# Summary of the Systematic Review

# Effectiveness of Programs Designed to Improve Self-Control

# Authors and report:

Alex R. Piquero, Wesley G. Jennings, D. P. Farrington (2008): Effectiveness of Programs Designed to Improve Self-Control, <u>www.bra.se</u>

This summary is completely based on the referred report, although the text is slightly edited.

# Background

This study evaluates the research on the effectiveness of programs designed to improve self-control up to age 10 among children and adolescents, and assesses the effects of these programs on self-control and delinquency/crime. There has been much attention paid in both criminology and psychology with respect to the importance of self-control in regulating antisocial, delinquent, and criminal behavior over the life course. Given the importance of selfcontrol, there have also been several programmatic efforts designed to improve self-control among children and adolescents. This study focuses on two inter-related questions "What is the effectiveness of programs designed to improve self-control up to age 10 among children and adolescents?" and "What are the effects of these programs on self-control and delinquency/crime?" While there were some studies with relatively small samples as well as some with considerably large samples, on average the studies included approximately 129 children/adolescents. On average, the children/adolescents were six years of age at the time of the intervention with a range of three to 10 years old.

# **Research Methods**

The report included only quantitative studies published in the English language and investigated the effects of self-control improvement programs on child behavior problems such as conduct problems, antisocial behavior and delinquency. Studies were only considered if they had a randomized controlled trial design with self-control improvement as a major component of the intervention and post-test measures of and/or child behavior problems for the experimental and control participants. Some studies were excluded because of the lack of random assignment, targeting mostly older adolescents or did not contain any relevant self-control and/or behavioral outcome measures/data. Thus, there were 34 studies that met the inclusion criteria as outlined. These studies generated 43 self-control effect sizes and 28 delinquency effect sizes.

### Results

Meta-analytic results indicate that self-control programs improve a child/adolescent's self-control. These interventions also reduce delinquency; and the positive effects generally hold across a number of different moderator variables and groupings as well as by outcome source (parent-, teacher-, direct observer-, self-, and clinical report). In particular, programs that are based on specific training efforts, that are focused and of short-duration are successful ingredients for improving self-control and, in turn, reducing delinquency.

Overall, the overwhelming majority of the effect sizes were positive suggesting that the effect of self control improvement programs seem to benefit children/adolescents by improving their self-control by post-test assessment. Some examples of the significant categorical moderators included: gender composition, where females evinced higher self-control gains, race composition, attrition problems published versus not published.

Nearly two-thirds of the studies were from published data between 1975 and 2008 and the overwhelming majority was performed in the United States (90%). Most studies operated in a school setting and drew their samples from high-risk/low income populations and most were based on mostly male (56%) and white (68%) samples. Most were broadly characterized as social skills development programs. A considerable number of the interventions focused on cognitive coping strategies, video tape training/role playing, immediate/delayed rewards clinical interventions and relaxation training. Examples of the broad categories of intervention type are social skills development studies where a number of integrated intervention programs are applied such as: curriculum, parent groups, child social skills training groups, parent-child sharing time, home visiting, child peer pairing, and academic tutoring. These programs address skills for emotional understanding and communication, friendship skills, self-control skills and social problem solving skills.

Other studies involved cognitive self-instructional training where children are taught to covertly emit verbalizations that will cue or guide their non-verbal behavior or studies classified as a video tape training/role playing intervention where the children are sat in front of a television and told by the instructor: "Here is my television. The boy you will see on TV has been told not to touch the toys that are in front of him. Watch closely". The immediate/delayed rewards clinical interventions took place in an experimental room where the experimenter showed the child how to use the desk bell and informed them that once they left the room, the child could ring the bell and the experimenter would return. There were also studies with relaxation training inter-

ventions where the children/adolescents were instructed to clear their minds of thoughts and worries while performing deep breathing techniques.

# Conclusions

Most studies were of sufficient quality because they used a research design involving random assignment. Self-control programs improve a child / adoles-cent's self-control and lead to reductions in delinquency.

But outcomes were only examined during a certain period of the life course (before age 10/12); therefore, it would be worthwhile to examine if the effectiveness of self-control improvement programs persists over time, particularly into late adolescence and early adulthood. It is not clear how these efforts may/may not improve outcomes in other life-course domains (e.g., improve academic performance). Research has shown that childrearing practices and socialization influences are affected by neighborhood context. Future studies should make efforts to measure the relative costs and benefits of interventions such as these across a variety of life course domains.

Interventions aimed at improving socialization and child-rearing practices (which produce more self-control) in the first decade of life offer benefits for the improvement of self-control as well as the reduction of delinquency/crime. Investment in these sorts of efforts should be an important part of the policy response, especially because self-control is malleable and responsive to external sources of socialization. The editors concluded that such efforts should serve as successful exemplars that warrant replication and extension all the while recognizing that scaling these programs up may not be as effective as keeping them narrow and targeted.