazard fashion, and that a more nuanced look at treatment programs was likely to produce effective interventions (Andrews, Zinger, et al., 1990a). Yet the Whitehead and Lab study was a product of a powerful professional ideology that emphasized the use of science to show that virtually nothing related to the correctional system was successful in reducing crime (Cullen & Gendreau, 2001).

The Martinson report and later anti-rehabilitation studies are important to the examination of treatment and recidivism for two reasons. First, they provided ammunition to those wishing to promote a more punitive corrections system, which eventually led to a philosophy that emphasized the managing of offenders with little concern for recidivism (Feeley & Simon, 1992). The notion that little could be done to rehabilitate offenders was consistent with the idea that crime was not a result of factors external to the individual such as poverty and unemployment. Instead, immutable characteristics such as differences in IQ were identified as leading to deviant behavior (Herrnstein & Murray, 1994; J. Q. Wilson & Herrnstein, 1986). As such, this ideology allowed the government to ignore social problems (Cullen, Gendreau, Jarjoura, & Wright, 1997; Currie, 1985), and therefore the focus on the offender, absent his or her surroundings, was at its pinnacle. Second, and equally important, Martinson was to some extent responsible for shifting the discussion from "what" programs work to "how" programs work. Cullen and Gendreau (2000) noted that the Martinson report alerted the academic community to the fact that not all treatment programs were created equal, and that the possibility existed that programs could have been effective had they enjoyed strong therapeutic integrity. The challenge was thus posed for treatment proponents to identify the specific mechanisms required for positive results.

Treatment Integrity

Andrews and colleagues (1990a; see also Andrews, Bonta, & Hoge, 1990; Andrews & Bonta, 2003) were largely responsible for identifying the components of successful treatment programming. They were still very much focused on the individual-as scholars trained in psychology they emphasized the importance of learning principles in attending to offender behaviors. They reasoned that criminal behavior was learned just as any other behavior (Sutherland, 1939), and therefore behavior modification involved changing the attitudes and cognitions that resulted in The task, therefore, was to identify the proper modalities that would deviance. successfully lead the individual away from a life of crime. In their own reworked metaanalysis of the studies used by Whitehead and Lab (plus additional studies they had uncovered), the authors discovered that treatment could, in fact, be effective (Andrews, Zinger, et al., 1990a). The difference between the two works is in how they organized the studies to be evaluated. Instead of the five categories used by Whitehead and Lab, Andrews and colleagues grouped studies into appropriate correctional service and *inappropriate correctional service.*²

Appropriate treatment attended to three principles: risk, needs, and responsivity. In brief, the risk principle states that intensive programs should be reserved only for

² Andrews et al. (1990a) included two other levels of type of treatment in their analyses. *Criminal sanctions* involved variation in judicial disposition at the beginning of the correctional process absent any type of variation in rehabilitative service. *Unspecified correctional service* included treatments that the researchers were unable to identify with confidence whether a program should be labeled appropriate or inappropriate.

higher risk offenders, and that those who were deemed lower risks should not be put through unnecessary programming. The principle of attending to criminogenic needs referred to concentrating on the wealth of psychosocial factors that lead to crime rather than those that do not. As such, programs aimed at non-criminogenic needs (e.g., selfesteem) were likely to fail, while those that targeted dynamic factors related to crime (e.g., antisocial attitudes) were likely to result in reductions in recidivism. Finally, the responsivity principle included the use of styles and treatment modalities that were matched with client need and learning styles. Programs that emphasized cognitive and behavioral learning principles were likely to be successful.³ Their readjusted analysis of Whitehead and Lab's meta-analysis produced an overall mean phi coefficient of .30 for the appropriate services group – with recidivism rates being cut, on average, by around 50% for programs in this category.⁴ Inappropriate service, essentially the converse of appropriate service detailed above, resulted in a phi coefficient of -.06.⁵

³ Later, Andrews and colleagues (1990) would add to these the importance of professional override in exercising discretion upon considerations of risk, need, and responsivity.

⁴ The phi coefficient is the appropriate measure of association between two dichotomous variables when their relationship within a given sample is the primary interest (as compared to using the odds-ratio when comparing between two subsamples on a dichotomous dependent variable) (see Lipsey & Wilson, 2001, p. 60-62). Andrews and colleagues (1990, p. 378) noted that it is equivalent to the Pearson productmoment coefficient, and that a mean phi of .30 represents a relatively strong relationship compared to other associations with recidivism (but see Lab and Whitehead, 1990).

⁵ Lab and Whitehead (1990) argued that Andrews and colleagues used tautological reasoning in their group creation of appropriate and inappropriate treatment (i.e., that the authors found programs that worked and synthesized the commonalities between them). This represents a valid argument, yet subsequent studies using the same grouping have found results comparable to the original study (Lipsey & Cullen, 2007; see also Andrews, Zinger et al., 1990b).

The Canadian school of thought capitalized on these findings and incorporated appropriate correctional service into the broader principles of effective intervention. Gendreau and colleagues (Gendreau, Smith, & French, 2006; see also Gendreau, 1996) detailed eight important tenets, which, if followed, are likely to lead to reductions in recidivism. The first five principles are largely based off of the above appropriate service concepts—with emphasis placed on behavioral programs delivered in an interpersonally-sensitive manner that attend to the criminogenic needs of high risk offenders. To these they added: designing program structure and activities to disrupt the delinquency network, providing relapse prevention strategies, and advocating for existing appropriate programs. A sizeable body of research has demonstrated that the principles of effective intervention are successful in reducing recidivism (Gendreau, et al., 2006), and that these practices have been implemented in the field of corrections to an increasing degree over the last decade (Listwan, Jonson, Cullen, & Latessa, 2008).

The importance of this line of research is that this information may be used to quantify the extent to which programs are adhering to empirically-established modes of effective correctional intervention. The Correctional Program Assessment Inventory (CPAI) is an instrument created by Gendreau and Andrews (1994) that assesses correctional programs in six primary areas: program implementation and leadership, offender assessment and classification, characteristics of the treatment components and program, staff characteristics, evaluation and quality control, and miscellaneous items such as amount of community and/or financial support (Latessa & Holsinger, 1998). The instrument allows for a standardized, objective way of assessing the quality of existing programs as well as their effectiveness in terms of reducing recidivism. An emerging body of research suggests that there is indeed large variation in correctional program quality – with most programs scoring on the low end of the CPAI (Latessa & Holsinger, 1998; Matthews, Hubbard, & Latessa, 2001), and that program integrity, as measured by the CPAI, is correlated with increased program effectiveness (i.e., reduced recidivism) (Holsinger, 1999; Lowenkamp, 2004; Lowenkamp & Latessa, 2004; Lowenkamp, Latessa, & Smith, 2006).

The focus on treatment program integrity through the use of the CPAI represents a significant advancement in the treatment literature and is in agreement with a larger trend toward promoting evidence-based practice for criminal justice in general (Sherman, 1998), as well as for corrections specifically (Cullen & Gendreau, 2000; MacKenzie, 2000). Given that the principles of effective intervention are largely based in the discipline of psychology, it is not surprising to see that larger sociological forces are somewhat ignored in determining the best available methods for behavior modification. Scholarly discussions from the Canadian school regarding effective and ineffective programs alike seemingly operate in a vacuum with little attention given for the communities that offenders will eventually return to. There is mounting evidence, however, that ecological characteristics are indeed important predictors of recidivism.

Structural Characteristics of Recidivism

A host of negative outcomes are associated with living in disadvantaged areas, and research is beginning to identify the mechanisms involved for these relationships (Sampson, Morenoff, & Gannon-Rowley, 2002). These structural effects work through a number of different social processes (e.g., local ties, social control) to account for ecological disparities in a variety of problem behaviors and health-related outcomes. This research also suggests, however, that structural characteristics such as concentrated disadvantage still represent important predictors for an array of outcomes, including criminal behavior (Sampson, et al., 2002; see also Pratt and Cullen, 2005), and are likely intensified for those attempting to reintegrate back into the society (Reisig, Bales, Hay, & Wang, 2007)—especially for those offenders who may have never been truly integrated in the first place. It should come as no surprise, then, that studies are beginning to uncover the deleterious effects of ecological disadvantage on offender recidivism.

In a study of 4,630 former inmates living in Multnomah County, Oregon, Kubrin and Stewart (2006) found that socioeconomic context significantly predicted recidivism. More specifically, those who lived in disadvantaged areas were more likely to be rearrested within a 12 month period.⁶ A one unit increase in a disadvantage index

⁶ It is important to recognize that recidivism studies use a bevy of indicators to indicate recidivism (e.g., technical violations, reconviction) and that follow-up periods also vary considerably (e.g., six months, three years) (Maltz, 1984; see Gottfredson and Taylor, 1986, p. 141 for a discussion of the equally problematic and conceptually similar time at risk issue). In general, it is recommended that a period of three years is ideal to effectively determine recidivism (National Advisory..., 1973). Thus, studies with shorter follow-up periods should be interpreted with caution; yet the current analysis is focused on the

(composed of relevant income, unemployment, and public assistance variables) resulted in 12-percent increase in the odds of recidivism, controlling for individual-level risk variables. This effect became particularly pronounced when individuals return to a neighborhood that was characterized by *extreme* disadvantage. Further, the authors found that living in affluent neighborhoods served a protective function in reducing recidivism. These findings were bolstered by a study of 49,420 ex-offenders in Florida by Mears and colleagues (2008) that also found ecological factors to significantly impact recidivism. Increased resource deprivation was associated with increased violent offending within a two year period of release, again controlling for individual-level risk factors. Taken together, these two studies reinforce prior research suggesting that ecological phenomena are important for the study of recidivism above and beyond that of individual-level attributes (S. D. Gottfredson & Taylor, 1986, 1988).

This line of research is also notable for uncovering differential impacts on recidivism by ecological factors for subgroups of ex-offenders. In particular, women and minorities are more likely to suffer the effects of returning to neighborhoods characterized by resource deprivation. Holtfreter and colleagues (2004; see also Reisig, Holtfreter, & Morash, 2002) determined that female ex-offenders living in poverty were significantly more likely to re-offend within six months – with poverty status increasing

influence of structural characteristics on recidivism, and using a shorter time period is problematic only if structural characteristics obscure long term trends (i.e., that structural characteristics would become empirically unimportant for the prediction of recidivism using longer follow-ups or equal times at risk).

the odds of rearrest by a factor of 4.6 and the odds of a technical violation by a factor of 12.7. This effect persisted even when controlling for an offender's score on the Level of Service Inventory (LSI) – a risk assessment tool developed and favored by scholars from the Canadian school of thought. Female offenders are offered few, if any, of the services required to successfully manage a law-abiding life in a resource-depleted community (Richie, 2001). Equally devastating has been the impact of disadvantaged communities on non-White offenders. Prior research has suggested that higher rates of reoffending by Blacks as compared to Whites may not be a "race effect," but rather a "place effect" (Kubrin, Squires, & Stewart, 2007). Given that few Whites are concentrated in extreme disadvantage as compared to non-Whites (Krivo & Peterson, 1996), it is not surprising that communities characterized by a lack of resources and inequality are particularly damaging toward recidivism by minorities. To be sure, Black ex-prisoners who return to communities with high levels of racial inequality are more likely to commit new crimes, and racial inequality also amplifies the effects of their individual-level risk factors (Reisig, et al., 2007).

Thus, two significant lines of research have developed in the treatment and recidivism literature over the last twenty years or so. First, the focus has shifted from an emphasis on the individual toward an emphasis on the integrity of the programs intended to reform that individual. No longer is it expected that any one particular type of program (e.g., vocational training) will work for all or even any offenders. Instead, there is a newfound importance placed on the particular components that are part of an effective treatment program. Instruments such as the CPAI allow for an evaluation of these programs to determine whether they are employing the best possible methods to reduce recidivism. In short, it is now evident that programs that exhibit treatment integrity by adhering to the principles of effective intervention are likely to result in reduced recidivism rates. Second, an emerging body of research is beginning to explore the broader structural issues involved with recidivism. Ecological factors such as resource deprivation are likely to burden offenders who return to disadvantaged communities. Research also suggests that ecology is likely to differentially influence some groups more than others. Taken together, the study of correctional intervention and corresponding recidivism rates has made great strides since the reductionist and exclusive focus on the offender.

The problem is that these two lines of research have proceeded forward largely independent of one another.⁷ It is likely that program integrity measures are influential in mediating or moderating the relationship between ecological characteristics and recidivism. This dissertation thus proposes to integrate these two lines of research. More specifically, the current study seeks to build upon previous work by Lowenkamp

⁷ It is instructive to note that the principles of effective intervention are beginning to creep into the literature on reentry. Travis (2005) provided what he calls the principles of effective reentry in his book on offender reintegration. The five principles are: prepare for reentry, build bridges between prisons and communities, seize the moment of release, strengthen the concentric circles of support, and promote successful reintegration. This presents a similar framework for understanding recidivism within the context of effective programming, but not necessarily one that emphasizes the specific components of individual programs. Similarly, several scholars (e.g., Listwan, Cullen, & Latessa, 2006; Lowenkamp & Latessa, 2005a) have begun to stress the importance of considering evidence-based practice and what works in corrections for reentry programs. While these represent significant advances, they do not specifically consider existing ecological theory.

and colleagues (2004; Lowenkamp, Latessa, & Smith, 2006) by investigating the relationship between ecological characteristics, program integrity, and treatment effects for halfway house (HWH) programs in Ohio.

RESEARCH STRATEGY

The current study seeks to build upon previous research by placing offender treatment in a broader criminological context. It does so by examining treatment at the "microsocial level of explanation" (Short, 1989)—assessing individual behavior in response to situations defined by social and cultural factors. Three broad types of questions will be addressed. Each will combine measures from the social disorganization and resource deprivation traditions—the macro-level paradigms found to be most strongly predictive of crime (Pratt & Cullen, 2005)—with program-level CPAI scores and their corresponding treatment effects.

First, the direct effects of structural characteristics on both treatment integrity and treatment effects will be analyzed. It could be expected that ecological factors such as resource deprivation would hamper the ability of policy-makers and treatment providers to build a solid treatment program based on the principles of effective intervention. Further, and consistent with recent studies, it is likely that structural characteristics play a role in recidivism rates. One would expect to find that treatment effects are smaller in an area that is ripe for criminal activity to occur (and reoccur). Second, the indirect effects of structural characteristics on treatment effects will be analyzed. More specifically, this section will address whether indicators of treatment integrity mediate structural conditions on treatment effects. If the CPAI scores mediate the effect between structural characteristics and treatment effects, the current study would serve as a call for a more complex understanding of offender change that is rooted in the macro-level traditions of criminological theory. Just as treatment advocates realized that what is delivered to whom in what manner is important, the current study would add to that the importance of *where* that treatment is delivered. Equally important, this finding would alert researchers to the fact that the impact of ecological characteristics on offender recidivism may actually work through the quality of programming received by that offender.

Third, interaction effects between structural conditions and treatment integrity will be analyzed. This part will assess whether the effects of treatment integrity vary under particular structural conditions. It may be, for example, that treatment integrity matters little in an environment rich in resources to buffer the offender from future criminal behavior. Stated differently, it may be the resource-depleted neighborhoods that most require an effective treatment program to overcome the disadvantages associated with the area.

PLAN OF THE DISSERTATION

Given the objectives of the current study, this dissertation will proceed in Chapter 2 to provide a discussion of the two lines of research mentioned above relevant to the study of treatment integrity and offender recidivism. More specifically, this chapter focuses on the histories of both correctional treatment and macro-level criminological theory. Each line of research will be presented in terms of key contributions leading up to their current states of knowledge. Chapter 2 will conclude with a discussion linking the two traditions, and will provide evidence that macro-level theories of crime have been applied to the study of recidivism, yet not to that of the treatment and program integrity literature specifically.

Chapter 3 details the methodology used to address the three types of research questions presented above. Information is provided on the HWH programs that comprise the sample for the current research. Included within this chapter is a discussion of the CPAI as an instrument to evaluate program effectiveness as well a discussion of the ecological measures used in the analyses. The specific techniques for the statistical analyses are also provided in this chapter.

Chapter 4 presents the results of the statistical analyses as they pertain to the research objectives of the study. These findings will provide insight as to the degree to which ecological characteristics and treatment integrity are related. To the extent that

31

they are, existing treatment theory and macro-level theories of crime would benefit from an integration of concepts common to offender recidivism.

Finally, Chapter 5 provides a summary and discussion of the major findings of the current dissertation. Conclusions will be made about the relative importance of treatment integrity as it pertains to existing findings about the impact of ecological characteristics on crime and recidivism. The potential limitations to the current study will also be provided. The dissertation concludes with a discussion of the implications for both criminological theory and correctional policy.

CHAPTER TWO

CORRECTIONAL TREATMENT AND MACRO-LEVEL CRIMINOLOGICAL THEORY

The HWH in American corrections has a rich history dating back to the mid 1800s, when they were developed more fully by the Quakers in an effort to assist offenders who were released from prison (Clear & Dammer, 2000). The name quite literally refers to the experience of individuals being halfway between the community and an institution, both for those offenders who are sentenced there in lieu of incarceration as well as for those returning to society after being institutionalized.⁸ These types of programs expanded rapidly in the 1960s and 1970s, and nearly 400 facilities were located in the U.S. in 1976 (Latessa & Allen, 1982). It is difficult to assess the number of HWHs in operation today given the broad definitions used to identify them, but it is safe to conclude that they remain a vital component of offender reentry efforts (Seiter & Kadela, 2003).⁹

The one common thread tying together all HWHs is that they serve as a transitional support system designed to aid the offender in his or her return to the community in hopes of avoiding future criminal transgressions. Outside of this theme, a wide variety of clients are served with an even broader spectrum of programming

⁸ The focus of the current dissertation, and the remainder of the HWH discussion, is on previously incarcerated individuals returning to the community via the HWH.

⁹ An assessment of correctional facilities in 2000 identified 22 states housing inmates in 961 HWHs (Camp & Camp, 2000).

(Donnelly & Forschner, 1984; Keller & Alper, 1970; Latessa & Allen, 1982). Typically, programs serve any offender requiring extra care toward successful reintegration. This may include offenders who have no family, housing or job prospects or those that have a substance abuse problem. Two types of HWH programs have been recognized in the literature (Caputo, 2004). *Supportive programs* tend to have a limited amount of direct services available to clients and instead connect them with agencies in the community to meet their needs. *Intervention programs* are highly structured and provide a variety of services (e.g., substance abuse, employment support) directly to clients. Most HWH programs tend to fall somewhere in the middle of these two types (Latessa & Allen, 2003). The focus, therefore, is on treating offenders so that their risks and needs are attended to in order to ensure successful reentry.

Current research suggests that HWH "work" to reduce recidivism (Seiter & Kadela, 2003), yet earlier efforts identified them as faring no better or worse than comparable alternatives (Latessa & Allen, 1982; Latessa & Travis, 1991), and still more recent congressional testimony to the House of Representatives Oversight and Government Reform Subcommittee indicated a wide variety in the quality of HWH programs leading to muddled conclusions about effectiveness (Halfway Home..., 2010). Accordingly, no definitive conclusions about the utility of HWH programs have been reached, and they remain a valuable program type to assess in terms of both integrity and broader ecological contexts. In order to do so, however, it is necessary to

34

understand fully the developments leading up to the current state of knowledge for both program integrity and recidivism in a macro-level context.

Although the progressions of correctional treatment and macro-level criminological theory have followed similar trajectories, particularly in terms of their waxing and waning in popularity, they have largely proceeded forward independent of one another. This is somewhat curious given that the correction of criminal behavior would seemingly need to attend to what leads to crime in the first place. While the United States' correctional system has consistently accounted for individual-level correlates of crime in attempting to curtail future offending, the same cannot be said for macro-level correlates. Due to this, programs that are said to be high in integrity are those that exhibit qualities based on psychological principles, with little attention given to advancements in macro-level criminological theory for understanding re-offending. The current chapter presents the progressions of each of these lines of thought, and particular emphasis is placed on the advancements of the last twenty years. It concludes with a discussion of the merits of combining these two literatures – the focus of which provides the impetus for the current analysis.

CORRECTIONAL TREATMENT

There are four purposes frequently identified as goals of the correctional system in the United States: deterrence, incapacitation, retribution, and reformation. At times, these seemingly incompatible goals are expected to be implemented simultaneously, yet the overall history of American corrections suggests that unequal attention and effort is paid toward the achievement of all four. Reformation in particular is often subverted by the remaining purposes. This might seem a curious statement to outsiders of correctional history, as a cursory look through the annals of corrections will identify rehabilitation as the guiding paradigm for much of the 20th century. This does not mean, however, that the principles and techniques guiding the rehabilitation of offenders were ever fully implemented as intended.

In general, the treatment or rehabilitation of offenders can be thought of as "a planned correctional intervention that targets for change internal and/or social criminogenic factors with the goal of reducing recidivism, and, where possible, of improving other aspects of an offender's life" (Cullen, 2002, p. 255). As such, it represents a philosophy that is concerned with not only the best interests of the offender, but also the safety of the general public through the reduction of recidivism (Cullen & Gendreau, 2000). The knowledge on how to best reform offenders has advanced considerably over the last two hundred years—from the barbaric punishments intended to deter offenders from future acts in colonial times to the evidence-based practices that emphasize the merits of cognitive behavioral treatment today. The road taken to reach the current state of treatment has been particularly bumpy, with rehabilitation being declared all but dead in the 1970s. Treatment advocates have spent much of their time dispelling the "correctional quackery"
(Latessa, Cullen, & Gendreau, 2002) that often guides correctional programming, rather than identifying and developing successful interventions. Consequently, the narrative of offender rehabilitation has often resembled a cyclic representation of failure.

The history of treatment is indeed a frustrating one in many respects, as it is evident that scholars and practitioners often fail to learn from the mistakes of corrections' past. Nevertheless, it is possible to identify certain turning points in which the knowledge and practice of offender rehabilitation has changed. Cullen and Gendreau (2000) identified three major shifts in thinking on how to best reform offenders. First, in the early 19th century, the penitentiary experiment took hold in an effort to overcome societal pressures toward crime as well as to provide a more humane way of dealing with society's waywards. The thought was that reform could best occur by keeping offenders isolated with a steady dose of disciplined work. Second, in the latter half of the 19th century, the use of prisons to emphasize reform through routine Early prisons were not a safe environment designed to induce lost its appeal. conformity. Instead, they were coercive, brutal institutions that provided offenders with little motivation to change. The Progressive movement of the early 20th century therefore represented a shift away from these structures toward a more individualized approach to reform. Finally, the 1950s brought a professionalized approach to the rehabilitation of offenders. Psychiatrists, psychologists, and social workers proliferated in this new environment that experimented with a wide range of therapeutic approaches to offender reformation.

37

Each of these represents a significant change in American penology that will be addressed in more detail below. In addition, two other important shifts are necessary to discuss as part of the history of treatment. First, beginning in the 1970s, the "nothing works" movement represented a substantial challenge to advocates of treatment and rehabilitation. The idea that no one correctional intervention had successfully reduced recidivism was a powerful nugget of truth that severely damaged the rehabilitative ideal. Evaluation studies proved to be a compelling tool within a social climate that was increasingly distrustful of the government in general and the correctional system specifically. Liberals and conservatives alike joined forces in an effort to revamp the way offenders were handled – with only an isolated few left defending rehabilitation as corrections' guiding paradigm. The second important additional shift was largely a response to the first. The movement toward "what works" in corrections has been led by a group of scholars who argued that rehabilitation was never truly implemented in the first place, and that the nothing works conclusion was representative of a fruitless search for an elusive panacea based on poor evaluations of even worse programming. The current state of treatment is one that emphasizes evidence-based practice to determine what represents effective programming in the rehabilitation of offenders.

THE ARRIVAL OF THE PENITENTIARY

In a manner that is somewhat similar to that of today, just deserts flourished in colonial times, as criminals were viewed as sinners with little hope for correction or rehabilitation (Cullen & Gilbert, 1982). The use of punishment was anything but systematic and fair. Corporal punishment (e.g., whippings) was a relatively common sanction, and executions frequently took place as a last resort response to those who continually engaged in rather pedestrian crimes such as pickpocketing, counterfeiting, and horsethievery (Rothman, 1995). All of these punishments were carried out in public, and the humiliation and pain inflicted was designed to deter both the offender and the viewing audience from further offending. Consequently, prisons had little use in a society intent on making the pains of criminal behavior visible to all. Prisons were instead infrequently used primarily as a way to detain debtors and those awaiting trial or execution.

Perhaps the most important line of thought that emerged from the colonial period was that the roots of deviant behavior were more internal than external; that is, the offender, not the community, was largely responsible for his or her deviant actions (Rothman, 1971). The corresponding rectification of deviance was thus concerned solely with the individual. In the late 18th century classical thinking was ushered in, which further stressed the importance of individual-level corrections. A more optimistic image of humans as rational beings led to a concentrated effort to overcome

the arbitrary, heinous penalties of earlier colonial times. Crime was not a sin, but rather the consequence of faulty reasoning on the part of the offender. Informed by social contract thinkers and the writings of Jeremy Bentham and Cesare Beccaria, the new colonial code emphasized equal treatment of all offenders through certainty and proportionality. Incarceration as a tool of punishment was implemented more widely, and it provided a straightforward, proportionate penalty: the more serious the crime, the longer the period of incarceration. Support for prisons in this capacity quickly waned as early structures became "financial burdens, custodial nightmares, and incubators of crime and vice" (Cullen & Gilbert, 1982, p. 58).

It is important to note that these early jails were not considered (nor expected to be) useful for reforming offenders. Rothman (1971, p.62) wrote of this time period, "To reformers, the advantages of the institutions were external, and they hardly imagined that life inside prison might rehabilitate the criminal." A change in criminological philosophy, however, drastically altered the perceived utility of the prison as an environment for reform. Beginning in the 1820s, life in America was characterized by increased geographic and social mobility and, consequently, a loosening of ties among individuals and their families, churches and communities (Rothman, 1971). The resulting disorganization was now perceived to be influential in the creation of criminals. According to Cullen and Gilbert (1982, p. 61), "the lawlessness threatening communal peace was now held to be symptomatic of a pervasive breakdown in the social order. With discipline attenuated and values in flux, the young and morally

vulnerable were being readily exposed to the corrupting influences of an increasingly secular society." The corresponding response, therefore, was to remove offenders from these criminogenic environments so that they may be reformed in settings away from the pressures of society.

Cullen and Gendreau (2000) observed that the penitentiaries of the early 19th century were the first indications that correctional intervention should reform offenders. This represents the first shift in how to best reform offenders – namely, that the prison provided an isolated environment within which offenders could establish prosocial behaviors through routine and ordered discipline. Incarceration was reinvigorated as a tool in the United States criminal justice system, and offender rehabilitation was to be the overriding concern of these structures.

Two rival penitentiary systems emerged on how to best bring about offender reform. First, the "separate confinement" system, most famously applied by the Quakers in Pennsylvania, stressed the importance of complete isolation of offenders from one another. In order to encourage reform, the advocates of this system believed that offenders would benefit most from silent reflection and punishment through the inability to socialize with others. This importance of isolation was often taken to the extreme, as hoods were placed on new inmates so that they would not see or be seen by anyone on the way to their cells (Rotman, 1995). Second, the "congregate" or "silent" system, most famously applied in New York, allowed for the integration of offenders during the day with isolation at night. The emphasis in the New York system was on industrial efficiency, and convicts worked together in workshops rather than cells. They were not, however, permitted to talk with one another. Whatever the differences between the two systems, the early penitentiaries emphasized that offenders could be rehabilitated once insulated from their criminogenic environments through religious influence and daily labor (Cullen & Gendreau, 2000).

In a theme that would become all too familiar to American corrections, the early penitentiaries based on rehabilitation would largely become custodial warehouses that emphasized control. Both the silent and congregate systems experienced several problems that led to enforced discipline and coercion instead of rehabilitation. Silence turned out to be a weak mechanism for rehabilitation, and the clientele were not first-time, impressionable offenders, but rather hardened criminals with little hope or desire for reform. Perhaps most importantly, offenders had little reason to improve their attitudes and behaviors when they knew their set release date (Cullen & Gilbert, 1982). The offender's chief concern, then, was "with the calendar, not his conscience" (Rothman, 1971, p. 250). In short, without incentive to change, offenders remained set in their ways.

THE PROGRESSIVE MOVEMENT

In 1870, several leading scholars of penology met in Cincinnati to discuss the current state of the prison and its ability to reform offenders. Although they were in

general agreement that American penitentiaries were a brutal failure, they reasoned that incarceration still represented an improvement over the punishment of years past. As such, a common recommendation was for reform to occur within the existing structures of the penitentiaries. More specifically, the Cincinnati Congress adopted principles, such as indeterminate sentencing, that provided an incentive for the offender to change. This is captured frequently in the declaration of principles as "The prisoner's destiny should be placed, measurably, in his own hands…Peremptory sentences ought to be replaced by those of indeterminate length. Sentences limited only by satisfactory proof of reformation should be substituted for those measured by mere lapse of time" (Wines, 1871, p. 541-2). Other progressive ideas were presented in the declaration of principles, including the importance of proper offender classification, the significance of education, the need for separate prisons for women and juveniles, and the necessary reduction of coercion and physical force.

The immediate contribution of the Cincinnati Congress was fleeting, but the ideas developed would later play a vital role in establishing the rehabilitative ideal. Initially, the principles generated a reformatory movement that was deemed a success in some respects. Zebulon Brockway, a prominent figure at the 1870 Congress, was well-known for establishing a reformatory in Elmira, New York that incorporated offender classification and indeterminate sentencing. The institution was hailed for demonstrating that offenders were indeed capable of reform, and that a system based on education and work was preferable to one based on control and punishment (c.f.,

Pisciotta, 1994). Overall, though, the themes established by the reformers at Cincinnati were hardly implemented in state practice (Rothman, 1980).

The rehabilitative ideal (as informed by the Cincinnati principles) would instead take hold in the first quarter of the 20th century. Crime was assumed to be caused by psychological and social factors that were unique to each offender and, therefore, the best way to prevent crime was to modify these distinct factors for each individual (Cullen & Gendreau, 2000). Proponents of the rehabilitative ideal embraced positivism and a search for the causes of crime—rather than endorse a classical view of criminal behavior as a decision internal to the individual. These reformers at the turn of the century, known as Progressives, ushered in a new era that emphasized individualized treatment and discretion on the part of corrections officials.

David Rothman (1980) famously described this era as one of "conscience versus convenience, " since, on the one hand, this period was perhaps the most forward-thinking to date, as Progressives realized that individuals committed crime for different reasons and, accordingly, the correction of criminal behavior involved the recognition that people "recovered" at different rates. In making analogies to medicine, the reformers succeeded in promoting individualized "cures" for each offender (Cullen & Gilbert, 1982). Several modifications of existing practice reflected this position. Indeterminate sentencing provided offenders with incentive to alter their criminal attitudes and behaviors in order to secure their freedom, and the creation of parole boards made it so that offenders deemed rehabilitated could be returned to the

community. Further, treatment within the community was expanded, with more offenders receiving probation sentences in lieu of incarceration. Finally, a separate system for juvenile offenders was implemented. By understanding the life history of each offender, Progressives had in mind a treatment program that provided remedies that were specific to each individual.

On the other hand, Rothman (1980) noted that all Progressives assumed one outstanding feature: that the new policies and programs required discretionary responses by criminal justice agents. Reformers believed that "the state could be trusted to carry out these precepts; indeed, the state had the obligation to act in the best and mutual interest of the offender and the community" (Rothman, 1980, p. 50). Criminal justice officials welcomed this trust and newfound power. The ability to exercise discretion allowed administrators to clear crowded court calendars and maximized their control over inmates while providing a reinforcement to the legitimacy of their institutions (Rothman, 1980). Judges had discretion on whether to send offenders to prison and for how long, probation/parole officers had discretion on whether to send offenders back to confinement, and parole board officials had discretion on whether to return offenders to the community (Cullen, 2002). In short, the benevolent reforms proposed by the Progressives provided administrators with an opportunity to run their institutions as conveniently and efficiently as possible.

The naivety of reformers was exposed as their vision was never fully achieved. Instead, few resources were devoted toward realizing the goals of reform. As but one example, parole boards were woefully inadequate and decisions on whom to return to the community were largely "a game of chance." Board members were usually unqualified to determine proper release, and the hearing would often resemble a second trial for the original offense (Rothman, 1980). Parole (and by association, indeterminate sentencing) was one of the most unpopular innovations in the criminal justice process and was frequently cited as the scapegoat for sensationalized cases of recidivism. Rothman (1980, p. 7) described the ensuing arrangement as "a hybrid, really a bastard version—one that fully satisfied the needs of those within the system but not the ambitions of reformers." Despite these unfortunate results, the rehabilitative ideal remained the guiding paradigm of corrections well into the 1970s, with an exaggerated importance placed on the professionalization of rehabilitation in the 1950s.

THE PROFESSIONALIZATION OF REHABILITATION

The similarities between the treatment of offenders and the treatment of patients by doctors would increase in the 1950s and 1960s through the professionalization of the rehabilitative ideal. This approach largely came about as a result of prison riots and general unrest among inmates, which was perceived to be a consequence of insufficient rehabilitative programming. Offenders were thought to be psychologically disturbed with a need for individualized treatment to cope with their emotional problems. An assortment of treatment programs was thus introduced that included group counseling, therapeutic milieus, and behavior modification (Cullen & Gendreau, 2000). The field of penology was largely composed of psychologists, psychiatrists, and social workers who used terms and phrases such as "case work" and "clinical method of reformation" (Rotman, 1995). There was an increased importance placed on community treatment and the reintegration of offenders into those communities. Finally, more sophisticated classification systems were implemented that improved existing categorizations of offenders. Perhaps most telling of the shift in ideology was a simple change in name by the American Prison Association to the American Correctional Association (Cullen & Gendreau, 2000). To be sure, "corrections" indicated the true intent of the system of this era.

Echoing the themes of the past, this intent never truly matched up with reality. Problems associated with unfettered discretion still lingered—no longer with prison management, but rather with treatment-oriented administrative decisions (Rotman, 1995). Equally damaging was the fact that these treatment programs and their providers were no more sophisticated or well-developed than their predecessors. The procedures enacted in the name of treatment during this time period were often appalling. Electroshock therapy, various experimentations with drugs, sterilization, and psychosurgery all essentially produced harm under the guise of benevolence (Cullen & Gilbert, 1982). Writing about the experiments of this time period, Gendreau and Ross (1979, p. 466) concluded, "it has become increasingly clear that we have failed miserably in attaining the goals of an experimenting society." It is readily apparent that a linguistic transformation was not equivalent to that of a change in action.

The significance of this brief but important shift in the canon of corrections was that liberal support for the rehabilitative ideal was beginning to wane for the first time. In the past, the failure to reform effectively was often indicative of ineffective administrators or techniques—never a flawed philosophy. The response was always that rehabilitation needed to be improved. Nevertheless, the intrusive therapies that more often resembled highly punitive practices led some to a different conclusion: that the state was incapable of effectively rehabilitating offenders (Cullen & Gilbert, 1982). The ethical concerns associated with reform, compounded by arbitrary decision-making on the part of corrections officials, severely damaged the foundation of the rehabilitative ideal.

NOTHING WORKS

It would be simply incorrect to identify any one factor as being solely responsible for the demise of rehabilitation and the conclusion that nothing works in reforming offenders. The social context of the 1970s was ripe for the questioning of offender rehabilitation from both sides of the political spectrum. Soaring crime rates signifying wider social disorder had those on the right contending that the U.S. was soft on crime. According to those who supported a classical view of crime, the benefits of criminal behavior were currently outweighing the pains (Cullen & Gilbert, 1982). For those on the left, several developments led to a general critique of state-run interventions. The Civil Rights movement did not achieve all of its goals and essentially left racial inequality intact. Shootings on college campuses (Kent State) and prisons (Attica) depicted a government willing to use brute force by all means necessary. Finally, the unpopular Vietnam War contributed to the overall distrust of the state (Cullen, 2002).

Under this setting, two of the major contributions to the decline of the rehabilitative ideal were: 1) the overall failure of the state to effectively intervene in the lives of offenders and, 2) the findings of Robert Martinson that treatment programs had no appreciable effect on recidivism. Each of these developments had the potential to damage reform efforts on their own, but when combined with one another, and in a climate rife with conflict, they provided a near fatal blow to the dominant correctional paradigm of the last seventy years. Without a sizeable liberal support group to say otherwise, the conclusion that nothing works would become the prevailing thought of the 1970s.

The Failure of Reform

The faults of the early Progressive system and its offspring were readily apparent throughout much of the 20th century. Convenience had indeed won the tug-of-war with conscience, and eventually liberals and conservatives alike became discouraged with the resulting state of corrections. Those in favor of indeterminate sentencing were disappointed to see that decisions were often discriminatory and more likely to be based on ignorance, hunch, or bias than sound reasoning. Liberals believed that rehabilitation in its current form was ultimately a mask for state coercion (Cullen, 2002). Those on the right believed that rehabilitation coddled inmates, and that the inability of formal sanctions to deter offenders was a direct result of compassionate discretion on the part of criminal justice officials. The current correctional system was seen as little more than a social welfare program that deflected responsibility from the offender as an individual. Put differently, rehabilitation was blamed both by liberals for allowing coercive acts by the state, and by conservatives for allowing lenient decision-making by the state (Cullen & Gendreau, 2000).

Creating a bizarre union, liberals and conservatives agreed that a return to determinate sentencing would best remove the rampant bias from the existing system. This approach also provided an inexpensive system reform and, although the two sides disagreed on the proposed length and severity of sentences, it was generally agreed upon that less discretion on the part of correctional officials would lead to equal treatment for all (Cullen & Gilbert, 1982). Conservatives and liberals therefore came together since "in the prevailing context of the state waging an unpopular war, shooting down college students and inmates, and plotting illegal political schemes, such a bargain seemed strangely and naively trusting" (Cullen & Gendreau, 2001, p. 324). Conservatives and "justice model liberals" stressed the values of consistency and fairness over state-obligated rehabilitation. In the end, there was simply a lack of confidence that the vision of the Progressives could ever be fully realized, which was perceived by some that nothing worked in offender rehabilitation (Cullen, 1986).

The Martinson Study and Fallout

Robert Martinson was not the first to produce findings suggesting the futility of existing correctional interventions (see, for example, Bailey, 1966; Robison & Smith, 1971). Prior to his work, however, a healthy support group for the rehabilitative ideal existed among liberal scholars and practitioners. Martinson's 1974 publication in *The Public Interest* would become the most prominent research study suggesting that nothing worked in offender rehabilitation. The study was buoyed by the prevailing context of social unrest in general, and discontent within the American correctional system specifically. Cullen and Gendreau (2000, p. 120) agreed: "Martinson's message that 'nothing works' assumed an importance far beyond what a single review of research would normally achieve." Many christened Martinson the "funeral director" of the memorial service for the rehabilitative ideal (Ross & McKay, 1980). The specific findings of his study therefore merit further discussion.

In 1966, the New York State Governor's Special Committee on Criminal Offenders wanted to transform their prisons to reflect what was most effective in terms of rehabilitation. Martinson, Douglas Lipton, and Judith Wilks were hired to conduct an evaluation of existing correctional interventions. Martinson's 1974 work provided a summary of the larger evaluation compiled by the three authors (Lipton, Martinson, &

51

Wilks, 1975). The report detailed the findings of 231 studies conducted between 1945 and 1967. Overall, no one type of intervention emerged as consistently producing reductions in recidivism for the treatment group. Many modalities, such as individual therapy, were identified as not working at all. Others had short-term effects that wore off, and still others had effects that were explained away as "policy effects." Martinson offered the possible explanation that programs may have been of low quality, but he also asserted that the tendency to repeat criminal behavior may be too powerful to overcome. Future statements by Martinson seemed to support the latter conclusion (Martinson, 1976), which, in the absence of clear support for the effectiveness of treatment, provided a foundation for the idea that "the punishment of offenders is the major means we have for *deterring* incipient offenders" (Martinson, 1974, p.50, italics in original).

The response to the article was largely one-sided – the conclusion that nothing works in correctional intervention took hold and eventually helped lead to an array of deterrence and incapacitation-based policies.¹⁰ A re-analysis of the Martinson studies by Sechrest and colleagues (1979) largely confirmed the validity of the initial report. A few lone voices did, however, raise issue with the findings and were largely responsible for keeping rehabilitation on life support (Cullen, 2005). In particular, Ted Palmer (1975, 1978) recognized that Martinson's pessimistic conclusions were not necessarily

¹⁰ Cullen (1986) observed that conservatives responded to the nothing works conclusion with the politically appealing policy of selective incapacitation. He also noted that liberals failed to provide an effective counterpunch and essentially acquiesced to a punishment-based correctional philosophy.

reflected in the data. He noted that nearly half of the studies analyzed by Martinson had positive or partly positive results.¹¹ According to Palmer, Martinson set the bar too high by seeking a panacea as part of an all or nothing approach to penology. Had he searched for the conditions under which programs were effective, he would have reached a different answer to what works in prison reform. The challenge, then, was for any remaining rehabilitation enthusiasts to identify the specific conditions under which what programs worked and for what type of offender.

Gendreau and Ross (1979; see also 1987) were largely responsible for providing initial hints to solving this puzzle. They correctly pointed out that most of the studies reviewed in Martinson's (1974) work were published prior to 1967, and that early research (and its corresponding evaluations) was hardly of sound methodological quality or rigor. In their own work, they would review more recent studies from 1973-1978 and essentially conclude the opposite of Martinson–that certain programs did actually work and that they exhibited particular characteristics (e.g., contingency management, therapists who exhibit personal warmth). Gendreau and Ross reinforced the idea that searching for any one successful method is likely to produce disappointing results. Further, they stressed the importance of recognizing individual differences in the delivery of treatment—a concept that would later prove vital in the development of the theory of effective intervention (Andrews & Bonta, 2003).

¹¹ A claim that Martinson dismissed as being akin to having a "partly pregnant girl friend" (1976, p. 185).

The reanalysis of the original Martinson report has uncovered a number of additional concerns with the initial findings. Cullen and Gendreau (2000), for example, observed that the original study was actually based on 138 measures of recidivism (rather than the often-identified 231), and that certain categories could be questioned as to whether they actually represented treatment (e.g., probation, imprisonment). Taking these findings into account, the authors estimated that the study represented 73 legitimate measures of treatment recidivism-hardly a representative sample when broken down into several categories. Finally, Cullen and Gendreau (2000) noted that many programs had positive effects on outcomes other than recidivism, and also that a category for cognitive behavioral training, one of the most effective treatment modalities (MacKenzie, 2000), was curiously missing from the report. Perhaps most indicative of the shakiness of the original findings was a recant from Martinson himself. Tucked away in an article on sentencing reform in a law journal, Robert Martinson (1979) noted, "some treatment programs do have an appreciable effect on recidivism" (p. 244, italics in original), and also that "the critical fact seems to be the *conditions* under which the program is delivered...such startling results are found again and again in our study" (p. 254-5, italics in original). The importance and readership of the article paled in comparison to the "nothing works" doctrine of 1974.¹² Indeed, the damage produced by the Martinson report would last for several decades (cf., Gendreau & Ross, 1987).

¹² A Google ScholarTM citation search revealed that Martinson (1979) had been cited 210 times while Martinson (1974) was referenced 1,313 times.

Gendreau and colleagues (2006) commented that the legacy of the Martinson report was in challenging rehabilitation proponents to step up their efforts to identify *how* programs were successful. Much of the research immediately following the 1974 report, both in favor of and against correctional rehabilitation, was concentrated on destroying arguments made by the other side. Gottfredson (1979) captured this dynamic perfectly in a light-hearted yet instructive account of "treatment destruction techniques." The broader point was that scholars were engaging in knowledge destruction rather than knowledge construction (Cullen & Gendreau, 2001). It was easy to say that "nothing worked;" equally effortless was to say that this conclusion that "nothing worked;" equally effortless worked and for whom – a chore made easier with stronger methods of analysis and insights from disciplines outside of sociology and criminology.

WHAT WORKS

In characterizing the shift from nothing works to what works, Cullen and Gendreau (2000, p.124) commented, "Advocacy and criticism have their place, but the challenge is to escape ideology and rhetoric and think openly regarding what the evidence has to say on effective correctional interventions." They argued that scholars in the 70s and 80s had been "raised" to show what does not work as opposed to what

does work (see also Tittle, 1985). In order to participate in knowledge construction, several idioms had to be followed to establish what works in corrections. Scientific criminology was to be the basis for effective correctional intervention, and it should be used to construct knowledge about what does work while tearing down knowledge that is not evidence-based. What works, as identified by scientific criminology, was not limited to any one level of analysis or theoretical perspective. Finally, as compared to pure research, it was equally legitimate for criminologists to produce knowledge that can reduce crime, and scientific criminology would result in more good in the world than a criminology that ignores what really works (see Cullen & Gendreau, 2001, p. 331-3).

The movement toward identifying what works in offender rehabilitation intensified in the 1990s with the support of a Democratic administration in the White House (Cullen & Gendreau, 2001). Accordingly, the National Institute of Justice was more supportive of funding research aimed at reducing crime. Equally important was the introduction to criminal justice of a powerful new analytic device for evaluating what works. The technique of meta-analysis assisted researchers in not only determining what was effective in reducing recidivism, but it also allowed for an examination of heterogeneity in those effects; that is, it identified the specific components of programs that led to sizeable reductions in recidivism while also showing what factors had no effect on recidivism. The method of meta-analysis was therefore indirectly responsible for creating theories of effective treatment (e.g., the principles of effective intervention), as well as objective tools for evaluating whether programs were following empirically-validated modes of successful treatment (e.g., the correctional program assessment inventory). In short, the tool of meta-analysis allowed for correctional intervention to regain scientific legitimacy (Palmer, 1992). Ultimately, based on the evidence, correctional treatment can indeed have an appreciable effect on recidivism.

The Contribution of Meta-Analysis

Up until the early 1990s, rebuttals to the nothing works doctrine were largely based on subjective evaluations of the existing literature. These presentations of what works were deflected away as instances of researchers engaging in picking and choosing successful interventions rather than weighing the entire body of evidence (see, for example, Martinson, 1976). The method of meta-analysis would instead provide an objective tool for evaluating the current state of correctional intervention. Meta-analysis represents a quantitative synthesis of available research that produces an overall effective size between variables, which can then be used to make meaningful comparisons and analyses across studies (Lipsey & Wilson, 2001). The technique offers several advantages over the traditional narrative review (see Pratt, 2002). First, because coding decisions are public, meta-analyses can be replicated by other scholars, and accusations of bias can be verified or cast aside empirically. Second, the database for a meta-analysis can be constantly updated as additional studies are published. Third, and perhaps most important, meta-analyses allow for researchers to determine whether the effect size varies under certain conditions. This ability to examine the conditions under which programs are effective was vital toward establishing what works in correctional intervention.

Ironically, one of the initial meta-analyses to be conducted on correctional intervention essentially provided support for nothing works. Whitehead and Lab (1989) analyzed 50 studies from 1974 to 1984 on juvenile correctional treatment and reported that correctional treatment had little effect on recidivism. Perhaps echoing the earlier faults of the Martinson (1974) study, the authors grouped intervention programs into five broad categories and concluded, "No single type of intervention displays overwhelmingly positive results on recidivism" (Whitehead & Lab, 1989, p. 285). Nevertheless, this result of no effect was even more impressive given that the authors used a rather liberal definition of program effectiveness.¹³ It seemed that even the most powerful, objective assessments of the existing literature would come to the conclusion that nothing works.

As mentioned above, one of the benefits of meta-analysis is that coding decisions are available to all who wish to examine the original claims of an author. Additionally, the potential for effects to vary across methodological decisions allows for a more rigorous assessment of the studies conducted. The importance of the Whitehead and

¹³ The cut-off value for program effectiveness was a phi coefficient of at least .20 – roughly equivalent in interpretation to a correlation coefficient of the same value.

Lab (1989) study is that it provided the impetus for one of the most influential studies of correctional treatment to date. Don Andrews and colleagues found the results of the Whitehead and Lab study curious. As psychologists, they themselves had experienced firsthand interventions that were successful in altering criminal behavior (see the discussion of these individuals in Cullen, 2005). After all, they reasoned, if criminal behavior was learned the same as other behaviors (Sutherland, 1939), why could it not essentially be modified using those same learning principles? Andrews and colleagues believed that the grouping of studies by Whitehead and Lab was unwarranted, and instead categorized existing studies based on whether they represented what they deemed "appropriate correctional service."

Appropriate service reflected three psychological principles: 1) delivery of service to higher risk cases (*risk*), 2) targeting of criminogenic needs while avoiding targets unrelated to crime (*need*), and 3) use of styles and modes of treatment that are matched with offender needs and learning styles (*responsivity*) (Andrews, Zinger, et al., 1990a, p. 369). The category therefore contained: programs that delivered service to higher risk cases, all behavioral programs (except ones administered to lower risk cases), programs that reflected specific responsivity-treatment comparisons, and also nonbehavioral programs that clearly targeted criminogenic need through structured intervention (Andrews, Zinger, et al., 1990a, p. 379). Using this categorization, while also including groupings for "criminal sanctions," "inappropriate correctional service," and "unspecified service," Andrews and colleagues reanalyzed the Whitehead and Lab

studies as well as an additional 35 studies. The type of treatment variable was the strongest of the correlates (e.g., quality of design, juvenile or adult) of effect size, and posthoc analyses confirmed that appropriate service had a mean phi coefficient that was stronger than that of the remaining three categories of treatment. On average, appropriate correctional service produced a phi coefficient of .30, exceeding the cutoff point used by Whitehead and Lab (but see Lab & Whitehead, 1990).

Subsequent quantitative syntheses have confirmed the findings of Andrews and colleagues: treatment, when effectively administered, can have a substantial impact on reduced reoffending (for a review of studies, see Lipsey & Cullen, 2007). These "second generation" meta-analyses (Cullen, 2002) therefore accounted for the heterogeneity of effect sizes for treatment programs and essentially sorted out the good from the bad. The mean reduction in recidivism for all treatment programs was around 10% (Losel, 1995), with some programs producing reductions up to nearly 40% (Lipsey, 1999; Lipsey & Cullen, 2007). Meta-analyses also allowed for the objective determination of what did not work. Studies have consistently shown that programs emphasizing sanctions based on control and deterrence have produced negligible reductions in recidivism, and, at worst, are likely to increase future offending (Andrews, Zinger, et al., 1990a; Dowden & Andrews, 2000; Drake, Aos, & Miller, 2009; Lipsey, 1992, 1999; Lipsey & Cullen, 2007; MacKenzie, 2000).¹⁴ To be sure, Lipsey and Cullen (2007, p. 303) concluded, "The smallest mean recidivism effect size found in any meta-analysis of a

¹⁴ See also the discussion of principles of ineffective intervention in Gendreau (2006).

general collection of rehabilitation studies is bigger than the largest one found in any meta-analysis of the effects of sanctions."

The technique of meta-analysis was thus largely responsible for reversing earlier conclusions that nothing works in offender rehabilitation. While the method still has its detractors—some referring to it as "alchemy" (see, Logan & Gaes, 1993)—it provides a readily quantifiable method of measuring the effectiveness of correctional treatment. The task, then, is to move beyond inductively uncovering correlates of successful programs to developing more coherent theories for effective treatment (Palmer, 1995). The "principles of effective intervention," largely developed by the same Canadian psychologists who earlier identified what appropriate treatment consisted of, provide an organizing framework for best understanding practices likely to reduce future offending.

The Principles of Effective Intervention

As noted above, the Canadian psychologists were adamant in suggesting that since criminal behavior was learned it would be possible to use social learning principles to modify offenders' undesirable attitudes and actions. Through their own experiences with offenders, coupled with the results of hundreds of studies on what works in reducing reoffending, the Canadians were able to create a theory of effective treatment. Cullen (2002, p. 283) agreed that they "have constructed a model of rehabilitation that is rooted in theoretical and empirical criminology, that organizes much of what is known about effective interventions, and that is largely supported by existing meta-analyses of the treatment literature." In short, the Canadians were responsible for creating a theory of crime correction that was based on a theory of crime causation.

Programs that adhered to the principles of effective intervention have reduced recidivism in the range of 25% to 80%, with an average reduction of about 50% (Gendreau, 1996). Perhaps most importantly, empirical support for the principles has been found by scholars *other* than the Canadians (Cullen, 2002). The most recent listing of these principles of effective intervention included (see also Antonowicz & Ross, 1994; Gendreau, 1996): 1) Organizational culture, 2) Program implementation and maintenance, 3) Management/staff characteristics, 4) Client risk/need practices, 5) Program characteristics, 6) Core correctional practice and, 7) Inter-agency communication (see Gendreau, et al., 2006, p.425-427 for more detail on each). Principles 4 and 5 are often identified as the most important for predicting program effectiveness, and they therefore warrant a more detailed discussion.

Client risk and need practices refer to the requirement for programs to assess offenders on a risk instrument that contains a wide range of criminogenic needs. Programs that adequately identify and address these needs are likely to be more successful in recidivism than those that do not. The emphasis must be placed on malleable, dynamic predictors (e.g., criminal attitudes) of criminal behavior rather than static predictors (e.g., criminal history). Further, the dynamic needs found to be related

62

to recidivism are to be attended to while avoiding those unrelated to future offending (e.g., self-esteem) (Andrews, Zinger, et al., 1990a; Gendreau, et al., 1996).¹⁵ Several studies have documented the importance of attending to criminogenic needs for the successful reduction of recidivism (see, for example, Andrews & Bonta, 2003; Antonowicz & Ross, 1994). In particular, a meta-analysis of 374 effect sizes found that programs that adhered to this principle reduced recidivism by 20% as compared to those that did not (Andrews & Bonta, 2003).

Program characteristics refers to two specific components relating to what services are delivered to whom. First, the most appropriate mode of treatment is behavioral in nature. Often referred to as the "general responsivity" principle (Andrews, Zinger, et al., 1990a), this includes techniques based out of the operant conditioning and social learning traditions such as prosocial behavior reinforcement, modeling of positive behaviors, and cognitive restructuring (Gendreau, et al., 2006).¹⁶ The successful program will employ intensive, behavioral forms of treatment attending to the criminogenic needs discussed above. Cognitive-behavioral programs have been found to produce sizeable reductions in recidivism (Lipsey, Chapman, & Landenberger, 2001; D. B. Wilson, Bouffard, & MacKenzie, 2005). Second, intensive services are to be reserved for high-risk offenders, with the idea being that unnecessary treatment

¹⁵ A particular instrument found to effectively predict recidivism based on criminogenic needs is the Level of Service Inventory (LSI-R) (Gendreau, et al., 1996).

¹⁶ The principles of effective intervention also emphasize "specific responsivity," which takes into account individual differences such as IQ to best increase the success of the general responsivity principle (Cullen, 2002).

delivered to low-risk offenders could actually increase the likelihood of future offending.¹⁷ High-risk offenders are also expected to benefit most from treatment. Research has shown that programs that delivered service to high-risk offenders are likely to be more effective in reducing recidivism (Lowenkamp & Latessa, 2005b; Lowenkamp, Latessa, & Holsinger, 2006; but see Antonowicz and Ross, 1994), and that programs adhering to both principle 4 and 5 have been found to reduce recidivism by 23% as compared to those that do not (Andrews & Bonta, 2003).

The Correctional Program Assessment Inventory

Treatment scholars have long recognized the importance of what Quay (1977) termed the "third face of evaluation" (see, for example, Gendreau & Ross, 1979). While most assessments of correctional treatment were concerned with the adequacy of research designs and specific outcomes, few analyzed the soundness of program integrity. Stated differently, few studies examined the "black box" of correctional intervention. The significance of the principles of effective intervention is that they can be quantified through the Correctional Program Assessment Inventory (CPAI) (Gendreau & Andrews, 2001) to determine how well a program is adhering to empirically-established modes of effective treatment. The advantages of the CPAI are that it is a versatile assessment tool that can be applied to a wide range of programs.

¹⁷ An increased likelihood of reoffending could occur, for example, when a low-risk offender is placed in a program that exposes him or her to high-risk offenders or disrupts the offender's prosocial ties and contacts in the community (Lowenkamp & Latessa, 2005b; but see Byrne & Taxman, 2005).

(e.g., adult, juvenile, community, institutional), it allows for the quality of a program to be quantified and can be used to make comparisons across programs, and it can be used as an evaluation tool (Latessa & Holsinger, 1998; see also Matthews, et al., 2001).

The specific components of the CPAI will be discussed more fully in Chapter 3. In brief, the tool is composed of 6 categories: program implementation and leadership, offender assessment and classification, characteristics of the program, characteristics and practice of staff, evaluation and quality control, and a miscellaneous category including ethical guidelines and levels of support. The CPAI has 77 items across the 6 categories, with each item determined as being present or not. Each section is then scored as either "very satisfactory" (70 percent to 100 percent), "satisfactory" (60 percent to 69 percent), "satisfactory but needs improvement" (50 percent to 59 percent) or "unsatisfactory" (less than 50 percent). The scores from each area are then summed and the same rating scale is used for the overall program score (Latessa & Holsinger, 1998). Scores are determined through structured interviews with program staff members, examination of program documentation, review of representative case files, and observation of program activities (Matthews, et al., 2001).

Two lines of research have emerged using the CPAI, the first of which assesses the degree to which established programs are adhering to the principles of effective intervention. The results so far have been rather disappointing. Gendreau and Goggin (1997) reported an average CPAI score of only 25% on 101 correctional programs in 1991. Matthews and colleagues (2001) reported that only 9 of 86 programs they

65

analyzed from January 1996 to September 1998 scored in the "very satisfactory" range on the CPAI. Slightly over one-third of programs received an "unsatisfactory" rating. An analysis of over 50 programs by University of Cincinnati researchers produced an overall average of less than 56% (Latessa & Holsinger, 1998). Finally, a recent analysis of 38 community-based residential programs produced an average CPAI score of 45% (Lowenkamp, Latessa, & Smith, 2006). In short, the principles of effective intervention, at least as measured by the CPAI, are not currently being implemented to a degree that can be expected to produce meaningful reductions in recidivism.

The second line of research is beginning to examine the relationship between program integrity and recidivism rates. Despite relatively poor scores on the CPAI by programs overall, those programs that *do* exhibit better scores are more likely to lead to reductions in recidivism (Lowenkamp, 2004; Lowenkamp, Latessa, & Smith, 2006). Of the 38 community-based residential programs examined by Lowenkamp and colleagues (2006), the 24 programs with an "unsatisfactory" CPAI score averaged a 1.7% reduction in recidivism, the 13 programs that rated "satisfactory but needs improvement" on the CPAI averaged a 8.1% reduction in recidivism, and the lone program scoring "satisfactory" on the CPAI produced a 22% reduction in recidivism rate. Program integrity has also been shown to be important in studies that did not incorporate the CPAI. In a meta-analysis of 273 studies of program effectiveness, Andrews and Dowden (2005) discovered that higher program integrity produced a greater treatment effect size *only when* appropriate treatment was being delivered. That is, the indicators

used by the authors to indicate integrity (e.g., adequate dosage, clinical supervision of workers) only mattered when the program attended to principles of effective intervention.

Evidence-Based Corrections

The current state of corrections in the United States has come a long way since the barbaric punishments of colonial times. What is most interesting is that the path to get here has taken many of the same turns as earlier shifts in corrections. The increased legitimacy of the principles of effective intervention for guiding correctional practices has contributed to cracks in the current penal harm movement (Listwan, et al., 2008). The same themes invoked today in doing so were similar to the ideals of the Progressives at the beginning of the 20th century. In particular, the Canadian scholars' theory of rehabilitation, and tools such as the CPAI, emphasize the need for individualized treatment. In rejecting a classical view of crime, the reformers of today are similar to their Progressive cousins in embracing positivism and a search for the causes and remedies of crime unique to each individual.

This emphasis on effective programming as measured by the CPAI is part of a larger movement to encourage evidence-based practice (Cullen & Sundt, 2003; Drake, et al., 2009; Latessa, 2004; MacKenzie, 2000; Sherman, 1998). A large difference between the reformers of yesterday and those of today is that meta-analyses and outcome assessments about effective practices are available to guide programming. Evidence-

based practice relies on the use of objective, empirical findings to guide policy rather than hunches, morals, opinions, and customs. MacKenzie (2000) described two types of evidence-based research: basic research and outcome research. Basic research involves identifying what works best when properly implemented while outcome research examines the specific results of each program, agency, or facility. It is evident from the discussion above that substantial efforts have been made at each type of research. The problem has been translating the evidence into the practice as several scholars have documented the difficulty in changing long-held attitudes and beliefs about corrections (Cullen & Gendreau, 2000; Cullen & Sundt, 2003; Flores, Russell, Latessa, & Travis, 2005; Latessa, 2004; Latessa, et al., 2002; Listwan, et al., 2008). Whatever the difficulty in convincing practitioners and policymakers of the effectiveness of treatment, it is clear that adhering to principles of effective intervention is cost-effective (Drake, et al., 2009) and that it enhances public safety through the reduction of recidivism (Cullen & Gendreau, 2000; Latessa, 2004).

A major divergence between the current trend toward evidence-based practice and that of the Progressive movement is the importance of context. While the Progressives gave importance to the ecological theories of crime that were popular at the time, the treatment literature of today largely discounts it. The Canadian scholars should be commended for devising a theory of rehabilitation that has a well-supported criminological theory (i.e., social learning) as its foundation. But as Cullen (2002, p. 278) noted, "It (the Canadian theory of rehabilitation) also rejects structural theories that link crime to 'root causes' whose origins lie in the organization of society...Indeed, from the Canadians' standpoint, structural factors can only have effects to the extent that they produce, within individuals, the antisocial values, cognitions, and orientations that are the proximate causes of criminal conduct." This stands in stark contrast to the Progressives, who "adopted two strategies, one designed to treat the broader causes of crime; the other to rehabilitate the deviant himself" (Rothman, 1980, p. 53). The reformers of the early 1900s were thus aware that the treatment of offenders needs to take into account the effects of the social conditions that produced these individuals. Again, the Canadians are not attempting to create a theory of crime, and their logic in attending to the more proximate causes of crime for the correction of behavior makes sense, but in ignoring macro-level theories of crime they could be potentially missing an opportunity to construct a more complete framework for offender rehabilitation.

MACRO-LEVEL CRIMINOLOGICAL THEORY

Perhaps not surprisingly, the broad progression of criminological theory closely parallels the line of thought behind American corrections. Early theorists focused largely on the individual specifically in an attempt to explain wayward behavior. As noted above, the first criminologists (e.g., Beccaria, Bentham) stressed the importance of a calculating offender who, when presented with an opportunity to engage in crime, would engage in a rational calculation to decide whether the benefits of doing so outweighed the costs. Aside from the rational choice perspectives of the classical school, early criminological theory also featured individual risk factors such as neuropsychological deficits. As but one example, Goddard (1914) wrote of the "feebleminded" and noted, "Those who are born without sufficient intelligence either to know right from wrong, or those, who, if they know it, have not sufficient will-power and judgment to make themselves do the right and flee the wrong, will ever be a fertile source of criminality" (p. 7). In short, criminal behavior was viewed as a manifestation of faulty decision making or individual pathologies.

These early ideas about the individual correlates of crime are frequently presented in criminological theory textbooks, yet criminology in the United States is largely rooted in the study of urban settlements and communities (Tittle, 2000). In particular, the "Chicago School" of sociology was largely responsible for identifying causes of crime external to the individual. This line of theorizing was captured eloquently by Wirth (1938, p. 1-2) who wrote, "Nowhere has mankind been farther removed from organic nature than under the conditions of life characteristic of great cities." The study of deviant behavior in an urban setting led to the conclusion that crime was a "social fact" (Durkheim, 1938), which could not be understood when removed from the contexts that created it (Abbott, 1997).

Although these macro-level theories of crime dominated American criminology in the 1950s and 1960s, they quickly and curiously fell out of favor by the 1970s for a variety of reasons to be discussed below. In their place, individual level explanations of crime were ushered back into the fold. These frameworks again were insistent that criminal behavior could be explained by factors unique to each individual, and the increased use of self-report and survey data facilitated the search for causes of crime that were unrestrained by structural forces (Sampson, 2002b). An emphasis on the individual also provided the politically convenient notion that crime was not due to social maladies such as poverty and inequality (Cullen, et al., 1997), and that the proper way to combat crime was to increase the penalties for deviant behavior and to incapacitate those who could not follow the rules.

It was the glaring afflictions associated with these social problems, however, and their differential impact on nonwhites and the lower class in particular, that were largely responsible for the resurgence of macro-level theory in the late 70s and 80s. Pratt and Cullen (2005) identified four major lines of research that reinvigorated the importance of context that was so prominent in earlier theorizing. First, the work of Cohen and colleagues (1979; 1981) detailed the specific opportunity structures that were likely to lead to criminal events and victimization. Second, Blau and Blau (1982) contributed the idea that violent crime could be predicted by levels of inequality rather than simple indicators of poverty. Third, *macro-level* deterrence research (e.g., Blumstein, Cohen, & Nagin, 1978) evolved out of considerations for whether the emphasis on deterrence and incapacitation-based policies was effective in reducing crime rates. Finally, the rediscovery of the Chicago School works by a select group of scholars was influential in shifting the discussion from individuals back to places.

William Julius Wilson's classic (1987) work on the plight of the urban underclass is often identified as a driving force in the resurrection of ecological research (Massey, 2001). Wilson argued that the "truly disadvantaged" of society were concentrated in areas that were plagued by a host of negative conditions (e.g., joblessness, poverty). In a meta-analysis of 31 different macro-level predictors of crime across 214 empirical studies, 509 statistical models, and 1,984 effect sizes, Pratt and Cullen (2005) confirmed that indicators of concentrated disadvantage were indeed among the strongest and most stable predictors of crime (see also Land, McCall, & Cohen, 1990). The authors argued that future macro-level works in criminology must account for these factors at the risk of model misspecification. The remainder of this chapter therefore seeks to establish the progression of the reemergence of social disorganization theory and the development of indicators of concentrated disadvantage. In doing so, the argument will be made that existing analyses of the effectiveness of treatment programs are lacking in that they do not account for these powerful structural antecedents of criminal behavior.

THE RISE AND FALL OF ECOLOGICAL THEORY

The writings of the Chicago school thinkers were a product of a time of mass industrialization and urbanization. The city represented a diverse conglomeration of individuals with a multitude of attitudes and behaviors that made cohesiveness
difficult. Within the urban environment, "the bonds of kinship, of neighborliness, and the sentiments arising out of living together for generations under a common folk tradition are likely to be absent, or, at best, relatively weak" (Wirth, 1938, p. 11). Such a backdrop was ripe for the development of social problems, including crime, through a variety of mechanisms.

The initial contribution of the Chicago school to the study of crime and delinquency was the realization that the organization of the city followed a predictable pattern. The work of Park and Burgess (1925) detailed a concentric zonal arrangement that was produced as a city grew outward. Within the city center was a business and industrial region that was surrounded by a zone in transition, which contained less than desirable, deteriorated housing due to its proximity to the city center. As this central business district expanded, the transitional area became a residential zone composed of low income individuals who were unable to move out of the city. The end result was a concentration of the "first immigrant settlement, the poor and dispossessed of all types, and vice industries" (Kornhauser, 1978, p. 62). The area was in constant flux – those who could afford to move out did, and those new to the city owning little more than their name moved in. The furthest zones from the city provided attractive living conditions characterized by relative wealth and residential stability.

Shaw and McKay (1942) applied this pattern of ecological differentiation to the study of juvenile delinquency. In their research they sought to determine how delinquency was geographically distributed as well as to examine the social conditions that were associated with high levels of delinquency. Using multiple indicators of delinquency as measured by official records in Chicago from 1900 to 1940, the authors established that crime was concentrated in the innermost zones identified by Park and Burgess. This distribution was the same for school truants, young adult offenders, rates of tuberculosis and, to a lesser extent, with infant mortality and rates of mental disorder. Later works confirmed this spatial distribution of crime in other cities such as Boston and Philadelphia; as such, Shaw and McKay determined that crime was endemic to particular *areas* – a finding that held no matter what racial or ethnic group occupied the center zones.

The conditions of these areas led Shaw and McKay to conclude that they were characterized by social disorganization, defined as "the extent to which a community structure is effective in articulating and realizing the common values of its residents and solving common problems" (Simcha-Fagan & Schwartz, 1986, p.670; Bursik, 1988; Kornhauser, 1978). They reasoned that this rupture in community cohesion was caused by three factors: poverty, racial heterogeneity, and residential mobility. While Shaw and McKay did not posit a direct link between poverty and crime (Bursik, 1986), they argued that impoverished areas had fewer conventional opportunities for employment and leisure time. Also, residents in poor areas were less likely to have an incentive to take care of their community. Racial heterogeneity contributed to disorganization through the inability of residents to agree on common cultural values and beliefs. Finally, residential mobility created a fluid community in which neighbors often failed to recognize one another. Each of these was detrimental toward creating a community structure in which residents enjoyed a common bond that enabled the management of social problems such as crime.

Shaw and McKay were relatively clear on the causes of social disorganization, but they were not as lucid as to how social disorganization in turn led to criminal behavior (Bursik, 1988). A variety of elements from current and later major criminological theories were invoked including strain (Merton, 1938), differential association and learning (Sutherland, 1939), opportunity structures (Cloward & Ohlin, 1960), social bonding (Hirschi, 1969), and delinquent subcultures (A. K. Cohen, 1955). Despite a hodgepodge of theoretical links between social disorganization and criminal behavior offered, the main interpretation of the theory involves the inability of a socially disorganized community to exert informal control over its members. Scholars frequently interpret social disorganization as occurring when "conventional institutions of social control (e.g., schools, churches, voluntary community organizations) [are] weak and unable to regulate the behavior of the neighborhood's populace, especially its youth" (Pratt & Cullen, 2005, p. 406). The logic of the social disorganization argument was appealing – certain areas were distinguished by a heterogeneous, poor population with a high turnover rate, which led to highly disorganized communities that were unable to control the deviant behavior of individual members. The theory enjoyed a great deal of success in the 50s and 60s before abruptly vanishing as researchers, lured by the promises of shiny new methods and statistical techniques, abandoned the rich,

contextual methods of the Chicago school and ventured into the "aspatial wilderness" (Massey, 2001, p. 43).

Bursik (1986, p. 36) lamented that, less than fifteen years after the second edition of Shaw and McKay's work, ecological research was largely reduced to "an atheoretical exercise in the mapping of criminal phenomena." The traditional American emphasis on group dynamics and organization was replaced with the familiar origins of criminology in the form of individual-level research. This shift was chiefly the result of increased usage of survey methodology and self-report data to easily assess micro-level predictors of crime. These methods also allowed for the pitting of theories against one another in an all-out effort to explain the most variance and lay claim to particular correlates of crime (Pratt & Cullen, 2005). Whereas the Chicago school emphasized ethnographic methods to establish the contextual nature of crime, these new analyses were primarily concerned with a variable approach in which social facts were removed from their environments and plugged into regression equations and factor analyses. The interaction amongst variables was viewed as a "methodological nuisance" rather than the way social reality actually happened (Abbott, 1997, p. 1162).

Additionally, macro-level theories of crime lost their substantive appeal when ecological correlations weakened due to mass socioeconomic and residential mobility (Massey, 1996; see also Bursik, 1986). Researchers began to wonder whether the strong findings of the Chicago school were specific to a certain time and place. Social disorganization theory in particular suffered from a number of criticisms including

76

charges of tautological reasoning—social disorganization was often indicated by the presence of criminal behavior. Further, the dangers associated with making individuallevel inferences based on aggregate level data (see Robinson, 1950) scared away many ecological enthusiasts. Those interested in spatial research turned their attention toward opportunity models instead of analyzing the structural antecedents of criminal behavior (Bursik, 1986). The vast majority of those in the field, however, concerned themselves with the sources of individual motivation to commit crime. In particular, the emergence of social bond theory (Hirschi, 1969) and the distinctly individual aspects of differential association theory (Akers, Krohn, Lanza-Kaduce, & Radosevich, 1979) resulted in a flurry of empirical tests that were largely devoid of structural components (for reviews see Kempf, 1993; Matsueda, 1988). In essence, the baby of macro-level theories of crime (social disorganization theory among them) was thrown out with the bath water.

THE RESURGENCE OF MACRO-LEVEL CRIMINOLOGICAL THEORY

The banishment of macro-level thought to the theoretical cellar was short-lived with over 200 empirical studies exploring the ecological correlates of crime in the 1980s and 1990s (Pratt & Cullen, 2005). This renewed interest was in large part spurred by scholars answering the criticisms of earlier structural skeptics. Most prominently, the inclusion of new exogenous variables, and the improved specification and indirect

effect assessment of old ones, allowed for more comprehensive macro-level models to be estimated. Additionally, Sampson and Wilson (1995) challenged scholars to avoid engaging in research that suffered from an "individualistic fallacy"-the idea that individual-level causal factors generated individual-level correlations with little thought for the structural forces at play. Finally, this ecological renaissance was also strangely buoyed by the development of new methodologies and analyses (e.g., structural equation modeling, hierarchical linear modeling), which, as noted above, were essentially responsible for the dismissal of earlier macro theories. Each of these realizations, combined with several other theoretical and empirical advancements to be discussed below, signaled the need to reintroduce ecological correlates back into criminology. Accordingly, several individual level theories have been extended to include structural antecedents of crime such as self-control theory (e.g., Pratt, et al., 2004), general strain theory (e.g., Agnew, 1999), and social learning theory (e.g., Akers, 2009).

Bursik (1988) famously detailed the problems and prospects facing social disorganization theory in particular. In discussing the resurgence of the theory, he credited three major works with reviving the ideas of Shaw and McKay: (1) Byrne and Sampson's (1986) edited volume on the social ecology of crime, victimization and fear of crime, (2) Reiss and Tonry's (1986) edited volume on communities and crime, and (3) Stark's (1987) work setting forth thirty propositions about the relationship between ecology and crime. Each of these contributions took the approach that it was something

about *places*, and not individuals, that led to crime. Bursik further argued that earlier criticisms of ecological theory had been attended to and that the social disorganization framework had successfully been adapted to additional substantive areas. Kubrin and Weitzer (2003) have since provided a more recent assessment of the state of social disorganization theory. Taken together, the reviews by Bursik and Kubrin and Weitzer suggest three major and interrelated advancements. First, the use of dynamic and multilevel modeling has provided a more appropriate assessment of the theory's main tenets. Second, the relationship between social disorganization and crime has been more fully specified to avoid criticisms of circular reasoning. Finally, and perhaps most importantly for the current analysis, the structural predictors of social disorganization have been expanded to include indicators of concentrated disadvantage.

New Models

Many of the original criticisms levied at traditional social disorganization theory and its offshoots were related to methodological issues unresolved through simplistic modeling. In particular, the initial analyses performed by Shaw and McKay were rather rudimentary and involved little more than plotting juvenile delinquency rates on a map of Chicago. Bursik (1986) in particular challenged the idea that the findings of Shaw and McKay represented an enduring relationship between place and crime. He correctly pointed out that the theory assumed ecological stability and that measuring ecological characteristics and crime at one time was an appropriate method of assessment (i.e., cross-sectional approaches were appropriate for testing social disorganization theory). Instead, Bursik found that the basic tenets of social disorganization theory did not hold up when measured over time: areas that were characterized by rapid ecological change in the 1940s and again in the 1960s did *not* experience high rates of crime. Bursik appropriately emphasized the need to consider factors external to the makeup of communities (e.g., real estate market fluctuations) while also stressing the importance of dynamic models to differentiate between ongoing patterns and unexpected disruptions of ecological compositions (see also Kubrin & Weitzer, 2003, p. 387-389).¹⁸

A second major concern for the theory was of the effect that crime itself might have on social disorganization. In essence, the crux of this criticism was that crime and disorder were predicted by crime and disorder. One way of addressing this problem, to be discussed below, was the inclusion of more direct measures of social disorganization as mediating variables between ecological indicators and measures of crime. Yet another way to account for this issue is through the estimation of nonrecursive models that assess the reciprocal effects between social disorganization and crime. As but one example, Bellair (2000) used simultaneous equations to untangle the relationship between informal surveillance and street crime. His research indicated that robbery

¹⁸ Several scholars (e.g., Sampson, et al., 2002; Vila, 1994) have noted that from a developmental lifecourse perspective, it could be expected that the impact of ecological factors would be strongest when crime was measured ten to fifteen years later. This perspective argues that growing up in concentrated disadvantage would affect individuals in their most crime prone years (15-24 age range). Testing of this hypothesis would also require a longitudinal assessment of social disorganization theory.

and stranger assault had a moderately strong effect on informal surveillance, yet there was no significant effect for informal surveillance on street crime. Bellair's findings suggested that previous research supporting the traditional social disorganization postulation of a negative relationship between informal control and crime may reflect improper causal ordering (see also Bursik, 1988, p. 542-543; Markowitz, et al., 2001).

One of the more intriguing progressions in the revival of social disorganization theory was the realization that contexts were affected by other contexts (Mears & Bhati, 2006). Capturing the true essence of the Chicago school, ecological scholars noted that "the most important fact about a neighborhood may not be its own crime rate, but the crime rate in surrounding neighborhoods" (Massey, 2001, p. 43). Kubrin and Weitzer (2003) observed that spatial interdependence could be expected given the inexact congruence between designated boundaries and actual ecological factors that shape social interaction. Further, they noted that many interpersonal crimes take place across neighborhood boundaries, and the failure to account for the spatial connections between communities may leave social disorganization models underspecified. Studies that have estimated the effects of ecological characteristics on crime rates with controls for spatial autocorrelation find significant spatial interdependence (Kubrin & Weitzer, 2003).

Perhaps the most significant advancement of social disorganization theory from a methodological standpoint has been the consideration for how context affects the motivational processes of individuals (see Short, 1985). The use of hierarchical linear modeling (HLM) makes possible the estimation of interactions between structural and individual-level factors. Further, HLM permits partitioning of the variance into between- and within-neighborhood components, which allows for independent assessments of the effects at each level (Elliott, et al., 1996). Studies that have taken this approach find a significant impact of ecological factors on individuals that cannot be explained as a result of individual-level characteristics varying across neighborhoods due to selection effects (Cattarello, 2000; Elliott, et al., 1996; Sampson, Morenoff, & Earls, 1999; Sampson, Raudenbush, & Earls, 1997). The application of HLM to social disorganization research therefore affirms the original Chicago school proclamation that context matters for individuals.

New Paths

Sampson and Groves (1989) argued that social disorganization had never truly been tested, and that an accurate assessment of the theory required the intervening mechanisms to be more fully developed. More specifically, the authors identified that social disorganization, as produced by the ecological factors set forth by Shaw and McKay, had been assumed to exist in models rather than having been measured directly. To remedy this Sampson and Groves constructed a community-level model that measured level of social organization in terms of local friendship networks, teenage peer group supervision, and organizational participation. Using data from the British Crime Survey, the authors found that the measures of social disorganization did in fact mediate a large portion of the effects of structural characteristics on crime. Their findings also bolstered social disorganization theory by giving it support outside of the United States as well as through the use of self-report data. Subsequent analyses have confirmed that the results of Sampson and Grove were not unique to that particular time period (Lowenkamp, et al., 2003).

The work of Sampson and Groves inspired a body of research designed to get around the circular reasoning of social disorganization. In effect, they answered the criticism that crime (as an indicator of social disorganization) was being used to predict crime through clarifying "the unique conceptual status of social disorganization by defining it in terms of the capacity of a neighborhood to regulate itself through formal and informal processes of social control" (Bursik, 1988, p. 527). Bursik and Grasmick (1993b) fleshed out these relationships even further in their systemic model of neighborhood control. They argued that existing research primarily was concerned with *private* and *parochial* control while largely ignoring *public* control. Briefly, private and parochial refer to control within the primary (e.g., friends, family) and secondary (e.g., neighbors) relational networks respectively while public control is enacted through a community's ability to solicit external resources from outside the neighborhood (see Hunter, 1985). Each of these types of mutually-reinforcing control was necessary for a community to effectively police its members and avoid a high crime rate (e.g., a neighborhood could have strong private and parochial control networks yet still exhibit a high rate of crime). Much of the ecological research that specifies

indicators of social disorganization follows a variation of this blueprint for testing the most common interpretation of Shaw and McKay.

Several mediating paths have been established between structural components of communities and crime that go beyond the traditional control formulation of social disorganization theory. Long-established differential association constructs such as definitions favorable to crime and interaction with delinquent peers have been shown to intervene between ecological indicators and crime rates (Cattarello, 2000; Heimer, 1997). Further, neighborhoods characterized by concentrated disadvantage (discussed below) are likely to produce individuals that experience high levels of strain (Agnew, 1999), as well as low levels of self-control (Pratt, et al., 2004), which in turn are likely to produce higher rates of crime. Finally, the link between social organization and socialization through culture has been reestablished since the damaging critique by Kornhauser (1978). This perspective argues that it is not enough to measure social ties between individuals within communities, which can vary in both strength and content. Studies have shown that attenuated neighborhood culture is an important component of explaining variation in criminal behavior through a social disorganization framework (Elliott, et al., 1996; Warner, 2003).

A particularly promising cultural concept for explaining the indirect relationship of structural variables on crime is that of collective efficacy. Sampson and colleagues (1997, p. 918) recognized that "social and organizational characteristics of neighborhoods explain variations in crime rates that are not solely attributable to the

84

aggregated demographic characteristics of individuals." Collective efficacy thus consists of "the linkage of mutual trust and the willingness to intervene for the common good" (Sampson, et al., 1997, p. 919). More specifically, it represents the *activation* of social ties – particularly in the form of shared expectations for social control (Sampson, 2006; Sampson, et al., 1999). Areas characterized by concentrated disadvantage and residential instability are less likely to enjoy the benefits of high levels of collective efficacy. This association is particularly important given the strong relationship between collective efficacy and crime (Pratt & Cullen, 2005; Sampson, 2006).

The specification of intervening mechanisms remains an important advancement in social disorganization theory. Despite robust findings, however, direct effects often remain between the structural characteristics of an area and crime (Peterson, Krivo, & Harris, 2000; Rosenfeld, Messner, & Baumer, 2001; Sampson, et al., 2002; Veysey & Messner, 1999; Warner & Rountree, 1997). These results signal the need for further analyses of the structural antecedents of crime. Appropriately, another area of significant development within the social disorganization tradition has been the construction of concentrated disadvantage measures to explain between- and withinneighborhood variations in crime.

New Variables

Recall that the three original structural covariates identified by Shaw and McKay were poverty, racial heterogeneity, and residential mobility. Each of these was predicted to lead to low levels of organization within the community and therefore inhibit the development of informal control and the reduction of criminal behavior. Added to these were the effects of family disruption (Sampson, 1986) and joblessness (W. J. Wilson, 1987).¹⁹ Sampson (1986) observed that neighborhoods with pronounced family disruption (e.g., divorce, single-headed families) were unlikely to provide an effective network of informal social control. He described a process in which these effects were detrimental to the entire community rather simply the children of the specific family. Wilson (1996) made a similar argument in that joblessness led to culturally destructive behaviors and attitudes for all of the community. Subsequent analyses confirmed that these two variables had similar impacts on crime, and that they provided an explanation for previous effects on crime attributed to inequality and racial composition (Sampson & Wilson, 1995).

The importance of these additional works was the realization that social disorganization and cultural isolation developed from the *concentration* of poverty, family disruption, and residential stability (Sampson & Wilson, 1995). In essence, the combination of previously identified exogenous ecological indicators led to pockets of extreme disadvantage. Wilson (1987) described these as "concentration effects" – the social transformation of the inner city, in processes similar to those described nearly 50 years earlier by Shaw and McKay, resulted in a disproportionate concentration of the

¹⁹ Additional sources identified as causes of social disorganization include formal control (Rose & Clear, 1998) and urbanization (Sampson & Groves, 1989).

most disadvantaged segments of the population. Scholars were quick to develop indices to capture the interaction among these theoretically relevant constructs. The creation of a concentrated disadvantage index was also done for practical reasons. Land and colleagues (1990) identified excessive collinearity among variables as the greatest flaw in previous ecological research. They recommended that the variables be combined into an index to overcome this problem, and their analyses documented that a resource deprivation/affluence index had the strongest and most invariant effect across time and multiple levels of analysis.²⁰

Concentrated disadvantage indices typically contain items that measure the percent of families below the poverty level, percent of families receiving public assistance, percent of female-headed families with children, percent unemployed, and percent black (see Sampson, et al., 1999). Pratt and Cullen (2005) reported that high levels of racial heterogeneity, the presence of economic deprivation, and high rates of family disruption were among the strongest and most stable macro-level predictors of crime. These relationships are particularly pronounced for nonwhites, and Sampson and Wilson (1995) commented that the worst urban contexts that whites live in are considerably better than the average context for blacks. Concentrated disadvantage has also been found to predict crime across gender and racial lines (Krivo & Peterson, 1996;

²⁰ Land et al. (1990) also found that measures of relative inequality and absolutely inequality loaded on the same factor and were more empirically similar than previous research indicated. The authors suggested that this may be the cause of inconsistent findings in prior studies, and their findings effectively joined the resource deprivation literature with the social disorganization literature (see also Pratt & Cullen, 2005, p. 431-432).

Steffensmeier & Haynie, 2000).²¹ Perhaps most impressive, indicators of concentrated disadvantage have been found to retain direct effects on homicide net of collective efficacy (Morenoff, Sampson, & Raudenbush, 2001).

Additional arguments have been made to include measures of concentrated affluence in addition to concentrated disadvantage (Massey, 1996). Sampson and colleagues (1999) found that the two indices did not present significant collinearity problems, and research is beginning to examine the concentrated protective factors that inhibit crime (Morenoff, et al., 2001). Massey (2001) developed an Index of Concentrated Extremes (ICE) that places both concentrated affluence and concentrated disadvantage on a continuum. The ICE measure is computed by subtracting the number of poor families from the number of affluence families and dividing by the total number of families. Values therefore range from complete poverty (-1) to complete affluence (+1). Future research would do well to untangle the effects of concentrated disadvantage and concentrated affluence on measures of crime.

Although the introduction of a concentrated disadvantage index has provided significant advancements in social disorganization theory, it would be unwise to discard analyses that examine separately the indicators of disadvantage. For one, it would be difficult to provide specific policy recommendations based on an index composed of empirically similar yet conceptually distinct items. Sampson (2006, p. 160)

²¹ Specifically, Krivo and Peterson (1996) found that white contexts characterized by extreme disadvantage, though relatively rare, still followed the same patterns as black contexts of concentrated disadvantage.

warned that factor analyses merely provide an "empirical entwinement" of multiple indicators that tell us "nothing about causality, sequential order, mediation or anything else of ultimate interest." Further, an insignificant relationship between a concentrated disadvantage index and crime may obscure significant effects of independent ecological correlates. Several scholars have chosen to take a more traditional approach by entering variables separately into their models (see, for example, Bellair, 1997; Warner & Rountree, 1997).

THE ECOLOGICAL CONTEXT OF RECIDIVISM

While this return to examine the structural factors of crime is evident in criminological theory, it is curiously absent from the corrections domain and recidivism studies in particular. Over sixty-five years ago Shaw and McKay (1942) recognized the importance of community for offender reentry. They argued that the only way that delinquency rates could be reduced was through changing the community-level conditions that produced them, and that attention to specific individuals (e.g., offender rehabilitation) would not appreciably reduce crime. Although this may represent an oversimplification of the intricacies involved with offender reintegration, their message is clear: ignoring the ecological correlates of crime is likely to result in an incomplete model of recidivism. Sampson (2002b, p. 112) agreed, "Too often our policies are

reductionist in nature, looking to change or incapacitate individuals, usually in a hierarchical fashion with state controls dominant."

This concept of the importance of context for recidivism is not new to the literature, yet it has received only scant attention since two studies by Gottfredson and Taylor (1986, 1988) raised issue with the individualistic bias of existing work. Their primary research question was simple: By considering the socio-economic context that offenders were released to after incarceration, was it possible to improve upon recidivism predictions that were based solely on the personal characteristics of the offender? Accordingly, their research sought to determine the impact that observable physical characteristics of a neighborhood (e.g., appearance of disorder, loitering, residential versus commercial dwellings) had on offender recidivism (independent of individual-level variables). Using a sample of 500 released inmates across 90 neighborhoods in Baltimore, they failed to find any main effects of socio-environmental indicators on release outcomes when controlling for time at-risk of offenders released over a two year period. The authors did, however, observe interactions between offender and ecological characteristics. In particular, offenders with significant prior criminal involvement did worse when released to "bad" environments as compared to "good" environments (S. D. Gottfredson & Taylor, 1986).

Subsequent analyses by Gottfredson and Taylor (1988) did not confirm these initial findings of a person-environment interaction on release outcomes. The authors improved upon their previous work by including more detailed community-level measures such as resident perception of attachment to community. Although these indicators were not influential in predicting individual release outcomes, they were important for understanding aggregate recidivism rates for a particular community. Further, Gottfredson and Taylor found that the offender per population rate added significantly to the prediction of community-level indicators of crime (e.g., as offenders per capita increased, positive bonds among residents decreased). Despite less than robust overall findings, the authors remained committed to the idea that environment matters for the prediction of recidivism with their optimistic conclusion that "it simply makes too much theoretical sense to dismiss" (S. D. Gottfredson & Taylor, 1988, p. 80).

A major contribution of these initial efforts was the notion that "...the person, his/her environment, and his/her behavior interact in a process of mutual and reciprocal influence, and that these processes are an integral part of the environment" (S. D. Gottfredson & Taylor, 1986, p. 147). Thus, the research since these initial works has largely proceeded in one of two directions. First, researchers have sought to determine the impact of offender reintegration on the community – often either through assessments of changing crime rates or changes in the structural components of an area. Second, complementing this line of thought has been another string of research that examines the effect of communities on individual offender outcomes.²²

²² It is important to note that, in agreement with the original arguments set forth by Gottfredson and Taylor, nearly all researchers studying these phenomena acknowledge the interaction between the macroand micro-levels. Nevertheless, their research questions are generally focused on only one of the two directions identified here (c.f., Hipp & Yates, 2009).

The Effect of Individuals on Communities

Todd Clear, Dina Rose, and colleagues have produced a number of studies that consider the impact of returning offenders on the social organization of a community (Clear, Rose, & Ryder, 2001; Clear, Rose, Waring, & Scully, 2003; Rose & Clear, 1998, 2003). They have argued that an overreliance on incarceration as a form of *formal* social control may hinder the ability of communities to foster *informal* social control. Further, through the "coercive mobility" of returning and removing offenders to and from the community, the residential stability of an area was disrupted in a manner that weakened family and community structures. This perspective suggests that offenders often serve a vital economic and social role in disadvantaged communities specifically. After a certain concentration of residents were removed from a community through incarceration, the effect of additional admissions to prison actually increased crime rates. Additionally, they determined a strong positive relationship between releasing offenders in the community and crime rates the following year (Clear, et al., 2003). Their research indicated that removing and returning offenders can serve to increase crime in a community directly through increased criminal behavior as well as indirectly through the weakening of social controls.

A recent analysis by Hipp and Yates (2009) more clearly examined the direct and indirect effects of returning previously incarcerated individuals to a community. The authors specified three potential ways in which parolees could impact the crime rate of a community. First, a direct effect could exist through increased crime committed by the specific released individual. Second, an indirect effect could exist through the rekindling of ties with fellow co-offenders, thereby increasing their criminal behaviors and ultimately the overall community crime rate. Finally, an indirect effect could also be indicative of parolees impacting a community's ability to provide social control.²³ Both direct and indirect effects were observed when analyzing the impact of returning parolees on crime in Sacramento. The return of parolees with a more violent criminal history increased the burglary and aggravated assault rates of a neighborhood, suggesting that these individuals themselves were committing the crimes. The study also found that the effect of single-headed parent households on crime was moderated by the return of parolees, which implies support for the idea that returning offenders to the community could actually reduce crime through the increase of informal social control. Hipp and Yates concluded that their findings provide strong evidence that returning parolees increase the rate of crime in a neighborhood.

The Effect of Communities on Individuals

The bulk of research examining the relationship between the structural factors of a community and recidivism has focused on the importance of community characteristics for successful reentry. Much of this literature has dealt with the differential impact of concentrated disadvantage on female and nonwhite offenders.

²³ The authors noted this relationship could be negative (as identified by Rose and Clear), but also raised the possibility that returning offenders would increase the levels of private and parochial control within a community.

Reisig and colleagues (2002) determined that previously incarcerated women were more frequently members of disadvantaged networks (smaller, less diverse network with fewer resources) (see also Richie, 2001). As a result, the probability of recidivism was higher for young, poor, less-educated women who were unable to rely on networks for support to overcome their adverse conditions and instead returned to the familiarity of a life of crime. In a study of 134 female felony offenders in Oregon and Minnesota, women of poverty status were 4.6 times more likely to be arrested and 12.7 times more likely to violate their supervision within six months. Perhaps most importantly, an actuarial risk assessment tool, found to reliably predict recidivism based on individual characteristics (Gendreau, et al., 1996), failed to do so once poverty status was taken into account (Holtfreter, et al., 2004).

In an analysis of over 5,000 offenders returning to the community in Multnomah County, Oregon, Kubrin and Stewart (2006) more directly examined the impact of ecological characteristics on recidivism. The authors used measures to capture the economic indicators of both disadvantage (i.e., concentrated disadvantage index) and advantage (i.e., ICE), and concluded that those who returned to disadvantaged neighborhoods were more likely to be rearrested within one year while those who returned to resource rich areas were less likely to be rearrested, controlling for individual-level factors. In fact, a one-unit increase in the disadvantage index resulted in a 12% increase in the odds of recidivism while a one-unit increase in the ICE measure resulted in a 62% decrease in the odds of recidivism. In a later work, the authors observed that these effects are likely particularly pronounced among African Americans living in areas of concentrated disadvantage (Kubrin, et al., 2007). It is important to also note their acknowledgement that the study only considers economic indicators of disadvantage, and that inclusion of more traditional social disorganization measures (e.g. family disruption) is needed in future research.

Finally, a group of researchers at Florida State University have also explored the impact of ecological characteristics on likelihood of recidivism. Reisig and colleagues (2007) determined that high levels of racial inequality (as measured by white to black ratios of income, joblessness, and poverty) increased the chances that blacks committed new felonies within a two year period, and that these structural indicators of racial inequality also magnified the adverse effects of individual-level risk factors for blacks specifically. These findings held even when controlling for overall levels of black deprivation. In a separate study that more fully captured the indicators of concentrated disadvantage, Mears and colleagues (2008) reported similar results in that recidivism was more likely for violent crime in resource-deprived areas within a two year period after release, and also that this relationship differentially impacted blacks in particular. These findings are striking given the strong quality of research employed – multi-level modeling including nearly 50,000 offenders across 67 counties while controlling for individual-level risk factors and spatial interdependence. The authors' concluding warning conjured up the writings of Shaw and McKay, "From a policy perspective, the findings here illustrate the problems associated with an individual-level bias in riskprediction efforts to identify individuals most likely to recidivate" (Mears, et al., 2008, p. 330).

THE SYSTEMIC MODEL OF CRIME AND OFFENDER REHABILITATION

Both the offender rehabilitation and macro-level criminological theory literatures have advanced substantially over the last several decades. Researchers are beginning to use the theoretical foundations suggested by macro-level principles to better understand recidivism, and the micro-level advancements in the treatment literature have been used to document the characteristics of high integrity rehabilitation programs. Yet these advancements have not been fully integrated in a manner that considers how context affects program integrity and effectiveness. To that end, the focus of this dissertation is on treatment *programs* (i.e., HWHs) as a unit of analysis. Doing so is consistent with the reformulation of social disorganization theory into the systemic model of crime (Bursik & Grasmick, 1993a, 1993b). In particular, the HWH as a community-based treatment and reintegration program appears to be the perfect blend of parochial and private control.

As noted above, parochial control represents "the supervisory capacities of a local community" and "residential participation in local institutions, such as churches, voluntary organizations, and schools" (Bursik & Grasmick, 1998, p. 115). As such, it extends beyond private control, which refers to the supervisory capabilities of primary

groups (e.g., family). Structural characteristics play an important role in the level of parochial control that is present within an area. Disadvantaged neighborhoods have a particularly difficult time attracting and maintaining sound institutions (Peterson, et al., 2000), and a large component of this struggle is the inability of residents to participate in and support local organizations (Skogan, 1989). To the extent that the HWH represents a community-based institution designed to assist in offender reentry, it will require the participation and support of the surrounding community – both directly through community investment and collaboration with HWH services as well as indirectly in overall support of the mission of offender reintegration programs.

Public control reflects the ability of a community to "secure public and private goods and services that are allocated by groups and agencies located outside of the neighborhood" (Bursik & Grasmick, 1998, p. 118). A high quality HWH program is reflective of public control in two major ways. First, the degree to which private, nonprofit organizations (e.g., the Salvation Army) are willing to establish and invest in a HWH within a community is likely influenced by the perceived success of that program based on structural characteristics. Second, the degree to which the state (e.g., Department of Corrections) is willing to invest in and contract out to a HWH program is likely also influenced by the structural characteristics of that area.²⁴ The ability of

²⁴ To that end, a HWH could be conceived of as a source of formal control, which Kubrin and Weitzer (2003) identify as a glaring omission in most social disorganization analyses. Further, those works that do consider formal control often focus on police presence within a community (c.f. Rose & Clear, 1998). A HWH program instead represents an institution intended to reduce recidivism through promoting successful reintegration. It could therefore be considered representative of the "formal-informal control

disadvantaged communities to secure effective public control is severely limited (Bursik & Grasmick, 1993a; Peterson, et al., 2000; Taub, Surgeon, Lindholm, Otti, & Bridges, 1977; Velez, 2001), and this lack of institutional efficacy is particularly pronounced for black communities (Bursik & Grasmick, 1998). Indeed, Bursik and Grasmick (1993) identified the failure to consider the relational networks that pertain to the public sphere of control as perhaps the greatest shortcoming of basic social disorganization theory.

The systemic model of crime thus provides a framework for emphasizing the importance of local institutions (other than the family), which were largely underdeveloped in original formulations of resource deprivation theories (Bursik & Grasmick, 1993b). Most research rooted in the systemic model tradition thus far is focused on social networks and ties amongst residents (e.g., Sampson, et al., 1997; Warner & Rountree, 1997). As such, the role of institutions has largely been ignored empirically in current research. LaFree (1998) detailed three ways in which institutions limit crime: (1) by reducing individual motivations to commit crime, (2) by supplying effective controls to curb criminal behavior and, (3) by providing individuals with protection against the criminal behavior of others. The HWH functions to provide both parochial and public control in a manner that addresses all three of these roles, with particular emphasis placed on the first two. The mere presence of a HWH program is

nexus" (Kubrin and Weitzer, 2003, p. 384), in which actions by the formal criminal justice system are buttressed by a social institution that also promotes informal social control (LaFree, 1998).

not, however, enough to guarantee success in reducing recidivism. Instead, a growing body of research is beginning to place emphasis on the *strength* of local institutions (Triplett, Gainey, & Sun, 2003).

The combination of program integrity with the systemic model of crime incorporates the strength of institutions to produce a more comprehensive assessment Triplett and colleagues (2003) set forth a theoretical of offender reintegration. framework identifying four dimensions of institutional strength: stability, presence of resources, a clear definition of roles and statuses, and interconnectedness amongst institutions. The CPAI addresses many of these themes and provides an objective indicator of the strength of HWH programs as indicated by the principles of effective intervention. Additionally, structural characteristics are directly linked to the above dimensions of institutional strength (see Triplett, et al., 2003, p. 450-452 for empirical Thus, the current analysis provides an initial step in identifying the support). importance of structural characteristics for rehabilitation programs in terms of institutional efficacy (i.e., program integrity). Consequently, it also provides an indication of the importance of ecological contexts for treatment program effectiveness and offender recidivism. Taken as a whole, the current dissertation provides one of the first empirical assessments of institutional strength as it pertains to recidivism within a systemic model of community control.

CONCLUSIONS

The movement toward evidence-based corrections has enjoyed a decent amount of success in recent years (Listwan, et al., 2008). Concerns over budget limitations and the overcrowding of institutions have prompted a search for a more efficient means of handling offenders. Compounding these financial and spatial problems is the inconvenient truth that over two-thirds of ex-offenders will be re-arrested within three years (Langan & Levin, 2002). In short, "what works" has assumed a newfound importance in a time of economic uncertainty and elevated recidivism rates. Accordingly, advancements in the treatment literature now represent a new way to organize the correctional system. Programs that are high in therapeutic integrity are said to be effective in reducing recidivism, and it is possible that correctional officials will begin to incorporate these principles more and more into practice. The danger in doing so is that disappointing results may be reached when neglecting the larger societal contexts that offenders return to.

In many ways, macro-level criminological researchers are just now beginning to see the myriad of opportunities available for theory application. One promising area in particular is the omnipresent issue of how best to reintegrate ex-offenders in the community. As noted above, offender rehabilitation and reintegration tend to focus on changing the individual with little regard for the communities that he or she will be returning to. Research is beginning to suggest that the failure to consider the larger contexts of reintegration is a mistake, and that ex-offenders are less likely to successfully reintegrate into disadvantaged communities. These studies have provided a significant first glimpse into the importance of context for recidivism rates, but they have thus far neglected the individual-level research on what is likely to work in rehabilitating offenders; that is, they do not take into account the quality of treatment that an offender may have received.

The academic disciplines guiding each of these lines of research are likely responsible for the lack of integration between the two thus far. The knowledge on behavior modification, largely rooted in psychology, emphasizes the alteration of attitudes and behaviors that are specific to each *individual*. The rehabilitation literature has a distinctly individual-level flavor, which presents a politically appealing position to conservatives (i.e., unlawful behavior is specific to certain individuals and is not a result of societal conditions) as well as to liberals (i.e., individual offenders have the capacity to change for the better and thus are worthy of rehabilitation efforts). On the other hand, the macro-level criminological theory literature is grounded in the discipline of sociology. It not only favors the influence of structure over human agency, but it also depicts a crime problem that is heavily influenced by disadvantage and inequalities amongst the members of society. It is perhaps not surprising, therefore, that these two lines of thought have yet to be combined in order to produce a more comprehensive understanding of offender reintegration. The present study is intended to be a first step toward joining these literatures by considering the importance of the

contexts that ex-offenders will be returning to for both treatment program integrity and corresponding treatment effects.

CHAPTER THREE

RESEARCH METHODS

Given the paucity of studies conducted examining the relationship between ecological factors and recidivism, the next step is to establish the extent to which structural antecedents of crime remain important predictors of recidivism when controlling for treatment integrity. While existing studies have made great strides in this direction, particularly when also controlling for individual-level variables, no recidivism study has fully accounted for the range of structural components deemed to represent resource deprivation as they relate to the offender rehabilitation literature. It could be expected that merely treating an individual for his or her criminogenic attitudes and behaviors would result in failure if the ecological context returned to was not taken into account. Further, the removal and treatment of individuals does little to alleviate the conditions that may have led them to crime in the first place (Fleisher & Decker, 2001), and the effects of concentrated disadvantage are likely amplified for exoffenders given their situation and needs (Kubrin & Stewart, 2006). Thus, it is imperative to examine the impact of environmental characteristics on treatment program integrity and corresponding success in reducing recidivism.

Over twenty years ago Gottfredson and Taylor (1986, p. 133) remarked of the relationship between ecological context and recidivism that "although the research problem appears straightforward, it is conceptually, methodologically, and practically

103

complex." This statement remains true today, as only a few studies have begun to untangle the relationship between structural factors and reoffending. The current chapter seeks to introduce the data and analyses used to answer the three research questions presented in Chapter One. In doing so, it will provide justifications for the specific methodological decisions made in attempting to produce results that reflect reality rather than artifacts of the specific data used.

THE CURRENT STUDY

The current analysis seeks to fill the gap in the macro-level criminological theory and treatment literatures through analyzing the program integrity and corresponding treatment effects of halfway houses in Ohio while taking into account the contexts that offenders return to. Currently, little work is being done that considers both the psychological approach of effective intervention and the sociological approach of criminogenic contexts. Cullen and Gendreau (2000, p. 150-1, italics in original) noted "it is likely counterproductive to pit psychologically relevant correctional treatment programs *against* programs that seek to transform the fabric of the neighborhood" and that it is possible to "change the proximate causes of crime within offenders and the criminogenic forces that loom in the larger social context."

In making the first step in this direction, the current study seeks to answer three questions. First, to what extent do the structural characteristics of an area directly impact recidivism for program individuals as compared to controls? Previous research has suggested that returning to a disadvantaged area is more likely to increase the odds of an ex-offender recidivating while returning to an affluent area instead serves as a protective factor. Second, to what extent do the structural characteristics of an area indirectly impact recidivism—specifically as they relate to treatment integrity? The quality of a treatment program could be conceived as a valuable resource that may not be attainable for disadvantaged communities. Finally, to what extent does the relationship between program integrity and recidivism vary across certain ecological characteristics? The answer to this question could potentially shed light on the importance of sound treatment programs for particular communities.

The present analysis builds off of research conducted by Lowenkamp and colleagues (2004; 2006) examining the relationship between Correctional Program Assessment Inventory (CPAI) scores and the treatment effects of community residential programs in Ohio. Lowenkamp (2004) analyzed data on over 3,000 offenders placed in halfway houses, as compared to a matched control group of offenders on parole, and determined that there was a significant relationship between program characteristics and program effectiveness. More specifically, programs scoring high on the CPAI were more likely to produce better treatment effects (i.e., offenders in these programs recidivated less than their matched counterparts).²⁵ The study did not, however,

²⁵ The specific measurements and findings employed in these studies will be discussed in more detail below. In brief, the total CPAI score was significantly correlated with any return to an Ohio Correctional Facility within 2 years (r = .42). The strength of the relationship increased (r = .60) when reducing the

account for the specific ecological contexts that offenders returned to. As such, it represents an incomplete assessment of the relationship between program integrity and recidivism—one that fails to consider the potential impact of macro-level explanations of criminal behavior. The current study seeks to augment the original analyses by subjecting the findings to a more rigorous examination through the inclusion of structural correlates of crime.

DATA

This dissertation analyzes data from three major sources. *Program quality* data were obtained as part of a larger project completed for the State of Ohio in 2002 (see Lowenkamp, 2004, for a more detailed discussion on data collection). Individuals trained in the application of the CPAI conducted site visits to all Community Corrections Act funded programs in the State of Ohio that provided residential services to state parolees through a halfway house program. These researchers tallied scores for each program based on a survey (Appendix A) and interview with the program director (Appendix B) as well as a review of relevant program materials (e.g., assessment instruments used, offender performance evaluation forms used). Some items on the CPAI were not scored given that the site visits were relatively brief and did not involve

CPAI score to include only the items that were significantly correlated with the outcome measure, which is the measure of program quality employed in the current analyses.

extensive monitoring of programs.²⁶ To be included in the sample, the program had to be in operation during fiscal year 1999. These data therefore represent the specific program characteristics of 38 halfway house programs in Ohio operated by 34 different service providers.

Program effectiveness data were obtained from site visits as well as compiled using information from the Community Corrections Information System (CCIS), National Crime and Information Center (NCIC) record checks, and recidivism data – all of which are maintained by the State of Ohio Department of Rehabilitation and Corrections. The crucial measure of program effectiveness is an aggregate measure of recidivism assessing the difference in re-incarceration rates (for any reason, technical violation or new criminal offense) between the treatment and comparison group over a two year period. An effect size was developed for each halfway house given that the analysis was conducted at the program level. Offender demographic characteristics and needs assessments (for purposes of matching) were obtained from the CCIS for the treatment group, and from prison adjustment files, classification instruments, and progress notes while incarcerated for the control group. Finally, the NCIC record checks were used to determine criminal history data for both groups.

²⁶ The full version of the CPAI contains 77 items. Due to the limited nature of the data collection, the total number of items scored for each halfway house was reduced to 62 (see Appendix C). As Lowenkamp and colleagues (2006) noted, the original research was not intended to be a validation of the CPAI, but rather that the instrument was used to structure data collection related to program integrity.

Structural characteristics were obtained using county-level data from the 1990 and 2000 U.S. decennial censuses.²⁷ The variables included measures accounting for traditional concentrated disadvantage variables (e.g., percent of families below the poverty level) as well as items representing concentrated affluence (e.g., percent of the population with a college degree or higher). Both individual items and scales affluence, concentrated representing concentrated disadvantage, concentrated immigration, and residential stability were used in the analyses. In addition, given that much of macro-level research is focused on the dynamic processes that contribute to crime (Bursik, 1986), change scores were computed by subtracting 1990 census values from 2000 census values for each of the variables and scales.²⁸ This represents, for example, the effect on treatment program quality and effectiveness as a county becomes more disadvantaged. Some clustering of the 38 programs occurred within counties and, therefore, the structural indicators were obtained for 14 distinct counties.

It is important to note that the counties analyzed in Ohio closely approximated the United States as a whole in 1990. Overall, the various structural components of the Ohio counties were quite similar to the national average with a few exceptions.²⁹ The

²⁷ In order to retain proper temporal prediction, data from the 1990 census were used to account for the fact that both program integrity and effectiveness were assessed in 1999.

²⁸ An additional method used to measure change is through percent change scores, which led to problems in the current analysis due to low base rates. For example, increasing from only 1% foreign-born to 2% foreign-born represents a 100% increase (see Bachman, 1992, p. 547). Yet another way is to use residual change scores computed by regressing the level of a variable at time *t* on its level at time *t* – 1 and using the residual as a measure of change (see Bursik, 1986).

²⁹ The change scores for the Ohio counties were also comparable to the national changes with the exception of percent Latino and percent foreign born.
counties were similar to the national average in terms of concentrated disadvantage indicators, with the average figures across the counties being 11 percent black, 10 percent of families below poverty, 9 percent of families on public assistance, and 8 percent of single female-headed families with children. By comparison, the national average was 12 percent black, 13 percent of families below poverty, 8 percent of families on public assistance, and 10 percent of single female-headed families with children. The affluence indicators were also comparable, with the averages across the counties being 25 percent employed in professional or managerial positions, 27 percent of families considered affluent, and 17 percent holding a bachelor's degree or higher (national averages 26%, 30%, and 20%, respectively). Finally, the figures for residential stability were similar, with the counties averaging 67 percent of occupied housing units being owner-occupied and 57 percent of residents having lived in the same house as five years earlier (national averages 64% and 53% percent, respectively). The major difference between the counties in Ohio and the U.S. overall was related to ethnic composition. In the Ohio counties, the average was only 1 percent Latino and 2 percent foreign-born while the national average was 9 percent Latino and 8 percent foreignborn. Overall, though, the counties included in the analyses were fairly representative of the United States as a whole.

Structural Characteristics in Nonmetropolitan Areas

Despite the overall similarity with the national averages, one county in particular consistently proved to be an outlier on a majority of the structural indicators. Ross County is located in a rural Appalachian region of southern Ohio and contained the Alvis House Veterans Hall halfway house. In 1990, only 30% of the county was considered urban (82% for the remaining counties), and the county was extremely impoverished (i.e., high % of families below the poverty level, low % with a bachelor's degree or higher, etc.), yet also very homogeneous in terms of racial and ethnic makeup. Accordingly, the county represents an area that does not follow the typical pattern of concentrated disadvantage.

In general, research has suggested that existing criminological theories are applicable to the study of nonmetropolitan areas (Laub, 1983), with social disorganization theory in particular also found to extend beyond the urban environment (Osgood & Chambers, 2000; Reisig & Cancino, 2004). There is, however, one important exception to the generalizability of resource deprivation theories to rural areas. Poverty tends to function differently in rural areas because of a negative association with residential instability. Put differently, poor rural populations are not necessarily highly mobile ones (Osgood & Chambers, 2000). Whereas traditional, urban social disorganization studies do not predict a direct relationship between poverty and crime, they do predict an indirect relationship whereby areas characterized by economic deprivation tend to have high rates of residential mobility and ethnic heterogeneity, thus leading to breakdowns in informal control (Bursik, 1988; but see Bursik & Grasmick, 1993a).

Instead, in nonmetropolitan areas poverty is often associated with high levels of ethnic heterogeneity yet low levels of residential mobility, and the effects of each on crime tend to cancel out. In addition, the effects of concentrated disadvantage are more pronounced in nonmetropolitan areas that experience a decrease in population (Barnett & Mencken, 2002), a finding that is somewhat at odds with traditional social disorganization theory and that is often explained by the loss of social support so crucial to smaller communities (Amato, 1993). For these reasons it would be inappropriate to include Ross County in the analyses without also determining the effect its inclusion has on the overall results.³⁰ Accordingly, analyses were conducted both with and without Ross County and the Alvis House Veterans Hall halfway house.

MEASURES

Program Quality

The Correctional Program Assessment Inventory indicates how well programs are adhering to the principles of effective intervention as developed by the Canadian scholars. The original tool was created by Gendreau and Andrews (1994), and the

³⁰ Important to note is that the HWH in Ross County had the strongest CPAI score and second strongest treatment effect, which makes it all the more important to examine the overall influence on the analyses by this program.

current version contains 77 items across six subsections: program implementation, preservice client assessment, program characteristics, staff characteristics, evaluation, and other (see Appendix D for definitions of each item). Each of these sections contains anywhere from six to 22 items, which are given a value of "1" if the programs have demonstrated that they meet the specified criteria and "0" if they have not. The items are summed and divided by the total number of items in each section. The overall score, as well as each subsection score, therefore represents the percentage of items currently employed by each respective halfway house. The current analysis uses a reduced form of the CPAI that only includes items that were significantly and positively correlated with at least one of two outcome variables (treatment effect with full sample or treatment effect with successful termination offenders only). It thus subjects the strongest possible relationship between program integrity and effectiveness to analyses that include ecological correlates of crime. The following sections provide information on each of the items within the reduced CPAI as well as the overall score for the 38 programs.

Program Implementation

The section covering program implementation contains 14 items overall that measure how well a program is developed prior to implementation as well as how qualified and involved the director of the program is. Effective programs have strong leadership and involvement on behalf of the program director – he or she is qualified and experienced, involved in designing the program, and participates in the hiring and training of staff. Additionally, they are based on strong theoretical models and usually are started on a pilot basis to work out any flaws (Latessa & Holsinger, 1998). A final important component are items measuring whether any contentious issues exist that may seriously jeopardize the project (Gendreau, et al., 2006).

As can be seen in Table 3.1, there were seven items that were significantly and positively correlated with at least one of the treatment effect measures. Designer qualifications (i.e., the director was professionally trained) was the item most frequently occurring in the programs (81%) and also had the strongest correlation with the treatment effect (r = .52, p < .05). The least frequently occurring item was whether the director was involved in direct service delivery (41%), and the weakest correlation was between the treatment effect and whether the director was involved in hiring the staff (r = .01). Overall, the 38 programs scored around 65% on this particular subsection, which qualifies as satisfactory based on recommended cutoff scores.³¹ The section was fairly strongly correlated with the treatment effect (r = .56, p < .10).

Client Pre-Service Assessment

The section measuring client assessment determines how well a program selects or rejects clients and how their needs, risk, and responsivity are assessed. It therefore contains the important items of the fourth principle of effective intervention detailed in chapter two (see Gendreau, et al., 2006). These three components of "appropriate

³¹ Previous works using the CPAI (e.g., Matthews, et al., 2001) have relied on four scoring categories to determine effectiveness of the overall tool and its subsections: *unsatisfactory* (less than 50%), *needs improvement* (50% to 59%), *satisfactory* (60% to 69%), and *very satisfactory* (70% and above).

Item	Ν	N Receiving Point	Percent Receiving Point	Correlation with Treatment Effect
1. Designer qualifications	31	25	80.65	0.52**
2. Designer experience	31	13	41.94	0.14**
3. The director selects staff	37	28	75.68	0.01 ^a
4. The director trains staff	37	28	75.68	0.36**
5. Conducts program	37	15	40.54	0.11**
6. Valued by at-large community	38	29	76.32	0.30**
7. Valued by CJ community	38	27	71.05	0.42**
	Ν	Alpha	Mean	Correlation with Treatment Effect
Average scale score for items	38	0.49	64.59	0.56*

Table 3.1. Descriptive Statistics, Correlations, and Alpha Reliabilities for CPAI Program Implementation Items

p < .05 weighted correlations p < .10^a Correlated with treatment effect using successful terminations only

treatment," as originally identified in the classic piece by Andrews and colleagues (1990a), are a critical foundation for the theory of effective correctional intervention. The full CPAI measures 12 different items within this section, with 10 of those items being related to the determination and quantification of risk, need, and responsivity.

Table 3.2 details the items within this section that were significantly correlated with the treatment effects. Seven items emerged as significant – six of which involved the principles of need, risk, and responsivity. The most frequently occurring item within the programs from this section was whether the type of client received by the program was appropriate according to the programmers (89%). Both risk methods (i.e., whether risk factors were surveyed by a standardized test or interview) and risk level defined (i.e., whether risk level was quantitatively summarized) were the least frequently occurring items (13%), yet risk level defined had the strongest correlation with the treatment effect (r = .33, p < .05). The weakest correlation with the treatment effect was for the items measuring risk factors and need factors (r = .15, p < .05). Overall, the 38 programs scored around 47% on this section, which qualifies as unsatisfactory, and the entire section was moderately correlated with the treatment effect (r = .42, p < .10).

Program Characteristics

The section detailing program characteristics is given the most weight of any subcomponent of the CPAI and the criteria contained within have sound empirical support in the literature (Lowenkamp, 2004). The section includes 25 items that pertain

Item	Ν	N Receiving Point	Percent Receiving Point	Correlation with Treatment Effect
1. Appropriate clients	38	34	89.47	0.21**
2. Risk factors	38	33	86.84	0.15**
3. Risk methods	38	5	13.16	0.17**
4. Need factors	38	33	86.84	0.15**
5. Need methods	38	7	18.42	0.25**
6. Risk level defined	38	5	13.16	0.33**
7. Need level defined	38	6	15.79	0.16**
	Ν	Alpha	Mean	Correlation with Treatment Effect
Average scale score for items	38	0.67	46.99	0.42*

 Table 3.2. Descriptive Statistics, Correlations, and Alpha Reliabilities for CPAI Pre-Service Client Assessment Items

p < .05 weighted correlations p < .10

to the quality of programming and supporting materials as well as the utilization of rewards and punishers, and the presence of booster sessions and aftercare. Effective programs match appropriate treatments to the risk level of offenders, and empiricallysupported methods of behavior change are properly incorporated into programming. The program characteristics subsection therefore represents many of the psychological principles (e.g., social learning methods of behavior change) that have found to be effective in reducing recidivism (Lipsey, et al., 2001).

Included in Table 3.3 are the 10 items that were positively and significantly correlated with the outcome measures. The criteria referring to location (i.e., clients are monitored well if in the community) was the most frequently occurring item (85%), while only one program received a point for varying both intensity and duration of treatment by risk level of offender. These least frequently occurring items also produced the weakest correlations with the treatment effect (r = -.04). The strongest correlation with the treatment effect was observed for the item measuring whether clients spent at least 40% of time per week in treatment (r = .48, p < .05). The 38 programs scored around 50% on this section, which qualifies as unsatisfactory, and the entire section was moderately correlated with the treatment effect (r = .52, p < .10).

Staff Characteristics

The staff characteristics subsection concerns how qualified and experienced staff members are in addition to the training they receive. Gendreau (1996, p. 124) noted, "therapists should relate to offenders in interpersonally sensitive and constructive ways

Item	Ν	N Receiving Point	Percent Receiving Point	Correlation with Treatment Effect
1. Type treatment	36	7	19.44	0.20**
2. Location	34	29	85.29	0.34**
3. Involvement	38	29	76.32	0.48**
4. Intensity varies by risk	38	1	2.63	-0.04^{a}
5. Duration varies by risk	38	1	2.63	-0.04^{a}
6. Match staff and program	37	8	21.62	0.27**
7. Client input	38	32	84.21	0.18**
8. Rewards	37	29	78.38	0.21**
9. Completion criteria	37	23	62.16	0.32**
10. Aftercare	38	16	42.11	0.22**
	Ν	Alpha	Mean	Correlation with Treatment Effect
Average scale score for items	38	0.43	50.41	0.52*

 Table 3.3. Descriptive Statistics, Correlations, and Alpha Reliabilities for CPAI Program Characteristics Items

p < .05 weighted correlations p < .10^a Correlated with treatment effect using successful terminations only

and should be trained and supervised appropriately," and that "interpersonal skills have all but been ignored in the nothing works debate." It is important to note that the success of a program is contingent upon the individuals running it to do so according to plan (Quay, 1977). In other words, a program that is well-designed and that follows the principles of effective intervention may prove a failure if staff are not invested in the vision of the program. The staff characteristics section contains 11 items detailing the specific background and training that is expected of a quality workforce.

As can be seen in Table 3.4, only three items were significantly correlated with either of the two treatment outcomes (two of which were significantly correlated with only the successful termination sample). The most frequently occurring item in the programs was whether staff are able to modify program structure with director approval (69%). The least frequently occurring item was that 75% of staff had training in criminal justice or a related field (21%), which also had the lowest correlation with the treatment effect (r = .03). The criteria assessing if staff were hired due to attributes that will contribute to the program had the strongest correlation with the treatment effect (r = .19, p < .05). The programs averaged a score of 45% on this section (unsatisfactory), and the entire staff characteristics subsection was weakly correlated with the treatment effect (r = .27, p < .10).

Evaluation

The fifth section of the CPAI includes items related to how well a program evaluates its services through the use of quality assurance and outcome mechanisms.

Item	Ν	N Receiving Point	Percent Receiving Point	Correlation with Treatment Effect
1. Area of study	38	8	21.05	0.03^{a}
2. Personal qualities	37	17	45.95	0.19**
3. Program input	36	25	69.44	0.08^{a}
	Ν	Alpha	Mean	Correlation with Treatment Effect
Average scale score for items	38	-0.30	44.74	0.27*

 Table 3.4. Descriptive Statistics, Correlations, and Alpha Reliabilities for CPAI Staff Characteristics Items

**p < .05 weighted correlations

*p < .10

^aCorrelated with treatment effect using successful terminations only

Table 3.5. Descriptive Statistics, Correlations, and Alpha Reliabilities for CPAI Evaluation Items

Item	Ν	N Receiving Point	Percent Receiving Point	Correlation with Treatment Effect
1. External quality	26	13	50.00	0.34**
2. Within program	38	9	23.68	0.27**
3. Follow-up	38	10	26.32	0.28**
4. Methodological quality	38	4	10.53	-0.04 ^a
	Ν	Alpha	Mean	Correlation with Treatment Effect
Average scale score for items	38	0.41	24.12	0.40*

**p < .05 weighted correlations

*p < .10

^aCorrelated with treatment effect using successful terminations only

Programs that study themselves tend to be more effective as adjustments can be made based on insight about program and offender performance (Latessa & Holsinger, 1998). The section contains 8 items and includes external (e.g., researchers) and internal evaluations of the program as well as client input regarding the satisfaction of services received.

The items of this subsection that were significantly correlated with at least one of the treatment effect outcomes are listed in Table 3.5. The most frequently occurring item was that there was a management audit system mechanism in place to evaluate the quality of external service providers (50%), which also had the strongest correlation with the treatment effect (r = .34, p <.05). The least frequently occurring item was the presence of at least one evaluation of the program within the last five years comparing treatment outcome with a risk-control comparison group (11%). This item also had the weakest correlation with the treatment effect (r = .04). Overall, the programs scored very poorly on this section, with an average score of 24% (unsatisfactory), and the subsection was moderately correlated with the treatment effect (r = .40, p < .10).

Other

The final section of the CPAI includes miscellaneous items that do not fit well into the other categories. There are 6 items in this section, which include how well client records are kept, a documentation of ethics of intervention, and the presence of a group of individuals or individual who are officially designated to advise the program (e.g., a Board of Directors). Program support, both financial as well as within the community, is also included in this section in addition to an item indicating whether any drastic changes to program operations have occurred within the last two years.

Two of these 6 items were significantly correlated with the outcome measure (Table 3.6). Documentation of the ethics of intervention was the more commonly present item (95%) and had the stronger correlation with the treatment effect (r = .26, p < .05). Adequate funding for the last two years was the lesser of the two items in terms of frequency (47%) and correlation with the treatment effect (r = .06). The 38 programs scored around 71% on this subsection (very satisfactory), and it was weakly correlated, yet not significantly, with the treatment effect (r = .16).

Total CPAI

Overall, only one subsection (other) of the CPAI received scores considered to be in the very satisfactory range for the 38 halfway house programs, and this area of the CPAI was not significantly related to treatment outcome. Four of the 6 subsections were considered to be unsatisfactory. The subsections ranged in strength of correlation with the treatment effect from the non-significant .16 for the other section to .56 for the program implementation section. Table 3.7 provides the average score of all 38 programs on the entire 33 reduced item CPAI. As can be seen, the overall mean score was 50.54 (sd = 13.25) and the correlation between the reduced item CPAI and treatment effect was relatively strong (r = .60). It is important to remember that only items that were significantly related to the treatment effect were included in the overall

Table 5.6. Descriptive Statistics, Correlations, and Alpha Kenabilities for CLAI Other Items								
Ν	N Receiving Point	Percent Receiving Point	Correlation with Treatment Effect					
38	36	94.74	0.26**					
38	18	47.37	0.06^{a}					
Ν	Alpha	Mean	Correlation with Treatment Effect					
38	-0.01	71.05	0.16 ^a					
	N 38 N 38	NNReceiving Point38363818NAlpha38-0.01	NN Receiving PointPercent Receiving Point383694.74381847.37NAlphaMean38-0.0171.05					

Table 3.6.	Descriptiv	e Statistics,	Correla	ations, a	and Alp	ha Reliab	ilities for	CPAI	Other	Items

**p < .05 weighted correlations
 *p < .10
 ^a Correlated with treatment effect using successful terminations only

Table 3.7. Descriptive Statistics, Correlations, and Alpha Reliabilities for CPAI Total Score (33 items)						
	Ν	Alpha	Mean	Correlation with Treatment Effect		
Average scale score for items	38	0.74	50.54	0.60*		
*						

*p < .10 weighted correlations

measure. Including all 62 items that were measured for the halfway house programs reduces the correlation to .35.

The overall poor performance of the halfway house programs on the CPAI is consistent with previous research suggesting that current treatment programs suffer from a lack of program integrity (Latessa & Holsinger, 1998; Matthews, et al., 2001). It is apparent that empirically validated components of successful programs have yet to fully be incorporated into practice. This realization is disappointing given the recent emphasis on evidence-based practice in criminal justice. There is, however, a strong relationship between those programs that do have sound program integrity and program effectiveness.

Program Effectiveness

As noted above the measure of program effectiveness is represented by calculating an odds ratio determining the likelihood of recidivism by the treatment group as compared to a control group. The treatment group included all 3,237 offenders that were terminated by the 38 halfway house programs during fiscal year 1999. This yielded an average of 139 offenders per program with a range of 12 to 329 and over 75% of the programs having served 50 or more offenders. These offenders were matched to 3,237 parolees drawn from a larger sample of offenders that were under parole supervision but not placed in a halfway house.

Sampson and colleagues (2002) commented that the issue of selection bias is the biggest challenge facing ecological research. More specifically, it is difficult to untangle the impact of certain places on crime versus the differential selection of certain individuals to certain places. In order to reduce some of these selection effects, it is necessary for the current analysis to match offenders on theoretically relevant characteristics. Accordingly, members of the treatment group have been matched to offenders from the control group on the basis of age, race, sex, and prior criminal history. The offenders were also matched on county of conviction and based on risk level as determined by a modified version of the Salient Factor Score (Hoffman, 1994). The modified assessment matches offenders based on prior criminal history, age at current offense, employment history, drug use history, and whether or not the offender has violated community control in the past (see Lowenkamp, 2004).

Table 3.8 provides descriptive statistics for the treatment and comparison groups. The two groups were equal in terms of racial composition and gender breakdown, but differed in terms of age as the treatment group was significantly younger than the comparison. Also, those placed in the treatment group were more likely to have a prior arrest and prior incarcerations. It is important to note that despite these differences, both groups had significant prior criminal histories. Controlling for these important individual-level factors allows for a more robust determination of the

	Treatment Group	Comparison Group
Variable	-	
	Mean (N)	Mean (N)
Age (Average Age in Years)*	34 (3,237)	37 (3,237)
Race	% (N)	% (N)
Black	62 (2,017)	61 (1,959)
White	38 (1,220)	39 (1,278)
Sex	% (N)	% (N)
Male	91 (2,959)	91 (2,959)
Female	9 (278)	91 (2,959)
	% (N)	% (N)
Prior Arrest (Yes)*	93 (3,022)	87 (2,822)
	% (N)	% (N)
Prior Incarceration (Yes)*	50 (1,618)	40 (1,299)

Table 3.8. Descriptive Statistics for Treatment and Comparison G	roups
(Adapted from Lowenkamp, 2004)	

Fable 3.9. Descriptive Statistics for Treatment Effect					
	Ν	Min	Max	Mean	SD
	20	1 5 4	0.15	2205	<0.0 7
Logged Odds Ratio	38	-1.54	2.15	3385	.698

impact of program quality on program effectiveness when including structural predictors of crime.

The actual measure of program effectiveness is the difference in re-incarceration rates for any reason (technical violation or new offense) between these two groups. The formula to calculate the odds ratio is contained in the equation below (all equations adapted from Lipsey & Wilson, 2001).

Equation 3.1:
$$ES_{OR} = \frac{ad}{bc}$$

Where *a* is the number of offenders in the treatment group that were not recidivists, *b* is the number of offenders in the treatment group that were recidivists, *c* is the number of offenders in the comparison group that were not recidivists, and *d* is the number of offenders in the comparison group that were recidivists. The log of the odds ratio is taken to center the odds ratio effect size around zero for ease of interpretation. In doing so, positive values indicate a treatment effect that favors the treatment group while negative values favor the comparison group. The formula for the log odds ratio is:

Equation 3.2:
$$ES_{LOR} = \log_{e}(ES_{OR})$$

Weights were created for each effect size in order to account for sample size differences between halfway house programs. This gives more influence to the effect sizes of programs with more offenders, which produces a more consistent effect size not biased by the results of individual offenders. The weight used is the inverse of the effect size variance (see Lipsey & Wilson, 2001, p. 36-37, 54).

Equation 3.3:
$$SE_{LOR} = \sqrt{\frac{1}{a} + \frac{1}{b} + \frac{1}{c} + \frac{1}{d}}$$

Equation 3.4:
$$w_{LOR} = \frac{1}{SE^2_{LOR}}$$

As can be seen in Table 3.9, the average effect size across all 38 programs favored the comparison group. In fact, 28 of the 38 programs (73%) were associated with effect sizes that indicated the comparison group recidivated at lower rates than the treatment group. The mean logged odds ratio was -.34 (sd = .70).³² Table 3.10 provides the program effectiveness scores for all 38 programs with their corresponding weights. An examination of the frequency distribution of the treatment effect variable revealed that it was considerably skewed. To address this problem and allow for the estimation of regression models, the square root of the treatment variable (plus a constant) was taken to transform the variable into a more normal distribution.

³² Calculating effect sizes using successful terminations only produced treatment effects that favor the treatment group in 23 out of 38 programs (61%). Given that the treatment group is likely under stricter surveillance than the control group, it could be expected that they are more likely to "fail" (i.e., be terminated due to a technical violation or new offense) than the control group in the community. Using successful terminations only accounts for this bias and produces treatment effects in the expected direction (favoring the treatment group). Data on the reason for return to prison were not available and therefore this explanation could not be tested directly.

	Logged Odds Ratio	
Program		Weight
Dayton Salvation Army	-1.54	5.30
SOS Hall	-1.31	5.66
Alternative Agency	-1.21	29.07
Cincinnati VOA McMahon Hall	-1.18	16.71
Spencer House	-1.11	1.29
Fresh Start	-0.99	8.73
Community Transitions	-0.96	12.04
Crossroads Center	-0.93	4.14
Cincinnati VOA Chemical Dependency	-0.93	17.10
Talbert Cornerstone	-0.78	6.85
Alvis House Price Hall	-0.78	6.25
Canton Community Treatment Center	-0.65	15.87
Oriana House RCC	-0.64	1.52
CAP 30/90	-0.63	7.85
CAP Females	-0.62	0.83
Toledo VOA	-0.60	13.91
Talbert Spring Grove	-0.60	14.81
Mansfield VOA	-0.58	2.55
Pathfinder's Males	-0.56	7.89
CAP Mental Health	-0.44	3.36
Diversified Males	-0.41	6.05
Oriana House RIP	-0.22	15.68
Oriana House TMRC	-0.13	11.87
Alvis House Dunning Hall	-0.06	8.52
Talbert Pathways	-0.02	0.86
CCA Women	-0.01	1.72
Goodwill Industries	0.00	2.48
Cincinnati VOA SAMI	0.00	3.17
CCA Men	0.06	16.37
Alvis House Alum Creek	0.07	37.31
Comp Drug	0.16	22.18
Talbert Beekman	0.18	8.14
Harbor Light	0.27	22.03
Cincinnati VOA Sex Offender's Program	0.38	1.22
Traynor House	0.48	2.00
Alvis House Cope Hall	0.49	4.01
Alvis House Veterans Hall	0.78	3.07

Table 3.10. Logged Odds Ratios and Weights(Adapted from Lowenkamp, 2004)

Structural Characteristics

Pratt and Cullen (2005) observed that advances in macro-level criminological theory created a methodological blueprint for studying macro-level phenomena. More specifically, the aggregation of socioeconomic data allowed for assessments of the impact of constructs such as resource deprivation (i.e., Wilson's (1987) "concentration effects"). Such an approach was theoretically grounded and provided a more comprehensive explanation of the variation in the social ecology of crime than poverty alone (Elliott, et al., 1996). Indeed, variables and indices representing the construct of concentrated disadvantage have produced some of the strongest and most invariant effects on indicators of criminal behavior (Pratt & Cullen, 2005, see also Land et al., 1990).

In addition, indices measuring concentrated affluence have been found to perform different empirically than those of concentrated disadvantaged (Sampson, et al., 1999). These variables likely assess the degree to which community dynamics serve as protective factors in discouraging or preventing criminal behavior. It may be, for example, that affluent communities are more likely to have interaction among neighbors and thus a greater capacity to exert informal control (Bellair, 1997). Equally plausible is that a resource-rich community provides numerous opportunities for its members to engage in prosocial and conventional activities rather than crime.

Whatever the mechanisms present in how concentration effects influence criminal phenomena, it is clear that structural characteristics still remain direct

130

predictors of crime (Elliott, et al., 1996; Lowenkamp, et al., 2003; Peterson, et al., 2000; Sampson, et al., 2002; Veysey & Messner, 1999; Warner & Rountree, 1997). Accordingly, traditional social disorganization measures of residential stability continue to be important components of structural analyses. Finally, classic social disorganization measures of racial heterogeneity have been largely subsumed within indicators of concentrated disadvantage (Sampson & Wilson, 1995). An emerging structural construct, however, is that of concentrated immigration. Research is beginning to indicate that concentrated immigration serves as a protective factor against a number of social maladies (Cagney, Browning, & Wallace, 2007; Decker, 2009), including criminal behavior (Sampson, 2008). The current analysis thus includes this measure to determine whether the relationship holds for recidivism as well.

Concentrated Disadvantage

The measure of concentrated disadvantage in the current analysis is similar to one used by Sampson and colleagues (Morenoff, et al., 2001; Sampson, et al., 1999). It consists of percent of families below the poverty line, percent of families receiving public assistance, percent of female-headed households with children, and percent black.³³ Table 3.11 provides descriptive statistics for each of these variables obtained from the 1990 U.S. census. These variables are highly interrelated and load on a single

³³ A notable omission from the current construct is a measure of unemployment. Principal components analysis revealed that percent unemployed loaded poorly (i.e., factor loading < .60) on the concentrated disadvantage construct. This is consistent with prior research suggesting that unemployment is conceptually distinct and empirically independent from other indicators of concentrated disadvantage (Land, et al., 1990).

factor using principal components analysis (eigenvalue of 2.77; all loadings were above .8). The construct explained 69% of the variance and also had high reliability (α = .851) (see Table 3.12; Table 3.13 provides analyses for the one county removed dataset). All scales were created by calculating a factor regression score that weighted each variable by its factor loading.³⁴

Concentrated Affluence

An increasing amount of attention is being paid to the construct of concentrated affluence in addition to concentrated disadvantage (Kubrin & Stewart, 2006; Morenoff, et al., 2001). Following previous works, the current analysis conceptualizes this concept as the percent of adults with a college education, the percentage of families with incomes higher than \$50,000, and the percentage of the civilian labor force employed in professional or managerial occupations.³⁵ Descriptive statistics for these variables from 1990 are presented in Table 3.11 and reveal that a sizeable percentage of the population (around 25% for each) could be considered affluent based on these indicators. There was also considerable variation amongst the indicators—as but one example, the highest percentage of college graduates in a county (27%) was three times that of the lowest percentage (9%). Factor and reliability analyses for the concentrated affluence

³⁴ Scales based on the summation of equally weighted z-scores divided by the number of items in each scale produced similar results.

³⁵ Massey (1996) recommended defining affluent as families whose income is four times the poverty level (which equates to \$54,000 in 1990). Due to data availability, affluent in the current analysis is defined as \$50,000 and above for 1990 and \$75,000 and above for 2000).

Variable	Mean	Median	SD	Mean	Median	SD
	(N=38)	(N=38)	(N=38)	(N=37)	(N=37)	(N=37)
Concentrated Disadvantage						
% Black	.153	.159	.062	.155	.159	.061
% Poverty	.100	.098	.015	.098	.098	.012
% on Public Assistance	.086	.080	.014	.085	.080	.013
% Female-Headed Families w/Children	.085	.085	.009	.085	.085	.085
Concentrated Affluence						
% with College Degree	.202	.201	.054	.205	.201	.052
% in Professional/Managerial Positions	.272	.285	.038	.274	.289	.036
% Affluent Families (\$50,000+)	.287	.301	.042	.290	.301	.040
Concentrated Immigration						
% Latino	.011	.008	.007	.011	.008	.007
% Foreign-Born	.028	.026	.013	.028	.027	.012
Residential Stability						
% Owner-Occupied	.630	.620	.067	.628	.620	.066
% Same House as 5 Years Earlier	.548	.551	.060	.547	.551	.061
CPAI	.505	.508	.132	.498	.500	.126
Treatment Effect	338	503	.699	369	563	.683
Ln(Tx+1.6)	1.078	1.047	.318	1.066	1.018	.313

 Table 3.11. Descriptive Statistics for 1990 Structural Variables

Scale	Factor I	Loadings
	<u>1990</u>	2000
Concentrated Disadvantage		
% Black	.824	.916
% Poverty	.829	.916
% on Public Assistance	.820	.722
% Female-Headed Families w/Children	.855	.898
Alpha	.851	.887
Concentrated Affluence		
% with College Degree	.973	.981
% in Professional/Managerial Positions	.989	.992
% Affluent Families (\$50,000+)	.954	.964
Alpha	.971	.979
Concentrated Immigration		
% Latino	.886	.901
% Foreign-Born	.886	.901
Alpha	.726	.769
Residential Stability		
% Owner-Occupied	.930	.931
% Same House as 5 Years Earlier	.930	.931
Alpha	.845	.847

 Table 3.12. Factor and Reliability Analysis of Structural Measures— (N = 38)

Scale	Factor I	Loadings
	<u>1990</u>	2000
Concentrated Disadvantage		
% Black	.886	.930
% Poverty	.908	.928
% on Public Assistance	.838	.753
% Female-Headed Families w/Children	.888	.908
Alpha	.901	.903
Concentrated Affluence		
% with College Degree	.970	.979
% in Professional/Managerial Positions	.988	.991
% Affluent Families (\$50,000+)	.948	.959
Alpha	.967	.976
Concentrated Immigration		
% Latino	.883	.896
% Foreign-Born	.883	.896
Alpha	.717	.754
Residential Stability		
% Owner-Occupied	.931	.931
% Same House as 5 Years Earlier	.931	.931
Alpha	.846	.847

 Table 3.13. Factor and Reliability Analysis of Structural Measures— (N = 37)

index are presented in Table 3.12. The variables strongly represented a single construct (eigenvalue of 2.836; all loadings above .9), explained 95% of the variance and produced a highly reliable scale (α = .971).

Concentrated Immigration

The scale representing concentrated immigration follows previous works by including variables measuring percent Latino and percent foreign-born (Sampson, et al., 1999). Table 3.11 provides descriptive statistics for each of these two variables. Two important qualifications must be stated about these data. First, a relatively small percentage of the counties in Ohio are made up of either Latino or foreign-born residents. The national average in 1990 was around 9% Latino and 8% foreign-born while the percentages in Ohio were 1% and 3%, respectively. Second, the ethnic makeup of foreign-born in Ohio is drastically different than the national breakdown. Whereas over half of the U.S. foreign-born population was from Latin America in 1990, most of the foreign-born population in Ohio was from Europe and Asia. The results of the current analysis should therefore be interpreted with these characteristics in mind. Both variables loaded on the same construct (eigenvalue of 1.569; both loadings above .8), explained 78% of the variance and produced a reasonably strong reliability scale (a = .726).

Residential Stability

The residential stability scale is made up of the traditional indicators of percent of occupied housing units that are owner-occupied and the percent of residents five years and older who lived in the same house five years earlier. Table 3.11 details the descriptive characteristics of each variable and indicates that nearly two-thirds of houses were owner occupied while slightly over half of residents lived in the same house as five years earlier. The variables represented one factor (eigenvalue of 1.731; both loadings above .9) and explain 86% of the variance. Finally, the two indicators produced a reliable scale measuring residential stability within the 14 counties ($\alpha = .845$) (see Table 3.12).

Change Scores

Bursik (1986) observed that structural processes can only be appreciated as they unfold over time, and that the original formulation of Shaw and McKay (1942) recognized that structural dynamics do not represent static relationships. A true test of the impact of structural characteristics on treatment program integrity and effectiveness would therefore take into consideration change within a county's composition over time. The current analysis thus employs change scores to account for the dynamics of structural alterations within counties. Change scores were calculated by subtracting 1990 values from 2000 values (see Table 3.14) for each of the variables and indices. The calculations also provide a more proximate estimate of structural characteristics as they pertain to the 1999 release date of the offenders.

Table 3.15 provides descriptive statistics of the change scores used in the analyses and allows for an assessment of how the 14 counties were transitioning in the

Variable	Mean	Median	SD	Mean	Median	SD
	(N=38)	(N=38)	(N=38)	(N=37)	(N=37)	(N=37)
Concentrated Disadvantage						
% Black	.171	.179	.069	.174	.179	.067
% Poverty	.084	.083	.013	.084	.083	.013
% on Public Assistance	.034	.030	.008	.034	.030	.008
% Female-Headed Families w/Children	.081	.083	.009	.081	.083	.009
Concentrated Affluence						
% with College Degree	.246	.252	.065	.250	.252	.062
% in Professional/Managerial Positions	.333	.348	.046	.335	.348	.044
% Affluent Families (\$75,000+)	.273	.288	.042	.278	.288	.040
Concentrated Immigration						
% Latino	.018	.014	.010	.018	.014	.010
% Foreign-Born	.037	.034	.019	.038	.034	.019
Residential Stability						
% Owner-Occupied	.646	.632	.065	.644	.632	.064
% Same House as 5 Years Earlier	.549	.554	.054	.548	.554	.055
CPAI	.505	.508	.132	.498	.500	.126
Treatment Effect	338	503	.699	369	563	.683
Ln(Tx+1.6)	1.078	1.047	.318	1.066	1.018	.313

 Table 3.14. Descriptive Statistics for 2000 Structural Variables

Variable	Mean	Median	SD	Mean	Median	SD
	(N=38)	(N=38)	(N=38)	(N=37)	(N=37)	(N=37)
Concentrated Disadvantage						
% Black	.018	.020	.007	.018	.020	.007
% Poverty	015	015	.010	014	015	.007
% on Public Assistance	052	050	.009	052	050	.008
% Female-Headed Families w/Children	004	004	.002	004	003	.002
Concentrated Affluence						
% with College Degree	.044	.052	.014	.045	.052	.013
% in Professional/Managerial Positions	.061	.065	.012	.062	.065	.012
% Affluent Families (\$75,000+)	014	014	.011	014	014	.011
Concentrated Immigration						
% Latino	.007	.005	.004	.008	.005	.004
% Foreign-Born	.010	.007	.010	.010	.007	.010
Residential Stability						
% Owner-Occupied	.016	.016	.006	.015	.016	.005
% Same House as 5 Years Earlier	.002	.006	.009	.001	.006	.009

 Table 3.15. Descriptive Statistics for Change Score Variables

1990s. As can be seen in the table, on average the counties became slightly less disadvantaged, with percent of families below poverty decreasing by 1.5% and percent on public assistance declining by 5.2%. With the exception of percent of families considered affluent, the affluence index measures follow the same pattern—the Ohio counties, on average, became increasingly well-off in terms of economic indicators of wellbeing in the 1990s. Finally, the counties saw a slight increase in percent Latino and percent foreign-born, and the residential stability indicators also exhibited a minor increase. Overall, then, the counties on average remained fairly stable in terms of racial and ethnic composition while increasing slightly on economic indicators.

ANALYTIC STRATEGY

The primary focus of the current analysis is to determine the extent to which structural characteristics impact treatment program integrity and effectiveness. It could be expected that given the robust relationships between structural variables and crime phenomena in general that county-level ecological indicators would have a substantial impact on both treatment program quality and corresponding treatment effects. Based on prior research (e.g., Kubrin & Stewart, 2006), it is possible that direct effects would emerge as the presence of concentrated disadvantage, for example, likely amplifies the difficulty in successful reintegration for an ex-offender. Equally plausible is that indirect effects could be present, as a sound treatment program (and therefore one that is successful in terms of reduced recidivism) could be considered a form of institutional efficacy that is likely to be absent in disadvantaged areas. Finally, it could be expected that the relationship between program integrity and program effectiveness would differ across levels of the different structural characteristics. As but one example, a strong treatment program may be less important for reducing recidivism in areas that already enjoy high levels of other resources (e.g., employment opportunities, quality schools).

Direct effects of structural characteristics on program integrity and effectiveness were assessed through weighted bivariate correlations. Applying a weight for the analyses gives more influence to the larger programs that produce a more robust relationship between program quality and outcome. Analyses were conducted for both the full sample and the sample without Ross County, and included separate matrices for the 1990 structural variables as well as the change scores. Each of the independent variables and the indices constructed were entered into the bivariate analyses.

Indirect effects of structural characteristics on treatment effects (working through program quality) were assessed using the same bivariate analyses. Given the strong correlation between integrity and effectiveness (r = .60), it is reasonable to assume that direct effects between structural components and program integrity represent a mediating path between structural components and treatment effects. To test this assumption further, a series of weighted least squares (WLS) regression models were estimated to determine if direct effects between structural characteristics and treatment effects. WLS

regression was employed instead of ordinary least squares (OLS) regression in order to adjust for problems associated with heteroskedasticity. This approach is consistent with other macro-level research (e.g., Altheimer, 2008; Pratt & Godsey, 2003) that accounts for non-equal variance and non-normally distributed errors across the dependent variable.

Finally, a series of WLS models were estimated that included interaction terms between the program integrity variable and the structural characteristic items. Each of the variables was entered along with their interaction term in three-variable models predicting treatment effect. To eliminate the presence of multicollinearity, each of the variables was mean centered before creating the interaction term (Jaccard & Turrisi, 2003). A significant interaction term indicates that the strong relationship between program integrity and effectiveness is contingent on certain ecological characteristics.

CHAPTER 4

RESULTS

The purpose of the current dissertation is to incorporate structural indicators of recidivism into analyses assessing the relationship between treatment program integrity and effectiveness (i.e., reduced recidivism). The failure to consider offender rehabilitation as part of a larger context could conceivably lead to incorrect conclusions about the importance of treatment program quality for successful offender reintegration. It may be that the integrity of a program becomes irrelevant once ecological characteristics are accounted for, and that change enacted within the confines of a HWH may not necessarily equate to change within the community. Further, given the empirical importance of a strong program (as one that adheres to the principles of effective intervention) for successful reentry, it is necessary to determine if particular characteristics of a community are influential in producing high quality programs; that is, are certain areas more likely to secure and retain the services of a sound treatment program? Finally, the relationship between program integrity and effectiveness may be contingent upon certain characteristics of a community. A disadvantaged community may enjoy greater benefits from a high quality treatment program than would an affluent community. Each of these issues signals the need to start asking a broader question of offender rehabilitation proponents: Does context matter?

Given the above objectives, this chapter contains the results of quantitative and qualitative analyses of HWH programs in Ohio. Accordingly, the analysis proceeds in four stages. First, the direct relationships between structural characteristics and program effectiveness are assessed. Second, the indirect relationships between structural characteristics and program effectiveness (working through program quality) are examined. Next, the interactions between measures of program quality and levels of structural characteristics and their impact on program effectiveness are investigated. Finally, the chapter concludes with a qualitative exploration of four specific HWH programs from the data. These programs were selected based on the correlations of their CPAI scores with their treatment effects – two of which exhibited the expected relationship and two of which did not.

THE IMPACT OF STRUCTURAL CHARACTERISTICS ON PROGRAM EFFECTIVENESS

The first set of analyses focuses on the direct effects of ecological characteristics on treatment effects. Prior research has suggested that the socioeconomic makeup of an area is important for the prediction of recidivism. Accordingly, these analyses determine the impact of structural characteristics on program effectiveness *independent of* program quality. Weighted bivariate correlations were calculated for both the full and one-county-removed samples using 1990 census figures as well as change scores.
1990 Census Figures

The correlations between treatment program effect sizes and 1990 structural characteristics are presented in Tables 4.1 and 4.2 (all tables are presented broken down by structural components for ease of presentation and clarity). As can be seen in Table 4.1, few indicators of disadvantage or affluence correlated directly with the outcome measure of program treatment effect. The only disadvantage measure that emerged as a significant correlate was the percent of families below the poverty level (r = .127, p < .05). This relationship was unexpectedly positive—areas characterized by a higher percentage of families below the poverty level with recidivism rates that favored the HWH group. The only affluence measure that was found to be a significant correlate of program effectiveness was the percent of individuals who had a bachelor's degree or higher (r = .212, p < .01). This relationship was in the expected direction, as a greater percentage of individuals with higher education degrees was linked with better treatment effects for the HWH participants.

Also presented in Table 4.1 are the correlations between structural indicators and program effectiveness for the sample without Ross County. The unexpected positive relationship between the percent of families below the poverty level and treatment effects was no longer statistically significant in the reduced sample correlations. In addition, the relationship between the percent of individuals with a bachelor's degree or higher and program effectiveness strengthened (r = .263, p < .01), and the percent of individuals working in professional or managerial positions (r = .112, p < .05) and the

combined affluence index (r = .114, p < .05) emerged as statistically significant correlates of program effectiveness. Overall, the removal of Ross County from the bivariate analyses of the 1990 socioeconomic indicators and program effectiveness provided a clearer picture on the importance of affluence for successful reintegration of HWH participants as measured by recidivism rates.

Table 4.2 presents the results of the immigration and residential stability measures on program effectiveness. No immigration indicators were significantly correlated with program treatment effect, yet all of the residential stability indicators were negatively associated with program effectiveness. A higher percentage of housing units that were owner-occupied (r = -.200, p < .01), a higher percentage of people that had lived in the same house for the last five years (r = -.189), and higher scores on the combined index (r = -.208, p < .01) all were associated with higher recidivism rates for the HWH group. In short, the greater the stability of the population within an area, the more likely that treatment recipients would fail (i.e., recidivate) as compared to the control group. The removal of Ross County from the analyses did little to influence the relationship between the immigration indicators and program effectiveness. The effects of residential stability were strengthened as greater stability was associated with worse treatment effects for the HWH participants.

Overall, then, structural characteristics seemed to matter little for measures of program effectiveness within the current data when comparing HWH participants to a matched control group. No indicators of concentrated disadvantage were found to be

DISADVANTAGE	Tx Effect Full Sample (N = 38)	Tx Effect Reduced Sample (N = 37)	AFFLUENCE	Tx Effect Full Sample (N = 38)	Tx Effect Reduced Sample (N = 37)
% Black	036	010	% College	.212**	.263**
% Poverty	.127*	.076	% Professional	.064	.112*
% on Assistance	.057	.025	% Affluent	098	056
% Female-headed	.023	.040	Index	.064	.114*
Index	.048	.036			

 Table 4.1. Correlations Between Treatment Effects and Disadvantage/Affluence Indicators, 1990 Census

** p < .01 * p <.05

Table 4.2.	Correlations	Between	Treatment	Effects and	Immigratio	n/Stability	Indicators.	1990 Census

IMMIGRATION	Tx Effect Full Sample (N = 38)	Tx Effect Reduced Sample (N = 37)	STABILITY	Tx Effect Full Sample (N = 38)	Tx Effect Reduced Sample (N = 37)
% Latino	016	001	% Owned	200**	227**
% Foreign Born	.059	.089	% Stability	189**	198**
Index	.023	.048	Index	208**	226**

** p < .01 * p <.05

significantly correlated with treatment effects in the expected direction. Additionally, the immigration indicators within the analyses—often associated with concentrated disadvantage measures—were not significantly related to program effectiveness. There were, however, significant correlations between affluence indicators and program effectiveness, especially upon the removal of Ross County. The more affluent counties within the dataset were correlated with treatment effects that favored the HWH participants. Finally, the indicators of residential stability consistently were associated with program effectiveness, albeit perhaps in the unexpected direction. Areas characterized by a higher percentage of residential stability were linked to recidivism rates that favored the control group.

Change Scores

As noted in Chapter Three, change scores for the structural components were computed by subtracting 1990 census figures from 2000 census figures. Positive values therefore represent an increase in any particular structural indicator over the ten year period. Table 4.3 presents correlations between program effectiveness and the measures of ecological change for the counties in Ohio. Nearly all of the disadvantage indicators (with the exception of the percent of families below the poverty level) were significantly inversely correlated with program treatment effect. More specifically, areas that were becoming increasingly disadvantaged were associated with higher recidivism rates for HWH participants as compared to nonparticipants. Significant

DISADVANTAGE	Tx Effect Full Sample (N = 38)	Tx Effect Reduced Sample (N = 37)	AFFLUENCE	Tx Effect Full Sample (N = 38)	Tx Effect Reduced Sample (N = 37)
% Black	154**	109*	% College	.179**	.226**
% Poverty	100	015	% Professional	.116*	.149**
% on Assistance	137*	098	% Affluent	.303**	.295**
% Female-headed	127*	082	Index	.193**	.190**
Index	142**	083			

 Table 4.3. Correlations Between Treatment Effects and Disadvantage/Affluence Indicators, Change Scores

** p < .01 * p <.05

Table 4.4.	Correlations	Between	Treatment	Effects and	d Immig	gration/St	tability	Indicators,	Change S	Scores

IMMIGRATION	Tx Effect Full Sample (N = 38)	Tx Effect Reduced Sample (N = 37)	STABILITY	Tx Effect Full Sample (N = 38)	Tx Effect Reduced Sample (N = 37)
% Latino	.204**	.239**	% Owned	.134*	.093
% Foreign Born	.276**	.299**	% Stability	044	061
Index	.237**	.248**	Index	140**	198**

** p < .01 * p <.05

relationships between program effectiveness and affluence indicators also emerged in the expected direction. Areas that were becoming more affluent were associated with treatment effects that favored the HWH group. The effect of percent of families considered affluent was particularly strong (r = .303, p < .01), indicating that an increase in wealthy families within an area may serve as a protective factor for treatment recipients.

As noted in Chapter Three, the HWH in Ross County produced a particularly strong treatment effect, and although the weight given to Ross County within the analyses was fairly small, the changes within the structure of the county over the ten year period could still potentially distort the overall picture between ecological change and program effectiveness. Overall, Ross County became less disadvantaged as compared to the other counties over this period, particularly for percent of families below poverty and percent of families receiving public assistance. This is perhaps not surprising given the relatively high levels of disadvantage that characterized the county Nevertheless, the county experienced larger reductions in disadvantage in 1990. indicators, yet lesser increases in affluence indicators, than the average county in the dataset. As can be seen in Table 4.3, these changes are reflected in the correlations, as the majority of disadvantage indicators are no longer significantly related to treatment effect. Additionally, the associations between program effectiveness and the indicators of the percent of individuals that have bachelor's degree or higher and the percent of individuals employed in professional or managerial positions strengthened. Thus, the

removal of the extreme case of Ross County provides an additional confirmation of what the data suggest – decreases in disadvantage and increases in affluence seem to be associated with better treatment effects for HWH participants.

Table 4.4 presents the results of correlations between immigration and residential stability indicators with the treatment effect. All three immigration indicators are positively associated with program effectiveness. An increase in the concentration of Latinos and foreign-born individuals within an area was correlated with treatment effects that favored the HWH participants. This relationship was strengthened upon the removal of Ross County, which experienced little change in the ethnic composition of individuals within the county. The percent of housing units that were owner occupied was significantly related to program effectiveness in a positive direction, although this effect disappeared upon the removal of Ross County. The overall residential stability index was negatively correlated with the treatment effect in both samples. Replicating the 1990 results, an increase in the overall stability of a county was associated with treatment effects that favored the control group.

The use of indicators of ecological change provides a more accurate and proximate assessment of how the structural dynamics of Ohio counties impacted the effectiveness of treatment programs. As compared to the absolute values of 1990, indicators of structural change were more likely to emerge as significant correlates of program effectiveness. Areas that experienced reductions in concentrated disadvantage were associated with recidivism rates that favored the treatment group, although this

151

effect was somewhat bolstered by the large reduction in concentrated disadvantage and accompanying strong treatment effect in Ross County. Indicators of changing affluence were also significant correlates of program effectiveness, and it appears that areas that become increasingly well-off may serve as a protective factor for the successful reintegration of treated individuals. A somewhat counterintuitive finding was revealed for the association between immigration indicators and program effectiveness. Areas that saw an increase in the concentration of Latinos and foreign-born were linked with programs that produced recidivism rates favorable to the treatment group. Finally, counties marked by increasing residential stability were associated with higher recidivism rates for the treatment group as compared to the control group.

Direct Effect Conclusions

Several important patterns emerged in determining the extent of direct effects of structural indicators on program effectiveness. First, relatively few statistically significant relationships emerged between 1990 census indicators and program treatment effects. Indicators of concentrated disadvantage, affluence, and immigration found to be predictive of recidivism in prior studies were relatively empirically unimportant in the current data when comparing HWH participants to nonparticipants. Residential stability indicators were, however, consistently negatively related to program effectiveness. Increased stability within an area was associated with worse recidivism rates for the HWH participants as compared to the control group.

152

Second, the use of ecological change indicators produced a substantially different picture that was more consistent with previous findings. Counties that became less disadvantaged and more affluent over the ten year period were associated with stronger program effects as measured by recidivism rates. An unexpected, robust finding was that counties that experienced an increase in the percentage of Latinos and foreign-born individuals were also correlated with stronger program effects.

Lastly, the removal of Ross County did impact analyses using both 1990 figures and change scores. Direct relationships between disadvantage indicators and treatment effects were strengthened upon the inclusion of Ross County, particularly in the change scores analyses. Also, the inclusion of this county in the full analyses often masked or weakened the relationships between indicators of affluence and program effectiveness. Overall, it seems that context "matters" directly for treatment program effectiveness, but the relationship appears more complex than prior research suggests.

THE IMPACT OF STRUCTURAL CHARACTERISTICS ON PROGRAM INTEGRITY

The next set of analyses focuses on the indirect impact of ecological characteristics on treatment effects working through program integrity. The potential correlates of program quality are a vital component in determining the overall importance of context given the strong correlation between CPAI scores and program effectiveness (r = .61, p < .01). More specifically, if a sound treatment program is highly

correlated with favorable treatment effects, then it is imperative to establish the correlates of high quality programs. A HWH that exhibits a high level of program integrity could be considered a form of institutional efficacy that is likely scarce in disadvantaged areas. Accordingly, a series of bivariate correlations were calculated between structural characteristics and CPAI scores for the full and reduced sample using 1990 census figures as well as change scores. As an additional check on the potential mediating properties of treatment integrity, weighted least squares (WLS) regression models were estimated and the CPAI measure was added to models in which direct effects between structural characteristics and treatment effects emerged.

1990 Census Figures

The correlations between 1990 census figures and CPAI scores are presented in Tables 4.5 and 4.6. Beginning with the disadvantage indicators, several items were significantly associated with program quality in the expected direction. The correlation between the percentage of residents that identified as black and CPAI was particularly strong (r = -.332, p < .01), and the percent of families that were female-headed and the overall disadvantage index also emerged as significant correlations. There were no significant relationships between the affluence indicators and CPAI scores with the exception of the percentage of families that were affluent. This correlation was in the unexpected (negative) direction, as a higher percentage of affluent families was associated with worse HWH programs in terms of treatment quality (r = -.168, p < .01).

	CPAI Full Sample	CPAI Reduced Sample (N = 37)		CPAI Full Sample	CPAI Reduced Sample (N = 37)
DISADVANTAGE	(N = 38)		AFFLUENCE	(N = 38)	
% Black	332**	312**	% College	.094	.144**
% Poverty	008	077	% Professional	100	056
% on Assistance	099	139**	% Affluent	168**	126*
% Female-headed	179**	165**	Index	058	011
Index	181**	199**			

 Table 4.5. Correlations Between CPAI and Disadvantage/Affluence Indicators, 1990 Census

** p < .01 * p <.05

Table 4.6.	Correlations	Between	CPAI and	Immigration	n/Stability	Indicators.	1990 Census
						,	

IMMIGRATION	CPAI Full Sample (N = 38)	CPAI Reduced Sample (N = 37)	STABILITY	CPAI Full Sample (N = 38)	CPAI Reduced Sample (N = 37)
% Latino	213**	201**	% Owned	006	030
% Foreign Born	235**	211**	% Stability	244**	255**
Index	250**	230**	Index	141**	160**

** p < .01 * p <.05

Table 4.5 also presents the impact of the removal of Ross County from the analyses. The indicators of the percent of residents that identified as black, the percent of female-headed families, and the overall disadvantage index all decreased in strength slightly, yet all remained statistically significant correlations with program quality. In addition, the relationship between CPAI scores and the percentage of families on public assistance became significant (r = -.139, p < .01). The percentage of residents that held at least a bachelor's degree also emerged as a significant correlate of CPAI scores (r = .144, p < .01). Finally, the unexpected relationship between affluent families and program quality still remained yet was diminished upon the removal of Ross County.

As can be seen in Table 4.6, all 1990 census items representing concentrated immigration were significantly correlated with CPAI scores. The strength of this association weakened upon the removal of Ross County, but the pattern remained the same: a higher percentage of Latino and foreign-born individuals within a county was associated with lower program integrity. The percentage of individuals who had lived in the same house five years earlier and the overall residential stability index were also significant correlations with CPAI scores. Areas that were characterized by higher residential stability were associated with worse HWH programs as measured by the CPAI. These relationships strengthened upon the removal of Ross County, yet the percentage of housing units that were owner-occupied failed to be an important correlate of program integrity in either sample.

It is apparent from the analyses using 1990 census data that the structural characteristics of an area play an important role in HWH program quality. Several indicators of disadvantage emerged as significant correlates of CPAI scores, suggesting that disadvantaged areas may have a more difficult time attracting and retaining the resources necessary to maintain a high quality program. The percentage of residents who identified as black was a particularly strong correlate of CPAI scores. This could potentially indicate that the ability to secure sound institutions (i.e., halfway houses) may have a racial component independent of other indicators of disadvantage. Few indicators of affluence emerged as significant correlates of program quality and those that did were either in an unexpected direction (the percent of families considered affluent) or only present upon the removal of Ross County (the percent of individuals with a bachelor's degree or higher). Indicators of concentrated immigration performed similar to those of concentrated disadvantage – areas with higher percentages of Latinos and foreign-born individuals were less likely to have strong treatment programs. Finally, the residential stability of an area was significantly associated with CPAI scores as counties characterized by higher stability were linked with programs of worse quality.

Change Scores

It is likely that the socioeconomic changes that take place within a county are significantly linked to the quality of its institutions. Areas that become increasingly disadvantaged could be expected to experience financial and social strains that make retaining high quality treatment programs difficult. Table 4.7 confirms this assumption as the change scores representing increasing disadvantage are negatively correlated with CPAI scores. This effect is particularly pronounced for areas that experienced an increase in the percentage of residents who identified as black (r = -.409, p < .01). The relationship between CPAI and the percentage of families below the poverty level was also relatively strong (r = -.244), while the percentage of families on public assistance (r= -.114, p < .05) and the percentage of families that were female-headed (r = -.186, p < .01) were significantly correlated with program quality to lesser degrees. The removal of Ross County weakened all of the relationships between changing disadvantage and CPAI scores, yet significant and substantial associations still remained with the exception of the percent of families on public assistance.

Table 4.7 also presents the results of changing levels of affluence on program integrity scores. An increase in the percentage of families considered affluent was highly correlated with CPAI scores (r = .478, p < .01), and this relationship represented the strongest association between structural characteristics and program quality in any of the calculations. This finding is particularly interesting given the significant *negative* correlation between the percentage of families considered affluent and program integrity using the 1990 census scores. The removal of Ross County did little to dampen this effect, while an increase in the percentage of residents who had at least a bachelor's degree became significant (r = .136, p < .05) in the reduced sample calculations. An

DISADVANTAGE	CPAI Full Sample (N = 38)	CPAI Reduced Sample (N = 37)	AFFLUENCE	CPAI Full Sample (N = 38)	CPAI Reduced Sample (N = 37)
% Black	409**	377**	% College	.088	.136*
% Poverty	244**	178**	% Professional	.019	.052
% on Assistance	114*	069	% Affluent	.478**	.473**
% Female-headed	186**	141**	Index	.303**	.302**
Index	282**	232**			

Table 4.7. Correlations Between CPAI and Disadvantage/Affluence Indicators, Change Scores

** p < .01 * p <.05

Table 4.8.	Correlations	Between (CPAI and	Immigration	n/Stability	Indicators.	Change Scores
							8

IMMIGRATION	CPAI Full Sample (N = 38)	CPAI Reduced Sample (N = 37)	STABILITY	CPAI Full Sample (N = 38)	CPAI Reduced Sample (N = 37)
% Latino	.005	.036	% Owned	.110*	.063
% Foreign Born	.211**	.235**	% Stability	.164**	.150**
Index	.290**	.302**	Index	.067	.016

** p < .01 * p <.05

increase in the overall affluence index of an area was also significantly correlated with program integrity scores. It is evident, therefore, that increasing levels of affluence are strongly associated with sound treatment programs.

The correlations between changing levels of concentrated immigration and residential stability with program integrity scores are presented in Table 4.8. A change in the percentage of foreign-born residents of a county was positively associated with CPAI scores (r = .211, p < .01), an effect that increased in strength upon the removal of Ross County. A change in the overall immigration index was also positively correlated with program integrity, yet the fluctuation in the percentage of Latinos in an area was unimportant as it pertained to CPAI scores in both samples. As such, it appears that areas characterized by increasing percentages of foreign-born residents were likely to have HWH that were high in program quality. Only one indicator of stability change emerged as a statistically significant correlate of CPAI scores. An increase in the percentage of residents who had lived in the same house five years earlier was associated with stronger treatment programs (r = .164, p < .01). This relationship was in contrast to the significant *negative* relationships that emerged between overall levels of stability and CPAI scores using the 1990 census data. Areas that became increasingly stabilized, independent of original levels of stability, were therefore linked to HWH programs with strong program integrity.

The use of change scores to represent the dynamic changes within a county replicated and substantially strengthened the findings of the 1990 census figure analyses. In particular, areas that were increasing in disadvantage were associated with worse treatment programs. Additionally, an increase in the wealth of an area (as measured by change in the percentage of families that were considered affluent) was strongly related to program integrity. Changes in the ethnic composition of an area were also associated with CPAI scores, as increases in the percentage of foreign-born residents and also increasing values on the overall immigration index were positively correlated with program integrity scores. Finally, counties that became increasingly stable were linked with stronger treatment programs. In short, the indicators of ecological change of the Ohio counties produced correlations that signaled a substantial impact of structural characteristics on program quality.

WLS Regression Models

WLS regression models were estimated as an additional check on the potential mediating properties of program integrity for the relationship between structural factors and program effectiveness. Given that significance levels are determined based on degrees of freedom, few of the bivariate significant relationships between structural indicators and treatment effects were replicated in the WLS regression models. In fact, no indicators from the 1990 census were significant predictors of treatment effects in analyses using either sample. There were, however, statistically significant predictors of program effectiveness using the change score variables. As can be seen in Tables 4.9 and 4.10, the change in percent of foreign-born individuals was significantly related to treatment effects in both the full and one-county-removed datasets. An increase in the percentage of foreign-born individuals was associated with recidivism rates that favored the HWH participants over the control group.

Upon inclusion of the program integrity variable, these relationships became insignificant, and the indirect effects of structural characteristics on program quality revealed in the bivariate analyses were confirmed by the WLS regression analyses. The full model represented a significant improvement over the simple relationship between percent foreign-born and treatment effect (F = 18.70, p < .01 full sample; F = 16.49, p < .01 reduced sample). Regression diagnostics indicated that multicollinearity among variables was not a concern, as all variance inflation factors (VIF) were less than 1.5 and tolerance measures were all above .5, each well outside of levels traditionally thought to be of concern. Additionally, no influential observations were observed within the data when evaluating diagnostics for leverage and discrepancy (e.g., Cook's D; leverage scores) (Fox, 1991).

An inspection of the scatterplot of the change in percent of foreign-born individuals on treatment effect revealed that while the relationship between the two variables is primarily negative, a cluster of variables representing a comparatively large increase in foreign-born individuals did not follow the general pattern. These cases represent the nine programs of Franklin County that were all affected by an increase from 3.4% foreign-born individuals in 1990 to 6.0% foreign-born individuals in 2000 – the largest change in the dataset. Taken together, these two characteristics indicate the

Variable	b	se	β	Variable	b	se	В
% Change in Foreign Born	7.395*	4.285	.276	% Change in Foreign Born	4.121	3.589	.154
				CPAI	1.050**	.243	.580
Constant	966	064		Constant	503	119	
\mathbf{D}^2 or \mathbf{C}		.004		\mathbf{D}^2 200 E 11	.303	.117	
$R^2 = .076, F =$ ** p < .01 * p < .10	2.979*			$R^2 = .398, F = 11$.571**		

 Table 4.9. Weighted Least Squares Regression of Treatment Effects on Change in Foreign Born (N = 38)

Variable	b	se	β	Variable	b	se	В
% Change in Foreign Born	7.938*	4.275	.299	% Change in Foreign Born	4.446	3.662	.168
				CPAI	1.018**	.251	.561
Constant	.955	.064		Constant	.512	.121	
$R^2 = .090, F =$	3.488*			$R^2 = .387, F = 10$	0.732**		
** p < .01 * p < .10							

need for analyses using robust standard errors that include a quadratic term to account for the nonlinear relationship between the two variables. Tables 4.11 and 4.12 present the findings from these models and reaffirm the overall picture from the linear models: the statistically significant, positive relationship between the change in percent of foreign-born individuals and program effectiveness is mediated by program integrity.

The change in the percent of families considered affluent also emerged as a significant predictor of treatment effect in the WLS regression analyses. As can be seen in Tables 4.13 and 4.14, an increase in the percent of affluent families was associated with an increase in treatment effects that favored the HWH group. The inclusion of the CPAI variable again mediated this statistically significant relationship, and the two variable model represented a significant improvement over the simple relationship between the change in percent of affluent families and program effectiveness (F = 15.905, p < .01 full sample; F = 14.551, p < .01 reduced sample). An inspection of the regression diagnostics confirmed that the model presented no problems of collinearity or influential cases. As such, it appears that the relationship between the change in the percent of families considered affluent and program effectiveness is an indirect one that works through program integrity - an increase in affluent families is associated with better quality treatment programs which therein are linked to program outcomes that favor the treatment group.

Variable	В	robust se	Variable	b	robust se
% Change in Foreign Born (mean centered)	-3.846	2.863	% Change in Foreign Born (mean centered)	187	2.937
% Change in Foreign Born Squared (mean centered)	1285.203**	271.016	% Change in Foreign Born Squared (mean centered)	542.864	380.188
			CPAI	.909**	.159
Constant	.908	.054	Constant	.554	.033
$R^2 = .230, F = 16.44 **$			$R^2 = .420, F = 205.50*$	*	
** p < .01					

Table 4.11. Weighted Least Squares Regression of Treatment Effects on Change in Foreign Born (N = 38)

Variable	В	robust se	Variable	b	robust se
% Change in Foreign Born (mean centered)	-2.937	2.976	% Change in Foreign Born (mean centered)	.150	3.056
% Change in Foreign Born Squared (mean centered)	1231.175**	279.510	% Change in Foreign Born Squared (mean centered)	540.732	389.175
			CPAI	.878**	.164
Constant	.909	.055	Constant	.567	033
$R^2 = .233, F = 15.96^{**}$			$R^2 = .409, F = 210.27*$	*	
** p < .01					

Table 4.12.	Weighted Least So	uares Regression	of Treatment Effects on	Change in Foreign	Born $(N = 37)$
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					(
Variable	b	se	β	Variable	b	se	β
% Change in Affluent Families	8.027*	4.213	.303	% Change in Affluent Families	.344	4.033	.013
				CPAI	1.097**	.275	.606
Constant	1.164	.077		Constant	.529	.172	
$R^2 = .092, F = 3.629*$ $R^2 = .375, F = 10.521**$							
** p < .01 * p < .10							
Table 4.14. Weighted Least Squa	ares Regi	ession o	f Treatr	nent Effects on Change in Affluent	Families (1	N = 37)	
Variable	b	se	β	Variable	b	se	β
% Change in Affluent Families	7.740*	4.234	.295	% Change in Affluent Families	.372	4.081	.014
				CPAI	1.077**	.282	.594

o Change in Attiuent Families				γ_0 Change in Amuent Families			
	7.740*	4.234	.295	, o enange in 14jjulen 1 annues	.372	4.081	.(
				CPAI	1.077**	.282	.5
Constant	1.156	.077		Constant	.538	1.75	
$R^2 = .087, F = 3$.342*			$R^2 = .361, F = 9$.586**		
01 * 10							

** p < .01 * p < .10

Indirect Effect Conclusions

Two important conclusions can be drawn from the indirect analyses focusing on the importance of program integrity for the relationship between ecological characteristics and program effectiveness. First, structural components play a prominent role in determining program quality as measured by the CPAI. Many more significant relationships emerged between ecological indicators and program quality as compared to the direct analyses between ecological characteristics and program effectiveness. Disadvantage measures in particular were strong correlates of program integrity: areas plagued by higher levels of disadvantage were associated with worse programming. This relationship was particularly pronounced for areas with a higher percentage of black residents. The use of change scores strengthened these relationships and also indicated that an increase in the overall wealth of an area was associated with stronger treatment programs.

Second, the multivariate analyses confirmed the mediating properties of the CPAI as suggested by the bivariate correlations and also provided a clearer picture of the relationships between ecological factors and program effectiveness. The unexpected positive correlation between the change in percent of foreign-born individuals and program outcome found in the direct analyses masked a more complex pattern. Specifically, the WLS regression analyses detected a curvilinear relationship between the variables suggesting that larger changes in the percent of foreign-born individuals –

in either direction – was associated with better program effectiveness.³⁶ Also, the strong relationship between the percentage change in affluent families and program effectiveness (a finding that remained significant even in the reduced degrees of freedom WLS model) was largely mediated by CPAI score. This was not surprising given that the relationship between the percent change in families considered affluent and CPAI score was the strongest of any of the correlates. Overall, then, both bivariate and multivariate analyses confirm that the relationships between structural characteristics and treatment program effectiveness work largely through program integrity.

THE IMPACT OF PROGRAM INTEGRITY ON PROGRAM EFFECTIVENESS ACROSS DIFFERENT CONTEXTS

The final set of analyses explores whether the relationship between program integrity and effectiveness varies across different levels of the structural characteristics. It is possible that certain areas benefit more than others from a sound treatment program. The ability to identify these types of areas would be useful toward the efficient distribution of precious resources within a state. A series of three variable models was therefore estimated that included the mean-centered CPAI variable, the

³⁶ The previous positive correlation was largely driven by a cluster of programs that had comparatively high increases in the percentage of foreign-born individuals. The removal of these programs leaves a statistically significant negative correlation between the change in percent of foreign-born individuals and program effectiveness.

mean-centered structural variable, and their mean-centered interaction, as described in Chapter Three. Analyses were conducted for both the full and reduced-sample using both 1990 Census figures and change scores. Only the 1990 Census figures produced significant interaction terms and these results are described below.

1990 Census Figures

Three structural indicators interacted with the program integrity variable in predicting program effectiveness. First, as can be seen in Tables 4.15 and 4.16, the impact of CPAI on treatment effects was marginally statistically dependent on the level of foreign-born individuals within a county in both samples. More specifically, the correlation between CPAI score and treatment effect was stronger in areas characterized by higher percentages of foreign-born individuals. Dividing the full sample in half at the median level of foreign-born individuals revealed programs above the median had a CPAI/Treatment correlation of .643 while programs below the median had a CPAI/Treatment correlation of .475. It is important to note, however, that the addition of the interaction term in the full sample did not present a statistically significant improvement over the main effects model (F = 3.62). The one-county-removed analysis produced a slight increase in overall model explanatory value ($R^2 = .475$ full sample,

Variable	b	se	β			
CPAI	1.143***	.233	.632			
% Foreign Born	9.073**	3.593	.438			
CPAI * % Foreign Born	34.487*	18.120	.332			
Constant	.237	.165				
$R^2 = .475, F = 10.250 * * *$						

Table 4.15. Weighted Least Squares Regression of Treatment Effects on Interaction Between CPAI and % Foreign Born (N = 38)

*** p < .01 ** p < .05 * p < .10

Table 4.16.	Weighted	Least Squares	Regression	of Treatment	Effects or	1
Interaction B	Between CP	AI and % For	eign Born (N	(= 37)		

Variable	b	se	В				
CPAI	1.057**	.233	.582				
% Foreign Born	11.558**	3.798	.559				
CPAI * % Foreign Born	48.403*	19.485	.466				
Constant	.202	.162					
$R^2 = .502, F = 11.104 **$							
** p < .01 * p < .05							

.502 reduced sample), and the inclusion of the interaction term did provide a significant improvement over the main effects model (F = 6.18, p < .05).

Upon inspection of the regression diagnostics for the above models it was determined that a particular program had undue influence on the analyses. The Alternatives Agency HWH of Cuyahoga County produced Cook's D values (3.90 full sample, 2.90 reduced sample) and leverage scores (.71 full sample, .73 reduced sample) that indicated a problematic influence on the model estimates. Cuyahoga County had the greatest percentage of foreign-born residents among the counties in 1990 (6.4%), and the Alternatives Agency HWH produced one of the strongest relationships between program integrity and program effectiveness in addition to a relatively strong weight within the analyses.³⁷ Models were therefore re-estimated without this particular program, and the interaction between CPAI scores and the level of foreign-born individuals within a county was no longer significant in either model. The above statistically significant results should therefore be interpreted with caution, yet it should not be dismissed that the strong relationship between program integrity and effectiveness for this particular program occurred in a county with a higher percentage of foreign-born individuals.

Tables 4.17 and 4.18 present similar results for the interaction between CPAI and the immigration index in predicting treatment effectiveness. Replicating the above findings for the percent of foreign-born residents, the relationship between CPAI and treatment effect is stronger in areas scoring higher on the immigration index. Also similar to the above findings, the reduced sample model presented a significant improvement over the main effects model (F = 4.53, p < .05), yet the full sample model did not (F = 3.08). It should be again noted, however, that these results are largely

³⁷ This program was selected as one of the four cases for qualitative review below due to its low CPAI score and corresponding poor treatment effect.

Variable	b	se	В			
CPAI	1.155***	.237	.638			
Immigration Index	.101**	.045	.398			
CPAI * Immigration Index	.425*	.242	.310			
Constant	.489	.121				
$R^2 = .457, F = 9.556^{***}$						

Table 4.17.Weighted Least Squares Regression of Treatment Effects onInteraction Between CPAI and Immigration Index (N = 38)

*** p < .01 ** p < .05 * p < .10

Table 4.18.	Weighted	Least Squ	ares Regress	ion of	Treatment	Effects	on
Interaction B	etween CPA	AI and Imm	igration Inde	$\mathbf{x} (\mathbf{N} =$	37)		

Variable	b	se	В			
CPAI	1.092**	.239	.602			
Immigration Index	.121*	.047	.478			
CPAI * Immigration Index	.545*	.256	.400			
Constant	.514	.121				
$R^2 = .470, F = 9.739^{***}$						
** p < .01 * p < .05						

driven by the Alternatives Agency HWH program. Examination of the regression diagnostics indicated that this case was problematic for the CPAI and immigration index interaction models. Removal of this case from the analyses produces insignificant interaction terms, and neither model presents a statistically significant improvement in prediction over the main effects model. One final structural indicator produced a significant interaction with program integrity in the reduced sample analyses only. The relationship between program integrity and effectiveness was somewhat conditional on the percent of residents in a county who identified as black. Table 4.19 presents the results of this analysis and indicates that a higher percentage of blacks within a county was associated with a stronger relationship between program integrity and effectiveness. Programs below the median of the percentage of residents who identified as black produced a CPAI/Treatment correlation of .593 while those above produced a CPAI/Treatment correlation of .666. The interaction term model was not, however, a significantly better predictor than the reduced model (F = 3.75).³⁸

Table 4.19.	Weighted	Least	Squares	Regression	of	Treatment	Effects	on
Interaction Be	tween CPA	I and %	6 Black (N	$\mathbf{N}=37$				

Variable	b	se	В				
CPA	1.067***	.255	.588				
% Black	2.106**	.878	.454				
CPAI * % Black	10.685*	5.517	.381				
Constant	.224	.188					
$R^2 = .457, F = 9.265^{***}$							

*** p < .01 ** p < .05 * p < .10

³⁸ Inspection of the regression diagnostics revealed that the Alternative Agency HWH was again somewhat of an over influential case (leverage value of .54). Removal of this case rendered the interaction term insignificant in the CPAI and percent black model.

Interaction Effect Conclusions

The relationship between program quality and effectiveness seemed to vary little across different levels of ecological context. This is a bit surprising given the strong relationship between structural characteristics and program integrity as identified in the indirect analyses. It could be that the relationship between program integrity and corresponding HWH treatment effects is not dependent on any particular ecological characteristic, and that a strong program will lead to positive results for treatment participants regardless of the characteristics of the surrounding area. Nevertheless, it cannot be denied that securing and maintaining a strong program appears to be dependent on the socioeconomic makeup of an area. Thus, while a strong treatment program may be more important for an area with a higher percentage of black residents, for example, it is entirely possible that too few high quality programs exist in these areas to determine this relationship within the current data.

It is important to recognize that the significant interaction terms that emerged are indeed vital for understanding the importance of ecological context for correctional treatment programs. Although the findings were somewhat bolstered by the extreme case of the Alternatives Agency HWH, this program presents an important piece of the puzzle in and of itself. In particular, the relationship between the CPAI score of this program and its corresponding treatment effect was fairly consistent with the overall pattern (i.e., the program had the second worst CPAI score in the data and the third worst treatment effect). It is entirely important, therefore, to take into account whether this relationship may have emerged within any particular unique ecological structure (e.g., the highest percentage of foreign-born residents in the dataset). Several scholars (see Bursik, 1986; Laub & Sampson, 1998) recommend further inspection of both influential cases and those that do not fit well within the broader empirical pattern in order to enrich overall explanations. The final component of this chapter thus provides a more qualitative analysis of the Alternatives Agency HWH and three other programs to gain a better overall picture of the relationships between program integrity, program effectiveness, and structural characteristics.

QUALITATIVE ANALYSIS OF FOUR PROGRAMS

The quantitative analyses presented above provide an initial first look at the importance of context for correctional treatment programs, yet they leave several important questions unanswered. Why do some programs succeed (i.e., have strong treatment effects) in spite of poor program integrity? Conversely, why do some high quality programs fail? In addition, what conditions led to the programs at the extreme ends of the positive relationship between program integrity and effectiveness? More specifically, is there knowledge to be gleaned from the high integrity/high effectiveness and low integrity/low effectiveness programs? The answers to these questions require a qualitative inspection of specific programs in order to produce a more complete picture of the influence of context on offender rehabilitation.

Laub and Sampson (1998) set forth a framework for integrating quantitative and qualitative information that neatly addresses the above inquiries. In their research on desistance in criminal offending across the life course they identified cases that strongly fit the expected patterns, but also selected "off-diagonal" cases that were inconsistent with their quantitative findings. The chosen cases form a 2 by 2 table in which two cells conformed to their quantitative findings and two cells did not. By analyzing the "deviant" or "negative" cases that do not fit the pattern it is possible to extend and build upon current theoretical explanations of a phenomenon (Emigh, 1997). In the present analysis, these qualitative inspections could potentially indicate the necessity of adding structural characteristics to theories of offender rehabilitation.

Accordingly, several considerations were taken into account when identifying the programs for further analysis. The most important qualification was the relationship between program integrity and program effectiveness. Thus, the scatterplot between CPAI and treatment effects, and residuals and leverage scores from the regression of treatment effects on CPAI, were inspected to identify potential cases for each of the four cells. Only programs with a minimum of 50 offenders were considered in order to assure the sample was large enough to provide an accurate assessment.³⁹ The last component for selection dealt with missing CPAI items. As

³⁹ This is admittedly a small sample size to use as a cutoff point and was largely driven by the desire to include the Veteran's Hall HWH program. While the analysis of this program contained only 30 offenders (matched to 30 controls), it exhibited the strongest CPAI score and second strongest treatment effect. Additionally, the program was located in Ross County, which is worthy of further analysis given the overall influence of this program and county in the quantitative analysis. Finally, although 60 is a

noted in Chapter Three, some programs did not receive a full assessment and CPAI scores were adjusted to account for missing items. This prohibited assessment of the influence of individual CPAI items, an important part of the qualitative analysis, and one program with a high number of missing items was dropped from consideration.

Four programs were identified to form a 2 by 2 table based on CPAI scores and treatment effects: a weak CPAI/weak treatment effect program (*Alternatives Agency*), a weak CPAI/strong treatment effect program (*Harbor Light*), a strong CPAI/strong treatment effect program (*Veteran's Hall*), and a strong CPAI/weak treatment effect program (*Booth House*). The analysis proceeds below by assessing each program based on program characteristics, individual CPAI items, and structural characteristics. Program characteristics were compiled by culling information from various sources including a report on Ohio HWH programs (Lowenkamp & Latessa, 2002), the Ohio Department of Rehabilitation and Correction website, and websites of the various service providers (e.g., Salvation Army). Where applicable, comparisons are made between programs that share important characteristics and thus allow for the identification of possible unique factors contributing to success or failure. Finally, an overall snapshot of each program is provided in a conclusion section for each.

small sample, it is considerably larger than several of the other programs under consideration, including the program with the largest treatment effect.

ALTERNATIVES AGENCY

(WEAK CPAI/WEAK TREATMENT EFFECT)

As noted above, the Alternatives Agency HWH program proved influential in the quantitative analyses exploring interaction effects. The program had an extremely poor CPAI score (21%, only 7 of 33 items present), and also had a poor treatment effect (logged odds ratio = -1.21). Additionally, with 514 total offenders in the analysis the program had one of the strongest weights in the dataset. The program is located in Cuyahoga County, an extremely urban county containing the city of Cleveland, and was one of two programs in the qualitative analyses to exist in this county.

Program Characteristics

The program is fairly young—it has been in operation since 1995, which would make less than five years in operation when assessed on program integrity in 1999. Both male and female residents are serviced by 30 full-time staff. The program has a capacity of 140 clients that spend an average of three to four months in residence. The Alternatives Agency HWH excludes offenders with a history of arson, sexual offenses, or severe violence and also does not accept offenders with severe medical or mental conditions.

Substance abuse seems to be the main focus of services offered at this program. Staff members also reported groups focusing on spirituality, feelings, discipline, and relapse prevention. Several changes have occurred since fiscal year 1999 including adding several treatment groups dealing with employment, education, and cognitive issues. The HWH also has a horticulture program and a graphic art program. Taken altogether, the Alternatives Agency HWH employs several programs found *not* to work in reducing recidivism (Gendreau, Smith, & Theriault, 2009), and it is therefore not surprising to see such poor CPAI scores.

The Alternatives Agency HWH also has a rather sordid history as a legitimate offender reentry operation in Cuyahoga County. In March 2009, the *Cleveland Plain Dealer* reported that Alternatives Agency was part of a larger federal corruption probe. The program spent about three million in taxpayer dollars per year and heavy speculation existed over a history of hiring current and former public officials as lobbyists, contractors, and consultants. Indeed, three people with ties to the agency pled guilty to bribery-related crimes in a federal court in 2009. In an effort to improve the image of the program the HWH was renamed Cuyahoga Reentry Agency in August of 2009, yet community outrage over the actions of the program continued.

The relationship between the community at-large and the HWH program is an important one, particularly for an analysis of the importance of context for treatment program integrity and effectiveness. The CPAI contains an item accounting for a program's relationship with the surrounding community. The item is defined as "the value and goals of the program are congruent with those of the community," and a variety of characteristics are taken into account for whether a program should receive
this point. Positive attributes include whether the program has community volunteers, whether the community knows the program location and who is served, whether there are community members on the board, at open houses, on community work projects, etc. Negative attributes include a lack of community involvement in any way or protesting over the location of the HWH or whom it serves. It is worth noting that the Alternatives Agency HWH was one of only nine programs in the dataset not to receive this point.

CPAI Characteristics

One of the weaknesses of the CPAI is that all items are weighted equally (i.e., present or not) despite unequal relationship between these items and treatment effects. It is possible, for example, that a low overall score may be masking the presence of important items (e.g., a program may only have 10 out of 33 items present yet those ten might be the strongest correlates of treatment effects in the tool). Accordingly, the three strongest areas and five strongest items of the CPAI (in terms of relationship with treatment effect) were identified and each program was assessed to determine whether they received points in these vital areas. This analysis could potentially uncover significant relationships for each program between structural characteristics and important *individual* items of the CPAI.

As noted above, the Alternatives Agency HWH received only seven total points on the CPAI. The three highest correlated areas with treatment effect were program implementation (r = .56), program characteristics (r = .52), and client pre-service assessment (r = .42). The program scored 14%, 10%, and 29% on these three sections, respectively. The five most important individual items, their definitions, and correlations with treatment effect are presented in Table 4.20. The Alternatives Agency HWH did not receive a point for any of these items. Recall from above that the program also did not receive a point for being valued by the at-large community, which was reasonably correlated with treatment effect (r = .30). In short, not only did the program perform poorly on the CPAI overall, but it also did not receive points for the most important elements.

Item	Correlation	Definition
1. Designer		The program director was professionally trained (university
qualifications		degree in helping profession)
	.52*	
2. Involvement		Clients spent at least 40% of time per week in treatment
	.48*	
3. Valued by CJ		Values and goals of the program are congruent with the
community		Criminal Justice community
	.42*	
4. The director		Director is directly involved in training staff
trains staff		
	.36*	
5. External		There is a management audit system mechanism in place to
Quality		evaluate the quality of external service providers
	.34*	

 Table 4.20. Five Strongest Correlates of Treatment Effect from the CPAI

County Characteristics

In 1990, Cuyahoga County was considered nearly 100% urban with an average population density of 3,082 people per square mile. Each of these characteristics was

well above the average county in the dataset (78% urban; 982 people per square mile). The county was fairly symbolic overall of Wilson's (1987) description of an area with widespread concentrated disadvantage. To be sure, the county had the highest score on the overall disadvantage index among counties (1.30; average county = -.34), and was among the top five highest on all disadvantage indicators including the highest percentage of residents who identified as black (25%; average county = 11%).

Despite this presence of concentrated disadvantage, the county also scored relatively high on the affluence indicators among counties in the dataset. The county ranked in the 3rd-5th highest range on all three affluence items and the overall index. Also indicating this dual presence was the county ranking on the ICE (7th), which measures disadvantage and affluence on a continuum as discussed in Chapter Two. Cuyahoga County also ranked high on indicators of immigration-with the highest percent of residents who were foreign-born (6%; average county = 2%) and the third highest percent of residents who identified as Latino (2%; average county 1%). Consequently, the county score on the immigration index (2.21) was well above the average county score (-.23). Finally, an interesting picture emerged amongst the stability indicators. The county ranked high (3rd) on the percentage of residents who lived in the same house as five years earlier (61%; average county = 57%), yet ranked low (12th) among counties for the percent of housing units that were owner-occupied (62%; average county = 67%). Thus, it appears a high percentage of residents who rented their housing units were doing so consistently over the last five years.

In terms of change scores, Cuyahoga County was one of the few in the dataset in which indicators of disadvantage only marginally improved or actually got worse. The county had the highest increase in the percent of residents who identified as black (3% increase; average county = 1% increase) and the second smallest decrease in the percentage of families below the poverty level (.007% decrease; average county 2% decrease). Indeed, the county score on the disadvantage index actually increased and was the largest increase in the dataset (.43; average county = -.13). The county had the fourth highest decrease among counties in the percentage of families considered affluent and produced an ICE score that ranked it fourth worst in terms of trending toward absolute poverty.

The county had the third highest increase in the percent of residents that identified as Latino and the fourth highest increase in the percent of foreign-born residents, increasing the already high levels of immigration indicators within the county as compared to the others in the dataset. Both of the residential stability indicators revealed a trend away from stability as compared to the rest of the counties. The county had only a small increase in the percentage of housing units that were owner-occupied (5th worst) and had a small decrease in the percentage of residents living in the same house as five years earlier (2nd worst). Overall, then, the changes within Cuyahoga County from 1990 to 2000 revealed an area of increasing disadvantage and instability as compared to the other counties in the dataset.

Conclusions

It is perhaps not surprising to see the Alternatives Agency HWH have poor program integrity and effectiveness when considering program characteristics, program integrity, and structural characteristics in combination. The program was built on weak theoretical foundations in terms of effective intervention and was further marred by controversy amid corruption. In addition to the program having a low overall CPAI score, key elements of therapeutic integrity were absent as the HWH produced abysmal scores on program implementation and characteristics. Also lacking were the five strongest individual level correlates of treatment effects and the item essentially measuring support from the community.

The characteristics of Cuyahoga County no doubt contributed to the ineffectiveness of the program. As noted in the quantitative analyses above, 1990 concentrated disadvantage indicators (especially percent black) were strongly inversely correlated with CPAI scores. This relationship was similar for higher percentages of foreign-born and Latino residents. It is notable that Cuyahoga had the highest levels of disadvantage and immigration among the counties in 1990. More impressive were both the direct and indirect findings of the changing nature of disadvantage in the quantitative analyses. Recall that the change in the percent of residents who identified as black was one of the strongest correlates (r = -.41) of CPAI, and the change in the percent of families considered affluent was *the* strongest correlate of CPAI (r = .48). Cuyahoga County was changing substantially in the wrong direction on both of these

indicators. It should therefore come as no surprise that treatment quality and effectiveness of the Alternatives Agency HWH suffered given the surrounding conditions. The question then becomes "How could a program possibly be successful within this environment?"

HARBOR LIGHT

(WEAK CPAI/STRONG TREATMENT EFFECT)

As noted above, two of the four programs selected for analysis were located in the same county. Harbor Light was also located in Cuyahoga County and also produced a relatively poor CPAI score (36%; 12 out of 33 items present). The program treatment effect, however, was relatively strong (logged odds ratio = .27), especially given the program's county of origin. The weight carried by the program in the analyses was also relatively strong (402 total offenders). The qualitative analysis of this particular HWH can thereby contribute important information when combined with the previous program's results.⁴⁰ The subsequent analyses follow the same plan as above with the exception of the exclusion of the county characteristics section to avoid

⁴⁰ In total, there were four programs from Cuyahoga County in the dataset. All had relatively low CPAI scores, the strongest of which was 52%, good for 16th strongest out of the 38 programs. Harbor Light was the only program of the four with a positive treatment effect score. These results illustrate both the importance of disadvantage for program integrity as well as the uniqueness in Harbor Light overcoming this disadvantage.

repetition. This section concludes with a short discussion comparing the Alternatives Agency HWH with the Harbor Light HWH.

Program Characteristics

The Harbor Light HWH is a Salvation Army run program that has been in existence since 1949. Both male and female clients are serviced by 39 full-time staff and one part-time staff. The program has a capacity of 130 clients that spend an average of three to five months in residence. The Harbor Light HWH excludes sex offenders and arsonists, and considers felons who demonstrate violent/assaultive behaviors and/or have severe psychiatric disorders on a case-by-case basis.

The program offers a variety of services including substance abuse, employment, cognitive groups, education, and financial programming. Referrals and linkage to community support systems (vocational, educational, and behavioral healthcare) appear to be an important component of the program as does in-house aftercare. There were, however, important changes to the program after fiscal year 1999 including the elimination of cognitive group programming and the use of a lay person as a primary administrator for the first time instead of a Salvation Army officer. Despite these changes, the program appears to have a relatively strong foundation, and even won the Salvation Army's national social service award for program excellence and achievement in 1988.

CPAI Characteristics

The Harbor Light HWH received points for only 12 out of 33 items on the CPAI, which ranked the program 7th worst overall. The program performed moderately well on the program implementation section of the CPAI (57%), yet received weak scores on both the program characteristics (30%) and client pre-service assessment sections (29%). Of the five strongest individual correlates in Table 4.20, two were present in the Harbor Light HWH. The program received a point for professional training of the director and also for involving clients in a sufficient amount of time for treatment, which were the two strongest individual correlates of treatment effects in the CPAI. Also notable is that the program received a point for the item assessing whether the HWH was valued by the community at-large.

Conclusion

The characteristics of Cuyahoga County were detailed above and do not require repeating, but it must be remembered that the Harbor Light HWH is operating in a highly disadvantaged context. Accordingly, the program has a relatively poor CPAI score, yet it appears to make up for this with other important qualities. The program is well-staffed and provides a vital aftercare component in addition to programming that addresses a multitude of offender needs. Harbor Light also appears to have a strong relationship with the community in emphasizing linkages to community support systems rather than simple HWH programming. Finally, despite a poor overall CPAI score, the Harbor Light HWH program seems to be scoring points where they are most vital. In order to best understand the success of Harbor Light it is necessary to compare it to a similarly situated program that failed.

Comparison between Alternatives Agency and Harbor Light

The comparison of the Alternatives Agency and Harbor Light HWHs allows for an intriguing opportunity to investigate the interactions between program and structural characteristics. By holding the structural characteristics constant, it is possible to get a better idea of what works due to the differing treatment effects among the programs. More specifically, the characteristics of Cuyahoga County suggest that both programs should have poor treatment integrity as well as poor treatment effects based on the quantitative analyses above. Why, then, did Harbor Light succeed while Alternatives Agency failed?

In terms of program characteristics, there are some similarities between each HWH. Both programs have a capacity of around 130-140 offenders who are in residence an average of three to six months. Both programs have similar rejection requirements and have programming related to substance abuse. There are, however, many more differences between the programs. Harbor Light is run by a reputable organization for over 60 years while Alternatives Agency has been under controversial ownership for only 15 years. Harbor Light had several programs at the time of assessment found to reduce recidivism (e.g., cognitive groups) while Alternatives Agency was limited to substance abuse programming in addition to several ineffective modes of programming (e.g., horticulture). Despite similar capacities, Harbor Light had ten more staff members to handle clients, and aftercare was present in Harbor Light yet absent in Alternatives Agency.

Although they performed similarly overall on the CPAI, there were important differences in favor of Harbor Light on subcomponents of the tool. In particular, the Harbor Light HWH received a score of 57% on the vital program implementation component of the CPAI compared to a score of 14% for the Alternatives Agency HWH. Harbor Light also received points for the two strongest individual correlates of treatment effect on the CPAI while Alternatives Agency received none. Finally, Harbor Light received a point for the valued-by-community variable while Alternatives Agency did not.

The importance of a strong relationship with the surrounding community cannot be ignored in these analyses. The management of a HWH can ill afford to be at odds with the surrounding community when conditions are already ripe for failure. The Alternatives Agency HWH seems to be particularly damaged by a negative relationship with the community. It is difficult to expect a successful treatment outcome for an individual when the environment that he or she is living in is rife with conflict over the existence of the program. In contrast, the Harbor Light HWH program seems to embrace the community and vice versa. Although not reflected in the current data, a change to the program after 1999 required clients to have an increased exposure to and participation in community activities. This change is consistent with a program that has emphasized referral and linkages to community support systems. In short, context "matters" to the extent that communities are involved in and embrace the HWH programs as evidenced by these two programs and their respective treatment effects.

VETERAN'S HALL

(STRONG CPAI/STRONG TREATMENT EFFECT)

The next program in the qualitative analysis is Veteran's Hall HWH in Ross County. This county was particularly unique as compared to others in the dataset and also proved to be influential in the quantitative analyses. Veteran's Hall represented the extreme "positive" end of the CPAI/treatment effect relationship. The program was the only one in the dataset to receive a "very satisfactory" rating on the CPAI (76%; 25 out of 33 items present) and the corresponding treatment effect was also strong (logged odds ratio = .78). The program is similar in many ways to the final program analyzed in the qualitative analyses and thus allows for a comparison of the unique contributions of structural characteristics.

Program Characteristics

The Veteran's Hall HWH is an Alvis House run program that has been in operation only since 1997.⁴¹ Both male and female offenders are serviced by six full-time staff. The program has a capacity of 24 clients that spend an average time of six months in residence. The program has a lengthy list of rejection criteria, including sex offenders that had crimes with a minor, had not completed a recognized sex offender program or had not been accepted into a sex offender program within the community. Also not accepted were offenders with a violent offense within the past three years, those with an arson history, were mentally ill or dangerous, or that had a disability beyond the scope of the program.

The HWH offers a variety of programming handling substance abuse, employment, education and mental health issues. The Alvis House website details the program's dedication to the EQUIP program, which is a cognitive behavioral program designed to reduce thinking errors by offenders. An important change that occurred after fiscal year 1999 was the cutting of program staff. Overall the program appeared to have a strong foundation that valued individual case management in order to assess the needs and goals of each client.

⁴¹ All five Alvis House HWH programs in the dataset had reasonably high CPAI scores, which indicates the dedication of these programs to evidence-based treatment. None of the remaining programs had treatment effects that equaled the Veteran's House, however, again indicating the importance of the surrounding area for treatment programs.

CPAI Characteristics

The Veteran's Hall HWH received points for all but six of the items on the reduced CPAI. The program scored exceptionally well on the top three areas of the CPAI—receiving a score of 86% on program implementation, 60% on program characteristics, and 100% on client pre-service assessments. Additionally, the program received points for four of the top five individual CPAI correlates of treatment effect. The program also received a point for having values and goals that were congruent with those of the surrounding community.

County Characteristics

Ross County is an extremely rural county, ranking lowest in the data in both percent urban (32%; average county = 78%) and persons per square mile (101; average county = 982). In 1990, the county was extremely poor, ranking worst in the dataset for the percentage of families below the poverty level (15%; average county = 10%) and the percent of residents who were unemployed (10%; average county = 7%). The county was also second worst in terms of the percentage of families who were on public assistance (12%; average county = 9%). Ross County also had a low percentage of residents who identified as black, Latino, or foreign-born. As such, the county is fairly characteristic of the poor, white Appalachian region of America (Tickamyer & Duncan, 1990).

In addition to high levels of disadvantage, the county had the lowest percentages for all of the affluence indicators in the dataset. The percentages for residents with a college degree, residents in professional or managerial positions, and families considered affluent were all well below the county averages, and this produced an extreme score for the county on the overall affluence index (-2.15; average county = -.58). Additionally, the county produced the lowest ICE value in the dataset (.05; average county = -.17). Ross County ranked near the middle of the counties on all residential stability indicators.

The period of 1990 to 2000 was one of rapid change for Ross County. The county saw a ten percent increase in areas considered urban (2^{nd} highest in the dataset). More importantly, Ross County had the largest decrease on all but one of the disadvantage indicators. Most notable were a six percent decrease in the percentage of families below the poverty level (average county = 2% decrease), a seven percent decrease in the percentage of families on public assistance (average county = 5% decrease), and a four percent decrease in the percent of residents unemployed (average county = no change). The decrease on the overall disadvantage index was well below the county average (-1.48; average county = -.13 decrease).

For the most part, there was not a corresponding increase in the affluence indicators. Ross County had the third lowest increase in the percentage of residents with a college degree (2% increase; average county = 4% increase) and third lowest increase in the percentage of residents in professional positions (4% increase; average

county = 6% increase). There also was very little change in the ethnic and racial makeup of the county. Nevertheless, Ross County had the largest increase on the ICE measure of all counties in the dataset (.05; average county = no change). Finally, the county had the highest increase in the percent of housing units that were owner occupied (3% increase; average county = 2% increase) and also the highest increase on the overall stability index (.24 increase; average county = .02). In summary, the county experienced a dramatic decrease in levels of disadvantage while becoming increasingly stable in terms of residential mobility.

Conclusion

The success of the Veteran's Hall HWH was rather impressive given both the poor structural conditions in 1990 as well as the amount of change Ross County went through from 1990 to 2000. Despite high levels of disadvantage, the program was able to produce a strong CPAI score by incorporating evidence-based practice into programming. No other program produced such strong scores on the vital sections of the CPAI. Although no interaction effects emerged in the quantitative analyses between CPAI scores and level of disadvantage, it would appear that the Veteran's Hall HWH was able to overcome high levels of poverty through strong programming; that is, a strong program score (e.g., qualifying as "very successful") may be vital for the areas hit most hard by disadvantage. It warrants an additional mention that this was an extremely rural, spread-out county that was different in these respects from any other county in the dataset. It cannot be ruled out that different dynamics may be at work in this county as compared to others (e.g., a more socially-supportive culture in which everybody knows one another and is often similarly situated) (Steblay, 1987). Nevertheless, to the extent that change indicators are an important correlate of program integrity and effectiveness as suggested by the quantitative analyses, Ross County fits well in the overall pattern of the importance of structural characteristics for treatment programs. More specifically, the negative relationship between the change in levels of disadvantage and program integrity and treatment effects is epitomized by the HWH in Ross County. The positive relationship between the change in stability indicators and program integrity and treatment effects is also exhibited by this program.

One final important finding is revealed by the analysis of the 1990 structural characteristics in combination with the Veteran's Hall HWH scores on program integrity. Although Ross County was extremely impoverished in 1990, it did not have corresponding high levels of residents who identified as black nor high levels of female-headed households with children. These were the two indicators of disadvantage found to be significantly negatively related to program integrity scores, a finding that remained strong even upon the removal of Ross County from the analyses. As such, this finding provides additional evidence of a distinct racial component to the importance of context for correctional treatment programs, and also suggests the

196

dangers of relying on a composite concentrated disadvantage measure in macro-level analyses.

BOOTH HOUSE

(STRONG CPAI/WEAK TREATMENT EFFECTS)

Booth House was the final program included in the qualitative analyses and was located in Montgomery County, which is a fairly urban county that contains the city of Dayton. The program had a reasonably strong CPAI score (52%; 17 out of 33 items present), yet had by far the worst treatment effect out of all the programs (logged odds ratio = -1.54). The program is somewhat small with 50 offenders (matched to 50 controls) represented in the data. The qualitative analysis of the Booth House HWH provides some answers to the question "Why do good programs fail?"

Program Characteristics

The Booth House HWH is a Salvation Army run program that has been in operation since 1989. Only male clients are served by 12 full-time staff. The program has a capacity of 15 clients that spend an average of 100 days in residence. Booth House has a fairly comprehensive set of restriction criteria including offenders with a violent history, arson conviction, lengthy institutional record, mental health issues, sex offenders not completing an institution sex offender program, and those refusing medical treatment. The program reserves the right to refuse any client.

The program offers services focusing on substance abuse, employment, financial issues, anger management, behavior modification, and self-help programs. Case managers assist residents with issues dealing with employment, recovery, savings, and housing, and provide referrals to community resources for mental health issues and physical problems. The program has experienced few changes since 1999, except for building remodeling to improve the client's recreation area, group room, and laundry facilities.

CPAI Characteristics

Booth House received points for 17 of the 33 items on the CPAI, which ranked the program 13th overall. The program scored well on the program implementation section (71%), yet scored considerably lower on both the program characteristics (40%) and client pre-service assessment (43%) sections. It was the only program analyzed in the qualitative section that received points for all five of the strongest individual correlates of treatment effect on the CPAI. Finally, it is worthy of note that the program was one of nine programs to not receive a point for being valued by the surrounding community. Overall, then, the program produced a strong score on the most important component of the CPAI and also received a point for all five important individual CPAI items, but scored relatively weakly on the other two important components of the CPAI and failed to receive a point for community involvement and acceptance.

County Characteristics

In 1990, Montgomery County had a comparatively high population density (1,243 people per square mile; average county = 982) and was also primarily urban (95%; average county = 78%). Although the urban nature of the county was quite similar to Cuyahoga County, it did not fare as poorly in terms of concentrated disadvantage. With the exception of ranking third in the percent of residents who identified as black (18%; average county = 11%) and fourth in the percentage of female-headed households with children (9%; average county = 8%), the county was relatively average on indicators of disadvantage. Indeed, the county ranked sixth on the overall disadvantage index (.11; county average = -.34).

Montgomery County was also similar to Cuyahoga County based on affluence indicators. The county ranked high on most indicators, including third in the percent of residents in professional positions (29%; average county = 25%) and fourth in the percent of residents with a college degree (20%; average county = 17%). The county was therefore comparatively affluent to Cuyahoga County, yet not as disadvantaged overall. The indicators of immigration also were similar to those of disadvantage – the county ranked in the 6th - 8th highest range on each.

Although the county was rather average on indicators of concentrated disadvantage and immigration, the same cannot be said for residential stability. Montgomery County had the fourth lowest percentage of housing units that were owner occupied (63%; average county = 67%) and the third lowest percentage of residents who had lived in the same house as five years earlier (53%; average county = 57%). The county ranked third lowest among those in the dataset for the overall residential stability index, suggesting that there was a high degree of residential instability within the county. Overall, the county was comparatively affluent (it ranked fifth highest on the ICE measure), average in terms of disadvantage and immigration, and high on residential instability.

Montgomery County remained equally ordinary across the 1990 to 2000 time period. The county did have the second lowest decrease in the percentage of residents who were unemployed (1% decrease; average county = 2% decrease) and also the fourth highest increase in the percentage of residents who identified as black (2% increase; average county = 1% increase). On the whole, though, the county was becoming neither more nor less disadvantaged, and again ranked near the middle for the change in overall disadvantage index. The pattern was the same for the change in immigration indicators within the county.

The county did, however, consistently experience changes below the county averages on the affluence indicators. It ranked fourth lowest overall on the change in the percent of residents with a college degree (3% increase; average county = 4%

increase), and third lowest overall on the change in the percent of families considered affluent (3% decrease; average county = 1% decrease). Despite comparatively similar affluence rankings to Cuyahoga County in 1990, Montgomery County did not see the same increases in affluence over the 1990 to 2000 period. The county ranked the lowest in the dataset on the change in the overall affluence index and had an ICE value trending toward absolute poverty, whereas the average county saw a slight increase on this measure.

The county also became comparatively more stable, ranking second highest on the change in the percent of individuals living in the same house as five years earlier (1% increase; average county = no change) and fourth highest on the overall change in residential stability index. In general, Montgomery County changed little over the 1990 to 2000 time period. It remained fairly average on indicators of disadvantage and immigration, and it did not experience the increase in affluence indicators that most counties did. The county also became increasingly stable, and this may be related to the minimal change in the affluence indicators (i.e., no wealthy individuals were moving in and poor individuals are remaining). Yet it is also apparent that those who did leave were likely more affluent, as the county experienced the third highest reduction in population density (32 less individuals per square mile; average county = 20 person increase per square mile).

Conclusion

The case of the Booth House HWH is a curious one. When considering program characteristics, program integrity, and structural characteristics the program had every reason to be successful. The HWH was run by a legitimate organization and had a small number of offenders to handle at any one time, particularly considering that there was almost a 1:1 ratio between staff and clients. The program also seemed to have stringent criteria for inclusion, which could potentially lead to "creaming" of offenders likely to succeed.⁴² Not only did the program have a relatively strong CPAI score, but it did reasonably well in the three most important sections and also received a point for all five vital individual items. Perhaps most importantly, Montgomery County was rather average and unchanging on indicators significantly related to program integrity and effectiveness as identified in the quantitative analyses.

There are, however, some unique characteristics of the program and county that could potentially shed light on this conundrum. First, the program served male offenders only and the average length of stay (100 days) was the smallest among the four programs studied. It is possible that there is something about serving male and female clients simultaneously that better prepares offenders for reintegration into society. The program also did not receive a point for the item assessing community involvement and acceptance, which again suggests the importance of this characteristic

⁴² Equally plausible, however, is that these exclusions led to Booth House only accepting low-risk offenders, which is not the group to target for treatment as identified by the principles of effective intervention.

for programs that exhibit the poorest of treatment effects. Finally, quantitative analyses suggested that an increase in affluence indicators was directly related to positive treatment effects, and the relative lack of change on these items in Montgomery County is notable.

The relative banality of the structural conditions in Montgomery County suggests a much larger problem: little was "done" by structural characteristics to either help or hurt program integrity or effectiveness. At the risk of oversimplifying, Montgomery County presented as close to a structural vacuum as possible within the dataset to test the relationship between program integrity and effectiveness. This relationship did not hold, again questioning the limits of focusing solely on individual theories of rehabilitation. In order to elucidate these findings further, it is necessary to compare this program with the Veteran's House HWH, which also had strong program integrity yet existed in a county that does "matter" as suggested by the quantitative analyses.

Comparison between Veteran's Hall and Booth House

The Veteran's Hall and Booth House HWH were similar in many ways. Both were relatively small programs in terms of staff and clients served. Each program was particularly choosy in terms of admissions accepted. Perhaps most importantly, both programs performed similarly well on the CPAI. Although the Veteran's Hall HWH did considerably better on the overall CPAI, it was missing a point for the strongest individual correlate of treatment effect on the CPAI (director training) while the Booth House HWH was the only program of the four to receive all five points for the individual items.

It could be expected that each program would therefore perform rather well, but this was not the case as measured by the treatment effects of each program. This is particularly surprising given that Veteran's Hall actually served more clients at any one time with half the staff than Booth House did. The most striking difference between the two programs was that the Veteran's Hall HWH was "helped" by structural characteristics whereas the Booth House HWH was not. Both programs operated in disadvantaged counties as measured by 1990 census indicators, but Ross County improved significantly on these measures leading up to 2000 while Montgomery County remained similarly disadvantaged.⁴³ Montgomery County also had the third largest decrease in the percentage of families who were considered affluent, which was the strongest change score correlate of treatment effect in the data (r = .30). In contrast, Ross County saw little decrease at all on this measure and had the largest increase on the ICE measure, indicating that the county was trending toward more wealth. Finally, the Veteran's Hall HWH received credit for having a strong relationship with the community whereas Booth House did not. Although the programs were somewhat

⁴³ Montgomery County ranked 5th highest of the counties on disadvantage in 2000 (up from 6th highest in 1990) while Ross County ranked 9th highest on disadvantage in 2000 (down from 4th highest in 1990).

similar in terms of program integrity, it is clear that the surrounding context of each program played a role in the success of each.

CONCLUSION

A macro-level approach to the study of the relationship between treatment integrity and treatment effects revealed that the structural characteristics of a county play a significant role in offender rehabilitation and reintegration. Existing thought about what works in the reduction of recidivism and the rehabilitation of offenders may be incomplete if only micro-level characteristics are considered to the exclusion of broader ecological contexts. Quantitative analyses indicated that the context within which a HWH operates was a significant predictor of program quality, as areas that were disadvantaged (especially those becoming increasingly disadvantaged) were less likely to produce programs that were high in treatment integrity. Further, direct effects between socioeconomic indicators and treatment effects emerged independent of program quality, suggesting that factors external to a program impact its effectiveness.

Indeed, the relationship between program integrity and program effectiveness is not perfect, and inspection of cases that do not fit the pattern allows for a more complete understanding of the importance of context for offender rehabilitation. Whereas quantitative analyses often treat outliers and influential cases as a nuisance, the current analysis capitalized on their existence to advance explanation. Indeed,

205

mixed methods approaches have become increasingly popular in the social sciences (Creswell, 2003), and conducting qualitative analyses in the current research has complemented and advanced the quantitative analyses in a number of important ways.

First, although the quantitative interaction analyses produced few significant findings, the qualitative analyses suggested that a strong treatment program could potentially overcome high levels of disadvantage; that is, a program that is high in treatment integrity may be able to counteract high levels of disadvantage to produce a strong treatment effect. In the quantitative analyses, it was suggested that this relationship may not have appeared due to the small amount of high quality programs in disadvantaged areas. A closer inspection of programs revealed that those with relatively decent treatment effects in spite of disadvantage "scored where it counts" on the CPAI. In particular, the Harbor Light HWH was relatively successful in the increasingly disadvantaged Cuyahoga County, and the program performed reasonably well on the most important section of the CPAI as well as received credit for the two strongest correlates with treatment effect and the valued-by-community item. Additionally, the Veteran's Hall HWH was able to overcome the extreme disadvantage in rural Ross County by having strong program integrity. It would appear, then, that high quality treatment programs are particularly important for disadvantaged areas, and that this finding was hidden in the quantitative analyses due to too few quality programs in poor areas.

Second, the qualitative analyses indicated that the structurally-flavored community support variable may be an important predictor of program success. It was revealed that while only nine of the 38 HWH programs failed to receive a point for this item, two of those programs were the ones analyzed above due to poor treatment effects (both for a relatively strong CPAI HWH and a relatively weak CPAI HWH). Community support and involvement with a HWH is a vital component of program success in terms of parochial control. The Alternative's Agency HWH in particular seemed to have a rather adversarial relationship with the surrounding community. It is difficult to believe that program participants can be successful in a community that does little to support the HWH and may actually actively campaign against it. As such, a different type of contextual indicator proved relevant toward understanding the relationship between program integrity and program effectiveness based on the qualitative analyses.

Finally, the qualitative analyses confirmed the importance of structural indicators for the extreme ends of the program integrity and program effectiveness relationships. More specifically, the structural characteristics of a county appeared to play a particularly important role for both the weak CPAI/weak treatment effect and strong CPAI/strong treatment effect HWHs. Increasing disadvantage within an area was strongly related both to program integrity and to program effectiveness as indicated by the quantitative analyses. The Alternative's Agency HWH was operating in a county that experienced an increase in disadvantage from 1990 to 2000 whereas the

remaining counties experienced a decrease, on average. This pattern likely had a strong impact on the weak program integrity and treatment effects associated with this HWH, and confirmed the difficulty of securing sound institutions within impoverished areas. In contrast, the Veteran's Hall HWH was located within Ross County, which had the largest decrease in disadvantage indicators from 1990 to 2000 in the dataset. It perhaps comes as no surprise that the program therefore had the highest CPAI and second highest treatment effect among the HWH programs. The qualitative analyses bolstered the quantitative findings by reaffirming the importance of structural change for the HWHs that exhibited the strongest relationship between CPAI and treatment effect.

CHAPTER 5

CONCLUSIONS

Over the last several decades, a resurgence in the support for offender rehabilitation by a select group of scholars has advanced the knowledge of offender treatment from an unkempt exercise in futility to a science-based compilation of the principles of effective intervention. Although considerable early efforts were placed on overcoming the resilient affirmation that nothing worked to reduce recidivism, the technique of meta-analysis provided a powerful, objective tool that allowed for scholars to effectively demonstrate that not all correctional programming was created equal. In particular, the Canadian scholars capitalized on these findings and incorporated what did, in fact, work into a theory of effective correctional intervention, and they then used this knowledge to create a tool for assessing how well programs adhere to what works in reducing recidivism.⁴⁴ Thus, the treatment literature has advanced to a state of evidence-based knowledge in which specific components of programs (rather than types of programs) are evaluated, creating the opportunity for a correctional system based on science rather than traditions, morals, or hunches.

At roughly the same time, a renaissance in macro-level criminological theory was taking place in the face of years of micro-level theory dominance. Crime was again considered by many to be a social fact rather than an individual act devoid of context, ⁴⁴ Some scholars (e.g., Smith, Gendreau, & Swartz, 2009) are now identifying treatment integrity as the fourth principle of effective intervention. and theories were developed (e.g., routine activities, macro-level deterrence) that considered place as an important component for the explanation of criminal behavior. Resource deprivation theories especially benefitted from some attention to early criticisms and a reformulation of major tenets. More specifically, the systemic model of crime transformed social disorganization theory and provided scholars with a foundation to empirically examine the relationships between structural characteristics, sources of formal and informal control, and crime. Currently, researchers are beginning to apply macro-level criminological theory to the study of recidivism, and a growing body of evidence is accumulating that suggests context plays a significant role in reoffending.

Despite the advancements in these two literatures, no attempts have been made at integration to provide a more cogent, comprehensive framework for understanding offender rehabilitation and reintegration. Few considerations are given by treatment proponents to what role broader ecological contexts may play in offender recidivism. Accordingly, incorrect conclusions about the success of offender rehabilitation may be reached when ignoring the communities that ex-offenders return to. Equally important is the failure for macro-level recidivism researchers to consider the quality of programming received by individual offenders. The preliminary conclusions about the importance of place for recidivism must be tempered by the fact that a consideration for the principles of effective intervention is absent. In short, by failing to integrate these two literatures the knowledge about what works in offender rehabilitation is incomplete.

The purpose of the current dissertation, therefore, was to provide an initial first step to thinking about the micro-level treatment and macro-level criminological theory literatures together. The analysis was intended to fill a gap in the literature by considering the importance of structural characteristics for both treatment program integrity (as measured by the CPAI) and program effectiveness (as measured by recidivism rates of treated versus control individuals). Three broad questions were answered. First, to what extent do structural characteristics impact program effectiveness directly? Second, to what extent do structural characteristics impact program effectiveness indirectly (working through program integrity)? Third, does the relationship between program integrity and program effectiveness vary across ecological contexts? Additionally, qualitative analyses uncovered the more nuanced relationships between program integrity, program effectiveness, and structural characteristics.

The remainder of this chapter provides a more detailed discussion of what the analyses revealed for the above questions. The structure of the discussion is as follows: First, the results from Chapter Four are revisited in a manner that allows for broad conclusions to be reached about the importance of context for correctional treatment programs. Next, based on these conclusions, the implications for both macro-level criminological theory and theories of offender rehabilitation are presented. Suggestions

211

for future research are then detailed. Finally, the chapter concludes with a discussion of the policy implications of the current work.

OFFENDER REHABILITATION IN A MACRO-LEVEL CONTEXT

The analyses in Chapter Four were intended to evaluate the significance of structural characteristics for offender rehabilitation and reentry. The results also provided insight on the extraneous factors that influence the relationship between program integrity and program effectiveness. Based on these analyses, four broad conclusions can be reached. First, context does indeed matter for theories of offender rehabilitation. The failure to incorporate ecological contexts into theories of treatment is likely to produce disappointing results in terms of reduced reoffending. Second, the structural characteristics of a county play a particularly important role in the ability to secure and retain sound institutions (i.e., HWHs with high program integrity). Thus, strong treatment programs appear to be a form of institutional efficacy that is scarce in disadvantaged areas. Third, the changing nature of a county in terms of socioeconomic indicators is more important for treatment program quality and effectiveness than is the absolute level of those indicators. Finally, some patterns emerged that were at odds with existing thought on macro-level criminological theory. In particular, racial/ethnic and residential stability indicators produced findings somewhat contrary to the existing literature.

Place Matters

The most important and the most general conclusion that can be drawn from the current analysis is that context matters for offender rehabilitation. This is by no means a brilliant discovery; in fact, it makes perfect theoretical sense. If macro-level theories of crime play a prominent role in the explanation of criminal behavior, then it is likely they will still do so when an ex-offender returns to the community. This inconvenient truth is likely amplified for ex-offenders who were never fully integrated within the community in the first place and are now further disadvantaged by the experience and stigma of incarceration (Fleisher & Decker, 2001; Hirschfield & Piquero, 2010). In essence, the lessons to be learned from previous failures in correctional policy have largely been ignored. Reformers of the early 19th century emphasized that the offender needed to be cured independent of the social maladies that contributed to criminal behavior, and the same is essentially true today – right down to the lack of attention given to alleviating the ills of those criminogenic contexts. Instead, the offender is treated in a sterile environment, and the same contexts are waiting unaltered upon his or her return. The onus has thus been indirectly placed on treatment proponents to "prove" that rehabilitation can be successful by merely treating the individual.

Substantial direct relationships between structural indicators and program treatment effects emerged in the current analysis, particularly when taking into account the changing socioeconomic nature of a county. Counties that became less disadvantaged and more affluent over the ten year period were associated with

213

stronger program effects independent of program integrity. Affluence indicators outperformed disadvantage indicators in terms of strength of relationship with treatment effects, which suggests that concentrated affluence is an important protective factor for offender reintegration worthy of further empirical attention (Massey, 1996). Concentrated immigration also appeared to be a protective factor, although these results were contingent on a substantial increase for these indicators within a county from 1990 to 2000. Additionally, qualitative analyses indicated that structural characteristics provided a plausible explanation for discrepancies within the integrity/effectiveness relationship among the HWHs. These results are consistent with an emerging body of research that suggests spatial dynamics are consequential for explaining criminal behavior (Morenoff, et al., 2001; Peterson, et al., 2000).

These findings are particularly important when considering that the HWH is a community-based treatment program associated more with offender reentry than the typical institutional form of rehabilitation (e.g., in-prison therapeutic community). Each year over 700,000 offenders are returning to communities and relatively little is known about the factors that influence successful reintegration (Travis & Visher, 2005). This amounted to an increase in the number of ex-offenders in the community from 1.8 million in 1980 to 4.3 million in 2000 (Raphael & Stoll, 2004), and there is evidence that previously incarcerated individuals contribute either directly or indirectly to a surge in crime rates (Clear, et al., 2003; Hipp & Yates, 2009). HWHs represent an attempt to ease the transition of the ex-offender back into the community and the results presented in

Chapter Four indicated that the community itself is influential in the success of this transition. Accordingly, it is imperative that reentry researchers focus on the ability of communities and their institutions to meet the needs of offenders rather than simply identifying those needs. The current analyses thus echo the conclusion of Mears and colleagues (2008, p. 303) in that "ignoring social ecology may unnecessarily undermine efforts to improve reentry."

In the most general sense, then, the current analysis suggests adding *where* to the list of questions asked of sound treatment programs. This implication should not be confused with the "knowledge destruction technique" that says that crime (and thus recidivism) is caused by structural factors, and that the rehabilitation of individual offenders is therefore a lost cause (Cullen & Gendreau, 2001, p. 326). It does suggest, however, that the influence of structure goes beyond merely contributing to the creation of the antisocial attitudes and behaviors of offenders. Treatment programs such as those within HWHs do not operate in a vacuum, but rather are influenced in terms of quality and effectiveness by the contexts within which they operate. Thus, the "what works" approach operates across different levels of analysis (Cullen & Gendreau, 2001, p. 332), and the most promising interventions are those that target for change the proximate causes of crime within individual offenders while also attending to the larger structural correlates of crime (Cullen & Gendreau, 2000).

Structural Characteristics and Institutional Efficacy

Perhaps the most robust finding of the current analysis is that structural characteristics play a prominent role in treatment program effectiveness by influencing the quality of programming available in HWHs as measured by the CPAI. This result is consistent with the systemic model of crime (Bursik & Grasmick, 1993b; Hunter, 1985), which more clearly specifies the mechanisms by which ecological factors lead to crime. In particular, this perspective argues that the effect of economic deprivation on crime and delinquency is indirect, mediated by the capacity of an area to develop and solicit private, parochial, and public controls (Bursik & Grasmick, 1993a). While most research in this tradition has emphasized social ties or networks as a mediating factor (e.g., Bellair, 1997; Sampson & Groves, 1989; Warner & Rountree, 1997), an emerging body of work has focused on the importance of institutions for exercising formal and informal control (Morenoff, et al., 2001; Peterson, et al., 2000). A HWH that is high in program integrity represents a strong institution that is more often located only in the communities which stand to benefit least from its presence. Indeed, Kubrin and Stewart (2006) noted that neighborhood economic status likely affects the quality, quantity, and diversity of local institutions designed to address the needs of former inmates. The current analysis provided support for this contention as disadvantaged counties (especially those becoming increasingly disadvantaged) were associated with lower quality treatment programs.
In particular, the counties that were characterized by a higher percentage of residents who identified as black were less likely to have strong treatment programs, and this effect was even more pronounced for an increase in the percentage of residents who identified as black within a county. These findings are consistent with research indicating a distinct racial component associated with the location of efficacious institutions (Bursik & Grasmick, 1998; Lee & Ousey, 2005; W. J. Wilson, 1987). Further, an increase in each of the remaining disadvantage indicators, as well as the overall disadvantage index, was associated with worse programming, and these results are also consistent with research indicating the inability of impoverished communities to secure and retain strong institutions (Hagedorn, 1991; Krivo & Peterson, 1996; Taub, et al., 1977). Supplementing these findings was the positive relationship between the increase in the percentage of families considered affluent and program quality, which was the strongest relationship produced in any of the analyses. Finally, the qualitative analyses suggested an important structural characteristic of a different sort: community support and involvement in HWH programs appeared to be a vital component of a successful treatment program.

The findings indicate, therefore, that context matters significantly for treatment program quality and corresponding program effectiveness; yet the scant empirical research on the importance of institutions for effective community control has thus far been mixed. Hipp and Yates (2009) found that resources provided by voluntary organizations (especially those geared toward helping youth) aided neighborhoods to

217

cope with returning parolees who might otherwise increase crime rates. Peterson and colleagues (2000) noted in their research that local institutions had only limited effects on violence, but that certain types of institutions (e.g., recreation centers) helped counter the effects of deprivation in extremely disadvantaged areas. Similarly, Morenoff and colleagues (2001) determined that local organizations and voluntary associations were important for the prediction of homicide only insofar as they promoted collective efficacy, concluding that "organizations and voluntary associations turned out to be relatively unimportant, suggesting that perhaps criminological theory has overstated the benefits to be derived from local forms of institutional organizations as a dimension of social capital has also produced murky conclusions (Messner, Baumer, & Rosenfeld, 2004; Rosenfeld, et al., 2001).

A major limitation to these previous works, however, is that institutions and organizations are indicated by counts. For example, Peterson and colleagues (2000) operationalized institutions as the number of libraries, recreation centers, etc. located within a particular census tract or in an adjacent tract. As such, the mere presence of an institution in a disadvantaged area is taken to mean that it is of sufficient quality to make a difference, an assumption that is not supported by the empirical literature. This realization has led some researchers (Sampson, 2006; Triplett, et al., 2003) to call for a more detailed examination of institutional strength. The current analysis thus represents one of the first works to consider the importance of institutional efficacy for offender reintegration, with the CPAI representing a measure of institutional strength. The results indicated that disadvantaged areas have a more difficult time attracting, developing, and securing strong institutions, but also that programs that are high in integrity are often able to overcome these structural disadvantages.

The Importance of Ecological Change

The above two conclusions provide support for the notion that how an area is changing is perhaps the most important structural component of treatment program integrity and effectiveness. This idea was featured prominently in the original work of Shaw and McKay (1942), yet has been curiously missing from more recent research in the ecological tradition. As Bursik (1986) noted, much of the work that has been grounded in social disorganization theory is problematic in that it assumes ecological stability. Indeed, the use of measures such as change scores provides an opportunity to examine the dynamic nature of relationships, which is a superior method as compared to simple models that include variables measured at one time period (Burek, 2005). The current analysis indicated that counties that were becoming more disadvantaged and less affluent were associated with poorer program quality and effectiveness.

In particular, the changing nature of an area had direct effects on treatment program effectiveness, and affluence change scores in particular seemed to be influential for whether treated individuals succeeded as compared to controls. Increasing disadvantage was also related to success for the treatment group, but this

219

finding disappeared once removing the program located in Ross County. Additionally, an increase in immigration indicators within a county was associated with stronger treatment effects. The relationships between changes in socioeconomic indicators and treatment program quality were even stronger, as an increase in the percentage of residents who identified as black was particularly damaging for program integrity. Changes in other disadvantage indicators produced similar relationships, and an increase in the percentage of families who were considered affluent was the strongest correlate of program integrity in the data. In short, important relationships between ecological change and program integrity and effectiveness would have been missed had the analysis been restricted to static structural indicators.

The use of dynamic measures also allows for a better understanding of the mechanisms present within the traditional indicators of social disorganization. For example, as discussed below, the residential stability indicators often produced inconsistent relationships with treatment program integrity and effectiveness. An examination of the change scores for the percentage of residents who lived in the same unit as five years earlier and the percentage of housing units that were owner occupied revealed why: a change on one of these indicators did not always translate to a change in the corresponding direction on the other. Instead, some counties such as Mahoning County experienced an increase in the percentage of housing units that were owner occupied yet no change or a decrease in the percentage of residents who lived in the same unit as five years earlier. This is consistent with the findings of Bursik and

Grasmick (1993a, p. 272), who noted that an area can appear highly stable even if a large number of residents have left the community when those who remain have lived in that area for more than five years (i.e., the same house as five years ago item may not truly capture residential stability).

The most important implication of change scores, however, is that they suggest that efforts at changing an area for the better may prove fruitful for treatment program integrity and effectiveness. More specifically, programs and policies aimed at improving the socioeconomic position of a county may translate to stronger treatment programs and corresponding treatment effects. A disadvantaged county is therefore not necessarily locked into a future of inefficient institutions and overall lack of formal and informal control. Perhaps most important is that this social change does not have to be specific to offenders or even the criminal justice system, and efforts at improving communities in general will likely translate to improved correctional programming and reductions in offender recidivism.

Unexpected Findings

Criminologists are just beginning to apply macro-level criminological theory to the study of recidivism, and preliminary works suggest that social ecology theories can provide an important framework for understanding reoffending (Kubrin & Stewart, 2006; Mears, et al., 2008). Many of the same mechanisms seem to be at work in explaining why offenders initiate and continue to engage in criminal behavior, and the results presented in Chapter Four largely confirm the applicability of social disorganization theory and its offshoots (e.g., the systemic model of crime) to the study of treatment program integrity and effectiveness. There is another benefit, however, to applying macro-level criminological theory to the study of recidivism. The extension of macro-level criminological theory to offender rehabilitation allows for testing and refinement of theory in order to increase explanation and generalizability. To that end, some inconsistencies with prior empirical works emerged in the current analysis regarding race/ethnicity, residential stability, and differences between urban and rural contexts.

The results in Chapter Four indicated that the percentage of residents who identified as black was a strong correlate of program integrity and effectiveness above and beyond that of the other disadvantage indicators. These effects were particularly pronounced for areas that were becoming increasingly black.⁴⁵ Thus, a distinct racial component to treatment program integrity and effectiveness was observed, and the current study supports the call for research that examines the impact of race and ecology on recidivism separate from other indicators of concentrated disadvantage (Mears, et al., 2008). Although prior works have suggested that the structural sources of crime (particularly violent crime) are invariant across race (Krivo & Peterson, 1996;

⁴⁵ Although unemployment indicators were not featured in the main analyses in Chapter Four, it is important to note that the change in the percentage of residents who identified as black was highly positively correlated with the change in the percentage of residents who were unemployed (r = .717, p < .01). This provides support to the propositions of race and work set forth by Wilson (1996), but it is also worth noting that the correlations between changes in unemployment and program integrity and effectiveness were either weak or nonsignificant.

Sampson & Wilson, 1995), a more promising approach is to explore the interactions between structural conditions, class, and race to identify policies and programs that are race-conscious (Massey, 1990, p. 354; c.f. W. J. Wilson, 1987). The current analyses therefore call into question the usefulness of the common practice of combining racial and economic factors into indices representing concentration effects (see Sampson, 2006, p. 160-1).⁴⁶

Additional findings at odds with previous research were the positive relationships between the change in immigration indicators and treatment program integrity and effectiveness. It must be remembered that these results were dependent on one county that had a particularly large increase in immigration, but it cannot be ignored that nine total programs within this influential county contributed to the relationship. Traditional social disorganization theory identified ethnic heterogeneity as leading to the breakdown of social control and thus higher crime rates, and the current analyses using static indicators of immigration somewhat supported this claim. An increase on these indicators over the ten year period was instead associated with better quality treatment programs as well as better outcomes for treated individuals. In fact, the positive association between the change in foreign-born residents and program treatment effects was the second strongest in the dataset.

⁴⁶ Further evidence toward this recommendation is the fact that the change in the percentage of residents who identified as black was strongly correlated to the change in families below the poverty level (r = .687, p < .01), yet only weakly related to the change in percentage of families that were female-headed (r = .136, p < .05) and the change in families on public assistance (r = .127, p < .05).

These results could be indicative of the "Immigration Paradox," in which residents of areas characterized by a higher percentage of immigrants perform better on a range of social indicators than one would expect given their socioeconomic disadvantages (Decker, 2009; Sampson, 2008). In particular, studies have found that the percentage of foreign born residents is either unrelated or negatively related to homicide and other violent crime rates (Martinez, 2009). The current study adds to this the possibility that an increase in immigrant concentration could potentially be conducive to successful offender reintegration. Several possible explanations have been offered for these relationships, including the idea that immigrants contribute to economic revitalization and also that they come from more socially-supportive cultures than the United States (Sampson, 2008).⁴⁷ In any event, an increase in the percentage of Latino and foreign-born residents appears to be a protective factor that can aid in the ex-offenders, reintegration and of this finding suggests that traditional conceptualizations of social disorganization may need to be modified to accommodate this empirical inconsistency.

As noted above, inconsistent findings emerged concerning the residential stability indicators in the dataset. The traditional relationship between stability and crime was that residential instability led to a breakdown in social control, and recent research in the systemic tradition has concluded that residential turnover fosters

⁴⁷ Note that these effects have been found to extend to all members of the community – not just foreignborn individuals specifically (Sampson, 2008, p. 32).

institutional disruption and weakens interpersonal ties (Sampson, et al., 1999). Using the 1990 census indicators, higher levels of residential stability were instead associated with worse treatment effects and lower CPAI scores. In contrast, increasing levels of residential stability as measured by change scores produced the typical positive relationships with crime and institutional indicators, but these relationships were often weak and in some cases nonsignificant. Part of these inconsistencies may be explained by the distinct changes within each indicator as detailed above, but they also suggest that residential mobility may be a less relevant factor in explaining crime within today's socially disorganized areas (Silver, 2000). At minimum, residential stability may operate differently in its relationship with institutional efficacy and successful offender reintegration, and future works should endeavor to more clearly specify this relationship.

Finally, the effects of structural characteristics on program integrity and program effectiveness in rural areas seemed to differ from the overall patterns. In particular, the Veteran's Hall HWH in Ross County was able to produce the highest CPAI score and second largest treatment effect in the dataset amid high levels of concentrated disadvantage. Several possible structural reasons for this unexpected occurrence were detailed in the qualitative analyses in Chapter Four. It is also plausible, however, that something specific to the rural versus urban distinction is at work.⁴⁸ Criminologists

⁴⁸ For example, studies have indicated an increased likelihood of helping behavior to occur in rural as compared to urban contexts (Steblay, 1987).

(e.g., Osgood & Chambers, 2000; Reisig & Cancino, 2004) have supported the use of social disorganization theory to explain criminal behavior in rural areas, yet research also indicates that rural treatment programs (HWH in particular) are qualitatively distinct from urban programs (Latessa & Allen, 2003). The challenge, then, is for future research on institutions and offender rehabilitation to test the applicability of the systemic model of crime for rural versus urban contexts.

IMPLICATIONS FOR THEORIES OF CRIME AND CORRECTIONS

All of the above conclusions signal the need to begin to think about offender rehabilitation and reintegration in a different way. What is needed is an integration of micro- and macro-level constructs (see, for example, Cattarello, 2000; Wikstrom & Loeber, 2000) to produce a more complete understanding of the factors involved in offender reintegration. Currently, there is a lack of theoretical foundation for reentry in general, with most works focusing on individual risk and protective factors. Instead, an understanding of the "risk environments" (S. D. Gottfredson & Taylor, 1986, p. 134) that ex-offenders return to could complement the individual level treatment literature by acknowledging that context plays an important role for successful offender reintegration. On the other hand, current research in the systemic model tradition would do well to consult the treatment literature on program integrity in order to develop a more complete picture of the importance of institutions for formal and informal control. Accordingly, in addition to the specific theoretical inconsistencies noted above, two broad implications for future theory can be reached when combining the macro-level criminological theory and treatment literatures.

First, theories of offender rehabilitation need to be modified to accommodate the growing body of work that suggests ecological context is vital for understanding offender reintegration. In particular, the current work builds on this literature by detailing the importance of structural characteristics for treatment program integrity and corresponding effectiveness. The Canadians should be commended for creating a theory of rehabilitation based on a strongly-supported criminological theory (i.e., social learning; Pratt, et al., forthcoming), but just as no one theory explains a sizeable portion of the variation in criminal behavior (Messner, Krohn, & Liska, 1989), no one theory will be able to fully capture the complexities of offender rehabilitation. In this vein, offender rehabilitation proponents need to recognize that macro-level criminological theories (such as the systemic model of crime) provide a viable understanding of the context within which offender rehabilitation operates.

The results presented in Chapter Four indicated that program integrity is in large part a function of the surrounding area, and treatment theories need to be adjusted to acknowledge that improving program quality is not as simple as championing for the principles of effective intervention. More specifically, the ability of practitioners to successfully implement evidence-based practice is likely impacted by the structural constraints of the surrounding community. Additionally, the relationship between

227

program integrity and successful offender rehabilitation is more complex than originally conceptualized. A simple focus on changing individual attitudes and behaviors through effective programming ignores the influence of the social contexts that ex-offenders return to. While rehabilitation proponents are not unmindful of this contention (see, for example, Cullen & Gendreau, 2000, p. 150-1), the current analyses suggest that the structural characteristics of an area have a direct relationship with the successful rehabilitation of offenders completing treatment. Thus, the theory of the principles of effective intervention should be expanded to include a consideration for the importance of structural characteristics.

Second, macro-level criminological theories should be developed more fully to account for variation in the strength of institutions. The current analyses indicated that the counties in Ohio differ substantially in their abilities to secure and retain sound HWH programs. This is consistent with a large body of research that emphasizes the lack of basic social institutions in disadvantaged communities (Peterson, et al., 2000; W. J. Wilson, 1987). The results in Chapter Four go beyond this fact by detailing the limited institutional efficacy of HWH programs in disadvantaged communities. Thus, not only are institutions scarce in disadvantaged communities, but those that are present are likely to be anemic in terms of strength and quality. This finding becomes particularly crucial when considering that the qualitative analyses provided evidence that a HWH high in program integrity could conceivably overcome structural disadvantages. Triplett and colleagues (2003) have set forth a comprehensive model for understanding the relationships between institutional control and neighborhood crime that focuses specifically on institutional strength. They identified four characteristics of institutional strength (stability, resources, a clear delineation of roles and status, and interconnectedness), and also present examples of each characteristic's relationship with private, parochial, and public control. The current analysis provides support for the major tenets of a modified version of the model, as structural characteristics were related to the strength of institutions (CPAI scores of HWH programs) and the strength of these institutions was related to recidivism of treated individuals as compared to controls. The current analysis cannot determine a specific connection between strength of institution and presence of private, parochial, or public control, but it is likely that the HWH represents an institution that can exercise and promote both informal and formal control.

Most research using the systemic model of crime as a theoretical framework has focused on the sources of informal control within a community (e.g., Bellair, 2000; Warner & Rountree, 1997). Indeed, Bursik and Grasmick (1993b) argued that one of the greatest shortcomings of the traditional social disorganization framework was a failure to consider the effect of public (and thus formal) control. Studies that do examine the effects of formal control conclude that the presence of formal control (e.g., incarceration) is detrimental toward the existence of informal control (Clear, et al., 2003; Rose & Clear, 1998). Instead, the current study suggests that a HWH program that is high in treatment integrity represents the nexus between formal and informal control (LaFree, 1998). The HWH is contracted by the state and thus fully accountable as a source of formal control, yet it is dependent upon the surrounding community's support and involvement for successful operation. The specification of the importance of institutional strength in the systemic model of crime thus takes on a newfound significance in studies of offender recidivism specifically.

IMPLICATIONS FOR FUTURE RESEARCH

Two limitations of the current analysis warrant specific mention, as they frequently plague macro-level analyses of crime. First, a central concern is that of a limited sample size for assessing the impact of ecological contexts on treatment program quality and effectiveness. Basing results on only 38 programs is indeed an issue, but it is important to note that these programs are part of a very unique dataset. Currently, no large-scale dataset exists that contains *direct* measures of program quality, and no other dataset combines program quality and effectiveness measures with that of structural indicators. As discussed in Chapter Three, the programs are also matched up on important characteristics and clientele served. While the inclusion of only community residential programs (i.e., halfway houses) could be viewed as a limitation, it also represents a constant that eliminates the potential for spurious results. For example, the inclusion of other types of correctional interventions such as electronic monitoring would raise questions of whether the relationship between ecological context and program effectiveness was influenced by program *type* rather than program quality. The halfway house programs also have similar requirements for exclusion of clients (e.g., serious violent offenders, arsonists), and the matching techniques employed assures that offenders in the treatment group are similar to those in the control group. As such, the findings should be considered robust and not an artifact of selection. Nevertheless, future research would do well to replicate the above analyses using larger and more diverse datasets.

Second, there has been considerable debate about the appropriate unit of analysis for measuring the impact of macro-level indicators on criminal justice phenomena (Sampson, et al., 2002). It is potentially problematic to use county-level data in that unobserved heterogeneity within counties may lead to an ecological fallacy. Nevertheless, the use of county-level structural indicators is consistent with prior criminal justice research in general (Baller, Anselin, Messner, Deane, & Hawkins, 2001; Osgood & Chambers, 2000) as well as with recidivism research specifically (Mears, et al., 2008; Reisig, et al., 2007). Further, the unit of analysis for the current study is at the program-level, which restricts the potential options for contextual variables. It makes little practical and theoretical sense, for example, to use census-tract measures where the program is located when offenders are returning to communities elsewhere. Offenders usually return to the communities from which they were sentenced (Seiter & Kadela, 2003), and any potential moves typically occur within the same county (Mears, et al., 2008; Reisig, et al., 2007). Thus, the county-level data provide an appropriate level of analysis for assessing the impact of structural factors on recidivism when accounting for treatment program integrity. Finally, prior research has indicated that the structural correlates of crime are generally robust across city, county, and state levels of aggregation (Land, et al., 1990). Despite these justifications, it is recommended that future works explore the more intricate mechanisms involved in offender reintegration at more refined units of analysis.

The macro-level criminological theory literature suggests a wealth of additional future research directions to be pursued beyond attending to the above limitations. One of the most robust findings of recent research is that the structural conditions of surrounding areas are as important (if not more important) than the specific conditions of a particular area (Mears & Bhati, 2006; Morenoff, et al., 2001; Sampson, et al., 1999). Future research would do well to determine the importance of the surrounding contexts for treatment program integrity and effectiveness. Also, scholars should continue to develop and incorporate measures of structural change into ecological recidivism models. The current analyses suggest that significant structural influences on criminal behavior may be missed when studies use static ecological indicators. Additional considerations for future research include the reemergence of culture in resource deprivation theories (Sampson & Wilson, 1995; Warner, 2003), the inclusion of measures of formal control (Rose & Clear, 1998), and an examination of reciprocal effects between

indicators of crime and institutions in recidivism studies specifically (Bellair, 2000; Peterson, et al., 2000).

The current dissertation also indicates additional research is needed for the treatment literature in particular. The research of Lowenkamp (2004) identified heterogeneity amongst correlates of treatment program effectiveness as measured by the CPAI. While some indicators of program integrity were strongly correlated with recidivism rates, others were either uncorrelated or significantly related in an unexpected direction. The current dissertation builds on these findings by describing treatment programs that succeeded despite having relatively low CPAI scores. Indeed, the CPAI only measures the presence of items, and the qualitative analyses in Chapter Four suggested that the presence of some items was more important than others. Thus, it is recommended that the CPAI be refined in order to account for the differential impact of items on recidivism rates-especially given the resource constraints of treatment programs in an under-funded corrections environment. Perhaps most importantly, the current dissertation indicates that the CPAI would benefit from items that take into account the context in which the program operates. This does not necessarily have to be structural indicators, which would be difficult for an individual program to change, but instead could be an expansion of the indicators of community support and involvement.

Finally, the current research serves as an appeal for more frequent use of mixedmethods in criminal justice research. Doing so is consistent with a return to the

233

contextual nature of the Chicago school of research (Abbott, 1997). The qualitative results of Chapter Four presented a detailed complement to the quantitative analyses, and the examination of outliers and influential cases depicted the dangers of ignoring these cases in previous research. While the current dissertation provides an important first step toward integrating the micro- and macro-levels of analysis in recidivism research, it fails to examine the more complicated microsocial mechanisms and processes at work (Short, 1989). A rich body of research exists at the individual level describing the complexities of offender reintegration (e.g., Maruna, 2001). The next step would be to consider the combination of ecological context with these intricacies to produce an even more enriched qualitative explanation of offender reintegration.

POLICY IMPLICATIONS

The intersection of macro-level criminological theory and research on effective offender interventions presents a unique opportunity to discuss the link between criminal justice theory and policy. The study of corrections is often focused on issues of policy effectiveness – the reduction of recidivism and enhancement of public safety – with little thought given to the theoretical underpinnings of criminal behavior. Accordingly, disappointing results are often reached when programs (e.g., boot camps) and policies (e.g., three strikes laws) are repeatedly embraced despite having their utility questioned by theoretical frameworks and empirical evaluations. This continued

reliance on a "get tough" mantra is part of a larger history in American corrections to avoid implementing effective policies that might require additional investment and patience on the part of policy makers, practitioners, and the general public (Rothman, 1980). In short, the gap between criminal justice theory and practice seems widest in the realm of corrections.

This does not mean, however, that research showing "what works" is incapable of penetrating the barriers of the penal harm movement (Listwan, et al., 2008; Pratt, 2009). Indeed, change is possible within the state-controlled enterprise of corrections, especially when successful policies are phrased in terms of public safety (Latessa, 2004) or cost effectiveness (Drake, et al., 2009; Welsh, 2004). Cullen and Gendreau (2001, p. 332) agreed, "The exercise of state control is not an inherent evil but a resource that should be used to foster effective and humane interventions. The task is daunting, but it is precisely why criminologists should not leave it exclusively to other people." In addition to continued emphasis on effective correctional programming, the current analyses suggest a much larger course of action: programs and policies broadly aimed at ameliorating effects of structural deprivation will have a beneficial impact on offender rehabilitation and the reduction of recidivism. With these two broad implications in mind, the remainder of this section presents general policy recommendations that are likely to contribute to successful offender reintegration.

Criminal Justice Policy Initiatives

The present analyses reinforce the need to consider the quality of correctional programming available to offenders. Currently, few treatment programs are implementing the principles of effective intervention to any meaningful degree (Gendreau, et al., 2009). The results presented in Chapter Four suggest that HWH treatment programs that are high in therapeutic integrity are potentially able to overcome structural disadvantages associated with criminal behavior. Thus, the current dissertation finds support for the importance of program integrity even in the face of structural constraints, and efforts to improve program quality are likely to result in sizeable gains in terms of treatment effects for the most disadvantaged of areas. Indeed, a HWH that is high in program quality appears to be the perfect mix of treatment and control strategies (Byrne & Taxman, 2005).

It would be naïve to assume that increasing program integrity is as simple as consulting a list of the principles of effective intervention or a CPAI checklist. The CPAI does not take into account system issues—a program's effectiveness can be undermined because of a lack of understanding or support from others within the system (Matthews, et al., 2001). For example, it is likely that traditional, control-oriented parole officers would require training and development in order to co-exist in a system that promotes offender change (Fulton, Stichman, Travis & Latessa, 1997). The quality of a program is also frequently compromised by staff drift and organizational resistance at both the frontline and administrative levels (Smith, et al., 2009). Several

additional difficulties are faced by those wishing to implement innovative organizational changes such as the adoption of evidence-based practices (see, for example, Gendreau, Goggin, & Smith, 1999; Taxman, Henderson, & Belenko, 2009). Perhaps the most important factor in promoting integrity, as suggested by the current analysis, is the ecological context within which the program operates. Areas that are characterized by high levels of concentrated disadvantage are unlikely to contain programs that are high in treatment integrity, and these are precisely the areas that would benefit most from their presence.

As a way of encouraging strong treatment programs in disadvantaged areas, correctional officials could reward (and renew) HWH contracts to private agencies that demonstrate adherence to the principles of effective intervention and program integrity (Cullen, 1986; Wright, 2010; but see Lucken, 1997). Programs such as the Harbor Light and Veteran's Hall HWHs demonstrated that it was, in fact, possible to score high on the important components of the CPAI despite being in counties that were relatively disadvantaged. Additionally, research suggests that support for effective interventions may be abundant in disadvantaged communities (Hirschfield & Piquero, 2010) – provided that the interests of community members are involved in program decision-making (Fleisher & Decker, 2001). This does not mean that the quality of treatment programs should be ignored in more advantaged areas, but the results from Chapter Four support prior research detailing the protective factors of concentrated affluence for offender recidivism (Kubrin & Stewart, 2006). Ultimately, the current research supports

the findings of Lowenkamp and colleagues (2006) who recommended that policymakers and funding agencies make decisions regarding the financial support of programs based at least in part on program integrity.

A second major implication for criminal justice policy more directly concerns the significance of ecological contexts for successful offender reentry. The current analysis revealed that the structural characteristics of a county were consequential for the successful reintegration of treated individuals. Additionally, although not central to the current dissertation, the return of ex-offenders to a community has been shown to contribute to crime rates (Clear, et al., 2003; Hipp & Yates, 2009). These findings point to the need for more attention to be given to the interplay between macro-level structural influences and individual offender reintegration. In particular, the responsibility of successful offender reentry needs to be equally distributed between individuals and communities. In many ways, the prisoner reentry movement is rehabilitation for the mass imprisonment era, and the primary goal of reentry programs is not solely to reform offenders, but also to enhance the public safety and social wellbeing of the communities to which they return (Clear, 2007; Western, 2006).

Indeed, there is a high opportunity cost to communities that overlook today's exoffenders (Fleisher & Decker, 2001); yet the current analysis suggested that communities that do get involved are likely to have a lower recidivism rate for treated individuals as compared to controls. The qualitative analyses revealed that a lack of community support and involvement with the HWH program provided a potential answer to the question of why good programs sometimes fail. Accordingly, it is necessary to create opportunities in which communities can become more fully involved in the reintegration process (Travis, 2005), and efforts should be made at assessing both the offender's impact on the community members as well as their willingness to assist with his or her reintegration (Colvin, 2000). It must be remembered that ex-offenders may never have been truly integrated in the first place. In essence, placing emphasis on repairing relationships between ex-offenders and the areas to which they return may be more of a first shot at cohesiveness.

One way to organize and implement these ideas is by developing and supporting reentry courts and centers. Reentry courts provide judicial oversight of the reintegration process as ex-offenders work with the court to develop an individualized reentry plan, which is continually reevaluated on a monthly basis. Community resources are readily available to those attempting to reintegrate, and the entire process of "back-end sentencing" is brought into the public view (Travis, 2005). A conceptually similar idea is that of reentry centers—"one stop shops" for the needs (e.g., housing, substance abuse treatment) of ex-offenders. These centers should be located centrally within the most disadvantaged communities, and their services should be available when ex-offenders need them most such as late evenings and weekends (Fleisher & Decker, 2001). Providing all of the required aftercare services in one place sets up exoffenders to succeed (Byrne & Taxman, 2005; Richie, 2001), yet it must also be recognized that there is a considerable degree of overlap between ex-offenders and

those already attended to by service sectors outside of the criminal justice system (Travis, 2005). To that end, the burden on these often resource-deprived agencies might be reduced a bit when they are located within an integrated system. Finally, these community-based service delivery systems would be best conceptualized as helping all disadvantaged members of a community, not just ex-offenders. This would remove some of the stigma and potential backlash of diverting precious resources solely to former criminals while also improving the conditions of the community as a whole (see Clear, et al., 2001, p. 344-8 for a list of additional community programmatic responses).

Social Policy Initiatives

Several scholars (e.g., Clear, 2007; Sampson & Wilson, 1995) have emphasized that focusing solely on rehabilitation and reentry initiatives is likely to lead to less than satisfactory reductions in the overall crime problem. While significant advancements have indeed been made in the treatment literature, it cannot be denied that offender rehabilitation represents a reactive, rather than proactive, approach to the reduction of crime. The findings of the current study thus serve as a call for a more progressive crime control agenda that focuses on general social policy initiatives (Cullen, Wright, & Chamlin, 1999). Kubrin and Stewart (2006) lamented the inattention given to approaches to reducing crime that do not involve additional investments in the criminal justice system, especially given that what seem to be "noncrime" policies have a considerable impact on criminal behavior (Sampson, 2002a).

A key benefit, then, to the application of macro-level criminological theory for the study of offender rehabilitation and recidivism is that a rich history of policy implications has already been set forth. The similar structures at work for both the explanation of offending and reoffending suggests that attention to these policy proposals will reduce recidivism as an added bonus in addition to the suppression of initial criminal behavior. To that end, policies aimed at ameliorating the effects of economic deprivation and family disruption, particularly in the most disadvantaged of areas, will likely have a significant impact on crime reduction (Pratt, 2009). Studies have shown that the effect of resource deprivation on crime is reduced in areas that have higher levels of public assistance payments and participation (Hannon & DeFronzo, 1998), and this effect persists in studies that have focused on assistance to African American families in particular (Sampson, 1987). In general, a greater emphasis placed on diverting state resources to health care and public education has found to be a protective factor in inhibiting criminal behavior (Currie, 1997, 1998; Pratt & Godsey, 2003).

What is needed is not a complete eradication of poverty or inequality, but rather an improvement at the bottom levels of social exclusion to a level that is more in line with other developed countries (Currie, 1998; W. J. Wilson, 1987). This can potentially be accomplished by creating jobs that are not merely entry level, dead-end jobs, but ones that are grounded in areas that the U.S. performs weak in, which also are related to the reduction of crime: child care, child protection, public safety and health care (Currie, 1998). Several criminologists (Colvin, 2000; Messner & Rosenfeld, 2001) have advocated for the creation of a national service program in which community needs would be attended to by young people at the expense of providing them educational and vocational stipends. Similarly, WPA-style jobs could be created aimed at improving the conditions of communities while employing workers who otherwise would be jobless (W. J. Wilson, 1987, 1996). The significance of employing community members to improve *their* community is that it provides employment opportunities while also building community empowerment—rather than merely having the state act coercively to decide what is in the best interests of the community. The odds at times seem overwhelming, yet there exists several opportunities for breaking the cycle of disadvantage within communities (Schorr, 1989).

As Messner and Rosenfeld (2001) noted, however, mere attention to poverty or inequality is unlikely to be an effective crime control strategy in the absence of other cultural and structural changes. In particular, they advocate for institutional reform and note that weak institutions invite challenge and an active resistance of informal and formal control on the part of residents. The current analysis is supportive of an emerging body of literature that suggests that institutions (and especially the strength of those institutions) are a vital component to a systemic model of crime (Bursik & Grasmick, 1993b; Hagedorn, 1991; LaFree, 1998; Peterson, et al., 2000). Accordingly, it is important to place an increased focus on strengthening local institutions in disadvantaged areas, as it is evident that the residents of these areas are unlikely to have the resources to produce and retain quality establishments on their own. These organizations do not necessarily need to directly provide control as in the case of the HWH, but instead they could contribute to the stabilization of communities and thus make them appear viable for outside investment (Bursik & Grasmick, 1993b; Peterson, et al., 2000; Sampson, 2002a). As such, it is conceivable that a high-quality recreational center, for example, would go a long way toward reducing criminal behavior (Peterson, et al., 2000).

All of the above recommendations are part of a broader movement to encourage the social support of citizens in the U.S. (Colvin, Cullen, & Vander Ven, 2002; Cullen, 1994; Cullen, et al., 1999; Currie, 1985). Cullen and colleagues (1999) noted that all of society benefits from a more socially supportive culture and that such an orientation makes sense to most people and is consistent with their vision of what a good society entails. Thus, the social support movement is not specific to offenders, but is aimed at improving the quality of life of individuals in the U.S. by creating communities based on equality and respect. In discussing the utility of offender rehabilitation programs, Byrne and Taxman (2005, p. 305) remarked, "only modest reductions in offender recidivism will result from this type of offender change strategy unless it is developed in conjunction with interventions designed to change communities as well." Such an approach is not only theoretically informed and empirically verified, but it is also a step toward increasing public safety and community stability at the expense of bettering the lives of wayward individuals.

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APPENDIX A-

PROGRAM DIRECTOR QUESTIONNAIRE

HALFWAY HOUSE/CBCF QUESTIONNAIRE PROGRAM DIRECTOR

Division of Criminal Justice University of Cincinnati Cincinnati, OH 45221-0389 (513) 556-5827 Fax (513) 556-3303

PROGRAM SERVICES DIRECTOR SURVEY

1.	Name of the Program:			
2.	Name of Contact Person:			
3.	Address, Phone # and fax # of program setting:			
4.	Years in Operation:			
5.	Number of residents/participants: Current Capacity			
	# adult:			
	% male/female:			
6.	Type of offenders served: parolees probationers work release (Check all that apply) pre-release pre-parole prisoners Diversions Other			
7.	Number of staff: # Full-time:			
	# Part-time:			
8.	What are the major services currently offered by the program: Substance abuse Education Sex Offender Employment Mental Health Anger Mgt. Cognitive groups Financial Other (list)			
9.	What were the major services offered by the program in fiscal year 1999: Substance abuse Education Sex Offender Employment Mental Health Anger Mgt. Cognitive groups Financial Other (list)			
10. In your opinion what are the major changes in the program since fiscal year 1999?				
11. Do you have a manual that details the types of treatment to be provided and treatment activities? Yes No				

12. When a client enters the program, do you assess his or her risk factors that would predict recidivism? Yes No

If yes, what is the method used (list all the tools that the program uses to assess risk)?

13. Do you assess a client's needs (dynamic characteristics) that are associated with possible recidivism? Yes No				
If yes, what is the method used (list all of the tools used to assess needs)?				
14. Do you assess a client's personal characteristics, attributes, and styles of interaction? (e.g., intelligence, verbal ability, level of anxiety) Yes No				
If yes, what is the method used (list all of the tools used to assess responsivity)?				
15. If standardized risk assessment is used, is a summary score used? Yes No				
16. If standardized needs assessment is used, is a summary score used? Yes No				
17. If standardized responsivity assessment is used, is a summary score used? Yes No				
18. Are you directly involved in selecting the staff? Yes No				
19.Are you directly involved in training the staff? Yes No if yes, please describe your involvement:				
20. Are you involved in directly supervising the treatment staff? Yes No				
21. Are you involved in providing direct service delivery to the client? Yes No If yes, please describe your role:				
22. Do clients have a mechanism whereby they may provide input into the structure and rules of the program? Yes No				
23. Are clients surveyed each year as to their satisfaction with the service being provided?				
24. Are offenders reassessed before they leave the program? Yes No If yes, how is this done?				
25. Is reconviction data gathered on client's 6 months or more after leaving the program? Yes No If yes, please describe the process used to collect recidivism data:				

26. Do you have an advisory board (Board of Directors) or a consultant, officially designated to oversee or advise the program in some fashion or another?

Yes No

PLEASE RATE EACH OF THE FOLLOWING:

27. How supportive is the community at large of your program? Please rate below:

12345not supportivevery supportive

28. How supportive is the **criminal justice community** (e.g. judges, program department, DOC, Sheriff, etc.) of your program (give examples)?

2 3 4 5 1 very supportive not supportive 29. How involved is your advisory board in your program? 2 3 1 4 5 not at all extremely 30. How supportive are staff of the treatment efforts provided by the program (i.e. the values and goals of the program)? 2 3 5 1 4

not supportive very supportive

31. Is the current funding considered adequate to sustain the program?

1	2	3	4	5	
not adequate					very adequate

If not adequate, please note the concerns:

32. While in the community, how well are clients' whereabouts and peer associations monitored?

1 2 3 4 5 not at all very well

33. In your opinion, have there been any changes in the program itself in the last two years, which have jeopardized the smooth functioning of the program?

1 2 3 4 5 no changes many changes 34. Have there been any changes in the area of **program funding** in the last two years, which have jeopardized the smooth functioning of the program?

1 2 3 4 5 no changes many changes

If many changes, please explain.

35. Have there been any changes in **community support** for the program in the past two years, which have jeopardized the smooth functioning of the program?

1 2 3 4 5 no changes many changes

If many changes, please explain.

PLEASE ANSWER EACH OF THE FOLLOWING:

36. What percentage of the offenders that you receive is inappropriate for the treatment and services you provide? _____

37. What are the selection criteria for admittance to your program?

38. Are there any exclusionary criteria that would prohibit a client from entering the program?

If yes, what is the basis for excluding clients?

39. What is the average length of the program (excluding aftercare)? ______

The range? _____

40. Have any formal evaluations of the program been carried out in the past five years? Yes No

If yes,

Outcome or process evaluation?

Was a comparison group used? Yes No

41. Is there an evaluator who assists the program in evaluation? Yes No

If yes, who?

APPENDIX B –

PROGRAM DIRECTOR INTERVIEW

HALFWAY HOUSE/CBCF INTERVIEW program director

Division of Criminal Justice University of Cincinnati Cincinnati, OH 45221-0389 (513) 556-5827 Fax (513) 556-3303 NAME OF REVIEWER_____ NAME OF PROGRAM____

Program Characteristics

Name of the Program:

Name of Contact Person:

Address, Phone # and fax # of program setting: _____

4. List your educational level:

- a. High School Diploma
- b. Some College
- c. Associates
- d. B.S.
- e. M.S. or higher

5. Area of degree(s):

(e.g., Criminal Justice, Counseling, Social Work, etc.)

7. Before coming to this program had you worked for another treatment program with offenders? Yes No

If yes, what was the name of the program(s)?

Program	Years There
Program	Years There
Program	Years There
Program	Years There

Program Implementation

1.1 What role did the current program director play in the design?

1.2 (Current Program Director) Were you instrumental in designing the current program

Yes No

Describe involvement:

1.3 What model(s) is the program based on (i.e. self help, cognitive behavioral, disease etc.)

Program Characteristics

2.1 List the various groups and interventions used by the program?

2.2 What is the schedule that clients follow during a typical day? (get copy)

Is this the same seven days a week? Yes No

If no, how does it vary?

2.3 How many hours per week is an offender involved in treatment activities?

Are all offenders required to work? Yes No If yes, how many hours per week? _____

2.4 How does your program vary (e.g., intensity, and duration) according to the level of risk of the client?

2.5 How are offenders assigned to groups? (what are decisions based on)

2.6 How is staff matched with the type of treatment that they provide? (what are decisions based on)

2.7 How is staff matched with the clients that they serve? (what are decisions based on)

2.8 What incentives and rewards are used to encourage program participation and compliance?

2.9 What punishments/sanctions are used to encourage program participation and compliance?

2.10 How do you determine when a client has completed the program (What are the completion criteria)?

2.11 Is aftercare provided for the client? Yes No

If yes, who provides it?_____

How long does it last?

How often do they meet with offender?

Staff Characteristics

3.1 Besides training and years of experience, are there any other personal characteristics that are considered important in hiring staff?

Yes No

If yes, please list the characteristics that are important.

3.2 Could you describe how new staff are trained to work in this program.

How long does this training take? (Number of days)

3.4 Do all program staff participate in ongoing training programs, workshops or conferences? Yes No

If yes, how often does ongoing training occur and how many staff participate?

3.5 How often are staff meetings held?

3.6 Have staff been able to modify the program structure?

No

If yes, please provide some examples of modifications made.

Yes

Evaluation

4.1 Do supervisors provide quality assurance assessments such as a file review, client feedback or other within program checks that monitor the treatment process? Yes No

If yes, what assessments are conducted?

4.2 If outside treatment providers, what program checks are in place?

APPENDIX C –

ABBREVIATED CORRECTIONAL PROGRAM ASSESSMENT INVENTORY

ABBREVIATED CPAI SCORING SHEET

Program serves:MalesFemalesBoth Type of ProgramCBCFHalfway House Check if primary treatment is for Sex Offenders 1. Program imitation 4. Staff Characteristics 1.1 Program imitation 4. Staff Characteristics 1.2 Designer Qualifications 4. Staff Characteristics 1.3 Designer Qualifications 4. Staff Characteristics 1.4 Select Staff 4. A Ares of Study 1.5 Supervises Treatment Shaff 4. Staff Characteristics 1.6 Supervises Treatment Shaff 4. Staff Characteristics 1.7 Conducts Program 4. Stability 1.10 Value by Al-large Community 4. Staff Support Goals Treat 1.11 Sustainable Funding 5.1 Internal Quality Assurance 2.1 Appropriate Clients 5.2 Evaluation 2.1 Appropriate Clients 5.1 Internal Quality Assurance 2.1 Appropriate Clients 5.1 Formal Evaluation 2.1 Appropriate Clients 5.1 Forgram Characteristics 2.1 Appropriate Clients 6. Other 2.1 Need Factors 5.2 Forgram Characteristics 3.1 Program Targets 5.1 Forgram Targets 3.1 Program Targets ScorRE 3.2 Type Treatment 5.2 Streat All items scored 0=Ne,	Name of Program:	Location			
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3. Program Characteristics *Note: All items scored 0=No; 1=Yes or N/A 3.2 Type Treatment Name of Reviewer(s): 3.3 Length Treatment Date of Reviewer(s): 3.4 Location TOTAL SCORE 3.5 Manual Very Satisfactory 3.6 Involvement 40-70% Very Satisfactory 3.7 Intensity varies by Risk Very Satisfactory 3.9 Match Treatment and Client Needs Improvement 3.10 Match Staff and Program Unsatisfactory 3.12 Client Input CPAI SUMMARY: 3.13 Use Appropriate Rewards 1. Program Implementation 3.14 Stimuli 2. Client Assessment 3.15 Completion Criteria 3. Program 3.16 Prosocial-Train 4. Staff 3.19 Quality of Aftercare 5. Evaluation SCORE /		SCORE //			
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3.4 Location	3.3 Length Treatment	Date of Review:			
3.5 Manual	3.4 Location				
3.6 Involvement 40-70%	3.5 Manual	TOTAL SCORE/			
3.7 Intensity varies by Risk	3.6 Involvement 40-70%				
3.8 Duration varies by Risk	3.7 Intensity varies by Risk	Very Satisfactory 70% +			
3.9 Match Treatment and Client Needs Improvement 50-59% 3.10 Match Staff and Program Unsatisfactory Below 50% 3.11 Match Staff and Client CPAI SUMMARY: 1.1 Program Implementation % 3.12 Client Input CPAI SUMMARY: 1. Program Implementation % 3.14 Stimuli 2. Client Assessment % 3.15 Completion Criteria 3. Program % 3.16 Prosocial-Train 4. Staff % 3.18 Aftercare 5. Evaluation % 3.19 Quality of Aftercare OVERALL %	3.8 Duration varies by Risk	Satisfactory 60-69%			
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3.11 Match Staff and Client	3.10 Match Staff and Program	Unsatisfactory Below 50%			
3.12 Client Input CPAI SUMMARY: 3.13 Use Appropriate Rewards 1. Program Implementation 3.14 Stimuli 2. Client Assessment 3.15 Completion Criteria 3. Program 3.16 Prosocial-Train 4. Staff 3.17 Prosocial-Rehearse 5. Evaluation 3.18 Aftercare 6. Other 3.19 Quality of Aftercare VERALL	3.11 Match Staff and Client	-			
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3.18 Aftercare 6. Other% 3.19 Quality of Aftercare% SCORE / OVERALL %	3.17 Prosocial-Rehearse	5. Evaluation %			
3.19 Quality of Aftercare OVERALL %	3.18 Aftercare	6. Other %			
SCORE / OVERALL %	3.19 Ouality of Aftercare				
	SCORE /	OVERALL %			

APPENDIX D-

DEFINITIONS OF CPAI ITEMS

Item	Definition
1. Program initiation	Current director was sole originator or instrumental in setting up
2. Designer qualifications*	The program director was professionally trained (university degree in helping profession)
3. Designer experience*	At least 3 years full time experience with offender treatment program
4. The director selects staff*	Director is directly involved in hiring of staff
5. The director trains staff*	Director is directly involved in training staff
6. Director supervises staff	Director is involved in providing supervision to treatment staff
7. Conducts program*	The director is involved in direct service delivery
8. Literature review	Conducted literature search of major criminological journals and texts to inform program design
9. Pilot program	Before formal program began there was at least a one month pilot phase to sort out program logistics and content
10. Need for program assessed	Documented assessment of need for program
11. Valued by at-large community*	Values and goals of the program are congruent with those of the community
12. Valued by CJ community*	Values and goals of the program are congruent with the Criminal Justice community
13. Cost effective	Is the program less costly than other alternatives
14. Sustainable funding	Does the program receive adequate funding

Elements of the CPAI: Program Implementation (Adapted from Lowenkamp, 2004)

* Indicates item included on the reduced version of the CPAI
| Item | Definition |
|--------------------------|---|
| 1. Appropriate clients* | Type of client received by the program is appropriate according to programmers |
| 2. Exclusions | Rational clinical, community, legal basis for excluding certain types of clients |
| 3. Risk factors* | A reasonable survey of risk factors on the individual level, by programmers |
| 4. Risk methods* | Are the risk factors surveyed by a psychometric scale/test or some type of standardized, quantifiable interview |
| 5. Need factors* | A reasonable survey of dynamic criminogenic need factors |
| 6. Need methods* | Dynamic criminogenic need factors are surveyed using a psychometric scale/test or some type of standardized, quantifiable interview |
| 7. Responsivity | Responsivity of offenders to different styles and modes of service |
| 8. Responsivity methods | Responsivity factors are surveyed using a psychometric scale/test or some type of standardized quantifiable interview |
| 9. Risk level defined* | Risk level quantitatively summarized or assigned a category |
| 10. Need level defined* | Need level quantitatively summarized |
| 11. Responsivity defined | Responsivity factors summarized to a level |
| 12. Validation Risk | The risk/need instrument has been validated on a local population within the past five years |

Elements of the CPAI: Client Pre-Service Assessment (Adapted from Lowenkamp, 2004)

Item	Definition
1. Program targets	Program must target criminogenic behavior and attitudes
2. Type treatment*	Treatment method employed is of a known effective type (e.g., radical behavioral, learning, cognitive-behavioral)
3. Length of treatment	The length of the treatment should be between 3 and 9 months and should not exceed 12 months
4. Location*	Clients are monitored well if in community; Clients are separated from the general population if in prison setting
5. Manual	Program has detailed program manual
6. Involvement*	Clients spent at least 40% of time per week in treatment
7. Intensity varies by risk*	Highest risk clients receive high intensity treatment
8. Duration varies by risk*	Length of intervention varies by risk level
9. Match treatment and client	Offenders are assigned to programs that match their levels and styles of learning, etc.
10. Match staff and program*	Staff assigned to program their skills match best with
11. Match staff and client	Staff are assigned to clients they can work with effectively
12. Client input*	Input into programmatic structures is gathered from clients and implemented with director approval
13. Rewards*	Appropriate rewards should be given and can include privileges, certificates, praise, points, etc.

Elements of the CPAI: Program Characteristics (Adapted from Lowenkamp, 2004)

14. Ratio	Rewards should outnumber punishers by at least 4:1
15. Theory	Theory supporting the type of punishment is described
16. Stimuli	Effective punishing stimuli are used
17. Procedure	Punishing stimuli are administered in the following fashion: they are not escapable, maximum intensity, earliest possible time after deviant behavior, alternative pro-social behaviors are provided
18. Negative effects	There is assessment as to whether the punishment produces negative results
19. Completion criteria*	Criteria clearly outlined as to when program terminates for each client. Should be defined by progress in acquiring pro-social skills
20. Train	Client trained to observe and anticipate problems
21. Rehearse	Client plans and rehearses alternative pro-social responses
22. Practice	Client practices new pro-social behaviors in increasingly difficult situations
23. Advocacy and brokerage	Client is referred to other services to address relevant needs
24. Family trained	Significant others trained to provide support
25. Booster session	Client returns to relearn or reinforce learned skills
26. Aftercare*	Does the program provide aftercare services

Item	Definition
1. Education	75% of staff have an undergraduate degree; 10% have advanced degree
2. Area of study*	75% of staff have training in criminal justice, education, nursing, psychology, social work, or specialized fields
3. Relevant experience	75% of staff have worked in treatment programs w/ offenders for at least 1 year
4. Personal qualities*	Staff are hired due to attributes that will contribute to the program
5. Stability	50% of staff have remained for 2 years
6. Assessment	Staff are assessed yearly on clinical skills related to service delivery
7. Clinical supervision	Staff receive regular clinical supervision
8. Initial training	Staff received 3 to 6 months formal training in theory and practice of interventions
9. On-going training	Staff receive further exposure relevant to program material
10. Program input*	Staff are able to modify program structure, with director approval
11. Staff support	Goals and values of the program are supported by the staff

Elements of the CPAI: Staff Characteristics (Adapted from Lowenkamp, 2004)

Item	Definition
1. Internal quality	There is a management audit system mechanism in place for quality control
2. External quality*	There is a management audit system mechanism in place to evaluate the quality of external service providers
3. Client satisfaction	Clients surveyed each year as to satisfaction with services received
4. Within program*	Periodic, objective, standardized assessment of clients on program target behaviors
5. Follow-up*	Client re-arrest, reconviction, or re-incarceration data gathered at six months or more, after leaving the program
6. Methodological quality*	At least one evaluation in the last five years, comparing treatment outcome with a risk- control comparison group of some sort
7. Unpublished report	A document containing introduction, method, results, discussion on file that details the effectiveness of the program
8. Peer review	A published document in an edited journal with an introduction, method, results, and discussion detailing the effectiveness of the program

Elements of the CPAI: Evaluation (Adapted from Lowenkamp, 2004)

Item	Definition
1. Client records	Client records are kept in a confidential file and include social history, presenting
	problems, assessment data, program progress notes, etc.
2. Ethical guidelines*	Documentation of the ethics of intervention
3. Program change	No noticeable changes in program components in last two years that jeopardized smooth functioning of the program
4. Program funding*	Program has received adequate funding for the last two years
5. Community support	Program has received support in the community and lacks antagonistic relationship with the community
6. Advisory board	A group of individuals, such as a Board of Directors, or one person such as a consultant officially designated to advise the program

Elements of the CPAI: Other (Adapted from Lowenkamp, 2004)