OMB No. 0925-0001 and 0925-0002 (Rev. 10/2021 Approved Through 09/30/2024)

BIOGRAPHICAL SKETCH

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NAME: Steinberg, Laurence

eRA COMMONS USER NAME (credential, e.g., agency login):

POSITION TITLE: Distinguished University Professor and Laura H. Carnell Professor of Psychology

EDUCATION/TRAINING (Begin with baccalaureate or other initial professional education, such as nursing, include postdoctoral training and residency training if applicable. Add/delete rows as necessary.)

| INSTITUTION AND LOCATION | DEGREE  (if applicable) | Completion Date  MM/YYYY | FIELD OF STUDY |
| --- | --- | --- | --- |
| Vassar College | B.A. | 05/1974 | Psychology |
| Cornell University | Ph.D. | 08/1977 | Developmental Psychology |

**A. Personal Statement**

I am an expert in normative and atypical development in adolescence. My current research interests include the neural underpinnings of adolescent risk-taking and decision-making, juvenile crime and delinquency, the links between brain and behavioral development, and legal and social policy. As Director of the MacArthur Foundation’s Research Network on Adolescent Development and Juvenile Justice from 1997-2008, I headed a study of the development of judgment and decision-making between the ages of 10 and 30 that has generated new findings concerning the independent contributions to risk-taking of sensation-seeking and impulsivity and co-directed a large-scale prospective study of serious juvenile offenders. My recent research includes several studies of peer influences on adolescent risk-taking and decision-making; a cross-cultural study of parenting, adolescent self-regulation, and risk-taking; a study of adolescent depression and reward sensitivity; and a study of first-time juvenile offenders.

I will provide guidance to William Mitchell on his proposed F99/K00 project using my expertise in adolescent social and reward-processing development. The proposed project represents a valuable contribution to the extant developmental and information processing literature. I have advised many graduate and early-career researchers and look forward to contributing my experience to William’s award. I am specifically well-situated to provide developmental theory in which to contextualize William’s F99 results and assist in the planning of and transition to the K00 portion of William’s proposal.

**Ongoing Research Support**

**1 R01 HD098097-01A1 Chein (PI) 09/01/2021-07/31/2026**

**(NICHD)**

**Origins and Outcomes of Smartphone and Social Media Habits Across Development**

**This award examines the predictors, correlates, and consequences of smartphone and social media use on adolescent development.**

**Role: Co-I**

**B. Positions, Scientific Appointments, and Honors**

Positions

|  |  |
| --- | --- |
| 1999 - | Distinguished University Professor, Temple University |
| 1998 - | Laura H. Carnell Professor of Psychology, Temple University |
| 1988 - | Professor of Psychology, Temple University |
| 1983 – 1989 | Professor of Child and Family Studies, University of Wisconsin--Madison |
| 1977 – 1982 | Assistant to Associate Professor of Social Ecology, University of California, Irvine |
| 1976 – 1977 | Lecturer in Human Development and Family Studies, Cornell University |

**Selected Honors**

|  |  |
| --- | --- |
| 2023 | Award for Distinguished Contributions to Developmental Psychology (formerly known as the G. Stanley Hall Award), American Psychological Association |
| 2022 | James McKeen Fellow Award, Association for Psychological Science |
| 2014 | Elizabeth Hurlock Beckman Award |
| 2013 - 2017 | Highly Cited Researcher, Thomson Reuters |
| 2013 (Elected) | Fellow, American Academy of Arts and Sciences |
| 2011 - | Member, MacArthur Foundation Research Network on Law and Neuroscience |
| 2011 | Henry and Bryna David Lecture, National Academy of Sciences |
| 2009 | Klaus J. Jacobs Research Prize for Productive Youth Development |
| 2009 | Award for Distinguished Contributions to Research in Public Policy, American Psychological Association |
| 2008-2012 | Chair, Committee on the Science of Adolescence, The National Academies |
| 2008 (Elected) | Fellow, Association for Psychological Science |
| 2008 | Presidential Citation, American Psychological Association |
| 2006 - 2008 | President, Division of Developmental Psychology, American Psychological Association |
| 2005 - 2008 | Member, Board on Children, Youth, and Families, Division of Behavioral and Social Sciences and the Institute of Medicine, The National Academies |
| 2005 | Distinguished Scientist Lecturer, American Psychological Association |
| 2004 - 2008 | Steering Committee and Executive Committee, NICHD Study of Early Child Care and Youth Development |
| 2003 | Urie Bronfenbrenner Award for Lifetime Contribution to Developmental Psychology in the Service of Science and Society, American Psychological Association |
| 2002 – 2007 | Member, NIMH Research Network on Affect Regulation and Adolescent Brain Maturation |
| 2000 | John P. Hill Memorial Award for Outstanding Contributions to the Study of Adolescence, Society for Research on Adolescence |
| 1999 | Gallagher Lecturer, Society for Adolescent Medicine |
| 1998 – 2000 | President, Society for Research on Adolescence |
| 1997 – 2008 | Director, MacArthur Foundation Research Network on Adolescent Development and Juvenile Justice |
| 1995 – 2000 | Member, MacArthur Foundation Research Network on Psychopathology and Development |
| 1987 (Elected) | Fellow, American Psychological Association, Division 7 (Developmental Psychology) |
| 1983 - 1988 | Faculty Scholar, William T. Grant Foundation, Program in the Mental Health of Children |
| 1976 - 1977 | Cornell University Fellowship |
| 1974 | Phi Beta Kappa and Graduation with Honors and Distinction in Psychology, Vassar College |

**C. Contributions to Science**

(Note: \* denotes a current or former student or fellow under my supervision)

1. The Dual Systems Perspective on Adolescent Decision Making. Compared to people of other ages, adolescents are more likely to engage in risky and reckless behavior, which poses a tremendous threat to their health and well-being. Traditional psychological accounts of adolescent risk-taking, including those that view it as the product of cognitive deficiency or delusions of invulnerability, have not proven to be correct. As an alternative to these views, I have advanced a neuroscientifically informed perspective on adolescent decision making, known as the “dual systems” perspective, that views reckless behavior in adolescence as the byproduct of an easily aroused “socioemotional reward system” and a still immature “cognitive control system.” Risk taking is the result of a maturational imbalance between these systems that is characteristic of middle and late adolescence. The model has had considerable influence on the study of adolescent development; the 2008 article in which I first proposed this view has been cited more than 4,000 times. Our research on this topic was cited by the U.S. Supreme court as one basis for its decision to abolish the juvenile death penalty and limit the use of life without parole as a sentence for juveniles.

\*Icenogle, G., **Steinberg, L.**, \*Duell, N., Chein, J., Chang, L., Chaudary, N., . . . Bacchini, D. (2019). Adolescents’ cognitive capacity reaches adult levels prior to their psychosocial maturity: Evidence for a “maturity gap” in a multinational sample. *Law and Human Behavior*, *43*, 69-85.

Shulman, E.\*, Smith, A.\*, Silva, K.\*, Icenogle, G.\*, Duell, N.\*, Chein, J., & **Steinberg, L.** (2015). The dual systems model: Review, reappraisal, and reaffirmation. *Developmental Cognitive Neuroscience, 17*, 103-117.

**Steinberg, L.** (2008). A social neuroscience perspective on adolescent risk-taking. *Developmental Review*, *28*, 78-106.

**Steinberg, L.**, Icenogle, G.\*, Shulman, E.\*, Breiner, K.\*, Chein, J., Bacchini, D., . . . Takash, H. (2018). Around the world, adolescence is a time of heightened sensation seeking and immature self-regulation. *Developmental Science*, *21*, 1-13.

2. The Peer Effect on Adolescent Risk Taking. One hallmark of adolescent risk taking is that it often occurs when young people are in groups, a phenomenon normally attributed to the effects of explicit peer pressure. In a series of experiments in which we randomly assign individuals to perform decision making tasks either alone or in the presence of peers, my colleagues and I have demonstrated that adolescents, but not adults, take more risks in the company of their peers, and that this effect is not merely due to explicit peer pressure (in some experiments, the peers are in another room and not in communication with the target participant.) Instead, we have shown that the peer effect on adolescent risk taking is likely due to the impact of peer presence on the activation of the adolescent brain’s reward circuitry. This, then, inclines adolescents to pay more attention to the potential rewards of a risky choice.

Chein, J., Albert, D.\*, O’Brien, L.\*, Uckert, K.\*, & **Steinberg, L.** (2011). Peers increase adolescent risk taking by enhancing activity in the brain’s reward circuitry. *Developmental Science*, *14*, F1–F10. PMCID: 3075496.

Gardner, M.\*, & **Steinberg, L.** (2005). Peer influence on risk-taking, risk preference, and risky decision-making in adolescence and adulthood: An experimental study. *Developmental Psychology*, *41*, 625-635.

Silva, K.\*, Patrianakos, J.\*, Chein, J., & **Steinberg, L.** (2017). Joint effects of peer pressure and fatigue on risk and reward processing in adolescence. *Journal of Youth and Adolescence*, *46*, 1878-1890.

Smith, A.,\* Rosenbaum, G.,\* Botdorf, M.,\* **Steinberg, L.**, & Chein, J. (2018). Peers influence adolescent reward processing, but not response inhibition. *Cognitive, Affective, and Behavioral Neuroscience, 18*, 284-295.

3. Adolescent Development in the Family Context. I have made numerous contributions to the study of parent-adolescent relationships, including research on the ways in which parent-child relationships change during the transition into adolescence (and, especially, with respect to the development of autonomy), the impact of variations in parenting practices on adolescent development, and the impact of adolescence on parental well-being and mental health. Numerous papers from this program of work have been cited more than 1,000 times each. I have shown how parent-child relationships are altered by the child’s pubertal maturation and have demonstrated the benefits of “authoritative parenting” across a wide array of ethnic and socioeconomic groups. My work on authoritative parenting has challenged the widely held belief that the benefits of different types of parenting are culturally relative and that the authoritative style is mainly beneficial to white, middle-class children. Our influential 1993 theoretical article on parenting style (Darling & Steinberg, 1993), in which we draw a distinction between the overall family climate in which the child grows (i.e., the parents’ “style” of parenting) and the specific practices in which parents engage, has been cited nearly 4,000 times. The thrust of the argument is that the same practice can have markedly different effects on children depending on the emotional context in which it takes place. Among the most striking findings to emerge from this program of work is the first published paper showing that adolescent pubertal maturation is actually hastened by growing up in a family environment characterized by relatively higher levels of conflict and lower levels of closeness.

Darling, N.\*, & **Steinberg, L.** (1993). Parenting style as context: An integrative model. *Psychological Bulletin, 113*, 487-496.

Lamborn, S.\*, Mounts, N.\*, **Steinberg, L.**, & Dornbusch, S. (1991). Patterns of competence and adjustment among adolescents from authoritative, authoritarian, indulgent, and neglectful homes. *Child Development*, *62*, 1049-1065.

**Steinberg, L.** (1988). Reciprocal relation between parent-child distance and pubertal maturation. *Developmental Psychology*, *24*, 122-128.

**Steinberg, L.**, & Silverberg, S.\* (1986). The vicissitudes of autonomy in early adolescence. *Child Development*, *57*, 841-851.

4. The Psychological Costs of Adolescent Employment. Prior to 1980, it was widely assumed that adolescents benefitted psychologically by working in part-time jobs after school. My colleagues and I were the first developmental psychologists to question the value of after-school employment for adolescent development and mental health. We have shown in a series of studies that after-school employment that exceeds 20 hours per week leads to declines in school performance and increases in substance use and delinquency. As a result of our work, there was a paradigm shift in the field toward a more cautious view of adolescent employment, and many states changed their child labor laws to place more stringent limits on the number of hours adolescents can work each week during the school year.

Monahan, K.\*, Lee, J.\*, & **Steinberg, L.** (2011). Revisiting the negative impact of part-time work on adolescent adjustment: Distinguishing between selection and socialization using propensity score matching. *Child Development*, *82*, 96-112.

**Steinberg, L.**, & Dornbusch, S. (1991). Negative correlates of part-time work in adolescence: Replication and elaboration. *Developmental Psychology*, *27*, 304-313.

**Steinberg, L.**, Fegley, S.\*, & Dornbusch, S. (1993). Negative impact of part-time work on adolescent adjustment: Evidence from a longitudinal study. *Developmental Psychology*, *29*, 171-180.

**Steinberg, L.**, Greenberger, E., Garduque, L.\*, Ruggiero, M.\*, & Vaux, A.\* (1982). Effects of working on adolescent development. *Developmental Psychology*, *18*, 385-395.

5. Understanding Adolescents’ Desistance from Criminal Behavior. I co-directed the most extensive study conducted to date of serious juvenile offenders (i.e., adolescents convicted of felonies), which involved tracking the behavior, mental health, and psychological development of more than 1300 adolescents over seven years. Through this program of work, my colleagues and I made several discoveries that have affected policies and practices in the justice system. First, although we confirmed that nearly 90% of serious juvenile offenders do not become chronic adult criminals, we noted that it is virtually impossible to predict on the basis of cross-sectional data collected in adolescence which ones will continue their antisocial behavior and which will desist. Second, we demonstrated that desistance from crime in adolescence is not mainly a function of the ways in which the justice system responds to offending, but, rather, a normative outcome of the process of development; in other words, adolescents stop committing crimes because they mature out of the behavior. In a series of papers, we have demonstrated that adolescent crime tapers off as individuals become more future oriented, less impulsive, and less susceptible to peer influence, and that individuals who do not show these patterns of maturation are the ones at greatest risk for reoffending as adults. As a result of this work, my colleagues and I have argued that the incarceration and harsh treatment of juvenile offenders is an ineffective, costly, and often unnecessary response to crime that is likely to increase, rather than decrease recidivism and that many juvenile offenders can be supervised in the community at a fraction of the cost, with no increase in the threat to public safety. Finally, my colleagues and I are currently following a large sample of first-time juvenile offenders to examine the impact of diversion from formal court processing on recidivism and other outcomes.

Monahan, K.\*, **Steinberg, L.**, & Cauffman, E.\* (2009). Affiliation with antisocial peers, susceptibility to peer influence, and desistance from antisocial behavior during the transition to adulthood. *Developmental Psychology*, *45*, 1520-1530. PMCID: 2886974.

Monahan, K.\*, **Steinberg, L.**, Cauffman, E.\*, & Mulvey, E. (2013). Psychosocial (im)maturity from adolescence to early adulthood: Distinguishing between adolescence-limited and persistent antisocial behavior. *Development and Psychopathology*, 25, 1093–1105.

Shulman, E.\*, Monahan, K.\*, & **Steinberg, L.** (2017). Severe violence during adolescence and early adulthood and its relation to anticipated rewards and costs. *Child Development*, *88*, 16-26.

**Steinberg, L.** (2017). Adolescent brain science and juvenile justice policymaking. *Psychology, Public Policy, and Law, 23*, 410-420.

Complete List of Published Work Since 2002 May Be Reviewed at: <http://www.ncbi.nlm.nih.gov/myncbi/browse/collection/47959761/?sort=date&direction=ascending>

**Google Scholar *h*-index: 150 (i10-index: 399; total citations: 145,247)**