



# **The Utility and Efficacy of Cognitive Behavioral Interventions in the Arena of Corrections. An Overview and Appeal to the Field of Probation**

by Joseph Arvidson, M.S.

In what is widely considered the dawn of the research age of corrections, in 1987 Paul Gendreau and Robert Ross published a survey of over 200 studies on rehabilitation from 1981 to 1987. Their work was reflective of the fact that, indeed, some correctional treatment programs were more effective than others. And at least to some degree, treatment did, in fact, reduce recidivism (Gendreau & Ross, 1987). Fast-forward some forty years, and we now have the benefit of hindsight to examine the degree to which the field of corrections embraced that seminal proclamation, and how research driven practices have evolved. Correctional probation officers now are more effective in their duties, consistently exhibit certain skills and behaviors. One of these behaviors, of course, is adherence to the principles of risk, deed and responsivity. Other effective skills have been identified as prosocial modelling and reinforcement, problem-solving, having a healthy worker-client relationship, and the use of other cognitive techniques, e.g., teaching clients the thought-behavior link via the ABC technique outlining antecedent, behaviors, and consequences (Trotter, 2013).

Broadly speaking, this forty-year snap shot of what works advises the practitioner to utilize cognitive social learning techniques. Prosocial modelling and reinforcement, problem-solving, and teaching clients about the thought-behavior link are straight out of the cognitive playbook. Having a healthy client-worker relationship is merely

exhibiting adherence to the responsivity principle. Whereas specific responsivity speaks of tailoring the delivery of services to the characteristic of the client (e.g., gender, race, learning style, motivation), the general responsivity speaks of “the use of cognitive social learning techniques to influence change because they are the most effective techniques to help offenders learn new attitudes and behaviors” (Bonta & Andrews 1994). A strong argument could be made that, if probation officers wanted to most effectively instill change in their clientele, the advice which would serve them best would be to simply embrace cognitive interventions.

Many current corrections professionals are familiar with the term “cog.” As those in government are prone to do, there is a tendency to use shorthand nomenclature. Cog is short for cognitive behavioral therapy, cognitive behavioral interventions, or cognitive programming. Central to all the preceding is the core tenant of the thought-behavior link. That is, our thinking drives our behavior. Or at least influences our behavior. The Greek philosopher Plato initially held that one’s cognitions shaped his or her view of the world (Hansen, 2008). Modern cognitive therapy started to emerge in the 1950s and 1960s. According to many accounts, Aaron Beck founded the cognitive therapy movement, initially focusing on work around the treatment of depression (Hanson, 2008).

Cognitive interventions, therapies, and programming are utilized with a myriad of populations, both criminal and non-criminal. Childhood anxiety can be a psychological distresser for many children and youth, potentially leading to an increase in the onset of other psychological disorders such as mood disorders, substance use disorders, and suicide. In examining the FRIENDS for Life for Children program, the findings indicated that implementation of that cognitive behavioral therapy (CBT) program in a school setting could be effective in mitigating the symptoms of social anxiety, particularly in girls (Matsumota & Eiji, 2016).

CBT has been shown to significantly improve both the level of psychopathology and the severity of gambling behavior (Jiminez-Murcia et al, 2015).

Dovetailing into the arenas of substance use and mental health, a randomized control trial involving the populations of co-occurring substance use and PTSD examined individual counseling and CBT. It concluded that integrated cognitive behavioral therapy was more effective than individual addiction counseling in reducing PTSD, re-experiencing symptoms and PTSD diagnosis (McGovern, Lambert-Harris, Alterman, Xie, & Meier, 2011).

Yet another randomized control trial examined the efficacy of cognitive behavioral therapy for psychosis (CBTp). Noting the lack of training in the United States for a cognitive approach to address psychosis, this study looked to the use of technology. Specifically, an interactive web-based program designed for CBTp. The sample was made up of clients with schizophrenia and moderate to severe auditory hallucinations. Measuring the severity of auditory hallucinations and other symptoms, participants in the web-based program showed significantly greater increases in social functioning than the usual care group (Gottlieb et al, 2017).

From anxiety to gambling disorders to co-occurring substance use to PTSD and psychosis, cognitive behavioral therapy has been utilized as an effective intervention. This list of populations that fall under the umbrella of cognitive care also includes those involved in the justice system. Within the juvenile justice system, programs that include a

cognitive behavioral component have shown the most promise for reducing recidivism (Thompson, Ringle, Way, Peterson, & Huefner, 2010).

An offense which has vexed criminal justice officials for decades has also been addressed by cognitive behavioral therapy. Repeat driving while intoxicated (DWI) offenders have long frustrated the courts and correctional officials alike. A longitudinal study examined differences in offenders with multiple DWI offenses who completed a 16-week CBT program with those who received standard services. CBT was more effective with recalcitrant, hard to treat DWI offenders. There was a significant difference in DWI recidivism three years after CBT completion. Specifically, 11 percent recidivism for CBT participants versus 25 percent for that state's average, and 30 percent for the national average (Quinn & Quinn, 2015).

The good news for correctional staff who abide by the risk principle, which states that higher levels of treatment should be reserved for medium- to high-risk clients (Bonta & Andrews, 1994) is that CBT has shown to be effective with high-risk probationers. An examination of the "Choosing to Think, Thinking to Choose" CBT program revealed that the program significantly reduced the prevalence of overall nonviolent offending (Barnes, Hyatt, & Sherman, 2017).

The research is promising with arguably one of the most high-profile populations in the criminal justice system — that of sex offenders. Ten empirical studies from 2001 to 2014 were reviewed to compare CBT-based interventions with a comparative intervention. The participants were made up of moderate- to high-risk male sex offenders. It was concluded that CBT in its various forms was an effective treatment modality to reduce sexual, violent, and general recidivism by sexual offenders (Mpofu, Athanasou, Rafe, & Belshaw, 2016).

Much attention has been given as of late to gender-specific approaches in corrections. To that end, a randomized, controlled trial compared women parolees/probationers who participated in a dialectic behavioral therapy-corrections modified (DBT-CM) program versus a health promotion (HP) program. Those findings revealed that the DBT participants had a reduction in recidivism (Nyamathi et al, 2018).

There would then appear to be ample evidence that the use of cognitive interventions can be applied effectively to an array of both criminal and non-criminal populations. Just as penicillin can be used to treat a wide variety of infections, cognitive interventions have shown to be efficacious with a wide variety of behavioral disorders and, of course, recidivism.

If one were to survey the landscape of correctional programming today, specifically evidence-based correctional programming, a theme of cognitive based programming would, indeed, emerge. Thankfully, these evidence-based programs are slowly but surely replacing short-sighted intervention which, in hindsight, we know were ineffective. Programs such as the Scared Straight program that are designed to frighten juveniles out of delinquency and the DARE (Drug Abuse Resistance Education) program, at least in its initial iteration, had a trivial effect on both substance use and crime (Welsh & Farrington, 2005). What, then, are some of the more common "off the shelf" cognitive based programs? A review is in order.

The National Institute of Corrections (NIC) published an outstanding review of the more prominent cognitive behavioral therapy programs currently utilized by the field of corrections (Milkman & Wanberg, 2007). These programs are well established and familiar to most corrections practitioners. Effective cognitive behavioral programs of all types make an effort to assist individuals in four primary tasks (Cullen & Gendreau, 2000):

1. Define the problems that led them into conflict with authorities
2. Select goals
3. Generate new alternative prosocial solutions
4. Implement these solutions

The following are six cognitive behavioral programs, as identified, by the NIC that are widely used in the criminal justice field today.

### **AGGRESSION REPLACEMENT TRAINING (ART)**

Originally designed to reduce anger and violence among adolescents involved with juvenile justice systems, the curriculum has been adapted more recently for use in adult correctional facilities. ART is comprised of three components. These are social skills training, anger control training, and moral reasoning (Glick & Goldstein, 1987).

### **CRIMINAL CONDUCT AND SUBSTANCE ABUSE TREATMENT: STRATEGIES FOR SELF-IMPROVEMENT AND CHANGE (SSC)**

SSC is a long-term, intensive, cognitive behavioral-oriented treatment program for adult substance abuse offenders. The program can be presented in either a community or incarcerated setting. Strategies for self-improvement and change attends to both extrapersonal circumstances (e.g., events, in addition to the thoughts, emotions, beliefs, and attitudes) that lead to criminal conduct and substance abuse. The treatment program is divided into three phases. Phase I is entitled Challenge to Change and focuses on helping the client develop self-awareness through self-disclosure and receiving feedback. Phase II is entitled Commitment to Change. Here, the focus is on strengthening basic skills for change and learning key CBT methods for changing thought and behavior that contribute to substance use and criminal conduct. Phase III is entitled Ownership of Change. This stabilization and maintenance phase involves treatment experiences designed to reinforce and strengthen commitment to change. This is done in part by helping the client become involved in mentoring, role modeling, self-help groups, and other community-based recovery maintenance services (Milkman & Wanberg, 2007).

### **MORAL RECONATION THERAPY (MRT)**

MRT was initially designed for criminal justice-based drug treatment. It has since been expanded for use with DWI, domestic violence, and sex offender populations. The term "conations" was used in the field of psychology until the 1930s, when it was replaced by "ego." The term refers to the conscious, decision-making portion of one's personality. Reconation, therefore, implies a reevaluation of one's decisions through the moral lens, e.g., correct and prosocial. The underlying theory of MRT is that criminal offenders and drug users have low moral reasoning. It is based on Lawrence Kohlberg's (Kohlberg, 1976) theory that moral development progresses through six stages, and that only a few members of the adult population attain the highest level. The authors contend that "client's enter treatment with

low levels of moral development, strong narcissism, low ego/identity strength, poor self-concept, low self-esteem, inability to delay gratification, relatively high defensiveness, and relatively strong resistance to change and treatment” (Little & Robinson, 1986, p. 135). The MRT program is designed to aide clients in moving their reasoning levels from self-centered to those that involve concern for the welfare of others and for societal rules (Little & Robinson, 1986).

### **REASONING AND REHABILITATION (R&R AND R&R2)**

Reasoning and rehabilitation is based on the theory that offenders suffer from cognitive and social deficits. The program focuses on enhancing self-control, interpersonal problem-solving, social perspectives, and prosocial attitudes (Ross & Fabiano, 1985). A belief that long-term programs correlate with low client motivation and high attrition rates lead to the development of the shorter in duration R&R2 (Ross & Hilborn, 1996).

### **RELAPSE PREVENTION THERAPY (RPT)**

RPT was originally designed to be a maintenance program to prevent relapse for those in addiction treatment. RPT rejects the use of labels such as drug addict or alcoholic and encourages participants to think of their behaviors as something they do rather than something they are. RPT uses techniques from cognitive behavioral coping skills to self-management and self-control of thoughts and behavior. As reflected by Marlatt and Donovan (2005), 75 percent of relapses were linked to three categories of high-risk situations. These high-risk situations were negative emotional states, interpersonal conflict, and social pressure. The program is based on the contention that relapse is less likely to occur when an individual has effective coping mechanisms to deal with these high-risk situations (Parks & Marlatt, 1999).

### **THINKING FOR A CHANGE (T4C)**

T4C was introduced by the NIC in 1997. It uses a combination of approaches to increase a client’s awareness of self and others. It integrates cognitive structuring, social skills, and problem-solving techniques. The initial phase of the program teaches clients a process by which to examine their ways of thinking, as well as their feelings, beliefs, and attitudes. As an alternative to antisocial behavior, social skills are taught. These skills are integrated into steps for problem-solving. This becomes the central approach for enabling clients to work through difficult situations without engaging in criminal behavior (Bush, Glick, & Taymans, 1997).

Given the variety of programs available for corrections administrators, consideration should be given not only to the type of cognitive programming (as in the examples above) but also to factors such as the client characteristic, program intensity/dosage, and facilitator characteristics (Polaschek, 2010).

Client characteristic, of course, primarily equates to level of risk. Adherence to the risk principle dictates that efforts should be primarily concentrated on moderate- to high-risk offenders (Andrews & Bonta 1994). This is in line with agencies who adhere to the principles of risk, need, and responsivity.

More and more attention has been lately in the field of corrections to the idea of dosage. That is, the number of treatment days or more to-the-point hours equates to reductions in recidivism. This needs to be of consideration to administrators and line staff when they consider what the arc of supervision looks like with their clients. It is not so much about viewing the probation agreement as a to-do list from the judiciary as it is about treatment dosage

needed to have an impact on recidivism with that client. This is a new viewpoint for many, yet it is working its way to the field. The requisite benchmarks of effectiveness are becoming more and more established, varying from 200 hours (Sperber, Latessa, & Makarios, 2013) to 300 hours (Bourgon & Armstrong, 2005).

Facilitator characteristic may be the most underappreciated contention as to cognitive programming effectiveness. Staffing for cognitive programs is often done simply by asking for officers to volunteer. Little if any effort is put into screening or fidelity efforts. This potentially negates the responsiveness principle, which advocates both a strong working alliance and skill in advancing client change through the use of cognitive behavioral methods (Bonta & Andrews 2007).

Lest there be resistance still to the efficacy of cognitive interventions in the arena of criminal justice, an examination of the evidence may be in order. Fortunately, several studies draw the same conclusion. There is, in fact, a considerable amount of meta-analytical research supporting the effectiveness of cognitive behavioral programs in lowering recidivism rates in both adult and juvenile clients who exhibit antisocial behavior (Brazao, Da Motrta, & Rijo, 2013). Another meta-analysis by the Correctional Drug Abuse Treatment Effectiveness (CDATE) of correctional treatment evaluation studies completed between January 1, 1968 and December 31, 1996 reflected that cognitive behavioral programs can reduce recidivism rates by significant amounts (Pearson, Lipton, Cleland, & Yee, 2002).

Focusing merely on the juvenile side of the equation for a moment, again the evidence appears to be ample. A meta-analysis of 46 studies of intervention programs for juvenile delinquents uncovered a significant difference between those programs that contained a cognitive component and those that did not (Izzo & Ross, 1990). The outcomes of a group therapy program known as Community Opportunity Growth was examined over a seven-year period. The results reflected some signs of the long-term effectiveness of a CBT group therapy program in reducing recidivism in juveniles. Additionally, there was a lower incidence of petitions at follow up comparing graduates with dropouts (Jewell, Malone, Rose, Sturgeon, & Owens, 2015).

Earlier, this paper reviewed some of the specialty populations in which cognitive intervention programs are utilized. Accordingly, a look at the resultant impact of cognitive interventions on specific population types is in order. One such program evaluation examined a long-term cognitive skills program utilized by inpatient mentally ill patients with criminal histories, the Service for Treatment and Abatement of Interpersonal Risk program (STAIR). There were significantly fewer arrest, hospitalizations, and days institutionalized post program completion (Yates, Kunz, Khan, Volavka, & Rabinowitz, 2009).

Anger and aggression are underlying themes for many justice-involved individuals. Here again, we see the efficacy of cognitive based programs. A meta-analysis of CBT-based anger management interventions produced encouraging results. When analyzing the effect of exposure to CBT based treatment on general recidivism, a risk reduction of 23 percent was discovered. When analyzing the effects of these programs on violent recidivism, a risk reduction of 28 percent was discovered (Henwood, Chou, & Browne, 2015).

The good news does not appear to be limited to community corrections settings. A review of prison-based cognitive intervention programs shows promise, as well. The Enhanced Thinking Skills program is facilitated in prisons in England and Wales. A study comparing the reconviction outcomes of 17,047 program participants with that of

19,792 non-participants released over the same time period showed program effectiveness. Specifically, prisoners who completed the Enhanced Thinking Skills program reoffended at a rate 9.5 percent lower than the predicted rate (Travers, Wakeling, Mann, & Hollin, 2011). In a follow up study, an examination of 21,000 male prisoners who attended the program reflected reduced reoffending for sexual offenders (a 13% reduction), violent offenders (a 17% reduction), and non-acquisitive offenders (10-12% reduction). Interestingly, the impact was not significant for those convicted of burglary or robbery (Travers, Mann, & Hollin, 2014).

An Israeli study examining a domestic violence program, House of Hope, run within the Israeli prison system indicated that the percentages of reincarceration and rearrests were significantly lower for program participants. The House of Hope program is made up of several components, including CBT as well as psychodynamic therapy and psychoeducational therapy. The study also found that the chances of participants being arrested and incarcerated for violent offenses was also significantly lower (Shoham, Zelig, Hasisi, Weisburd, & Haviv, 2018).

Substance abuse among justice involved individuals is an ongoing issue. Here again, the research outcomes are positive. A meta-analysis of randomized control trails showed that cognitive behavioral treatments for adult substance use disorders demonstrated a statistically significant effect over comparisons conditions (Magill and Ray, 2009). Participants of a federal prison residential drug treatment program having a CBT component were less likely to experience new arrest or relapse during the first six months following release (Pelissier et al, 2001). A CBT substance abuse treatment program for female inmates significantly reduced both drug use and arrest (Hall, Prendergast, Wellisch, & Cao, 2004).

As illustrated, the use of cognitive behavioral interventions has merit with a variety of offense types in settings ranging from community-based facilitation to prison programs. The good news for those wishing to embrace this information and carry the cognitive mantle forward is that, in a sense, we have come full circle back to the risk-needs-responsivity (RNR) model. The summaries and findings of this paper are merely reflective of the next generation of RNR, specifically responsivity. Adherence to general responsivity requires correctional interventions to employ cognitive social-learning methods to affect behavior change with clients. Developing an awareness of their problems, learning decision making skills, use of pro social modeling, use of appropriate reinforcement and disapproval strategies, and the learning of problem-solving strategies all fall under the general responsivity umbrella (Taxman, 2014). James Bonta, the co-architect of the RNR model, recently defined responsivity merely as "use cognitive behavioral interventions" (Bonta 2018).

For the progressive correctional practitioner, the focus is clear. Show adherence to the responsivity principle by effectively and consistently utilizing cognitive behavioral interventions. This is not merely to be accomplished by farming out clients to traditional cognitive based programs, such as those highlighted previously. Rather, this will entail the use of one-on-one cognitive interventions in the office setting. The dosage literature makes it clear that change will not occur merely in the classroom setting where cog programs are facilitated. The role of the probation officer is morphing into that of coach (Lovins, Cullen, Latessa, & Jonson, 2018). In this role, their primary duty will shift from that of rule enforcement to that of behavioral change. Regardless of the offender type, whether in the community or institutional setting, the proven mechanism for advancing behavioral change is the use of cognitive interventions.

## Author Biography:

Joseph Arvidson, M.S., GCERT, is Executive Director of The Paragon Group, LLC. The Paragon Group strives to promote and advance evidence-based practices in the arena of criminal justice. Their scope of services includes speaking engagements, as well as training and consulting as to RNR and desistance-based models. Mr. Arvidson's training and consulting clientele have ranged from Federal Probation to local for profit and non-profit agencies. His career in corrections spans over 30 years in both community and institutional settings. He has extensive experience training and facilitating a variety of evidence-based practices ranging from cognitive skills programs, motivational interviewing, and a variety of risk assessments. Mr. Arvidson has been an adjunct faculty member at Concordia University, St. Paul and Metropolitan State University since 2000, where he teaches a number of graduate- and undergraduate-level criminal justice courses. Mr. Arvidson received both his B.A. and M.S. degrees from St. Cloud State University in the discipline of criminal justice administration. He also attained a graduate certificate in project management from Metropolitan State University. He currently serves as member of Concordia University, St. Paul's Criminal Justice Executive Advisory Board. Mr. Arvidson is co-host of "The Criminologists" podcast.

## References

- Andrews, D.A., & Bonta, J. (1994). *The psychology of criminal conduct*. New York, NY: Anderson publishing. pp 192.
- Barnes, G., Hyatt, J., & Sherman, L. (2017). Even a little bit helps. An implementation and experimental evaluation of cognitive-behavioral therapy for high risk probationers. *Criminal Justice and Behavior*, 44, 611-630. DOI: 10.1177/0093854816673862
- Bonta, J. (2018). Do no harm. Retrieved from <https://www.linkedin.com/pulse/do-harm-james-bonta/>
- Bonta, J. & Andrews, D.A. (2007). Risk-Need-Responsivity model for offender assessment and rehabilitation (No. 2007-04). Ottawa, Canada: Department of Public Safety and Emergency Preparedness Canada.
- Bourgon, G. & Armstrong, B. (2005). Transferring the principles of effective treatment into a "real world" prison setting. *Criminal Justice and Behavior*, 32, 3-25.
- Brazao, N., da Motra, C., & Rijo, D. (2013). From multimodal programs to a new cognitive interpersonal approach in the rehabilitation of offenders. *Aggression and violent behavior*, 18, 636-643.
- Bush, J., Glick, B. & Taymans, J. (1997). *Thinking for a Change: Integrated cognitive behavior change program*. Washington, DC: U.S. Department of Justice, National Institute of Corrections. NIC Accession Number 016672.
- Cullen, F., & Gendreau, P. (2000). Assessing correctional rehabilitation: Policy, practice, and prospects. In *Criminal Justice 2000*, Vol. 3., ed.



- Gendreau, P., & Ross, R. (1987). Revivication of rehabilitation: Evidence from the 1980s. *Justice Quarterly*, 4(3), 349-407. doi: 10.1080/07418828700089411
- Goldstein, A.P., & Glick, B. (1987). *Aggression Replacement Training: A comprehensive intervention for aggressive youth*. Champaign, IL: Research Press.
- Gottlieb, J.D., Gidugu, V., Tepper, M., Davis, M.J., Greenwold, J., Barro, R.A., . . . Mueser, K.T. (2017). Randomized controlled trial of an internet cognitive behavioral skills-based program for auditory hallucinations in persons with psychosis. *Psychiatric Rehabilitation Journal*, 40, 283-292.
- Hall, E. A., Prendergast, M. L., Wellisch, J., Patten, M., & Cao, Y. (2004). Treating drug-abusing women prisoners: An outcomes evaluation of the Forever Free program. *The Prison Journal*, 84(1), 81- 105.
- Hansen, C. (2008). Cognitive-behavioral Interventions: Where they come from and what they do. *Federal Probation Journal*, 72, 43.
- Henwood, K., Chou, S., & Browne, K. (2015). A systemic review and meta-analysis on the effectiveness of CBT informed anger management. *Aggression and Violent Behavior* 25, 280-292.
- Izzo, R. & Ross, R. (1990). Meta-analysis of rehabilitation programs for juvenile delinquents, a brief report. *Criminal Justice and Behavior*, 17, 134-142.
- Jiminez-Murcia, S., Granero, R., Fernandez-Aranda, F., Arcelus, J., Aymami, M., Gomez-Pena, M., . . . Menchon, J. (2015). Predictors of outcome among pathological gamblers receiving cognitive behavioral group therapy. *European Addiction Research*, 21, 169-178. DOI: 10.1159/000369528
- Kohlberg, L. (1976). Moral stages and moralization: The cognitive-developmental approach. *Moral development and behavior*, ed. T. Lickona, 31–55. New York: Holt, Rinehart and Winston.
- Little, G., & Robinson, K. (1986). *How to escape your prison: A Moral Reconation Therapy workbook*. Memphis: Eagle Wing Books.
- Lovins, B.K., Cullen, F.T., Latessa, E.J., & Jonson, C.L. (2018). Probation officer as a coach: Building a new professional identity. *Federal Probation Journal*, 82, 13-19.
- Magill, M., & Ray, L. A. (2009). Cognitive-behavioral treatment with adult alcohol and illicit drug users: A meta-analysis of randomized controlled trials. *Journal of Studies on Alcohol and Drugs*, 70, 516- 527.
- Marlatt, G.A., & Donovan, D.M. (2005). *Relapse prevention: Maintenance strategies in the treatment of addictive behaviors*. New York: Guilford Press.
- Matsumota, Y., & Shimizu, E. (2016). The FRIENDS cognitive behavioral program in Japanese schools: An examination of the treatment effects. *School Psychology International*, 37(4), 397-409. DOI: 10.1177/01430343034316649639

- McGovern, M.P., Lambert-Harris, C., Alterman, A.I., Xie, H. & Meier, A. (2011) A Randomized Controlled Trial Comparing Integrated Cognitive Behavioral Therapy Versus Individual Addiction Counseling for Co-occurring Substance Use and Posttraumatic Stress Disorders, *Journal of Dual Diagnosis*, 7(4), 207-227. DOI: 10.1080/15504263.2011.620425
- Milkman, H. & Wanberg, K., (2007) Cognitive Behavioral Treatment: A review and discussion for corrections professionals. *US Department of Justice, National Institute of Corrections.*, May 2007. NIC Accession Number 021657
- Mpofue, E., Athanasou, J., Rafe, C. & Belshaw, S. (2016). Cognitive-behavioral therapy efficacy for reducing recidivism rates of moderate- and high-risk sexual offenders: A scoping systematic literature review. *International Journal of Offender Therapy and Comparative Criminology*, 62, 170-168. DOI: 10.1122/0306624X16644501
- Nyamathi, A., Shin, S., Smeltzer, J., Salwem, B., Yadav, K., Krogh, D., & Ekstrand, M. Effectiveness of Dialectical behavioral Therapy on reduction of recidivism among recently incarcerated homeless women: A pilot study. *International Journal of Offender Therapy and Comparative Criminology*, 62(15), 4796-4813.
- Pearson, F., Lipton, D., Cleland, C., & Yee, D. (2002). The effects of behavioral/cognitive-behavioral programs on recidivism. *Crime and Delinquency*, 48, 476-496.
- Pelissier, B., Wallace, S., O'Neil, J. A., Gaes, G. G., Camp, S., Rhodes, W., & Saylor, W. (2001). Federal prison residential drug treatment reduces substance use and arrests after release. *American Journal of Drug and Alcohol Abuse*, 27(2), 315-337.
- Polaschek, Devon L.L., (2011). Many sizes fits all: A preliminary framework for conceptualizing the development and provision of cognitive-behavioral rehabilitation programs for offenders. *Aggression and violent behavior*, 16, 20-35.
- Quinn, T. & Quinn, E. (2015). The effect of cognitive-behavioral therapy on driving while intoxicated recidivism. *Journal of Drug Issue*, 45(4), 431-446. DOI: 10.1177/00220426 15603390
- Ross, R.R., & J. Hilborn. 1996. *R&R2 short version for adults: A handbook for training prosocial competence*. Ottawa, Ontario: Cognitive Centre of Canada.
- Shoham, E., Zelig, A., Hasisi, B. Weisburd, D. & Haviv, N. (2018). "The whole is greater than the sum of the parts": Prison staff perceptions of domestic violence rehabilitation programs. *International Journal of Offender Therapy and Comparative Criminology*, 62(11), 3298-3321. DOI: 10.1177/0306624X17741803.
- Sperber, K., Latessa, E. & Makarios, M. (2013). Examining the interaction between level of risk and dosage of treatment. *Criminal Justice and Behavior*, 40, 338-348.
- Taxman, F. (2014). Second generation of RNR: The importance of systemic responsivity in expanding core principles of responsivity. *Federal Probation Journal*, 78(2), 32-40.

Thompson, R., Ringle, J., Way, M., Peerson, J., Huefner, J. (2010). Aftercare for a cognitive-behavioral program for juvenile offenders: A pilot investigation. *JOBA-OVTP*, 2(3).

Travers, R., Mann, R., & Hollin, C., (2014). Who benefits from cognitive skills programs? Differential impact by risk and offense type. *Criminal Justice and Behavior*, 41(9), 1103-1129.

Travers, R., Wakeling, H., Mann, R. & Hollin, C. (2011). Reconviction following a cognitive skills intervention: an alternative quasi-experimental methodology. *Legal and Criminological Psychology*, 18, 48-65.

Trotter, C. (2013). Reducing recidivism through probation supervision: What we know and don't know from four decades of research. *Federal Probation Journal*, 77(2), 46-47.

Welsh, B., & Farrington, D. (2005). Evidence-based crime prevention: Conclusions and directions for a safer society. *Canadian Journal of Criminology and Criminal Justice*, 47(2), 337-354.

Yates, K., Kunz, M., Khan, A., Volavka, J., & Rabinowitz, S. (2009). Psychiatric patients with histories of aggression and crime five years after discharge from a cognitive-behavioral program. *The Journal of Forensic Psychiatry and Psychology*, 21(2), 167-188.