Prospectus for "Improving Non-Cognitive Skills as a Means of Reducing Adolescent Crime"

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The importance of cognitive skill for socioeconomic success has been known for some time. More recent work has highlighted the importance of non-cognitive skill. Findings on non-cognitive skill suggest new strategies for reducing crime.

Non-cognitive skills influence numerous measures of socioeconomic success, including schooling, earnings, health and longevity. Their importance in relation to cognitive skills varies across measures. Crime is an area where non-cognitive skills are particularly important.

Cognitive and non-cognitive skills also differ developmentally. Cognitive skills exhibit strong inter-temporal complementarities. The development of cognitive skills generally are much like the development of math skills. Just as arithmetic is a building block for algebra, basic cognitive skills are building blocks for more advanced skills. As a result, the marginal product of investment in cognitive skill is highest for pre-school age children and falls rapidly with age.

For non-cognitive skills, inter-temporal complementarities are weaker, so investments in non-cognitive skills remain productive even into adolescence. This bodes well for the idea of raising non-cognitive skills as a means to reduce crime. The reason is that much crime is a phenomenon of youth. Delinquency tends to begin in early adolescence and peak in the late teen years. It may be much more effective to structure anti-crime interventions during these peak crime years around non-cognitive skills, which are still malleable in adolescence, than around cognitive skills, which are not.

By way of example, one non-cognitive skill purportedly linked to crime reduction is impulse control. Many crimes, ranging from theft to murder, are thought to be carried out on impulse. At the same time, impulsivity is an element of many taxonomies of personality. Interventions that focus on reducing impulsivity could pay off in reducing crime.

The suggestion that non-cognitive skills may serve as a useful focus for anti-crime interventions raises basic questions. How do we raise non-cognitive skills? Are some more important than others? Are there types of non-cognitive skill deficits that are most closely linked to crime?

Whereas such questions would have reasonably clear answers if the subject were cognitive skills, they are much less clear for non-cognitive skills. Schools are not the primary locus for investment in non-cognitive skills, as they are for investments in cognitive skills. Nor are there established curricula for developing specific non-cognitive skills, as there are for developing specific cognitive skills such as mathematics, literacy, and the like.

Much of what is known about interventions to raise non-cognitive skills comes from the experimental psychology literature. The interventions themselves are usually carried out in a medical or therapeutic setting. They fall into two broad categories. The first has a relatively narrow focus, seeking to reduce offending. The second has a broader focus, seeking to change personality traits thought conducive to crime. The two types of interventions focus largely on different outcomes. The first would focus on offending itself, or on attitudes and behaviors closely associated with offending. The second would

focus on long-term dispositions associated with crime, such as certain traits or syndromes.

The main contribution of the paper will be to review and organize what is known about interventions designed to reduce adolescent crime by increasing non-cognitive skills. Our focus on adolescence is motivated by the sizable role that adolescents play in criminal offending. We plan to further focus our efforts by emphasizing the role of interventions that focus specifically on non-cognitive skills. These interventions may include school-based programs, for example, but we will not focus on the non-cognitive impact of general school activities. Likewise, we will include interventions that focus on the family, but will not cover the role that families play in promoting non-cognitive skills generally.

Our main organizing device will be a 2-by-2 matrix that cross-classifies interventions by focus and by outcome. We will search the experimental psychology literature for sources. We will describe the relevant interventions that have been studied, organize them according to the typology outlined above, and discuss the evidence on their effectiveness and scope. Where the literature permits, we will distinguish different types of non-cognitive skills.

We will also include information about costs. If enough information can be gathered, we will attempt to roughly estimate a benefit-cost ratio. If possible, we will distinguish costs according to the focus of the program, since we might expect interventions that focus on long-term personality change to be more expensive than interventions focused on short-term behavioral change. Finally, we plan to present

comparative estimates of the cost of reducing crime via investments in non-cognitive skills to strategies that focus on cognitive skills.

There is substantial recent evidence that non-cognitive skill deficiencies are linked to crime. This suggests using non-cognitive skills as a focal point for devising anti-crime strategies. There is not a lot of work on this topic, and most of it has been published in venues that are off the beaten track for economists. By organizing and synthesizing what is known about the subject, we hope to stimulate further work on the topic.