AN OVERVIEW OF WHAT WORKS IN CORRECTIONAL INTERVENTIONS

As a learning organization, Roca is continuously seeking to align itself with research that speaks to its work with high risk youth and young adults. More and more, Roca is focusing its work on a population of individuals who are involved with the criminal justice system. As such, the Crime and Justice Institute offers this overview of the research around targeting appropriate individuals with certain types of interventions and the importance of program or model implementation.

There is a wealth of correctional research that has been accumulated over the past 30 years related to best practices in working with higher risk populations. The advent of this research followed a study known as the “Nothing Works” evaluation conducted by Martinson (1974). Martinson completed a basic narrative review of the rehabilitation literature and concluded that “rehabilitation has no appreciable effect on recidivism” (p.23). In response to this methodologically weak study and its unexpected, yet politically popular conclusion, Palmer (1975) examined the same 82 studies reviewed for Martinson’s work using the ballot box method and found that 48 percent of the studies demonstrated a reduction in recidivism. Palmer (1975) suggested that the research needed to focus on knowledge construction, rather than destruction. Recognizing that the public and political climate generally supported a more deterrence or retributive ideology for addressing offending, Palmer indicated that a shift in the research was necessary to identify what programs work best, on which populations and under what conditions. This call to research is what began the evolution of the “What works” literature. In particular, these efforts to focus on identifying effective program characteristics and targeting appropriate populations for specific treatment and services is more commonly known as the principles of effective intervention.

The principles can be categorized into focusing on risk, need, responsivity and fidelity (Andrews et al., 1990). In particular, programming that is developed upon and consistently demonstrates adherence to the principles of effective intervention have been empirically shown to reduce recidivism. The following discussion will be divided into two sections. The first will provide a brief overview of the research related to risk, need, responsivity, and fidelity. The second section will highlight how Roca is currently demonstrating efforts to align with the risk, need, responsivity and fidelity principles.

The Risk Principle

The risk principle identifies who to target for the most intensive of services and programming. Specifically, limited resources should be directed to those at highest risk for involvement in the criminal justice system. Further, higher risk clients should receive the greatest dosage of treatment and

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1 Higher risk in this instance means a greater likelihood of repeating crime producing behaviors
2 The ballot box methodology is conducted by an actual tallying of programs that experienced a treatment effect that reduced recidivism and those that did not reduce recidivism. In particular, programs would have been required to demonstrate a significant reduction in recidivism.
3 Recidivism had multiple definitions for the studies reviewed by Martinson.
intervention. This principle is of critical importance given the serious constraints of limited budgets and working with growing community supervision and prison and jail populations.

Multiple studies and meta-analyses\(^4\) have repeatedly shown that programming that focuses on lower risk individuals or mixes high and low risk groups actually increases rates of recidivism for the lower risk client (Andrews et al., 1990; Andrews and Dowden, 1999, 2006; Dowden and Andrews, 1999a, 1999b, 2000; Lipsey and Wilson, 1998; Lowenkamp, Latessa and Holsinger, 2006; Latessa and Lowenkamp, 2005; Bechtel, Lowenkamp and Smith, 2007; Latessa, Lowenkamp and Bechtel, 2008). A meta-analysis conducted by Andrews and Dowden (1999) found that programs that adhered to the risk principle were able to reduce recidivism by 19 percent, whereas programming that served mixed risk groups had increased recidivism four percent. Findings from a large halfway house study conducted in Ohio suggested that intensive programming for higher risk offenders decreased recidivism by ten percent to 30 percent. Yet, these same programs consistently increased recidivism for the lower risk offenders (Latessa and Lowenkamp, 2005). Similarly, a quasi-experimental study of Pennsylvania's community based correctional facilities found that the majority of all 54 sites served mixed risk populations. The probability of any form of recidivism for those in the treatment group, identified as offenders who entered the halfway houses, was 60 percent in comparison to 38 percent for those who received straight parole. In terms of re-incarceration, those in the treatment group had a 54 percent probability for return to the facility and those on parole were 32 percent more likely to be re-incarcerated (Latessa, Lowenkamp and Bechtel, 2008).

In terms of supervision and intensity of services, Bonta, Wallace-Capretta and Rooney (2000) examined intensive rehabilitation supervision\(^5\) and found a 17 percent increase in the recidivism rates of the lower risk offenders. High risk offenders in this same program experienced a 20 percent reduction in recidivism. One meta-analysis examining the impact of mixed risk groups for programming and services found an 18 percent increase in recidivism for programming that combined lower and higher risk groups (Bechtel, Lowenkamp and Smith, 2007).

Given the overwhelming empirical support for the risk principle and matching programming to the risk level of the offender, the issue of intensity or dosage is one that continues to be examined. Specifically, the question being asked is "how much supervision and programming is appropriate based on the risk of the individual"? Currently, the examination into the intensity of programming and services, or dosage, has become a popular focus for researchers (Serin and Prestin, 2000). There has been clarification of defining dosage as it relates to the frequency and duration of sessions for programming. In addition, researchers have explored if different offending types (violent, sexual, and domestic violence) require different lengths of programming. Given the variation in length of different

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\(^4\) A meta-analysis is a summary of existing studies. The finding from a meta-analysis is commonly referred to as the treatment effect and is often presented as a correlation. Larger and positive correlations suggest that a better outcome was produced by the program or intervention being evaluated.

\(^5\) Intensive rehabilitation supervision goes beyond just traditional supervision practices and is intended for a higher risk individual where treatment and programming referrals are made that target the high risk criminogenic need areas. In addition, supervising officers are expected to formulate a case management plan around the targeting of these high need areas. Low risk offenders should not be assigned to this type of supervision.
programs, some lasting months and those lasting for five or more years, it has been a challenge to adequately measure the actual intensity of programming and then compare it to overall effectiveness in terms of participant outcome. While there is still considerable exploration to be done in this area, there is consistency in recommending that programming that targets criminogenic needs for higher risk groups should be three to nine months in length and that 40 percent to 70 percent of the participant time should be spent in structured activities (Bourgon and Armstrong, 2005).

The most rigorous experimental designed study examining dosage of programming included 620 offenders who were randomly assigned to either a treatment or control group. Members of the treatment group received either 100, 200 or 300 hours of intensive programming that focused on criminogenic needs and followed a cognitive behavioral treatment model. Criminogenic needs are defined as high risk behaviors and attitudes that have been empirically demonstrated to be crime producing. Results from this experiment found that 31 percent of the treatment group recidivated in comparison to 41 percent of the control group. In addition, this study demonstrated that variations in programming yielded significantly different findings in terms of recidivism based on the risk of the offender. Specifically, 300 hours of treatment for the higher risk group reduced recidivism by 21 percent. One hundred hours of treatment did not result in reductions in recidivism for the highest risk group. Further, medium risk offenders in the treatment group reduced recidivism by 16 percent with only 100 hours of programming and additional hours did not yield further reductions (Bourgon and Armstrong, 2005). As such, this experiment suggests that adherence to the risk principle by providing the appropriate dosage of programming that is matched to the risk of the individual has demonstrated promising results in terms of reducing recidivism. Another lesson taken from this study implies that limited resources and funding can be appropriately allocated by risk level.

The objective identification of risk with offending populations is typically done with the use of an actuarial assessment tool. The administration of these tools is often done with file reviews and by completing semi-structured interviews with clients. These tools are to be empirically validated and normed to the targeted population. While risk factors can be both static and dynamic, there are assessment tools that focus only on static predictors of offending and those that have both static and dynamic items. While it is commonly recognized that past behavior is the best predictor of future behavior, there are four risk factors that have been empirically identified as those with the strongest correlations to recidivism. These include a history of antisocial behavior, antisocial personality, antisocial attitudes and antisocial peers (Andrews and Bonta, 1994). These dynamic risk factors are referred to as criminogenic needs. The following discussion identifies and describes criminogenic needs and the importance of directing programming toward these targets.

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6 The validation and norming of an actuarial assessment tool is necessary for any agency administering risk and need instruments on their targeted population. Risk and need tools should be statistically examined for their predictive validity, or the instrument’s ability to predict recidivism. Further, norming is a very important part of this analysis since it allows for the determination of risk cutoffs that guide practitioner decision-making. For example, ranges to scores on standardized risk assessments can then determine which individuals are low, moderate and high risk and the appropriate resources can be directed to the higher risk individual.
The Need Principle

The need principle suggests that programmatic interventions are to address criminogenic needs. Criminogenic needs are empirically related to high risk behaviors that can often be crime producing. Research examining these dynamic characteristics has demonstrated that these needs should serve as the primary targets for intervention. Examples of criminogenic needs include: antisocial personality, antisocial attitudes and antisocial peers. In particular, antisocial personality includes lack of empathy, impulsivity, aggression/hostility and poor problem solving skills. While these needs should serve as the primary targets in working with a higher risk population, other criminogenic needs include: substance abuse, employment, education, leisure and recreation, poor communication and low family affection (Andrews and Bonta, 1994). Non-criminogenic needs are defined as characteristics that have not been shown to be consistently correlated with high risk behaviors and recidivism in empirical studies. Examples of these would include self esteem, trauma or victimization and maturity.

Programming for high risk groups should ideally focus on a variety of criminogenic needs rather than on one area solely. There is some clear logic to this since individuals identified as high risk would likely not be limited to only one high need area. Therefore, programming should provide interventions for a variety of need areas. Programs that target multiple criminogenic needs are identified as multi-modal and have been shown to bring about the greatest reductions in high risk behaviors and recidivism (Dowden and Andrews, 1999a, 1999b). In particular, research supports that reductions in recidivism rates by as much as 31 percent are found when the treatment model targets four to six more criminogenic needs than non-criminogenic needs (Gendreau, French & Taylor, 2002). Gendreau and French (2006) conducted a meta-analysis reviewing 68 studies examining the impact of criminogenic needs. Their findings revealed that the average effect size was much greater for the programs that targeted between three to eight criminogenic needs, suggesting a 29 percent reduction in recidivism. Further, programs that only targeted between one and two criminogenic needs saw an average reduction in recidivism of 16 percent. Finally, programs that did not focus on any criminogenic needs either saw no effect or a .06 percent reduction in high risk behaviors. As such, programming that serves a higher risk population should have interventions that are multi-modal and focus on three or more criminogenic need areas.

The Responsivity Principle

The responsivity principle provides direction on how to target high risk groups. There are two types of responsivity, general and specific. General responsivity is defined as programming modalities that produce the most success with high risk populations. In particular, social learning approaches and cognitive behavioral interventions have been empirically demonstrated to produce the greatest reductions in antisocial or crime producing behaviors. Both narrative reviews and meta-analyses have found that cognitive behavioral programming shows the greatest impact in reducing high risk behaviors and recidivism (Gendreau and Ross, 1987; Palmer, 1995; Dowden and Andrews, 2000; MacKenzie, 2000; Gendreau, French and Gionet, 2004; Lipsey, 2009). Specific responsivity refers to individual obstacles that could limit the likelihood for program involvement and success (Andrews and Bonta, 1998). As such, identifying the barriers to treatment, programming and supervision and addressing those prior to
and/or during this period is critical. Examples of specific responsivity include: motivation, anxiety, different forms of learning abilities, language, transportation, gender and culture (Cullen, 2002). Program providers should identify and address specific responsivity areas for all potential participants in order to increase the likelihood for program completion and potential subsequent reductions in high risk behaviors. Van Voorhis, Braswell and Lester (2007) recommend that practitioners use responsivity assessments to determine the responsivity factors of their clients and further to make recommendations about placement with case manager staff and group selection.

The Fidelity Principle

The fidelity principle primarily focuses on how programs appropriately and effectively incorporate the risk, need and responsivity principles. Further, programs are to be implemented as designed and in adherence to their respective model. Research on the fidelity principle demonstrates that characteristics for implementing and maintaining evidence-based programming goes well beyond basic quality assurance standards, such as file review and case management practices. In particular, orientation and booster trainings on elements of the model, group observation, staff skill sets, updates on research, and empirical findings about the program process and outcome measures. Further, research demonstrates the importance of program evaluation and a link between program implementation and program outcomes (Gendreau and Ross, 1987; Barnoski, 2004; Andrews and Dowden, 1999; Lipsey, 2001, 2009; Gendreau, 1996).

Barnoski (2004) examined the proper and improper implementations of Functional Family Therapy and Aggression Replacement Therapy on two programs targeting juvenile/youthful populations and found significant differences between the outcomes for the treatment (participated in the intervention delivered with fidelity) and comparison groups (participated in the intervention not delivered with fidelity). Specifically, when Functional Family Therapy was delivered according to the structured program model, recidivism was reduced by 38 percent for the treatment group. Likewise, the proper implementation of Aggression Replacement Therapy resulted in a 24 percent reduction in recidivism for participant youth in comparison to non-participants. However, when these programs were not competently delivered, recidivism rates were increased by 17 percent for Functional Family Therapy and ten percent for Aggression Replacement Therapy.

In a meta-analysis examining program implementation and outcomes, Andrews and Dowden (1999) found that there are certain characteristics that are correlated with program implementation and high treatment effects. In particular, these characteristics are staff trainings, staff supervision, adherence to a structured program model that includes the use of printed curriculum manuals, applying the appropriate dosage of treatment, monitoring and evaluating change and working directly with an external research/evaluator. Similarly, in two of Lipsey's (2001, 2009) meta-analyses, the involvement of an external researcher was related to increased program effectiveness. In particular, the more recent analysis by Lipsey (2009) examining juvenile interventions found that higher fidelity was attributed to the consultation of a program evaluator.
Staff competencies and staff characteristics are also considered key elements to the fidelity principle and these specific areas are even considered on standardized program evaluation tools, such as the Correctional Program Assessment Inventory 2000 (CPAI-2000) and the Evidence-based Correctional Program Checklist (CPC). Staff characteristics, including being firm but fair, rolling with resistance and modeling prosocial behavior are considered to be essential characteristics for staff charged with assisting clients with behavioral change. On the CPAI-2000, there is a section related to the staff’s delivery of core correctional practices. Core correctional practices are the cognitive behavioral skill sets that can be implemented by all program and supervision staff in a variety of settings to promote behavioral changes when interacting with clients in a group or one on one setting. These skills serve to model prosocial behaviors and reinforce prosocial behaviors when they are demonstrated in order to encourage repetition. In addition, these skills assist program and supervision staff with identifying antisocial behaviors and attitudes when they are present and then to provide the steps needed for offering prosocial feedback about antisocial behaviors so they can be extinguished and replaced with a prosocial alternative. These nine skills are: effective reinforcement, effective use of disapproval, effective use of authority, skills practice, structured learning, development of a professional relationship/rapport, problem solving, effective modeling and advocacy and brokerage. It should be noted that the CPAI-2000 also evaluates the use of motivational interviewing skills under the core correctional practices section of the tool, but this specific skill is not considered to be a core correctional practice.7 Dowden and Andrews (2004) conducted a meta-analysis on the use of core correctional practices and found that with the exception of advocacy and brokerage, programs (including human service agencies) that used these skills demonstrated increases in their overall effectiveness with clients. As such, the selection, training and ongoing coaching of staff in the use of their skills is essential for program fidelity.

The CPAI-2000 and its predecessor, the CPAI, were developed to examine how well a program adhered to the principles of effective intervention. Since these instruments are standardized, researchers have been able to examine the assessment’s ability to be correlated with reductions in recidivism based on the overall score. Strong correlations were demonstrated in Lowenkamp’s (2004) Ohio halfway house study and Nesovic’s (2003) meta-analysis examining individual CPAI program evaluations. A more recent study examining the predictive validity of the CPAI was done using program data from nine of Ohio’s community correctional facilities. To increase the rigor of this analysis, Lowenkamp, Latessa and Lemke (2006) first examined if the program followed the risk principle by calculating the percentage of high risk youth served at these sites. Program effectiveness was then calculated by comparing the recidivism rates of the high risk youth participating in these programs with youth that attended RECLAIM program or were placed in an Ohio Division of Youth Facility along with controlling for sex, race, risk, and offense type. Overall, programs that received a rating on the CPAI of 70 percent or above experienced a ten percent to 14 percent reduction in recidivism when compared to their respective DYS or RECLAIM counterparts. Programs that scored below 60 percent experienced an 11 percent to 17 percent increase in recidivism. Overall, the research suggests that program fidelity has

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7 Unlike the full CPC program evaluation tool, the CPC- Group Form is similar to the core correctional practices section of the CPAI-2000 and does assess staff for their use of core correctional practices.
an impact on program effectiveness/participant success and evaluating a program’s ability to implement the principles of effective intervention is critical.

**Roca’s Alignment with Risk, Need, Responsivity and Fidelity**

Roca is diligently focused on the research on what the most effective practices are when targeting and providing interventions for high risk youth. By understanding what the literature states in terms of the principles of effective intervention, Roca is then able to implement these practices into their innovative model. Further, Roca is committed to evaluating their model and being transparent about this process in an effort for other agencies to learn from its work. The remainder of this paper discusses how Roca’s work is in alignment with the principles described above.

**Risk Principle**

Roca’s targeted population in Chelsea is identified as very high risk youth between the ages of 14 to 24. Those served by Roca in this location fall into one or more of the following groups: high school dropout or on the verge of dropping out; refugee or immigrant; street-, court- or gang involved; and young parent. While the Chelsea site serves both males and females, currently the Springfield site is serving only males. In particular, at the Springfield site, which is the first replication of Roca, participants are between the ages of 17 and 24 and all have some involvement with the criminal justice system, including a felony arrest. Other risk factors considered by Roca-Springfield include not having a high school diploma or GED (unless that GED was obtained while incarcerated), being identified as a school dropout, lack of employment and/or the inability to retain employment, and gang involvement.

While Roca is likely to be serving high risk youth based on some of these eligibility characteristics, participants are not assessed using an actuarial standardized risk assessment tool. One of the primary reasons for this is due to the non-mandatory structure for participation in Roca. To begin with, Roca staff engage in “relentless outreach” with their targeted population and work with local agencies and institutions (e.g., police departments, schools, courts) to identify potential participants that these agencies/institutions often struggle to support and provide services for, including mandatory programming and services. Since the standard practice for administering an actuarial risk assessment tool often involves scheduling a significant amount of time to conduct a semi-structured interview and file review for a potential participant, Roca’s model does not readily allow for such an opportunity during the building of the transformational relationship with the youth. As such, Roca’s eligibility criteria are identified over two month period by Roca staff.
Need Principle

The mission of Roca is to assist its participants with changing behavior that would typically lead them down a path to violence and poverty. Roca does seek to address some criminogenic needs, such as antisocial behavior and attitudes, antisocial peers, employment, substance abuse, education, and leisure and recreation. Not all of the needs are addressed through “programming”, which can prove challenging in terms of evaluation. Much of the work associated with addressing needs is done within the context of the youth worker-participant interaction over a period of years.

Responsivity Principle

In terms of identifying and addressing the responsivity of participants, Roca is very focused on specific responsivity, or removing barriers to participation. Roca fully recognizes that in working with disengaged and disenfranchised youth and young adults, it is necessary to identify the Stage of Change of those individuals to best understand where they are in terms of motivation and commitment to behavioral change. Roca’s youth workers are trained in motivational interviewing techniques, allowing them to address participant ambivalence and resistance. As another example of Roca’s application of specific responsivity, Roca not only provides transportation as needed for participants, but also goes to pick up participants who do not necessarily want to participate. In addition, the structure of Roca’s programming is in response to participant readiness. The organization offers “stage-based programming” that allows young people to participate in a level of programming for which he or she is ready (e.g., participation in drop-in GED classes versus on-going, structured GED classes). Relapse to former behaviors is often a part of the process toward sustained change, so Roca staff see it as an opportunity, rather than a barrier or reason for dismissal.

As described earlier, by addressing the specific barriers before and during program participation, it is more likely that an individual will experience success in completing a program and continuing to practice and maintain new skills and behaviors. Further observation during the implementation evaluation is needed to determine the extent to which Roca adheres to general responsivity.
Fidelity Principle

Roca describes itself as an outcomes-driven organization and works diligently to collect and assess its data to evaluate the effectiveness of its model. Using data from the Efforts to Outcomes database, assigned Roca staff and external evaluators monitor data related to eligibility criteria, the type and amount of staff contacts for all participants on caseloads, program attendance and participant movement through the three phases of the model. Findings are used to identify fidelity issues and to inform and, when needed, adjust or re-focus staff efforts.

In terms of the use of core correctional practices, Roca has provided evaluation staff from the Crime and Justice Institute the opportunity to observe its work in practice. During a recent site visit, there were numerous examples of staff developing and maintaining a healthy professional rapport with participants. Staff were continuously engaging participants, encouraging them and at times demonstrating empathy. While not formerly trained on core correctional practices, staff properly used the skill of effective reinforcement during the observation period. This skill was attempted on several occasions and fully completed on one occasion (see the sidebar example).

Next Steps

Because of Roca’s interest in ensuring alignment with what works in correctional interventions, one of its external evaluators, the Crime and Justice Institute, plans to administer the CPAI-2000 at both the Chelsea and Springfield locations in 2011. This will provide Roca with an understanding of the extent to which the delivery of its model adheres to the principles of effective intervention. Recommendations made from this evaluation will provide guidance for Roca on how close the implementation of the high risk intervention model aligns with risk, need, responsivity and fidelity. From this Example of the Use of Effective Reinforcement by Roca Staff

A staff member was discussing how a participant’s job was going, one he has held for 4 months. The participant shared that this was the longest he has retained employment. First, the youth worker began by providing specific and concrete verbal praise that was distinctly different than simple verbal acknowledgement of appropriate behavior. In particular, this staff member exclaimed that this was “simply awesome” and described that he was very proud of this individual for not only getting this job but for also keeping this job for the past 4 months. The participant described how he would be taking two significant steps toward maintaining employment and potentially increasing his opportunities for advancement. He stated that he would be taking advanced cooking classes and would also be going with the youth worker to get a gang tattoo covered that the participant indicated was embarrassing and unprofessional in appearance. The participant further acknowledged regret for getting tattoo. The worker did not pass judgment on the decision to get a gang tattoo but merely reinforced the decisions and behavior of the participant to take additional classes, maintain consistent employment and to get the tattoo covered. This pro-social behavior was identified and then the youth worker took the final step of effective reinforcement which was to discuss how these actions may lead to short and long term benefits for the participant. With no prompting from the youth worker, the participant stated that he would most likely be able to advance at his current job and would be able to take better care of his child with legitimate employment.
effort, Roca will be able to make informed decisions on how to most efficiently and effectively continue its relentless outreach with high risk youth and to serve this population with fidelity to the principles of effective intervention.

This document was written in January 2011 by Kristin Bechtel, PhD candidate, with contributions from Barbara A. Pierce, MPPM. Both serve as leads for the implementation and impact evaluations of Roca’s model in Chelsea and Springfield, MA.