

**WAYS TO MAKE TRAINING and PSYCHOTHERAPY MORE EFFECTIVE:
HOW TO IMPROVE THE LIKELIHOOD OF GENERALIZATION**

Donald Meichenbaum, Ph.D.
Research Director of
The Melissa Institute for Violence Prevention
Miami, Florida
www.melissainstitute.org
Distinguished Professor Emeritus,
University of Waterloo
Ontario, Canada
Distinguished Visiting Professor
School of Education, University of Miami

Contact Information:
dhmeich@aol.com

Presentation at the Third Silence The Violence Conference,
The Melissa Institute,
October. 2008

GUIDELINES FOR IMPROVING GENERALIZATION

“Treatment/training is not only about change, it is about the generalization of that change”

A major concern for all therapists or trainers, no matter the setting in which they are working, is the issue of generalization or transfer of training across tasks, settings and maintenance over time. The gains that are made in training often fail to generalize and they are not maintained afterwards. Training should be designed to promote and facilitate generalization, rather than assuming it will occur naturally. Trainers cannot merely “train and hope,” but rather, they need to build into their training programs explicit guidelines and the technology of generalization. Trainers should use interventions that address generalization directly.

A number of researchers who come from different theoretical perspectives have offered advice on ways to increase the likelihood of treatment generalization. Stokes and Baer (1977) and Stokes and Osnes (1988) use an operant framework; Larson (2005) and Larson and Lochman (2001), Meichenbaum (1997, 2005) and Ylvisaker, Szekeres & Hartwick (1991) work from a metacognitive perspective; Diaz (1990) and Wood, Bruner and Ross (1976) from a developmental perspective; and Pressley (1990) and Meichenbaum and Biemiller (1998) from an educational perspective. Each have offered guidelines to enhance treatment generalization.

This presentation will begin with:

1. a consideration of the lessons to be learned from research on interventions with juvenile offenders.

This will be followed by a consideration of:

2. a Trainer's Checklist and accompanying Report Card that can be used to guide and evaluate interventions that are designed to enhance treatment efficacy (**Tables 3 and 4**).
3. Finally, a Trainee's Checklist will be provided that can be used by trainees to self-evaluate their progress and their ability to apply the skills that they have learned across behavioral settings and over time. (**Table 5**).

In the same way that an airplane pilot or an automobile mechanic has a PROCEDURAL CHECKLIST, trainers of intervention of programs require a similar procedural checklist or set of training guidelines. Following these procedural guidelines will increase both the efficacy of any form of intervention and increase the likelihood of generalization.

TREATING THE JUVENILE OFFENDER: LESSONS LEARNED

(Information gleaned from R. Hoge, N. Guerra, & P. Boxer (Eds.) (2008). Treating the juvenile offender. New York: Guilford Press and from www.melissainstitute.org and www.teachsafeschools.org)

Research indicates that:

1. Interventions should be provided closer-to-home, follow a rehabilitation and skills-oriented approach, be evidence-based and gender-sensitive, risk-focused and strengths-based, attempt to engage families and pro-social peers and provide coordinated services for special-needs youth. Interventions need to be developmentally, culturally and gender sensitive.
2. Interventions should be implemented along a continuum of care from least to most restrictive. The least restrictive interventions should be tried first. Institutional placement away from the home setting is least effective.
3. Multi-component programs that address multiple risk factors across multiple contexts/settings simultaneously are most effective. Training programs with youth should not aggregate deviant peers or administer interventions in a group format where offenders may reinforce each other's antisocial behaviors. (**Table 1** offers examples of intervention programs that should be avoided and that may make things “worse.” **Table 2** offers a list of effective viable alternative interventions, as summarized by Dodge et al., 2006). But such contagion effects can be minimized or counteracted by providing close supervision, creating a positive treatment climate and a commitment to a training and rehabilitation future goal-orientation.
4. Intervention should be individually-tailored and should focus on dynamic (changeable) risk factors and should simultaneously build on the trainee's strengths. A Case Conceptualization Model should be used to guide assessment and treatment decision-making. Subgroups of offenders with unique risk profiles (sex offenders, offenders who evidence comorbid psychiatric disorders, substance abuse disorders and who have learning disabilities) require additional focused interventions. There is a need to address co-occurring difficulties.
5. Offenders who evidence childhood-onset life-persistent, escalating patterns of offending (chronic offenders), especially if they evidence a callous and unemotional (CU) attitude (lacking guilt, remorse and disregarding others' feelings, tendency to ignore conventional norms) require special attention. Being a member of a gang presents particular challenges. (Approximately 75% of incarcerated youth have some gang affiliation).
6. Skills-oriented cognitive-behavioral treatments have evidenced the most robust treatment effects. Interventions that nurture emotional self-regulation and interpersonal problem-solving skills training and that provide employment training and job opportunities have the largest impact. Interventions need to help “open doors for success” and create more adaptive “niche-picking” skills (i.e., ways to help youth choose settings in order to avoid high-risk situations and antisocial peers).

7. More specifically, cognitive-behavioral interventions that use experiential activities, role play, frequent practice and overcorrection procedures have been found to be most effective. Active “hands-on” discovery-oriented engaging learning (doing over didactic listening) has been found to be most effective. These training programs usually include self-control training, anger management and negotiation training, relaxation and mindfulness training, social problem-solving, social perspective taking, empathy training, moral reasoning and changing attitudes and beliefs, as well as work on community re-entry skills. Planning for release from treatment settings should begin almost from the outset. All staff members need to employ the “language of rehabilitation” and “metacognitive talk” (active transitive verbs) that nurture personal agency and responsibility and that help youth address the trainee's social-cognitive information processing style (e.g., hostile attribution bias or believing that provoking events were done “on purpose”).
8. Interventions need to follow generalization guidelines. As noted, one cannot “train and hope” for transfer. In order to foster generalization the intervention program needs to focus on ways to foster a positive non-criminal identity with accompanying pro-social normative beliefs, a hopeful future goal-orientation, a sense of personal agency, academic success and job skills, empathy and pro-social peer attachments. Training needs to help change norms about aggression (e.g., help the youth acknowledge the harmful consequences of aggressive behavior). There also needs to be active, ongoing intensive case management that helps youth address re-entry stressors. *(See Trainer's Checklist for ways to nurture the treatment generalization process - - Table 3 and accompanying Trainer's Report Card—Table 4).*
9. Create a treatment milieu that fosters a sense of CommUnity (stressing Unity) and that facilitates change. The treatment milieu should also arrange opportunities for association with pro-social peers and adult role models/mentors (namely, nurture positive adult social bonds).
10. Programs that engage and involve families have proven most effective. Family therapies like **Multisystemic Therapy** (Henggeler and his colleagues); **Functional Family Therapy** (Alexander and Parsons); **Multidimensional Treatment Foster Care** (Chamberlain & Reid) have been found to be most effective when implemented with integrity/fidelity. Research indicated that parenting practices (a lack of parental supervision, poor communication, and inconsistent discipline) and the absence of an affective bond are linked to antisocial activities. Research has shown that children and youth who maintain close bonds to, and a positive relationship with their parents (or parent substitutes), are less likely to be influenced by negative peer groups and they are more able to stand up against negative peer pressure. For an example of a culturally-sensitive parent-youth intervention program that has been successfully implemented with African-American youth and their fathers see <http://www.cdc.gov/prc/selected-interventions/notable-work/boys-health-risks-reduced-father-son-bonds.htm>).
11. Comprehensive individualized, longer duration treatments that train to the point of mastery and that put the youth into a consultative mode is critical in obtaining treatment generalization and durability of training effects. The trainee needs to be able to explain or describe, demonstrate and teach to others what they have learned. Moreover, they have to be able to offer self-generated reasons why engaging in such activities are important in achieving their training goals that have been collaboratively generated.

12. A number of punitively-oriented interventions such as boot camps, “shock” programs (Scared Straight), waiver of juveniles to adult courts have been found to be ineffective, if not iatrogenic (i.e., increase the level of violence).
13. Certain life experiences or “turning points” such as job stability and attachment to significant others (e.g., marriage) can help redirect delinquent trajectories. There is a need to help youth build stakes in pro-social activities through education and mentoring relationships, job acquisition and integration into highly valued intimate relationships. Help youth develop what is called “human capital.” “Human capital” refers to the attainment of personal pro-social competencies, a sense of positive self-respecting identity and a sense of personal agency, self-regulation skills, social problem-solving and communication skills, a system of pro-social normative beliefs, a hopeful future goal-orientation, academic competence that leads to high school graduation and vocational skills. (*See Alternatives to Violence Project www.AVPUSA.org for an example of such a training program*).
14. Fragmented, uncoordinated, insufficient and often inappropriate treatments from multiple services and systems are ineffective. Interventions need to be integrated, rather than parallel or sequential and they need to focus on possible barriers that may undermine the implementation and integrity/fidelity of the treatment (e.g., inadequate staffing, training, funding, antagonistic staff attitudes).
15. Community-based interventions that use ex-gang members as mediators to reduce gang revenge killings have been found to be effective (see Alex Kotlowitz's article “Is urban violence a virus?” in New York Times Magazine, May 2, 2008). The article describes the work of Gary Slutkin in community-based interventions. (gslutkin@vic.edu)

TABLE 1

**PROGRAMS AND POLICIES THAT AGGREGATE DEVIANT PEERS AND THAT SHOULD BE
AVOIDED IF POSSIBLE**

(From Dodge et al. 2006 and www.teachsafeschools.org)

Education

1. Tracking of low-performing students
2. Forced grade retention for disruptive youth
3. Self-contained classrooms for unruly students in special education
4. Group counselling of homogeneously deviant youth
5. Zero tolerance policies for deviant behavior
6. Aggregation of deviant youth through in-school suspension
7. Expulsion practices
8. Alternative schools that aggregate deviant youth
9. Individuals with Disabilities Education Act (IDEA) reforms that allow disruptive special education students to be excluded from mainstream classrooms
10. School-choice policies that leave low-performing students in homogeneous low-performing schools

Juvenile Justice and child welfare

1. Group incarceration
2. Military-style boot camps and wilderness challenges (“brat camps”)
3. Incarceration placement with other offenders who committed the same crime
4. Custodial residential placement in training schools
5. Three strikes-mandated long prison terms
6. Scared Straight
7. Group counselling by probation officer
8. Guided group interaction
9. Positive peer culture
10. Institutional or group foster care
11. Bringing younger delinquents together in groups
12. Vocational training

Mental Health

1. Any group therapy in which the ratio of deviant to non-deviant youth is high
2. Group therapies with poorly trained leaders and lack of supervision
3. Group therapies offering opportunities for unstructured time with deviant peers
4. Group homes or residential facilities that provide inadequate staff training and supervision

Community programming

1. Midnight basketball
2. Unstructured settings that are unsupervised by authority figures (e.g., youth recreation centers designed as places for teens to “hang out”)
3. Group programs at community and recreation centers that are restricted to deviant youth
4. After-school programs that serve only or primarily high-risk youth
5. 21st Century Community Learning Centers
6. Interventions that increase the cohesiveness of gangs
7. Gang Resistance Education and Training programs
8. Comprehensive Gang Intervention program
9. Safe Futures program
10. Urban enterprise zones
11. Federal housing programs that bring together high-risk families

TABLE 2
EFFECTIVE PROGRAMS THAT REPRESENT VIABLE ALTERNATIVES TO AGGREGATING
DEVIANT PEERS
(From Dodge et al. 2006)

Education

1. Universal, environment-centered programs that focus on school-wide reform, including:
 - a. clearly explicated expectations for student and staff behavior
 - b. consistent use of proactive school discipline strategies
 - c. active monitoring of “hot spots” for behavior problems
 - d. improved systems to monitor student achievement and behavior
2. Universal classroom programs to build social competence (e.g., Responding in Peaceful and Positive Ways, PATHS, school-wide bullying prevention programs)
3. School-wide positive behavior support
4. Individual behavior support plan for each student
5. Improved training in behavior management practices for classroom teachers, especially:
 - a. group contingencies
 - b. self-management techniques
 - c. differential reinforcement
6. Incredible Years Teacher Training
7. Good Behavior Game
8. Consultation and support for classroom teachers
9. Family-based Adolescent Transitions Program
10. Matching deviant youth with well-adjusted peers (e.g., Coaching, BrainPower, Peer Coping Skills Training, the Montreal Longitudinal Project)
11. Multimodal programs (e.g., LIFT-Linking Interest of Families and Teachers, Fast Track, Seattle Social Development Project)
12. Proactive prevention programs that shape student “morals” and encourage responsible decision making
13. Cognitive-behavioral Intervention for Trauma in Schools (CBITS)

Juvenile justice and child welfare

1. Functional family therapy
2. Multisystemic therapy
3. Multidimensional treatment foster care
4. Intensive protective supervision
5. Teaching Family Home Model
6. Sending delinquent youth to programs that serve the general population of youth in their neighborhoods (e.g., Boys and Girls Clubs)
7. Community rather than custodial settings
8. Interpersonal skills training
9. Individual counselling
10. Treatment administered by mental health professionals
11. Early diversion programs
12. Victim-offender mediation
13. Teen court programs
14. Therapeutic jurisprudence programs
15. Community commitment orders
16. Psychiatric consultation

Mental Health

1. Individually administered treatment
2. Family-based interventions
3. Adolescent Transitions Program
4. Linking the Interests of Families and Teachers (LIFT)
5. Iowa Strengthening Families Program
6. Family Unidas Program
7. Mentoring programs such as Big Brothers/Big Sisters

Community programming

1. Public or private organizations that are open to all youth, regardless of risk status, and that provide structure and adult involvement (e.g., religious groups, service clubs, Scouts, Boys and Girls Clubs)
2. School-based extracurricular activities that include pro-social peers
3. Encouragement of commitments outside of gangs (e.g., to jobs, family roles, military service, mentors)
4. Early childhood interventions such as the Perry Preschool Program, school readiness programs like Head Start, and programs that highlight reading comprehension skills
5. Job Corps
6. Policing programs that target high-crime neighborhoods where high-risk youth congregate
7. Community efforts to reduce marginalization of specific groups of youth

TABLE 3

CHECKLIST OF WHAT TRAINERS SHOULD DO AT THE OUTSET, DURING AND FOLLOWING TRAINING IN ORDER TO INCREASE THE LIKELIHOOD OF GENERALIZATION**PROCEDURAL CHECKLIST ON WAYS TO IMPROVE GENERALIZATION****AT THE OUTSET OF TRAINING ACTIVITIES:**

- 1. Establish a good working alliance with the trainee because the quality of this relationship is the single most important factor in producing positive outcomes and it exceeds the proportion of outcome attributed to any other feature of the training. The quality of the relationship predicts drop out rate and level of compliance (Norcross, 2002, Wampold, 2004). The trainee needs to feel respected, accepted, engaged, and be treated as a collaborator. Hostile, confrontational, fear-engendering interactions are counter-productive and ineffective. If training is being conducted on a group basis, then the level of group cohesion and identity with the group is predictive of outcome. The trainer should be viewed as a “constructive supportive coach.”**
- 2. Engage the participants in explicit goal-setting. Highlight that the treatment is not only about changing, but transferring (extending) the newly acquired skills (changes) learned in the training program to new situations/settings.**
- 3. Discuss the challenge to generalize or transfer skills. Lead participants to view generalization as an attitude, rather than just as a set of transferable skills. Participants need to find (search out) opportunities to practice what was learned in a supportive environment.**
- 4. Raise concerns about transfer from the outset of training. Have participants examine how learning such skills will help them achieve their short-term and long-term goals. Discuss why learning these skills is of value. Relate skills and homework tasks to treatment goals. Use Motivational Interviewing strategies to engage trainees.**
- 5. Provide participants with opportunities to come up with suggestions of what should be done to transfer skills. Use collaborative Socratic questioning and discovery learning. The concept to be learned should emerge as part of an activity requiring little verbal expression so trainees can figure out what is being taught and why. The trainer can use shaping and scaffolding procedures with prompts of Socratic questioning. When required, directed teaching methods can be added.**
- 6. The skills should be taught in a manner that allows the training to build one skill upon another in a sequenced fashion. Name and describe each skill that is being taught. Encourage the trainees to view these skills as “tools” that they can carry with them and draw upon as needed. Label and refer to transfer strategies and convey that generalization is the goal of treatment. Help them understand how similar skills can be applied across multiple settings (e.g., self-talk, problem-solving). Trainers should discuss,**

model, and label metacognitive self-regulatory strategies.

7. **Tell participants explicitly that transfer is expected. Encourage and challenge patients to apply and adapt skills and strategies to varied and novel situations, rather than learn to apply specific skills to discrete behaviors and settings. Use “like a” statements throughout training. “This skill is like....” Use teachable stories and anecdotes.**
8. **Solicit public commitment statements of what they are going to do and why. Write out on a decisional balance sheet, the pros and cons of making changes. Use behavioral contracts that include transfer activities.**
9. **Tailor instructions to the developmental needs of the participants and be sensitive to gender and cultural differences and train skills that are ecologically valid. Training should build upon the trainees' strengths and abilities.**
10. **Throughout the course of training anticipate and discuss possible barriers and obstacles to implementing homework (both external and internal barriers). Include in the training program skills designed to handle potential barriers.**
11. **Help participants select training and transfer tasks carefully-where there is a high likelihood of similarity. The more similar the features of the training and the real life setting, the greater the likelihood of generalization (e.g., use exposure-based training and provocation challenge procedures in training that are ecologically valid and as similar to real life as possible.)**
12. **Nurture a “community of learners” -- where participants can help each other (e.g., an Alumni Club of graduates, other trainees, pro-social peers).**

DURING THE TRAINING ACTIVITIES

13. **Ensure that the training tasks are tailored to the trainees' levels of competence, namely, slightly above the trainees' current ability levels (“teachable window” or work within the “zone of proximal development” or “zone of rehabilitation potential”). Skills to be taught should be broken down into identifiable parts. Trainers should use minimal prompts and fade supports (scaffold instruction), as trainees gain competence.**
14. **Keep training simple by using acronyms to summarize teaching skills (e.g., SNAP—Stop Now And Pause; RETHINK—Recognize, Empathize, Think, Hear, Integrate, Notice, Keep present problem at hand, or Linehan's Dialectical Behavior therapy uses such acronyms as RAID, SCIDDLE, RSVL, DEAR MAN), so they come to be readily retrievable mnemonics. Use reminders such as wallet-size index cards. Have trainees keep a Training Folder and refer back to it often.**
15. **Provide prolonged, in-depth training with repeated practice to the point of proficiency in order to ensure conceptual understanding. Facilitate skill practice and provide constructive feedback. The length of training should be performance-based, rather than time-based. Provide extended individual and group training where indicated, so**

participants can develop mastery of skills and strategies. Provide help and coaching to complete “homework” assignments.

16. Promote awareness of skills and teach problem-solving metacognitive executive skills and strategies (self-monitoring, planning and freeze-frame procedures) that can be applied across settings. Use overt and covert rehearsal and self-monitoring.
17. Begin by accessing participants' knowledge. Provide advance organizers (“big picture,” reminders of goals) and informed instruction (how the content of this session relates to previous sessions; “*Where have we been?*” and “*Where are we headed?*”).
18. Explicitly instruct on how to transfer. Use direct instruction, discovery-oriented instruction and scaffolded assistance (fade supports and reduce prompts as trainees' performances improve). Employ videotape coping modeling films as training material. Have the trainees make a self-modeling video of successfully performing the skills that they can watch. The training can include such skills as the ability to label emotions and use feeling language; use a calm down plan and how to take a time out; how to solve interpersonal conflicts using social problem-solving, negotiation and assertive communicative skills (e.g., “I” statements, instead of “you” statements).
19. Conduct training across response domains and settings. Training should be conducted “loosely.” This involves varying stimulus contexts for training. Use diverse examples to illustrate the application of skills to different behaviors and to different situations. Use multiple trainers. Work on skills development and maintenance in real world settings using environmental modifications and supports. The trainer should maintain close contact with significant others who should be viewed as “change agents” (e.g., parents who are trained as therapists, or residential staff, classroom teachers, probation officers who are taught how to support, model and reinforce the desired behavioral changes).
20. Use cognitive modeling, think aloud-diaries, journals, behavioral and imaginal rehearsal and role playing. Have an Alumni Club of recent graduates who act as teaching models.
21. Nurture a “cognitive shift” and attitudinal change. Can use modeling films, bibliotherapy, story-telling that nurtures a new “possible self.” Help trainees alter the stories they tell themselves and that they tell others. Have the trainees make a “self-advocacy” videotape of where they have been, where they are now psychologically, and what they hope to achieve in the future, and moreover, how they plan to get there. Trainees might develop a “Hope Chest” that includes items that reflect a different pro-social life-style.
22. Have participants repeat reasons why they should engage in transfer activities; reconfirm public commitment statements; review goal statements with “If...then” and “Whenever...” rules.
23. Review with the trainee, his or her relapse prevention training procedures throughout training. Have trainees analyze and learn from transfer failures and successes and keep a Relapse Prevention (RP) workbook. The trainer should design “Relapse Prevention

Sheets" with the trainee. These sheets should contain reminders of key responses for any problematic situation that the trainees can refer to when necessary. Encourage trainees to use RP concepts and language.

AT THE CONCLUSION OF TRAINING ACTIVITIES

24. Put participants in consulting reflective roles. Following an experiential exercise have participants reflect on the activity (i.e., think about what they just did and what it meant, how can they use these skills in future situations). Have participants teach (demonstrate, coach) and explain verbally or diagrammatically (alone or with others) their acquired skills and transfer strategies. Have participants be in a position of responsibility, giving presentations to and consult with other beginning participants or younger individuals. Have them make teaching videotapes for others.
25. Ensure that participants directly experience the benefits ("pay offs") of choosing new (non-aggressive) options. Ensure that trainees receive naturally occurring rewards.
26. Label and reinforce participants' transfer activities. Talk about maintaining and building upon change.
27. Provide between session coaching. Access to ongoing counselling (computer chat lines, telephone counselling and hotlines).
28. Have the trainee develop an explicit written relapse prevention plan and "trouble shoot" possible solutions to potential obstacles, barriers and responses to possible lapses. Encourage trainees to view "failures" as a reflection of a lack of skills, not enough practice, the training program not being sensitive to trainees' needs and skill levels, rather than a sign of being a "sick," "bad," or an "incompetent" person.
29. Provide active aftercare case management supervision. Use websites and ongoing computer chat-lines. Fade supports and "scaffold" assistance throughout training.
30. Review progress and ensure that trainees take credit (make self-attributions) and declare ownership for performance gains and transfer efforts. Have participants talk about what they learned and take "personal ownership" of coping skills. Trainers should use "how" and "what" questions. ("How did they change? How can they maintain improvements?") Nurture trainees' sense of personal agency and personal efficacy.
31. Encourage trainees to design personal transfer activities. Enlist trainees in a mutual search for situations in which the coping skills can be employed, discussed and practiced. Ask the trainees to discuss and identify the variety of situations where they could apply new skills and strategies. Prompt the trainees to set goals for implementing these skills over the next week. Provide monitoring forms to map progress. Have the trainees adopt a "*personal scientist's*" approach.
32. Involve significant others in training. Keep in touch with significant others (peers, parents, teachers, administrators, family members) from the outset of training through

follow-up. Use a primary prevention program institutional-wide intervention involving peers and use a bystander intervention program to supplement training for the targeted group.

- 33. Space out training sessions to every other week, then monthly so trainees can assume more responsibility for implementing changes.**
- 34. Provide booster sessions and ongoing follow-up group meetings. Have trainees enter group training if they fail to handle lapses successfully. (Use the analogy of a General medical practitioner where patients go for annual checkups. “Fine-tuning” is a smart thing to do). There is research to indicate that merely sending participants a post card after intervention expressing interest and concern enhanced efficacy. (See www.melissainstitute.org -Meichenbaum *Lessons learned working with suicidal patients*).**
- 35. Use a graduation ceremony, involving significant others and include certificates of completion and appreciation. Provide trainees with “transitional objects” (e.g., pictures, logos, tee shirts, trainer's business card and ways to remain in touch).**

TABLE 4
REPORT CARD ON HOW WELL YOUR TRAINING PROGRAMS
FOSTER GENERALIZATION

*How many of these 23 features are included in your training program?
 What grade would you give to your Intervention Program in its ability to foster generalization?*

In order to foster transfer at the OUTSET OF TRAINING, my program:

1. Establishes a good working alliance with trainees so the trainer is viewed as a supportive constructive “coach.”
2. Uses explicit collaborative goal-setting to nurture hope. Discusses the reasons and value of transfer and relates training tasks to treatment goals.
3. Explicitly instructs, challenges and conveys an “expectant attitude” about transfer.
4. Uses discovery learning, labelling transfer skills and strategies.
5. Solicits trainees' public commitment and uses behavioral contracts.
6. Anticipates and discusses possible barriers to transfer.
7. Chooses training and transfer tasks carefully (builds in similarities and uses ecologically-valued training tasks).
8. Develops a “community of learners” (e.g., advanced trainees, an Alumni Club).

In order to foster transfer DURING TRAINING, my training program:

9. Keeps training simple- uses acronyms and reminders (wallet-size cards and a “Hope Chest”).
10. Uses performance-based training to the point of mastery. Provides regular feedback and has trainees self-evaluate and record performance.
11. Accesses prior knowledge and skills, uses advance organizers and scaffolded instruction.
12. Teaches metacognitive skills-involving self-monitoring, planning, self-management, self-rewarding.
13. Conducts training across setting, using multiple trainers and environmental supports.
14. Uses cognitive modeling, think alouds, journaling, rehearsal and role playing procedures.
15. Promotes generalization through between session assignments and between session coaching.

16. Includes relapse prevention activities throughout training that decreases the chance of setbacks after training is completed. “Inoculates” against failure.

In order to foster transfer at the CONCLUSION, my training program:

17. Puts trainees in a consultative role (uses reflection, opportunity to teach others, puts trainees in a position of responsibility).
18. Ensures trainees directly benefit and receive reinforcement for using and describing their transfer skills.
19. Provides active aftercare supervision-fades supports and “scaffolds” assistance.
20. Ensures trainees take credit and ownership for change (self-attributions). Nurtures personal agency.
21. Ensures participants design personal transfer activities.
22. Involves training significant others and ensures that they support, model and reinforce the trainees' new adaptive skills.
23. Provides booster sessions.
24. Conducts a graduation ceremony and offers a Certificate of Accomplishment.

Another way trainers can increase the likelihood of generalization is to have the trainees at various times during training indicate the “take-home lessons” that they have learned and how specifically they will implement each skill (“where, when and how.”) The trainees should be asked to demonstrate (role-play) various skills, and moreover, provide the reasons why engaging in each of these activities could help them achieve their training goals and why doing so is important. The trainees can also be asked to provide a confidence rating of their perceived ability to carry out each skill. What potential barriers/obstacles might they encounter (plan for) and how can these be addressed, if they occur.

Table 5 provides a Summary List of Skills/Activities that Trainees can try. Imagine that members of a Probation Board, Judges, Principals of Schools, Trainers and Parents required the trainees to go through this checklist before being released or placed in a different setting.

The research indicates that placing trainees in a Consultative Mode, where they have to convince others, as well as themselves, of the changes they are committed to working on and exactly “why” doing so is important, will increase the likelihood of generalization and improve the efficacy of any intervention.

TABLE 5

TRAINEE'S CHECKLIST

As a result of participating in training, I have learned how to do the following activities/skills: (Please give examples of each skill and then indicate the reasons why doing each activity is important and how it will help you achieve your goals? What barriers/ obstacles might get in the way of your performing each activity/skill and how can these potential barrriers be anticipated and handled? How confident are you, from 0% confidence to 100% confidence, that you can implement each of these activities?)

- ___ 1. Be on the lookout for triggers and settings (people, places and things) such as the use of drugs or having urges/cravings that set me off. Be vigilant about Apparently Irrelevant Decisions (AIDS) that may contribute to a relapse. Bring these triggers and AIDS into my awareness. (Some examples of my triggers and AIDS are...).
- ___ 2. Reduce risk factors and make sure I spend my time in "safe" places with "safe" people. Work to keep myself out of trouble and away from temptations. Safeguard my environment so it is "unfriendly to trouble." Avoid high-risk situations and activities (people, places and things).
- ___ 3. Notice warning signs of when I am getting upset. (For example, "I am becoming upset, angry, depressed, anxious, bored").
- ___ 4. Conduct my "Clock Analysis" in order to see the connections between my feelings, thoughts and behaviors.
- 12 o'clock-- external and internal triggers
 3 o'clock-- primary and secondary emotions urges and cravings
 6 o'clock-- automatic thoughts/images, thinking patterns, and underlying beliefs
 9 o'clock-- behavioral acts (what I do) and how others respond
- ___ 5. Take actions to break my "Vicious Cycle" (Clock Metaphor)
- ___ 6. Monitor my moods and accompanying thoughts. Keep my journal and check it regularly. Modify my beliefs that fuel my craving and behavior. Look at my Coping Flashcards as reminders of what I have to do differently.
- ___ 7. Remind myself why it is important to stay "safe" and free of trouble. Think about the consequences to me and others of my actions. Conduct a cost-benefit analysis of pros and cons, short-term and long-term (2 X 2 analysis). Keep hope alive by restating my goals in specific behavioral, doable and measurable terms.
- ___ 8. Take responsibility for the choices I make.
- ___ 9. Be able to "notice," "catch," "interrupt," "anticipate/plan for," "set positive/pro-social goals," "reward myself," "tell others/show others what I have learned," and "take credit for changes I have made."

- ___ 10. Ask for help from “safe people” (family, friends, training team members) who will assist me in achieving my training goals. Make “healthy decisions” and develop meaningful relationships.
- ___ 11. Implement my Safety Plan which includes the following specific steps which include a Goal-Plan-Do-Check game plan. I will seek out opportunities to practice my new skills. I will prioritize what I will try first and use my back-up plans.
- ___ 12. Anticipate the possible barriers and potential obstacles that might get in the way of doing my Safety Plan. Have a Game Plan in place to address each of these potential barriers/obstacles.
- ___ 13. Create “If...then” and “Whenever...if” backup Safety Plans.
- ___ 14. Use my Coping Cards as reminders to “jump start” my healthy thinking and Safety Plans.
- ___ 15. Challenge, test out and change my thoughts and thinking processes. Change what I tell myself and alter my “internal debate” and make better choices. Be my own best “coach.”
- ___ 16. Catch myself when I am being demanding and impatient with others. Lengthen my fuse and learn how to “think before I act.” Increase my frustration tolerance. Reduce my “musts” and “shoulds.”
- ___ 17. Accept my feelings and thoughts and learn how to “ride out” the urge to hurt others or to hurt myself. Like an “ocean wave,” my feelings and thoughts peak and then gradually come down.
- ___ 18. Use my problem-solving skills. View perceived provocations, threats and disappointments as “problems-to-be solved,” rather than as interpersonal insults and personal failures.
- ___ 19. Use my self-soothing techniques so I won't hurt others or myself. (Use my relaxation, mindfulness and distraction coping skills).
- ___ 20. Look for the “Middle Road” and use my “I statements,” Negotiation Skills, and Cognitive Skills. For example, I can ask myself:

“What is the data and evidence to support my belief that ...?”

“Are there any other explanations for what happened?”

“What does it mean if indeed...?”

“Can I ask myself the questions that my trainer/counselor would be discussing with me?”

“Can I take my counselor's/trainer's voice with me?”

“What are my goals in the situation and what are all the ways to achieve them?”

“Which alternatives are likely to keep me out of trouble?”

“Don't give into my 'Might as well' type thinking. Keep in mind that 'It matters what I do.'”

“Write this all down in my journal.”

- _____ 21. Remind myself of the reasons to do all of these activities and visit my “Hope Chest.” Remind myself of my “strengths,” “signs of resilience” and “survivor skills” that I have used in the past. Listen to the audiotape of my training sessions as a reminder.
- _____ 22. Use my Future Imagery Procedures. Mentally rehearse how I can handle high-risk situations and pro-social ways to achieve my goals beforehand.
- _____ 23. Cope with any lapses that may occur and view them as “learning opportunities.” These are “wake-up” calls to use my coping skills. They should awaken my curiosity so I can play detective/scientist and use my problem-solving skills. Use my Clock analysis to figure out what went wrong.
- _____ 24. Plan for future high-risk situations and possible reoccurrences so I am not “blindsided” down the road. I can review my Relapse Prevention Journal on lessons learned from past lapses and look for ways to cope with setbacks. I need to DO my recovery plan (that is, take the time---2 minutes---to remember why I am following my treatment and recovery plans, taking my medication, doing “safe” things).
- _____ 25. I can write myself a letter listing my various coping skills and share this with trusted others. Make a “gift” of what I learned by sharing it with others.
- _____ 26. Take pride in what I have been able to achieve, “in spite of” possible temptations, social pressure, conflict with others and upsetting feelings (boredom, loneliness, humiliation, guilt, shame, anger).
- _____ 27. Recognize that I am on a “journey,” but not alone in creating a “Life worth Living.” Structure my daily activities with meaningful activities. Live up to my behavioral contract that I made with others and with myself. Remember that being a “man” (“adult,” “responsible woman”) is keeping your word and being a model for others. Maintain hope and demonstrate the “courage to change” and create a “positive lifestyle.” Remember that recovery and developing a new lifestyle and a new “possible self” is a marathon, and NOT a sprint.
- _____ 28. These are some of the things I have learned from my training that I can use. In addition, I can also _____.

REFERENCES

- Alternatives to Violence Project (2002). Manual Basic Course. Plainfield, VT: AVP Distribution Service (See www.AVPUSA.org).
- Diaz, R.M. (1990). The social origins of self-regulation. In L.C. Moll (ed.), Vygotsky and education. Cambridge, MA: Cambridge University Press.
- Dodge, K., Dishion, T. & Lansford, J. (2006). Deviant peer influences in programs for youth. New York: Guilford Press.
- Hoge, R., Guerra, N. & Boxer, P. (Eds.) (2008). Treating the juvenile offender. New York: Guilford Press.
- Kotlowitz, A. (2008, May 2). Is urban violence a virus? New York Times Magazine.
- Larson, J. (2005). Think first. Addressing aggressive behavior in secondary schools. New York: Guilford Press.
- Larson, J. & Lochman, J. (2001). Helping school children cope with anger: A cognitive behavior intervention. New York: Guilford Press.
- Meichenbaum, D. (1977). Cognitive behavior modification: An integrative approach. New York: Plenum Press.
- Meichenbaum, D. (2005). Treating individuals with anger control problems and aggressive behaviors. Clearwater, FL: Research Press.
- Meichenbaum, D. & Biemiller, A. (1998). Nurturing independent learners. Boston: Brookline Books.
- Miller, M.L. & Shuford, J.A. (2005). The Alternatives to Violence Project and Recidivism. (Retrieved July 7, 2008 from www.AVPUSA.org).
- Norcross, J.C. (2002). Psychotherapy relationships that work. New York: Oxford University Press.
- Pressley, M. (1990). Cognitive strategy instruction. Cambridge, MA: Brookline.
- Stokes, T.F. & Baer, D.M. (1997). An implicit technology of generalization. Journal of Applied Behavior Analysis, 10, 349-367.
- Stokes, T.F. & Osnes, P.G. (1988). The applied technology of generalization and maintenance. In R.H. Horner, G. Dunlap & R.I. Koegel (Eds.), Generalization and maintenance: Lifestyle changes in applied settings. Baltimore, MD: Paul H. Brookes.
- Toglia, J.P. (1991). Generalization of treatment. American Journal of Occupational Therapy, 45, 505-516.
- Walraith, C. (2001). Evaluation of an inmate-run Alternatives to Violence Project. Journal of Interpersonal Violence, 16, 607-611.
- Wampold, B.E. (2001). The great psychotherapy debate: Models, methods and findings. Mahwah, NJ: Lawrence Erlbaum.
- Wood, D., Bruner, J.S. & Ross, G. (1976). The role of tutoring in problem solving. Journal of Child Psychology and Psychiatry, 17, 89-100.