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PRINCIPAL INVESTIGATOR: Laurence Steinberg, Ph.D.

CONTRACTING ORGANIZATION: Temple University-Of the Commonwealth System
Philadelphia, PA 19122

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### ABSTRACT

During this research period, we retained local IRB approval of the protocol and related documents. We have completed the first experiment and have begun the second experiment in the study protocol. In the first experiment, we enrolled 120 males tested in the “alone” condition and 102 males tested in the “peer” condition (i.e., in the presence of 3 other observing male subjects). All subjects were adolescent males between 18 and 22 years old. Overall, 528 subjects were enrolled in the first experiment. Data from experiment 1 demonstrate 3 important findings: 1) Peers increase adolescents’ sensitivity to rewards, including greater preference for immediate over delayed rewards; 2) Peers increase adolescents’ sensitivity to both positive and negative feedback, and thus enhance adolescents’ ability to learn from the outcome of their choices; 3) Peers do not make adolescents more impulsive.

The second experiment is in progress and we have thus far enrolled 50 male subjects, aged 18-22, tested in the presence of three male ‘peer’ subjects, two of whom are also 18-22 years old and one of whom is 25-30 years old. Total number of subjects enrolled thus far is 200. Data collection for experiment 2 is in progress.
15. SUBJECT TERMS
subject recruitment, enrollment, IRB approval, active data collection

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I. Introduction

The purpose of this research is to study the impact of peers on risk-taking and decision-making among 18-22 year old males who are demographically similar to current warfighters. In experiments 1, we explore peer influences on a set of decision-making tasks that differentially emphasize key processes implicated in risky decision-making. In experiment 2, we investigate whether the inclusion of a single, older team member (aged 25-30) attenuates the peer effect (i.e., young decision-makers’ increased inclination toward risk-taking in the presence of peers), and explore whether it is possible to train or condition individuals to be more resistant to peer influence. In experiment 3, we will investigate whether increased levels of mental fatigue, a common element in combat situations, exacerbate the peer effect. Our ultimate interest is in comparing decision-making by individuals acting within groups that are composed in different ways, under varying situational circumstances.
II. Body

A. Summary of progress to date

To date, we have completed experiment 1, which enrolled 202 target participants tested either alone or in a peer group (i.e., with 3 observing participants aged 18-22). Overall, 528 were enrolled in experiment 1. At present, efforts are focused on experiment 2, which entails the recruitment of 100 young subjects tested in the presence of 2 young observers and an older study confederate. We have successfully retained IRB approval of the present protocol, including recruitment methods to advance recruitment efficiency, including flyers, online recruitment tools such as social networks and University recruitment web sites.

B. Overview of research tasks

1. Probabilistic Gambling Task

This task enables us to systematically examine how decision-making is influenced by the perceived probability of success or failure, by the magnitude of the potential reward or loss, and by the degree of uncertainty inherent in the decision. The task thus allows us to manipulate these three variables systematically (probability, magnitude, and certainty) in order to better understand the task conditions under which the peer effect is more or less potent. In this task, the subject is presented with a computerized picture of a circular “wheel of fortune,” and has been told that the wheel will spin and that he must bet or not bet that the outcome of the spin will result in a gain of points. The circle has been divided into three pie-shaped slices of different widths: green (where the size of the “slice” indicates the likelihood that the outcome of the spin will produce a reward), red (indicating the likelihood that the outcome will produce a loss), or gray (indicating uncertainty in the outcome). The only decision to be made is whether to bet (engage in risk-taking) or pass. The wheel then spins, and it stops on one of the three colors. The result of the spin determines whether
coins are added to or subtracted from the participant’s bank. Uncertain spins will have an equal probability of resulting in a gain or loss. We have created pre-determined configurations of green-red-gray slices to examine performance as a function of the likelihood of reward, likelihood of cost, and degree of uncertainty, and will compute outcome measures reflecting the frequency with which the participant chose to bet under these conditions. We are especially interested in the degree to which participants choose to bet when potential costs are high and/or uncertain. In one previous study, we have shown that individuals make riskier choices when with peers than when alone (2).

2. **Modified Iowa Gambling Task**

The Iowa Gambling Task is a neurocognitive measure that has been extensively used in studied of individuals who persistently engage in risky behavior despite experiencing negative consequences, such as compulsive gamblers or substance abusers. In the original version of the task, participants are presented with four decks of cards, turned face-down, and told that two of the decks are winning decks and two are losing decks. They are then asked to draw cards from the decks so as to maximize their winnings. The task was modified for our purposes, such that participants make a play/pass decision with regard to one of 4 decks pre-selected on each trial, rather than deciding to choose to draw from any of 4 decks on any trial, as in the original task. This modification allows us to determine the independent effects of reward-seeking and cost-avoidance on card selection. For each trial, one of the four decks is highlighted with an arrow, and participants are given 4 seconds in which to decide to play or pass that card. If participants choose to play, a monetary outcome is displayed on the card and the total amount of money earned is updated and appears on the screen. If participants pass on a given card, the image of the card on the screen displays the message “Pass,” no outcome information is given, and the total amount of money earned does not change. As in the original task, two of the decks are advantageous and result in a
monetary gain over repeated play. The other two decks are disadvantageous and produce a net loss over repeated play. In addition, within each type of deck (advantageous vs. disadvantageous), there is one deck in which the losses or rewards experienced are infrequent but relatively large, and one in which they are consistent and relatively small. The task is administered in 6 blocks of 20 trials each. Performance is operationalized in three ways: percentage advantageous deck choices (reward-seeking), percentage disadvantageous decks not chosen (cost avoidance), and net score (the difference between the percentage advantageous and disadvantageous decks chosen). Importantly, the percentage of advantageous decks chosen in a given block is not contingent upon the percentage of disadvantageous decks avoided, which permits the computation of independent reward-seeking and cost avoidance scores. This task has been used in previous studies as a measure of reward sensitivity, but has not been employed to date in studies of peer influence (3,4).

3. **Delay Discounting task**

The Delay Discounting task assesses subjective preference for smaller, but more immediate, rewards relative to larger, delayed, rewards. In our adaptation of the task, the amount of the delayed reward was held constant at $1,000. We vary the time to delay in 6 blocks (1 week, 1 month, 6 months, 1 year, 5 years, and 15 years), presented in a random order. For each block, the starting value of the immediate reward is $200, $500, or $800, randomly determined for each participant. The respondent is asked to choose between an immediate reward of a given amount and a delayed reward of $1,000. If the immediate reward is preferred, the subsequent question presents an immediate reward midway between the prior one and zero (i.e., a lower figure). If the delayed reward is preferred, the subsequent question presents an immediate reward midway between the prior one and $1,000 (i.e., a higher figure). Participants then work their way through a total of nine ascending and descending choices until their responses converge and their preference for the
immediate and delayed reward are equal, at a value reflecting the discounted value of the delayed reward, known as the “indifference point.” As is customary in studies using this task, two dependent variables are computed: the average “indifference point” and the discount rate \((k)\), (with a lower indifference point and higher discount rate indicating stronger reward sensitivity). This task has been used in previous studies as a measure of preference for immediate reward, which we have shown is intensified in the presence of peers (5-10).

4. **First Person Shooter Task**

This task simulates the situation in which an individual must immediately decide whether another person is or is not a threat, by determining whether the object held by the person is a weapon or something that only appears to be a weapon (like a phone). It requires participants to quickly recognize if a person is a “friend” or an “enemy,” according to task instructions. Participants are simply asked to press a button if they see a “friend” on the screen, and another button if they see an “enemy.” The task seeks to examine whether decision making and attention allocation under time constraints influence a person’s ability to respond accurately to relevant stimuli. It is a measure of the impact of time pressure on accurate decision-making. It has not been previously used to examine peer influences on decision making.

5. **The Stoplight Game**

The Stoplight Game is a simple driving task in which subjects control the progress of their vehicle along a straight track by deciding whether to brake as they approach a series of intersections, each with a traffic signal that has turned yellow. Participants are told that traveling through the intersection without incident will cost no time, that stopping and waiting for the signal to turn red and cycle back to green will cost some time, and that attempting to cross the intersection...
but crashing into a crossing car will cost a great deal of time. Importantly, both the timing of the traffic signals and the probability of a crash in the associated intersections are varied so as to be unpredictable by the participant. Risk-taking (i.e., not braking for the yellow light) is encouraged by offering monetary incentives for completing each course in a timely fashion. Successfully traveling through an intersection saves time, whereas braking and waiting for the signal to turn green wastes time. This task has been used in previous studies as a measure of sensation-seeking, and performance is made more risky by the presence of peers (1).

**Self-Report Measures**

We administer the following self-report measures, which will be used to predict individual differences in susceptibility to the peer effect: Global Assessment Test (GAT) (14); Zuckerman Sensation-Seeking Inventory (15); Barratt Impulsivity Scale (16); Benthin Risk-Processing Scale (17); Resistance to Peer Influence scale (18), and the NEO-FFI questionnaire (11,12, 13).

**C. Recruitment and enrollment**

In experiment 1, we enrolled 120 participants tested in the alone condition and 100 target participants tested in the presence of three other same-sex, same-age individuals. Overall, 528 participants were enrolled. Mean age in experiment 1 was 19.78 years (SD=1.25), and the groups (alone vs. main participant in peer group vs. observers) did not differ in age. Below is the racial composition of participants in each condition. In all groups, the majority of participants were Caucasian, followed by the second largest categories, Asian/Pacific Islander and Black/African American. Behavioral data collected during experiment 1 replicates our previous studies and establishes a peer effect. Results from experiment 1 are discussed later in this document, under the section labeled *Reportable Outcomes.*
Alone Condition

Peer Condition (Experiment 1)

Observing Peers (Experiment 1)
At this time, recruitment and enrollment efforts are focused on Experiment 2, which involves 100 young participants (aged 18-22 years) tested in a peer group composed of two same-age individuals and one older individual (aged 25-30 years). To this date, we have enrolled a total of 50 peer groups in experiment 2. Data from the first 19 will most likely be disregarded because modifications were made to the recruitment efforts targeting 25-30 year old participants. A description of this implemented medication is provided in the next section.

D. Problem areas and implemented modifications to address issues encountered during the course of this report period

At the beginning of experiment 2, we were recruiting participants primarily through online sources such as craigslist. The first 76 individuals (or 19 peer groups) enrolled in experiment 2 were recruited using this recruitment strategy. However, we found that a majority of the older individuals we had recruited through these sources were demographically different from the younger participants. Namely, a significant proportion of older participants had lower education than the younger participants. Data from the first 19 peer groups revealed that the mean years of education completed by the older participants was 15.3 years, relative to the 13.4 years of education completed by the younger participants, a majority of whom were current college students. 13.4 years of education is approximate to the start of sophomore year in college, whereas 15.3 years of education is approximate to the beginning of senior year of college, suggesting that many of the 25-30 year old peers enrolled in experiment 2 up to that point did not complete college. In fact, almost half of them (n=8) had completed high school or less. This was indicative of demographic differences between the older peer and other college-aged participants. Because education is oftentimes used as a proxy of social status and experiential maturity, it was necessary to ensure that
all participants were of similar education/socio-economic status. As a result, we implemented a study confederate scheme, whereby we have a consistent sample of 8 Temple University graduate students, aged 25 to 30, serve as the older participants in the peer group. The mean number of years of education completed by the study confederates is 18 years, relative to the 13.8 years for the younger participants. The average age among confederates is 26.9 years old (SD=1.72). Of the 8 study confederates, two are African-American and the remaining six are Caucasian. Six confederates are married or in a relationship, and two are single. All except one are employed at least half-time.

We have enrolled 31 groups since the implementation of the confederate scheme.
III. Key Research accomplishments

During this reporting period, we have completed experiment 1 and begun experiment 2. Experiment 1 findings replicate previous studies and establish the influence of peers in decision-making (results summarized in next section). In experiment 2, we will test whether the presence of an older individual in the group attenuates the impact of social context on decision-making. We are currently collecting experiment 2 data. Because data collection began only very recently, we have no reportable outcomes from experiment 2 at this time.
IV. Reportable Outcomes

Experiment 1. A total of 528 subjects were enrolled in experiment. Self-report data were collected on 521 of those subjects. Their mean age was 19.8 (SD=1.25), and age did not differ by social context or role within social context (main participant vs. observer). 95% of the subjects were current college students and 43% of them were employed at least part-time. Below are the race demographics of the total sample and by social context.

Experiment 1. Race Demographics
Behavioral Findings From Experiment 1

Delay Discounting Task

The average indifference point was significantly lower for subjects in the peer condition, compared to alone condition, at time intervals of 1 year or more. This shows that the subjective value of $1000, if offered at 1 year or later, is significantly lower for participants in the peer condition compared to alone.

Collapsed across all time delays, the average indifference point is significantly lower for the peer condition, $p<0.05$. Moreover, the discounting rate is also significantly lower for the peer condition compared to alone, $p<0.05$, indicating young males have a greater preference for lower, immediate
rewards relative to delayed, large rewards when they are surrounded by peers compared to when they are alone.

**Stoplight Task**

In this task, subjects in the peer group were less likely to brake and more likely to pass thru red lights and crash compared to subjects who completed the task alone, $p<0.05$. Given this behavioral pattern, the risk index is significantly higher for the peer-group condition compared to alone, $p<0.001$. Figures are on the next page.
Iowa Gambling Task

Approach Behavior

Overall, the average slope was estimated to be positive and significant (b=1.19, p=0.05), suggesting that any within subject variability in the percentage of plays from good decks can only marginally be attributed to learning over time. Social context had no effect on the slope, meaning that rate of [reward] learning did not differ between participants in the alone vs. peer condition.

![Graph showing percentage of good plays by social condition](image)

Figure 1. Percentage of plays from good decks by social condition

Social context had a significant effect on the intercept at Block 6 (b=7.348, p<0.001), indicating that people in the peer condition made a greater percentage of good plays compared to those in the alone condition. To examine whether there was a ceiling effect in approach behavior for peer-group participants, I re-ran the previous model with the intercepts set at Block 1. This model revealed that males in the peer condition were more likely than those in the alone condition to from play advantageous decks in the first task block, indicating a potential ceiling effect on peer-group participants’ performance.
Avoidant Behavior

Social context had a significant effect on slope (punishment learning; b=-3.35, p<0.01), demonstrating that participants in the peer condition had a steeper, downward slope that indicates increasing reluctance to play from the disadvantages decks as the task progressed. Social context also predicted a higher percentage of bad plays for peer condition compared to alone condition by the end of the game (intercept at Block 6).

![Figure 2. Percentage of plays from bad decks by social condition](image)

Overall, net scores showed that subjects in the peer condition performed significantly better in IGT compared to subjects in the alone condition.
**Probabilistic Gambling Task**

There was no peer effect on risk decisions (i.e., % of risky plays).

**PGT: Percentage of Risky Plays in Alone vs. Peer Condition**

There was a peer effect on response time on the two most ambiguous pie types, when the ratio of gain-to-loss probability is 0.81 and 0.67.
V. Conclusion

During this reporting period, we were able to complete experiment 1. Overall, data showed that peers increase reward sensitivity using delay discounting and stoplight tasks. In addition, data from IGT showed that peers increase sensitivity to both rewards and loss. Lastly, we found no peer effect in the First Person Shooter Task, suggesting the presence of peers does not make young males more impulsive. We continue to have IRB approval of the present protocol and all protocol-related documentation, including consent forms, questionnaires, and study tasks. We are currently collecting data for experiment 2, and, at this point, only enrolled one-third of the target sample size.
VI. References


VII. Appendices

RESISTENCE TO PEER INFLUENCE (RPI) QUESTIONNAIRE

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<th>Sort of True for Me</th>
<th>Sort of True for Me</th>
<th>Really True for Me</th>
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<td>1.</td>
<td></td>
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<tr>
<td>Some people go along with their friends just to keep their friends happy</td>
<td>BUT</td>
<td>Other people refuse to go along with what their friends want to do, even though they know it will make their friends unhappy</td>
<td></td>
</tr>
<tr>
<td>2.</td>
<td></td>
<td></td>
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</tr>
<tr>
<td>Some people think it is more important to be an individual than to fit in with the crowd</td>
<td>BUT</td>
<td>Other people think it is more important to fit in with the crowd than to stand out as an individual</td>
<td></td>
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<tr>
<td>3.</td>
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<tr>
<td>For some people it’s pretty easy for their friends to get them to change their mind</td>
<td>BUT</td>
<td>For other people it’s pretty hard for their friends to get them to change their mind</td>
<td></td>
</tr>
<tr>
<td>4.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Some people would do something that they knew was wrong just to stay on their friends’ good side</td>
<td>BUT</td>
<td>Other people would not do something that they knew was wrong just to stay on their friends’ good side</td>
<td></td>
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<tr>
<td>5.</td>
<td></td>
<td></td>
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<tr>
<td>Some people hide their true opinion from their friends if they think their friends will make fun of them because of it</td>
<td>BUT</td>
<td>Other people will say their true opinion in front of their friends even if they know their friends will make fun of them because of it</td>
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</table>
6. Some people will not break the law just because their friends say that they would **BUT** Other people would break the law if their friends said that they would break it

7. Some people change the way they act so much when they are with their friends that they wonder who they “really are” **BUT** Other people act the same way when they are alone as they do when they are with their friends

8. Some people take more risks when they are with their friends than they do when they are alone **BUT** Other people act just as risky when they are alone as when they are with their friends

9. Some people say things they don’t really believe just because they think it will make their friends respect them more **BUT** Other people would not say things they didn’t really believe just to get their friends to respect them more

10. Some people think it is better to be an individual even if people will be angry at you for going against the crowd **BUT** Other people think it’s better to go along with the crowd than to make people angry at you
**My Personality**

Directions: If you agree with a statement or decide that it describes you, answer TRUE. If you disagree with a statement or feel that it is not descriptive of you, answer FALSE. Answer every statement either True or False even if you are not entirely sure of your answer.

<table>
<thead>
<tr>
<th></th>
<th></th>
<th>TRUE</th>
<th>FALSE</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>I tend to begin a new job without much advance planning on how I will do it.</td>
<td>T</td>
<td>F</td>
</tr>
<tr>
<td>2.</td>
<td>I usually think about what I am going to do before doing it.</td>
<td>T</td>
<td>F</td>
</tr>
<tr>
<td>3.</td>
<td>I often do things on impulse.</td>
<td>T</td>
<td>F</td>
</tr>
<tr>
<td>4.</td>
<td>I very seldom spend much time on the details of planning ahead.</td>
<td>T</td>
<td>F</td>
</tr>
<tr>
<td>5.</td>
<td>I like to have new and exciting experiences and sensations even if they are a little frightening.</td>
<td>T</td>
<td>F</td>
</tr>
<tr>
<td>6.</td>
<td>Before I begin a complicated job, I make careful plans.</td>
<td>T</td>
<td>F</td>
</tr>
<tr>
<td>7.</td>
<td>I would like to take off on a trip with no pre-planned or definite routes or timetable.</td>
<td>T</td>
<td>F</td>
</tr>
<tr>
<td>8.</td>
<td>I enjoy getting into new situations where you can’t predict how things will turn out.</td>
<td>T</td>
<td>F</td>
</tr>
<tr>
<td>9.</td>
<td>I like doing things just for the thrill of it.</td>
<td>T</td>
<td>F</td>
</tr>
<tr>
<td>10.</td>
<td>I tend to change interests frequently.</td>
<td>T</td>
<td>F</td>
</tr>
<tr>
<td>11.</td>
<td>I sometimes like to do things that are a little frightening.</td>
<td>T</td>
<td>F</td>
</tr>
<tr>
<td>12.</td>
<td>I’ll try anything once.</td>
<td>T</td>
<td>F</td>
</tr>
<tr>
<td>13.</td>
<td>I would like the kind of life where one is on the move and traveling a lot, with lots of change and excitement.</td>
<td>T</td>
<td>F</td>
</tr>
<tr>
<td>15.</td>
<td>I like to explore a strange city or section of town by myself, even if it means getting lost.</td>
<td>T</td>
<td>F</td>
</tr>
<tr>
<td>16.</td>
<td>I prefer friends who are excitingly unpredictable.</td>
<td>T</td>
<td>F</td>
</tr>
<tr>
<td>17.</td>
<td>I often get so carried away by new and exciting things and ideas that I never think of possible complications.</td>
<td>T</td>
<td>F</td>
</tr>
<tr>
<td>18.</td>
<td>I am an impulsive person.</td>
<td>T</td>
<td>F</td>
</tr>
<tr>
<td>19.</td>
<td>I like wild and uninhibited parties.</td>
<td>T</td>
<td>F</td>
</tr>
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Benthin Risk Measure

ACTIVITIES SCALE

Now I want to talk about different activities that people sometimes do. Here is a list of activities.

Activities:

- Drinking alcohol
- Vandalizing property
- Riding in a car with an intoxicated (drunk) driver
- Smoking cigarettes
- Having unprotected sex
- Stealing from a store
- Getting into a physical fight
- Going into a dangerous part of town
- Threatening or injuring someone with a weapon

I’m going to ask you a few questions about each one of these. (Question 1 is answered for each activity, then question 2, etc.)

The first question is, “If you did this activity, how scary are the things that could happen? I want you to answer using the scale here (point to “Scary” exhibit). See, a “1” means that the things that could happen are “not scary at all.” A “2” means that they are “a little scary.” A “3” means that they are “pretty scary” and a “4” means that the things that could happen are “very scary.”

Let’s answer first for drinking alcohol. If you drank alcohol, how scary are the things that could happen?

1. If you did this activity, how scary are the things that could happen?

<table>
<thead>
<tr>
<th>Risks are not scary at all</th>
<th>Risks are a little scary</th>
<th>Risks are pretty scary</th>
<th>Risks are very scary</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
</tbody>
</table>
2. If you did this activity, how much are you at risk for something bad happening?

<table>
<thead>
<tr>
<th>Risk Level</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Very much at risk</td>
</tr>
<tr>
<td>2</td>
<td>Pretty much at risk</td>
</tr>
<tr>
<td>3</td>
<td>A little bit at risk</td>
</tr>
<tr>
<td>4</td>
<td>Not be at risk</td>
</tr>
</tbody>
</table>

3. How would you compare the benefits (or pleasures) of this activity with the risks?

<table>
<thead>
<tr>
<th>Comparison</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Risks are much greater than the benefits</td>
</tr>
<tr>
<td>2</td>
<td>Risks are somewhat greater than benefits</td>
</tr>
<tr>
<td>3</td>
<td>Benefits are somewhat greater than risks</td>
</tr>
<tr>
<td>4</td>
<td>Benefits are much greater than risks</td>
</tr>
</tbody>
</table>

4. If something bad happened because of this activity, how serious would it be?

<table>
<thead>
<tr>
<th>Severity</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Not at all serious</td>
</tr>
<tr>
<td>2</td>
<td>A little serious</td>
</tr>
<tr>
<td>3</td>
<td>Pretty serious</td>
</tr>
<tr>
<td>4</td>
<td>Very serious</td>
</tr>
</tbody>
</table>

5. Have you ever done this before?

<table>
<thead>
<tr>
<th>Answer</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Yes</td>
</tr>
<tr>
<td>2</td>
<td>No</td>
</tr>
</tbody>
</table>

5a. If yes, how many times have you engaged in this activity during the last six months?

<table>
<thead>
<tr>
<th>Frequency</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>None</td>
<td>Once or twice</td>
</tr>
<tr>
<td>3-5 times</td>
<td>More than 5 times</td>
</tr>
</tbody>
</table>
**BARRATT IMPULSIVITY MEASURE**

DIRECTIONS: People differ in the ways they act and think in different situations. This is a test to measure some of the ways in which you act and think. Read each statement and put an X on the appropriate circle on the right side of this page. Do not spend too much time on any statement. Answer quickly and honestly.

<table>
<thead>
<tr>
<th>Number</th>
<th>Statement</th>
<th>Choices</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>I plan tasks carefully.</td>
<td>1 2 3 4</td>
</tr>
<tr>
<td>2</td>
<td>I do things without thinking.</td>
<td>1 2 3 4</td>
</tr>
<tr>
<td>3</td>
<td>I make-up my mind quickly.</td>
<td>1 2 3 4</td>
</tr>
<tr>
<td>4</td>
<td>I am happy-go-lucky.</td>
<td>1 2 3 4</td>
</tr>
<tr>
<td>5</td>
<td>I don’t “pay attention.”</td>
<td>1 2 3 4</td>
</tr>
<tr>
<td>6</td>
<td>I have “racing” thoughts.</td>
<td>1 2 3 4</td>
</tr>
<tr>
<td>7</td>
<td>I plan trips well ahead of time.</td>
<td>1 2 3 4</td>
</tr>
<tr>
<td>8</td>
<td>I am self controlled.</td>
<td>1 2 3 4</td>
</tr>
<tr>
<td>9</td>
<td>I concentrate easily.</td>
<td>1 2 3 4</td>
</tr>
<tr>
<td>10</td>
<td>I save regularly.</td>
<td>1 2 3 4</td>
</tr>
<tr>
<td>11</td>
<td>I “squirm” at plays or lectures.</td>
<td>1 2 3 4</td>
</tr>
<tr>
<td>12</td>
<td>I am a careful thinker.</td>
<td>1 2 3 4</td>
</tr>
<tr>
<td>13</td>
<td>I plan for job security.</td>
<td>1 2 3 4</td>
</tr>
<tr>
<td>14</td>
<td>I say things without thinking.</td>
<td>1 2 3 4</td>
</tr>
<tr>
<td>15</td>
<td>I like to think about complex problems.</td>
<td>1 2 3 4</td>
</tr>
<tr>
<td>16</td>
<td>I change jobs.</td>
<td>1 2 3 4</td>
</tr>
<tr>
<td></td>
<td>Statement</td>
<td>1</td>
</tr>
<tr>
<td>---</td>
<td>---------------------------------------------------------------------------</td>
<td>---</td>
</tr>
<tr>
<td>17</td>
<td>I act “on impulse.”</td>
<td>1</td>
</tr>
<tr>
<td>18</td>
<td>I get easily bored when solving thought problems.</td>
<td>1</td>
</tr>
<tr>
<td>19</td>
<td>I act on the spur of the moment.</td>
<td>1</td>
</tr>
<tr>
<td>20</td>
<td>I am a steady thinker.</td>
<td>1</td>
</tr>
<tr>
<td>21</td>
<td>I change residences.</td>
<td>1</td>
</tr>
<tr>
<td>22</td>
<td>I buy things on impulse.</td>
<td>1</td>
</tr>
<tr>
<td>23</td>
<td>I can only think about one thing at a time.</td>
<td>1</td>
</tr>
<tr>
<td>24</td>
<td>I change hobbies.</td>
<td>1</td>
</tr>
<tr>
<td>25</td>
<td>I spend or charge more than I earn.</td>
<td>1</td>
</tr>
<tr>
<td>26</td>
<td>I often have extraneous thoughts when thinking.</td>
<td>1</td>
</tr>
<tr>
<td>27</td>
<td>I am more interested in the present than the future.</td>
<td>1</td>
</tr>
<tr>
<td>28</td>
<td>I am restless at the theater or lectures.</td>
<td>1</td>
</tr>
<tr>
<td>29</td>
<td>I like puzzles.</td>
<td>1</td>
</tr>
<tr>
<td>30</td>
<td>I am future oriented.</td>
<td>1</td>
</tr>
</tbody>
</table>
During the past four weeks, how have you felt about your relationship (with significant other/spouse) and your family?

<table>
<thead>
<tr>
<th></th>
<th>Not at all satisfied</th>
<th>Somewhat satisfied</th>
<th>Neutral</th>
<th>Satisfied</th>
<th>Extremely satisfied</th>
<th>Not applicable — No significant other or family</th>
</tr>
</thead>
<tbody>
<tr>
<td>How satisfied are you with your relationship/marriage?</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>How satisfied are you with your family?</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
</tbody>
</table>

Think about how you have acted in actual situations during the past four weeks. Please answer only in terms of what YOU actually did. Please read carefully. Select a number from 0 to 10 according to how often you showed/used the qualities listed:

<table>
<thead>
<tr>
<th></th>
<th>Never 0</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
<th>9</th>
<th>10</th>
<th>Always</th>
</tr>
</thead>
<tbody>
<tr>
<td>Creativity—coming up with new ideas</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
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<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>Curiosity or interest</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
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</tr>
<tr>
<td>Critical thinking, open-mindedness, or good judgement</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
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<td>○</td>
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<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>Love of learning</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
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<td>○</td>
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</tr>
<tr>
<td>Perspective or wisdom</td>
<td>○</td>
<td>○</td>
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<td>○</td>
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<tr>
<td>Bravery or courage</td>
<td>○</td>
<td>○</td>
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<td>○</td>
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</tr>
<tr>
<td>Persistence</td>
<td>○</td>
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<tr>
<td>Honesty</td>
<td>○</td>
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<tr>
<td>Zest or enthusiasm</td>
<td>○</td>
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</tr>
<tr>
<td>Love or closeness with others (friends, family members)</td>
<td>○</td>
<td>○</td>
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<tr>
<td>Kindness or generosity to others</td>
<td>○</td>
<td>○</td>
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<td>○</td>
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<tr>
<td>Social skills or social awareness or street smarts</td>
<td>○</td>
<td>○</td>
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<td>○</td>
</tr>
</tbody>
</table>
Think about how you have acted in actual situations during the past four weeks. Please answer only in terms of what YOU actually did. Please read carefully. Select a number from 0 to 10 according to how often you showed/used the qualities listed?

<table>
<thead>
<tr>
<th>Quality</th>
<th>Never</th>
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<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
<th>9</th>
<th>10</th>
<th>Always</th>
</tr>
</thead>
<tbody>
<tr>
<td>Teamwork</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
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<td>○</td>
<td>○</td>
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</tr>
<tr>
<td>Fairness</td>
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</tr>
<tr>
<td>Leadership</td>
<td>○</td>
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<td>○</td>
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</tr>
<tr>
<td>Forgiveness or mercy</td>
<td>○</td>
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<tr>
<td>Modesty or humility</td>
<td>○</td>
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<tr>
<td>Prudence or caution</td>
<td>○</td>
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</tr>
<tr>
<td>Self-control</td>
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<td>○</td>
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<td></td>
</tr>
<tr>
<td>Appreciation of beauty and excellence</td>
<td>○</td>
<td>○</td>
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<td>○</td>
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<td></td>
</tr>
<tr>
<td>Gratitude and thankfulness</td>
<td>○</td>
<td>○</td>
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<td>○</td>
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</tr>
<tr>
<td>Hope or optimism</td>
<td>○</td>
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<td>○</td>
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</tr>
<tr>
<td>Playfulness or humor</td>
<td>○</td>
<td>○</td>
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</tr>
<tr>
<td>Spirituality</td>
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<td></td>
</tr>
</tbody>
</table>

How well do these statements describe you?

<table>
<thead>
<tr>
<th>Statement</th>
<th>Not at all like me</th>
<th>A little like me</th>
<th>Somewhat like me</th>
<th>Mostly like me</th>
<th>Very much like me</th>
</tr>
</thead>
<tbody>
<tr>
<td>I am good at changing myself to adjust to changes in my life.</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>It is difficult for me to adjust to changes.</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>I can usually fit myself into any situation.</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>For things I cannot change, I accept them and move on.</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>I control my emotions by changing how I think about things.</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>When something stresses me out, I try to avoid it or not think about it.</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
</tbody>
</table>
When something stresses me out, I try to solve the problem.  

<table>
<thead>
<tr>
<th></th>
<th>Not at all like me</th>
<th>A little like me</th>
<th>Somewhat like me</th>
<th>Mostly like me</th>
<th>Very much like me</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>

When bad things happen, I try to see the positive sides.

<table>
<thead>
<tr>
<th></th>
<th>Not at all like me</th>
<th>A little like me</th>
<th>Somewhat like me</th>
<th>Mostly like me</th>
<th>Very much like me</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>

I usually keep my emotions to myself.

<table>
<thead>
<tr>
<th></th>
<th>Not at all like me</th>
<th>A little like me</th>
<th>Somewhat like me</th>
<th>Mostly like me</th>
<th>Very much like me</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>

When something stresses me out, I have effective ways to deal with it.

<table>
<thead>
<tr>
<th></th>
<th>Not at all like me</th>
<th>A little like me</th>
<th>Somewhat like me</th>
<th>Mostly like me</th>
<th>Very much like me</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>

When I am feeling upset, I keep feelings to myself.

<table>
<thead>
<tr>
<th></th>
<th>Not at all like me</th>
<th>A little like me</th>
<th>Somewhat like me</th>
<th>Mostly like me</th>
<th>Very much like me</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>

Answer in terms of whether the statement describes how you actually live your life.

<table>
<thead>
<tr>
<th></th>
<th>Not at all like me</th>
<th>A little like me</th>
<th>Somewhat like me</th>
<th>Mostly like me</th>
<th>Very much like me</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>

I am a person of dignity and worth.

<table>
<thead>
<tr>
<th></th>
<th>Not at all like me</th>
<th>A little like me</th>
<th>Somewhat like me</th>
<th>Mostly like me</th>
<th>Very much like me</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>

My life has meaning.

<table>
<thead>
<tr>
<th></th>
<th>Not at all like me</th>
<th>A little like me</th>
<th>Somewhat like me</th>
<th>Mostly like me</th>
<th>Very much like me</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>

I believe that in some way my life is closely connected to all humanity and the world.

<table>
<thead>
<tr>
<th></th>
<th>Not at all like me</th>
<th>A little like me</th>
<th>Somewhat like me</th>
<th>Mostly like me</th>
<th>Very much like me</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>

What I do at school and/or work has enduring meaning.

<table>
<thead>
<tr>
<th></th>
<th>Not at all like me</th>
<th>A little like me</th>
<th>Somewhat like me</th>
<th>Mostly like me</th>
<th>Very much like me</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>

I believe there is purpose for my life.

<table>
<thead>
<tr>
<th></th>
<th>Not at all like me</th>
<th>A little like me</th>
<th>Somewhat like me</th>
<th>Mostly like me</th>
<th>Very much like me</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>
Answer in terms of how you usually think.

<table>
<thead>
<tr>
<th></th>
<th>Not at all like me</th>
<th>A little like me</th>
<th>Somewhat like me</th>
<th>Mostly like me</th>
<th>Very much like me</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>When bad things happen to me, I</strong></td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td><strong>expect more bad things to</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>happen.</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>When bad things happen to me, I</strong></td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td><strong>blame myself for them.</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>I have no control over the things</strong></td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td><strong>that happen to me.</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>When bad things happen to me, I</strong></td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td><strong>cannot stop thinking about how</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>much worse things will get.</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>When I have a physical problem,</strong></td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td><strong>I am likely to think that it is</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>something very serious.</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>When I fail at something, I give</strong></td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td><strong>up all hope.</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>I respond to stress by making</strong></td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td><strong>things worse than they are.</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Please be as honest as possible.

<table>
<thead>
<tr>
<th></th>
<th>Never</th>
<th>Hardly ever</th>
<th>Some of the time</th>
<th>Often</th>
<th>Most of the time</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>How often do you feel left out?</strong></td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td><strong>How often do you feel close to</strong></td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td><strong>people?</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>How often do you feel part of a</strong></td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td><strong>group?</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
How well do these statements describe your feelings about your job? How well do these statements describe your feelings about your job?

<table>
<thead>
<tr>
<th></th>
<th>Not at all like me</th>
<th>A little like me</th>
<th>Somewhat like me</th>
<th>Mostly like me</th>
<th>Very much like me</th>
</tr>
</thead>
<tbody>
<tr>
<td>My education and work are some of the most important things in my life.</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>I am committed to my job and my education.</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>I would choose my current choice of careers again if I had the chance.</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>How I do in my job and/or at school influences how I feel.</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
</tbody>
</table>

How many people are there who you can always count on if you have serious problems?

- ○ None
- ○ 1
- ○ 2
- ○ 3
- ○ 4 or more

I have a best friend.

- ○ Yes
- ○ No

I am very close to my family

- ○ Yes
- ○ No

I have someone to talk to when I feel down.

- ○ Yes
- ○ No
I have as much contact with my friends outside work and/or school as I want or need.

- Yes
- No

I spend time at interests or hobbies other than work and school.

- Yes
- No

In the **past four weeks**, how often have you been bothered by any of the following problems?

<table>
<thead>
<tr>
<th>Problem</th>
<th>Not at all</th>
<th>Several days</th>
<th>More than half the days</th>
<th>Nearly everyday</th>
<th>Everyday</th>
</tr>
</thead>
<tbody>
<tr>
<td>Little interest or pleasure in doing things.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Feeling down, depressed, or hopeless.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Trouble falling or staying asleep, or sleeping too much</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Feeling tired or having little energy.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Poor appetite or overeating.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Feeling very angry.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Feeling bad about yourself, or that you are a failure, or that you let yourself or your family down.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Trouble concentrating on things, such as reading the newspaper or watching television.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Feeling very frustrated.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Moving or speaking so slowly that other people could have noticed. Or the opposite—being so fidgety or restless that you have been moving around a lot more than usual.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Here are a number of words that describe different feelings and emotions.

In the past four weeks, how often have you felt this way?

<table>
<thead>
<tr>
<th>Feelings</th>
<th>Never</th>
<th>Hardly ever</th>
<th>Some of the time</th>
<th>Often</th>
<th>Most of the time</th>
</tr>
</thead>
<tbody>
<tr>
<td>Joyful</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>Sad</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>Distressed</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>Peaceful/calm</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>Excited</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>Ashamed</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>Amused/playful</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>Upset</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>Inspired</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>Hopeful</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>Angry</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>Guilty</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>Happy/content</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>Scared/fearful</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>Bored</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>Hostile</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>Love</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>Enthusiastic/energized</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>Proud</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>Anxious/nervous</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>Frustrated</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
</tbody>
</table>
Curriculum Vitae
Laurence Steinberg

Department of Psychology Temple University Philadelphia, PA 19122 (769) 236-0708 (voice) (215) 204-5539 (fax) laurence.steinberg@temple.edu www.temple.edu/psychology/lds

PRESENT POSITIONS
Department of Psychology Temple University Philadelphia, PA 19122 (769) 236-0708 (voice) (215) 204-5539 (fax) laurence.steinberg@temple.edu www.temple.edu/psychology/lds
Distinguished University Professor, Temple University (1999-) Laura H. Carnell Professor of Psychology, Temple University (1998-) Professor of Psychology, Temple University (1988-)

EDUCATION
The Johns Hopkins University, Baltimore, Maryland (1970-71) Vassar College, Poughkeepsie, New York (1971-74)
Ph.D. in Human Development and Family Studies

PREVIOUS POSITIONS
Director of Graduate Studies, Department of Psychology, Temple University (1994-1999, 2001-2007)
Director, Division of Developmental Psychology, Department of Psychology, Temple University (1991-94)
Professor of Child and Family Studies, University of Wisconsin--Madison (1983-89)
Faculty Associate, National Center on Effective Secondary Schools, School of Education, University of Wisconsin--Madison (1985-89)
Associate Professor of Social Ecology, University of California, Irvine (1982-83)
Faculty Associate, Public Policy Research Organization, University of California, Irvine (1979-83)
Associate Director for Undergraduate Studies, Program in Social Ecology, University of California, Irvine (1981-82)
Assistant Professor of Social Ecology, University of California, Irvine (1977-82)
Lecturer in Human Development and Family Studies, Cornell University (1976-77)

PROFESSIONAL MEMBERSHIPS
Society for Research in Child Development Society for Research on Adolescence (President, 1998-2000) American Psychological Association (Fellow) (President, Division 7 (Developmental), 2007-2008) Association for Psychological Science (Fellow)
(vitae revised 9/4/2013)

EDITORIAL BOARDS

39
HONORS AND AWARDS

Phi Beta Kappa and Graduation with Honors and Distinction in Psychology, Vassar College (1974)

SELECTED RECENT PROFESSIONAL ACTIVITIES

BOOKS AND EDITED VOLUMES

RESEARCH ARTICLES
(*denotes former or current student or postdoctoral fellow) in press

42


2013


2012


DOI: 10.3389/fnhum.2013.00223


2011


Burchinal, M., McCartney, K., Steinberg, L., Crosnoe, R., Friedman, S., & McLoyd, V. (2011). Examining the black-white achievement gap using the NICHD study of early child care and youth development. *Child Development*, 82, 1404-1420. PMCID:


2008


2007


2006


2002


2001


Steinberg, L. (2001). We know some things: Adolescent-parent relationships in retrospect and prospect. *Journal of Research on Adolescence*, 11, 1-20. (Reissued in 2011 as part of the journal’s “virtual issue” containing the 10 most frequently cited articles during the decade 2000-2010.)


1997


1996


1995


1994


1993


1992


17


1991


1990


18


55


1989


1988


1987


1986


Steinberg, L. (1986). Stability (and instability) of overt Type A behaviors from childhood to young adulthood.


1985


1984


1983


1982


20

21


1981


1979


22


1978


1976


ESSAYS, EDITORIALS, AND BOOK REVIEWS


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**RESEARCH GRANTS, AWARDS, AND CONTRACTS**

**Department of Defense, U.S. Army Medical Research and Materiel Command**

Laurence Steinberg (PI), “Group Influences on Young Adult Warfighters’ Risk-Taking” (2012-2015) (Role: Principal Investigator)

**National Institute of Child Health and Human Development**

25


**National Institute on Alcohol Abuse and Alcoholism**

Kathryn Harden (PI), “Genetic Influences on Adolescent Decision-Making and Alcohol Use” (2012-2014) (Role: Co-Investigator)

**National Institute on Drug Abuse**


**MacArthur Foundation Research Network on Law and Neuroscience**

BJ Casey (PI), “Neural and Behavioral Correlates of Age Differences in Psychological Capacities Relevant to Judgments of Criminal Responsibility” (2011-2013) (Role: Co-Principal Investigator)

**Pennsylvania Department of Health (Health Research Formula Fund Grant)**

Laurence Steinberg (PI), “Social Influences on Alcohol Consumption in Adolescent Versus Adult Mice” (2011-2012) (Role: Principal Investigator)

**Robert Wood Johnson Foundation (via subcontract from University of Pennsylvania)**

Laurence Steinberg (PI), “Correlates and Consequences of Positive Health in Adolescence” (2011-2013) (Role: Principal Investigator)
National Institute on Alcohol Abuse and Alcoholism
Jason Chein (PI), “Combined Effects of Alcohol and Peer Context on Behavior and Neural Correlates of Risk-Taking” (2011-2016) (Role: Co-Investigator)

John D. and Catherine T. MacArthur Foundation
Laurence Steinberg (PI), “Models for Change Research Initiative, Phase V” (2010-2013) (Role: Principal Investigator)

Office of Juvenile Justice and Delinquency Prevention, U.S. Department of Justice
Elizabeth Cauffman (PI), “Crossroads: Formal versus Informal Processing in the Juvenile Justice System” (2010-2013) (Role: Co-Principal Investigator)

John D. and Catherine T. MacArthur Foundation
Laurence Steinberg (PI), “Models for Change Research Initiative, Phase IV” (2009-2010) (Role: Principal Investigator)

Jacobs Foundation
Klaus J. Jacobs Research Prize in Productive Youth Development (2009-2014) (Role: Inaugural Prize Recipient)

John D. and Catherine T. MacArthur Foundation

Office of Juvenile Justice and Delinquency Prevention, U.S. Department of Justice
Edward Mulvey (PI), “Pathways to Desistance: A Prospective Study of Serious Adolescent Offenders, Renewal Proposal” (2008-2009) (Role: Co-Principal Investigator)

National Institute of Justice, U.S. Department of Justice
Edward Mulvey (PI), “Pathways to Desistance” (2008-2010) (Role: Co-Principal Investigator)

John D. and Catherine T. MacArthur Foundation

John D. and Catherine T. MacArthur Foundation

Office of Juvenile Justice and Delinquency Prevention, U.S. Department of Justice
Edward Mulvey (PI), “Pathways to Desistance: A Prospective Study of Serious Adolescent Offenders” (2007-2009) (Role: Co-Principal Investigator)

Pennsylvania Council on Crime and Delinquency
Edward Mulvey (PI), “Pathways to Desistance: A Prospective Study of Serious Adolescent Offenders” (2007-2008) (Role: Co-Principal Investigator)

National Institute of Drug Abuse
Laurence Steinberg (PI), “Peer Effects on Neural and Behavioral Markers of Risk-Taking” (2006-2010) (Role: Principal Investigator)

John D. and Catherine T. MacArthur Foundation
Laurence Steinberg (PI), “Continuation of the Pathways to Desistance Study: Renewal Proposal” (2006-2009) (Role: Principal Investigator)

Pennsylvania Council on Crime and Delinquency
Edward Mulvey (PI), “A Prospective Study of Serious Adolescent Offenders in Philadelphia” (2006-2007) (Role: Co-Principal Investigator)

Office of Juvenile Justice and Delinquency Prevention, U.S. Department of Justice
Edward Mulvey (PI), “A Prospective Study of Serious Adolescent Offenders, Renewal Proposal” (2006-2007) (Role: Co-Principal Investigator)

**National Institute of Drug Abuse**
Edward Mulvey (PI), “Pathways to Desistance from Substance Use Problems and Crime” (2005-2010) (Role: Co-Principal Investigator)

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**National Institute of Child Health and Human Development**

**Pennsylvania Council on Crime and Delinquency**

**Office of Juvenile Justice and Delinquency Prevention, U.S. Department of Justice**

**Pennsylvania Council on Crime and Delinquency**

**National Institute of Mental Health**
Nathan Fox (PI), “The Effects of Early Temperament on Social Behavior in Adolescence” (2004-2007) (Role: Co-Principal Investigator)

**Office of Juvenile Justice and Delinquency Prevention, U.S. Department of Justice**
Edward Mulvey (PI), “A Prospective Study of Serious Adolescent Offenders” (2002-2005) (Role: Co-Principal Investigator)

**John D. and Catherine T. MacArthur Foundation**

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**William T. Grant Foundation**
Edward Mulvey (PI), “A Prospective Study of Serious Adolescent Offenders” (2002-2005) (Role: Co-Principal Investigator)

**William Penn Foundation**
Laurence Steinberg (PI), “A Prospective Study of Serious Juvenile Offenders in Philadelphia” (2002-2005) (Role: Principal Investigator)

**Office of Juvenile Justice and Delinquency Prevention, U.S. Department of Justice**

**Robert Wood Johnson Foundation**
Edward Mulvey (PI), “A Prospective Study of Serious Adolescent Offenders” (2001-2004) (Role: Co-Principal Investigator)

**William T. Grant Foundation**
Edward Mulvey (PI), “A Prospective Study of Serious Adolescent Offenders” (2001-2004) (Role: Co-Principal Investigator)

**Office of Juvenile Justice and Delinquency Prevention, U.S. Department of Justice**

**National Institute of Justice, U.S. Department of Justice**
Edward Mulvey (PI), “A Prospective Study of Serious Adolescent Offenders, Renewal Proposal” (2000) (Role: Co-Principal Investigator)

**Open Society Institute, The Soros Foundations**

**John D. and Catherine T. MacArthur Foundation**

**MacArthur Foundation Research Network on Psychopathology and Development**

**MacArthur Foundation Research Network on Psychopathology and Development**

**John D. and Catherine T. MacArthur Foundation**

**MacArthur Foundation Research Network on Psychopathology and Development**

**MacArthur Foundation Research Network on Psychopathology and Development**

**John D. and Catherine T. MacArthur Foundation**

MacArthur Foundation Research Network on Psychopathology and Development
Laurence Steinberg (PI) “Child and Adolescent Life Events Development” (1996-1997) (Role: Principal Investigator)

MacArthur Foundation Research Network on Psychopathology and Development

John D. and Catherine T. MacArthur Foundation

MacArthur Foundation Research Network on Psychopathology and Development

MacArthur Foundation Research Network on Successful Pathways Through Middle Childhood and on Psychopathology and Development

William T. Grant Foundation

Temple University Biomedical Research Fund

The Lilly Endowment
Laurence Steinberg (PI), “Family, Peer, and Community Influences on Adolescent Achievement” (1990-1993) (Role: Principal Investigator)

Temple University Research Incentive Fund

Graduate School Research Committee, University of Wisconsin--Madison

National Center on Effective Secondary Schools, U.S. Department of Education

William T. Grant Foundation
Laurence Steinberg (PI) “Adolescent Autonomy and Family Relations” (1987-1988) (Role: Principal Investigator)

National Center on Effective Secondary Schools, U.S. Department of Education

Graduate School Research Committee, University of Wisconsin
National Center on Effective Secondary Schools, U.S. Department of Education
Laurence Steinberg (PI), “Student Achievement and Responsibility” (1985-1986) (Role: Principal Investigator)

Graduate School Research Committee, University of Wisconsin
Laurence Steinberg (PI), “Changes in Family Relations During Adolescence” (1984-1985) (Role: Principal Investigator)

William T. Grant Foundation
Laurence Steinberg (PI) “Faculty Scholars Award” (1983-1988) (Role: Principal Investigator)

University of California Focused Research Program
Ellen Greenberger (PI) “Early Work Experience and Adolescent Stress” (1979-1982) (Role: Co-Principal Investigator)

The Ford Foundation

The Spencer Foundation

National Institute of Education
Ellen Greenberger (PI), “Early Adolescents at Work: Costs and Benefits to Learning and Social Development” (1979-1981) (Role: Co-Principal Investigator)

National Institute of Education
Ellen Greenberger (PI), “Early Adolescents at Work: Effects of Part-Time Employment on Literacy and Maturity” (1978-1979) (Role: Co-Principal Investigator)

Committee on Instructional Development, University of California
Laurence Steinberg (PI), “Development of Instructional Materials for ‘Human Development over the Life Cycle’.” (1978) (Role: Principal Investigator)

College of Human Ecology, Cornell University

COLLOQUIA, CONFERENCE PRESENTATIONS, AND INVITED ADDRESSES


Steinberg, L. (August, 1977). Research in the ecology of adolescent development: A longitudinal study of the impact of physical maturation on changes in the family system in early adolescence. Paper
Invited discussant, Symposium on Maternal Stress, Western Psychological Association, Honolulu, April, 1980.
Invited speaker, National Center for Vocational Education, Ohio State University, May, 1980.
Paper presented at the annual meeting of the American Psychological Association, Los Angeles. Invited speaker, Bush Foundation Program in Child Development and Social Policy, UCLA, September,


Steinberg, L. (March, 1986). Recent research in adolescent development. Invited workshop at the annual meeting of the Society for Adolescent Medicine, Boston.


Invited lecture, Laboratory for the Study of Adolescence, Department of Psychiatry, Michael Reese Hospital and the Committee on Human Development, University of Chicago, May, 1988.


Invited speaker, Department of Child and Family Development, University of North Carolina at Greensboro, February, 1992.


Invited colloquium, Department of Human Development and Family Studies, Penn State University, April, 1992.


Invited participant, Social Science Research Council working group meeting on Community and Neighborhood Influences, New York, May 14, 1992.


Invited presentation, Center for Research on Young Children and Families, Teachers College, Columbia University, June 18, 1997.
Invited workshop leader, Vice President and Mrs. Gore’s “Family Re-Union” conference on Families and Learning, Nashville, June 24-25, 1997.


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Invited participant, the High School of Tomorrow Forum, National Association of Secondary School Principals, Hershey, PA, October 13-14, 1999.


Steinberg, L. (December, 1999). Adolescent Violence: The Roles of Parents, Peers, and Communities. Cummins Endowment for Adolescent Medicine Lecture, Morristown Memorial Hospital, Morristown, NJ.


Invited colloquium, Irving B. Harris School of Public Policy, University of Chicago, June, 2001.

Adolescence Summer School, Puidoux-Chexbres, Switzerland. Steinberg, L. (October, 2001).
Adolescent development and juvenile justice. Invited campus-wide lecture
sponsored by the departments of Psychology, Education, and Urban Studies, Vassar College. Invited
colloquium, The Bush Center in Child Development and Social Policy, Yale University, October,
2001. Discussant, symposium entitled “Gender, Mental Disorder, and Juvenile Justice,” annual meeting
of the
American Society of Criminology, Atlanta, November, 2001. Invited participant, Annie E. Casey
Foundation Roundtable on Family Strengthening Youth Development,
competence to stand trial. Paper
presented as part of a symposium entitled “Juveniles’ Competence to Stand Trial,” at the annual
meeting of the American Psychology and Law Society, Austin, Texas. Steinberg, L. (March, 2002). The
juvenile psychopath: Fads, fictions, and facts. Paper presented as part of a
symposium entitled “Recent Research and Legal Developments on Juvenile Psychopathy,” at the annual
meeting of the American Psychology and Law Society, Austin, Texas. Steinberg, L. (March,
Invited keynote address, University of Virginia Institute of Law, Psychiatry and Public Policy annual
conference on juvenile forensic practice, Richmond, March 22, 2002. Invited colloquium, School of
Social Ecology, University of California, Irvine, April 1, 2002. Chair, symposium entitled “Adolescents’
Competence to Stand Trial as Adults: The MacArthur Juvenile
Competence Study.” Biennial meetings of the Society for Research on Adolescence, New Orleans,
April, 2002.
Steinberg, L. (April, 2002). Age differences in capacities underlying competence to stand trial. Paper
presented as part of a symposium entitled “Juveniles’ Competence to Stand Trial,” at the biennial
meeting of the Society for Research on Adolescence, New Orleans.
Discussant, symposium entitled “Emotion Regulation in Adolescence,” biennial meetings of the Society
Invited presenter, symposium entitled “What is the Meaning of Good Science in the Field of
Adolescent Development?” Biennial meetings of the Society for Research on Adolescence, New
Orleans, April, 2002.
Invited keynote address, National Family & Parenting Institute International Conference on
Invited speaker, Practical Parenting Partnerships annual meeting, Lake Osage, Missouri, April, 2002.
Invited participant, National Consortium on Violence Research (NCOVR) Summer Workshop, St.
Augustine, Florida, June, 2002. Invited participant, White House Conference on Character and
Community, June 19, 2002. Steinberg, L. (June, 2002). Is decision-making the right framework for the
study of adolescent risk-taking?
Invited paper presented at the Adolescent Risk Conference, Institute for Adolescent Risk
Communication, University of Pennsylvania, June, 2002. Invited keynote speaker, Adolescent Health
Institute, University of New Hampshire Cooperative Extension,
Lake Winnipesaukee, New Hampshire, June, 2002. Chair, invited symposium entitled “Juveniles’
Competence to Stand Trial: The MacArthur Study.” Annual
meeting of the American Psychological Association, Chicago, August, 2002. Steinberg, L. (August,
2002). Age differences in capacities underlying competence to stand trial. Paper
presented as part of a symposium entitled “Juveniles’ Competence to Stand Trial: The MacArthur
Study,” at the annual meeting of the American Psychological Association, Chicago. Invited speaker,
Satellite Series on “Healthy Teen Development,” University Extension, Iowa State


Steinberg, L. (June, 2004). A developmental perspective on risk-taking in adolescence. Paper presented as part of an invited plenary symposium sponsored by the National Institute of Drug Abuse at the meeting of International Society for Addiction Medicine, Helsinki.

Steinberg, L. (September, 2004). Adolescent development in the family context. Invited Master Lecture, XVIII Congresso di Psicologia dello Sviluppo, Sciacca, Italy.


Grand rounds, Department of Child Psychiatry, Tulane University School of Medicine, New Orleans, March 11, 2005.
APA Distinguished Scientist Lecture, Rocky Mountain Psychological Association, Phoenix, April, 2005.
Steinberg, L. (June, 2005). You and your adolescent. Invited lecture, Young Presidents’ Organization Southern 7 Chapter, Greenbrier, West Virginia.
Steinberg, L. (June, 2005). The ten basic principles of good parenting. Invited lecture, Young Presidents’ Organization Southern 7 Chapter, Greenbrier, West Virginia.


5th Annual Russell Barkley Lecture, Department of Psychiatry, University of Massachusetts Medical School, Worcester, Massachusetts, November 2, 2006.


Invited keynote address, Minnesota Association For Children’s Mental Health, Duluth, Minnesota, April 28, 2008.


Steinberg, L. (August, 2008). Adolescent development, social policy, and the law: Lessons from a decade in the trenches. Presidential address, Division of Developmental Psychology, American Psychological Association annual meeting, Boston.


Invited colloquium, Sackler Institute for Developmental Psychobiology, Weill Medical College of Cornell University, March 26, 2009.


Dmitrieva, J., & Steinberg, L. (April, 2009). Services that work: In search of juvenile justice programs that reduce recidivism. Paper presented as part of a symposium entitled “Improving Functioning of Incarcerated Adolescents: Effectiveness of Formal and Informal Interventions” at the biennial meetings of the Society for Research in Child Development, Denver.


Invited colloquium, Department of Psychology and Center for Drug Abuse Research Translation, University of Kentucky, April 16, 2009.


Invited speaker, Conference on Learning and the Brain, Learning and the Brain Society, Washington, May 9, 2009.


Invited lecture, Harris School of Public Policy Studies, University of Chicago, February 25, 2010.


Steinberg, L. (March, 2010). Does Exposure to Sexy Media Lead Adolescents to Have Sex? A Reanalysis and a New Conclusion. Paper presented as part of a symposium titled “Using Propensity Score Matching to Control for Selection Effects in Research on Extracurriculars, Employment, and


Invited lecture, “Workshop on Development as Action in Context,” German Psychological Association,
Dornburg, Germany, June 16-18, 2010. Invited participant, National Institute of Child Health and Human Development conference on Cognition,
Invited speaker, conference on Adolescence: Exploration and Self-Regulation of the Unknown, Jacobs Foundation Conference, Marbach, Germany, April 6-8, 2011.


Steinberg, L. (March, 2012). Toward a positive psychology of adolescence. Paper presented as a part of a symposium entitled “Positive Adolescent Health” at the biennial meeting of the Society for Research on Adolescence, Vancouver.


Invited colloquium, Committee on Education and Center for Human Potential and Public Policy, University of Chicago, April 2, 2013.


Invited plenary presentation, SRCD Teaching Institute, biennial meeting of the Society for Research in Child Development, Seattle, April, 2013.

Invited speaker, SRCD preconference on evolutionary psychology, biennial meeting of the Society for Research in Child Development, Seattle, April, 2013.

Undergraduate and Graduate Courses Taught
Cornell University (1976-77) Adolescence and Adulthood Adolescence in Modern Society
University of California, Irvine (1977-83) Introduction to Human Behavior Human Development Over the Life-Cycle Abnormal Behavior
Adolescent Development Perspectives on Child Rearing Seminar in Human Development (Graduate)

TEACHING
University of Wisconsin-Madison (1983-88) Development from Middle Childhood to Late Adulthood Adolescent Development in Social Context Adolescence, Family, and Work (Graduate) Adolescence and the Family (Graduate) The Family at Mid-Life (Graduate) Interdisciplinary Perspectives on Adolescent Development (Graduate)
Temple University (1988-) Introduction to Psychology (Developmental Psychology Unit) Developmental Research Methods Adolescent Development Capstone Course in Psychology Core Course in Developmental Psychology (Graduate) Developmental Research Methods (Graduate) Seminar in Socioemotional Development (Graduate) Seminar in Adolescent Development (Graduate) Seminar in Developmental Psychopathology (Graduate) Supervision of Master’s Students (Committee Chair/Thesis Advisor)


Supervision of Doctoral Students (Committee Chair/Dissertation Advisor)


Marguerite Clark (1987). “Patterns of Friendship among Middle-Aged Adults.” School of Social Sciences, University of California, Irvine.


Michael Fraser (2001). “An Examination of the Specificity of the Link Between Stress and Disorder Using the Adolescent Life Events and Difficulties Schedule.” Department of Psychology, Temple University.


Supervision of Postdoctoral Fellows

University of California, Irvine
Committee on Courses (1982-83)

UNIVERSITY-LEVEL SERVICE


CURRICULUM VITAE

Jason M. Chein

825 Weiss Hall
1701 N. 13th Street
Temple University
Philadelphia, PA 19122-6085

Telephone: (215) 204-7314
Fax: (215) 204-5539
E-mail: jchein@temple.edu
URL: http://www.temple.edu/tunl

Positions and Academic History:

2006- Temple University, Philadelphia, PA
Assistant Professor, Department of Psychology

2006- Princeton University, Princeton, NJ
Visiting Researcher, Center for the Study of Brain, Mind, & Behavior

2004-2005 Princeton University, Princeton, NJ
Postdoctoral Fellow, Center for the Study of Brain, Mind, & Behavior

2001-2004 Univ. of Pittsburgh, Pittsburgh, PA
Ph.D., Cognitive Psychology
Center for the Neural Basis of Cognition (Carnegie Mellon Univ./ Univ. of Pittsburgh)
Dissertation: Evaluating alternative models of working memory with neuroimaging

2002 Chatham College, Pittsburgh, PA
Adjunct Faculty Member, Department of Biology

1997-2001 University of Pittsburgh, Pittsburgh, PA
M.S., Cognitive Psychology
Center for the Neural Basis of Cognition (Carnegie Mellon Univ./ Univ. of Pittsburgh)
Thesis: Evidence of a domain general learning network: An FMRI investigation with verbal and nonverbal paired-associates

1992-1997 Temple University, Philadelphia, PA
B.A., (Summa Cum Laude)
Majors in Psychology & Computer Science, minor in Cognitive Neuroscience

Fellowships, Awards, and Honors:

2001 Tim Post Award For Research Excellence (University of Pittsburgh)
2001 Temple University Alumni Gallery of Success (Temple University)
2000 Trainee Travel Award, Organization for Human Brain Mapping
1998 Center for the Neural Basis of Cognition Fellowship (National Science Foundation)
1998 National Science Foundation Graduate Student Fellowship, Honorable Mention
1997 College of Arts & Sciences Graduation Ceremony Speaker (Temple University)
1997 President’s Scholar (Temple University)
1997  Phi Beta Kappa National Honor Society
1997  General Alumni Award For Academic Achievement (Temple University)
1997  Clifford M. Kliger Scholarship For Outstanding Work In Psychology (Temple University)
1996  Jerry Zaslow Award For Achievement in Academics and Service (Temple University)

Professional Memberships:

1997-present  Cognitive Neuroscience Society
1997-present  Society for Neuroscience
2006-present  American Psychological Association
2007-present  Organization for Human Brain Mapping

Professional Activities:

Review Editor, *Frontiers in Human Neuroscience*

Ad-hoc Reviews

Research Support (Active)

NIH R21 DA022546-01 (PI: Steinberg, $999,315)  9/30/2006 - 8/31/2010
Peer Effects on Neural and Behavioral Markers of Risk-Taking in Adolescence
Role: Co-Principal Investigator

Spatial Intelligence and Learning Center
Role: Co-Investigator

NIH R01 MH059256-06 (PI: Fiez, $1,469,319)  6/1/2000 -12/31/2010
Articulatory/Phonological Processes in Working Memory
Role: Consultant

Peer-Reviewed Publications:


**Manuscripts under review and in revision:**

Chein, J.M. & Morrison, A.B. (under review). Expanding the mind’s workspace: Training and transfer effects with a complex working memory span task.


Berryhill, M.E., Chein, J.M., Olson, I.R. (under review). At the intersection of attention and memory: the mechanistic role of the posterior parietal lobe in working memory.

**Manuscripts in preparation:**


**Book Chapters:**


Published Conference Proceedings/Abstracts:


Schneider, W., Chein, J., Smith, T., & Shrager, J. (1998). FMRI of domain general learning. Published abstracts of the 28th annual meeting of the Society for Neuroscience, Los Angeles
Conference Presentations and Invited Lectures:


Popular Media Coverage:


Teaching Experience:

2006-present Foundations in Cognitive Psychology (Temple University, undergraduate)
2006 Topical Seminar on Functional Magnetic Resonance Imaging (Temple University, graduate)
2002 Psychology Research Methods Laboratory (University of Pittsburgh, undergraduate)
2002 Functional & Clinical Neuroanatomy (Chatham College, graduate)
1999-2000 Systems Neuroanatomy (Teaching Fellow, Univ. of Pittsburgh, graduate)
1998 Introduction to Psychology (Teaching Assistant, University of Pittsburgh, undergraduate)
1996, 1997 Freshman Skills Seminar (Co-instructor, Temple University, undergraduate)

University & Departmental Service:

College of Liberal Arts Academic Technology Committee (2008-present)
Department of Psychology Colloquium Committee (2007-present)
Department of Psychology Space Committee (2008-present)
Department of Psychology Cognitive Neuroscience Search Committee (2007)