

# Colorado Probation Research in Brief

## *Utilizing Behavioral Interventions to Improve Supervision Outcomes in Community-Based Corrections*

Wodahl, E., Garland, B., Culhane, S., and McCarty, W. (2011) *Utilizing Behavioral Interventions to Improve Supervision and Outcomes in Community-Based Corrections*. Criminal Justice and Behavior, 38:386-405.

**Key Words:** sanctions, incentives, rewards, 4:1, technical violations, behavior change, learning theory

### **A Balanced Approach**

#### **Summary/Conclusions**

Researchers used a random sample of offenders to determine the effect of rewards and sanctions on successful outcomes. Offenders in the sample were on intensive supervision (ISP) and included probationers and parolees. The study explored three specific issues: 1. Do sanctions for violations influence the likelihood of successful completion? 2. Do rewards for compliant behavior influence the likelihood of successful completion? 3. Does a ratio of rewards to sanctions influence the likelihood of successful completion? Results indicated that all three approaches worked, but the most significant outcomes were found with the use of a 4:1 or higher ratio.

#### **Limitations of Information**

There are cautions for generalizing the results of this study. First, the demographics of the sample population may not be same as the average Colorado probationer. Secondly, there are external influences on success rates that could not be accounted for (e.g., agency culture, officer characteristics). Additionally, the data was limited to general categories of rewards and sanctions, so the effect of specific types of responses are not known.

**Caveat:** The information presented here is intended to summarize and inform readers of research and information relevant to probation work. It can provide a framework for carrying out the business of probation as well as suggestions for practical application of the material. While it may, in some instances, lead to further exploration and result in *future* decisions, it is not intended to prescribe policy and is not necessarily conclusive in its findings. Some of its limitations are described above.

There are two approaches to gain supervision compliance: deterrent-based, in which punishment or threat of punishment is used; and behavioral strategies, in which rewards and sanctions are used. Although “there is little evidence to suggest that deterrent-based strategies have been successful in increasing offender compliance,” research noted in this article “suggests that programs that are able to incorporate sanctions in concert with the use of rewards to reinforce conforming behavior will be more effective than those that rely on sanctions alone.”

This study explored the effect of sanctions and behavioral strategies by selecting a random sample of 283 probationers and parolees on ISP in Wyoming between 2000 and 2003.

Results indicated that using sanctions alone does explain a small portion (27%) of why offenders successfully complete ISP, as the odds of successful completion were improved as the number of sanctions increased.

Results indicated that using rewards alone explains a larger portion (46%) of why offenders successfully complete ISP, as the odds of successful completion were improved as the number of rewards increased.

However, “the most powerful” predictor of success was the ratio variable, which explained 66% of the completion type. As the ratio of rewards to sanctions increased, the probability of a successful completion grew substantially. For example, an offender who received a 1:2 reward-to-punishment ratio had about a

19% probability of completing ISP successfully. When the ratio was increased to 2:1 reward-to-punishment, the probability of successful completion increased to 57%; moreover, when increased to 4:1, the probability increased to 71%. The study concluded that a 4:1 ratio is optimal, as the effect of increasing rewards slowly diminishes.

#### **Practical Applications**

- ✓ Aim for the 4:1 reward-to-sanction ratio with all clients.
- ✓ Utilize the incentives and sanctions lists, developed for the TVBC project, to expand the options available for rewarding and punishing clients.
- ✓ Talk with clients at the outset of supervision to determine what they consider to be meaningful rewards and punishments.
- ✓ Clearly tie rewards or sanctions to the specific behavior you are addressing, so it is evident to the client why they are receiving a response.
- ✓ Engage the principles of effective responses. **Celerity**-Respond as quickly after the behavior as possible. **Certainty**-Respond to all violations in some way. **Consistency**-Similar situations should result in similar responses. **Neutrality**-Tell clients how responses are chosen. **Parsimony**-Responses should be no more severe or gratuitous than needed to effect the behavior. **Proportionality**-Responses must be proportional, so the size of the response matches the behavior. **Risk and Need**-The higher the client's risk, the more intense the response. Also, tailor responses to the identified criminogenic needs.