## Testimony of Jennifer L. Woolard, Ph.D. Assistant Professor of Psychology, Georgetown University

July 12, 2007

Prepared for the joint hearing of the

Committee on Education and Labor's

Subcommittee on Healthy Families and Communities

And

the Judiciary Committee's Crime, Terrorism, and Homeland Security Subcommittee

Madame Chairwoman and members of the Subcommittee on Healthy Families and Communities, and the Subcommittee on Crime, Terrorism, and Homeland Security, thank you for the opportunity to speak with you this afternoon about the Juvenile Justice and Delinquency Prevention Act. As a developmental and community psychologist who specializes in adolescence and the law I share with you some of what behavioral science research can contribute to the policy discussion about responses to youth.

First, adolescents are developmentally different from adults in ways that are critical to behaviors that are relevant to the justice system. Although the belief that adolescents are different may appear patently obvious to parents of adolescents or those of us who recall our own youth, the critical point here is that advances in behavioral and brain research support a fundamental tenet of the juvenile justice system itself – that these differences are critical to behaviors relevant to the justice system. In my brief time I will focus on two major aspects of adolescents' functioning – what my colleague Laurence Steinberg calls the cognitive control network and the socio-emotional network.

The socio-emotional network refers to brain systems responsible for emotion, rewards, and social processing. Imaging research shows that these brain regions undergo major changes in early adolescence that are related in part to hormonal changes of puberty. These changes coincide with characteristics of adolescence such as increased sensation-seeking, increased/easier emotional arousal, and increased attentiveness to social information. So, adolescence is a time characterized by a socio-emotional system that is easily aroused and highly sensitive to social feedback.

At the same time, adolescence is characterized by a still-immature cognitive control system. When we talk about the cognitive system we're not just talking about intellectual ability, which does increase throughout childhood and adolescence but really reaches its peak at about age 16 – perhaps disappointing news to those of us well beyond those years. We're also talking about planning, future orientation, and the ability to regulate oneself. These critical abilities involve prefrontal and anterior cingulate portions of the brain that continue to develop well into young adulthood. These areas are responsible for what we might consider mature or deliberate thinking – the abilities to identify and consider future consequences, understand possible sequences of events, and control impulses.

As a result, adolescents are less able to control impulses, less able to resist pressure from peers, less likely to think ahead, and more driven by the thrill of rewards. Adolescents' psychosocial functioning, even at the age of 18, is significantly less mature than that of individuals in their mid-20s. Moreover, the effects of immaturity are probably even greater outside the control of a laboratory. For example, under conditions of emotional arousal or stress juveniles' cognitive capacity to think like adults is undermined by that socioemotional system. Risky behavior may be produced by these competing systems but in adolescence it's not a fair fight – the socioemotional system has an advantage in the circumstances that are not controlled, deliberate, and calm – circumstances that may encompass much of adolescent delinquency. Theory suggests that with maturation comes

the integration of the two systems, bringing their influence into greater balance and perhaps contributing to the reduction in risky behavior we see in adulthood.

Let me be clear – the advances in brain imaging techniques such as Functional Magnetic Resonance Imagine are exciting and offer windows into the structure and function of the brain. However, research is still at the early stages. We cannot definitively tell you that certain regions are "responsible" for risky behavior, immature thinking, or delinquent acts. It cannot be used to evaluate individual development, assess guilt or innocence, or give a probability of recidivism or responsiveness to treatment. It cannot tell us where adolescence ends and adulthood begins. What it does do, however, is tell us that our initial brain research is consistent with the decades of research documenting important differences in the cognitive capacities, psychosocial development, and behavior of adolescents compared to adults.

The research on developmental differences challenges policymakers and practitioners to sort and manage a young population that can appear simultaneously adult-like and immature. Because it is a period of broad and fundamental change, adolescence is a time of incredible diversity within and among youth. Individuals may differ from each other, but the same adolescent may be more or less advanced in various specific capacities. For example, he may be able to think in quite sophisticated ways, but be emotionally immature. Also, age is not a consistent marker of maturity. Two fifteen-year-olds may vary widely in their physical appearances, cognitive abilities and social experiences.

Adolescents face common developmental tasks but approach them in different ways and

at different rates; variability is the norm. Out of this variability, we know that most adolescents mature into law-abiding, productive adult citizens. So, what guidance can developmental research provide?

I believe the body of behavioral and brain research calls into question assumptions made by some that juveniles are simply "miniature adults" because they are capable of committing certain offenses. For example, while many laws allowing or requiring juveniles to be tried as adults facilitate categorical distinctions based on physical age, the expressed rationales for transfer legislation are tied to developmental maturity – which are often not equivalent. If the historical intent of transfer laws were met, i.e., the removal of a small number of serious offenders who are unamenable to treatment or pose a serious risk to public safety, one *might* argue that the youth who end up in the criminal justice system indeed represent the mature, hardened criminal for whom development differences are nonexistent or irrelevant.<sup>i</sup> In contrast, the expansion of transfer mechanisms has resulted in a larger, more heterogeneous population with many for whom that maturation is likely not yet complete.

The reality of managing young offenders it is not simply a matter of adjusting existing adult programs and practices; rather, it requires a qualitatively different approach. The importance of separating youth from adults in correctional settings cannot be overemphasized. Youths' foreshortened time perspective, for example, can mean that the same amount of time in isolation imposed for disciplinary sanctions for adults can have a more severe or excessive impact on youth. One study comparing the perceptions of youth

transferred to the adult system with those retained in the juvenile system found that over 60 % of the youth rated prison as having a negative impact on their attitudes and behaviors, in part because staff treated them negatively or apathetically. Youths reported that juvenile sanctions had an effect because they gained something (e.g., skills, hope, services); adult sanctions tended to have an effect on attitudes and behavior because they cost something (e.g., loss of hope, safety, respect).

It is incumbent upon researchers and policymakers to ask questions about outcomes that extend beyond recidivism to include pathways of development (e.g., appropriate relationship formation, individual capacities) and positive engagement in the larger society (e.g., employment, contributions to society). I applaud your interest in these issues and encourage you to consider the resources that developmental research can offer through systematic theory and evidence. These findings, at a minimum, support the importance of a developmentally appropriate juvenile justice system that simultaneously works to prevent and reduce offending while augmenting the opportunity for youth to follow a successful and productive developmental pathway.

\_

<sup>&</sup>lt;sup>i</sup> Although even in this situation, it is not clear that these youth would be fully mature in the ways described above. The combination of serious crime with perceived lack of amenability or risk to public safety is neither a necessary nor sufficient guarantee of mature development.