Lecture 2: Adolescent Risk Taking: Issues and Myths

I. INTRODUCTIONS
A. Questions
- 1. Why do adolescents engage in risky behavior?
- Identify factors you think distinguish adolescents who do and don’t engage in risk taking
- 2. What factors matter in your theory of adolescent risk-taking
  - Biology: Is there a biological basis (neurology, genes, hormones) for adolescents engaging in risky behavior?
  - Psychology: Are adolescent risk takers more irrational or immoral than non-risk-takers?
  - Social-cultural context: Do adolescent risk takers have in common a particular set of environment features (parents, peers, neighborhoods, cultures). If so what are the social-cultural features of the context which promotes risk taking?

II. MYTHS
A. Who Takes Which Risks
- Who takes which risks?
  A.1 Not all adolescents take risks.
  - Culturally strong stereotypes of adolescents
    - Being out of control
    - Impossible to reason with
    - Taking every conceivable risk
  - The image of adolescent going through a period of “storm and stress” is overstated.
  - Offer & Offer found that in cross cultural studies a majority of adolescents were happy.
  - The transition may not be a time of “great upheaval” or wide spread “semi-criminality” (G Stanley Hall)
II. MYTHS
A. Who Takes Which Risks

- Who takes which risks?
  
  A.2 Risk takers are not only males.
  
  - Byrnes notes a small tendency for males to take more risks than females (d = .13).
  - This may reflect a gender difference in the preferred forms of risk.
  - Among 20 year olds, girls higher in smoking than boys.
  - Boys higher in risky driving than girls.
  - The results of a study of gender difference in risk taking would be skewed, depending on which risk behavior is sampled.

B. Why Risks are Taken?

- Why take risks?
  
  B1. Adolescents take risks out of ignorance:
  
  - Claims of adolescent ignorance about the harm of risky behavior (smoking, illicit drugs, unprotected sex) have been disproved.
  - Risk takers understand the risk from risky behavior as well as non-risk-takers.
  - But it is also not the case that adolescents are completely informed either.
  - Many do not understand the biology of pregnancy or addiction, the physics of driving, the limits of reaction times etc. etc.

II. MYTHS
A. Who Takes What Risks?

- Who takes which risks?
  
  A.3 Risk takers don’t necessary take multiple risks
  
  - Byrnes notes that correlational and factor analytic studies of risk taking do not always demonstrate a single general risk taking tendency.
  - Correlations or single factor findings may be a statistical artifact of the fact that a plurality of a sample engaged in no risk taking.
  - Byrnes notes that there is more situational variability and less cross-situational generality in risk taking.
  - It is hard to find cross-situational generality in any behavior (e.g., attachment).

B. Why Risks are Taken?

- Why take risks?
  
  B2. Risk takers feel invincible or invulnerable
  
  - Byrnes notes that claims regarding adolescents’ feelings of invincibility or invulnerability to dangers have also been difficult to confirm.
  - No strong evidence of disassociation (knowledge of danger associated with risky behavior but no application to the self).
  - No evidence of “adolescent egocentrism” – seeing themselves as so special that things just don’t apply to them.
  - However, weaker evidence that risk takers feel less vulnerable than non-risk takers.
## II. MYTHS
### B. Why Risks are Taken?

#### Why take risks?

**B3. Hormones**
- Adolescent “craziness” often explained by “ranging hormones”.
- Ranging hormones may not directly predict behavior, but it may predict growth secondary sex characteristics
  - Male: Hair, larger hands and feet, broader shoulders and chest, greater muscle mass and physical strength, voice change.
  - Female: Enlarged breasts, wider in hips than in shoulders, smoother skin texture
- These secondary sex characteristics alters prepubescent social relations
- It is the reorganized social relations due to changes in secondary sex characteristics which predicts “craziness”

**B4. Personality**
- Adolescent risk takers have a “risk taking” or some other unique personality.
- This too may overestimate cross-situational generality – does personality predict behavior across situations?
- More situational or contextual control over risk taking.
- Does a person wake up saying that they are going to engage in risky behavior today?
- No doubt some are more or less willing to do take risks (i.e., need little or more contextual support), this suggests a Person x Situation model.

### Value of risks?

**C1. Is risk taking bad?**
- Presumption that all “risk taking” is bad.
  - Byrnes; Discriminate between risks worth and not worth taking.
- Risk taking is not simply the negative outcome associated with all actions, it is also associate with positive outcomes.
  - Only those who will risk going too far can possibly find out how far one can go. T.S. Elliot
  - Go out on a limb. That’s where the fruit is. Jimmy Carter.
  - Other risk taking quotes: [thinkexist.com/quotations/risk-taking](http://thinkexist.com/quotations/risk-taking)
- Risk-taking is intimately tied with exploration in adolescence.

**C1. Does risk taking diminish?**
- Presumption that adolescent risk taking goes away as adolescents become adults.
- Byrnes: Teens may be vulnerable to certain types of risk because of their social context, exploratory tendencies, social and psychological needs etc.
- Although the form of risk may change over age, adults may be just as risky in terms of absolute frequency.
- One question (not asked by Byrnes) is whether adolescents and adults engage in the same processes when taking the forms of risk taking that each takes.
### III. MEANING OF RISK

#### A. The Concept of Risk

- Why the broad belief that adolescents do “stupid things” when...
- Most adolescents don’t, adults do it as frequently, and its not done for stupid reasons (ignorance, invincibility, hormones, personality)
- One reason may hinge on the meaning of risk
- “Risks” sound like those things which people should avoid at all costs!
- Failure to detect or avoid the risks sounds irrational.
- Seeking our risks sounds also sounds irresponsible

#### B. Perspectives on Risk

- There are many definitions of risk depending on the specific contexts and perspectives...
- Financial Risk: To avoid possible financial losses.
- Legal Risk: Unforeseen negative consequences.
- Engineering Risk: Frequency and value of potential negative outcomes.
- Generally, from these contexts “risk” refers to situations in which it is possible but not certain that some undesirable event will occur.
- We’ll think about risk from Philosophy, Economics, Decision Science, Epidemiology and Psychology

#### B1 Philosophy

- From a philosophical perspective, there is a right and wrong way to think about any situation involving risk.
- Philosophical approach to risk is normative, prescriptive and rational.
- Normative means that the account serves as the standard, or norm (vs. fact), regarding the way to deal with risk.
- Prescriptive (vs. descriptive) means that it is concerned with identifying the rules regarding how risk should be dealt with.
- Rational (irrational) means that the prescriptive norms are completely justifiable.
III. MEANING OF RISK
B. Perspectives on Risk

- B1 Philosophy
  - Probability theory is a prescriptive, normative and rational way for considering risk
  - It is a mathematical study of phenomena characterized by randomness or uncertainty.
  - Risk decisions are made by comparing probabilities of positive and negative outcomes associated with an act.
  - Presume that such probabilities can be objectively assigned.
  - People in the same situations face the same risks.

- B2 Economics
  - Economists adopt probabilistic approach to risk but distinguished risk and uncertainty.
    - **Risk:** The probabilities of the various possible outcomes are known
    - **Uncertainty:** The probabilities of the various possible outcomes are not known.
  - This distinction, made by the (Knight, 1923)
    - Knight is the founder of the Chicago School of Economics

- B3 Decision Science
  - Decision Science is a branch of statistic which examines judgments under uncertainty.
  - DS have addressed risk, adopting a more subjectivist view of probability
  - This view rejects the difference between risk and uncertainty as the probabilities assigned are merely expressions of a “degree of belief”:
    - Such expressions make reference to beliefs not to the world.
    - “Having a 50% chance of throwing heads” is now understood as a belief not a state of the world.
III. MEANING OF RISK
B. Perspectives on Risk

- B3 Decision Science
  Subjective Expected Utility (SEU) theory presumes that people subjectively assign not only probabilities (defined as a degree of belief) but also values to outcomes.
  - As a result, two people may be facing the same situation, but judge the risk very differently.
  - SEU remains a normative, prescriptive, and rational approach to deal with risk, it just allows individuals to assess risk uniquely for themselves.

- B4 Epidemiology
  The consequence of risk-taking is such that risk can be defined as medically not just probabilistically.
  - Epidemiology is the scientific study of factors affecting the health and illness of populations.
    - A risk factor is defined epidemiologically as “an aspect of personal behavior or lifestyle, an environmental exposure, or an inborn or inherited characteristic which on the basis of epidemiological evidence is known to be associated with health-related condition(s) considered important to prevent.” *Epidemiological Dictionary 1996*

  - Expression *important to prevent* suggests a social standard for assessing epidemiological risk.
  - Epidemiological evidence is typically correlational but nonetheless it is used to provide casual accounts of disease and illness.
    - In another epidemiological definition, risk factors are considered as “part of the causal chain, or expose the host to the causal chain.”
    - The use of epidemiological techniques to make causal claims poses interesting challenges and remains a source of problems today (*Burt 2001*), as it was over 40 years ago (*Hill, 1965*).

- B5 Psychology
  Psychological studies of risk explore the basis of failures to be normative, prescriptive, and rational in the face of risk.
  - Examples of this include…
    - Individual differences: Some people are more risk averse and some more risk seekers.
    - Failure to be consistent: Failure to judge probability appropriately (the Linda problem).
    - Factors which may undermine normative reasoning about risk including psychopathology, emotion, social context.
  - Psychological theories of reasoning about risk.
III. MEANING OF RISK

C. Similarities

- There is a similarity in the approaches to study risk.
  C.1 Normative: In each approach there is an appeal to standards or norms for identifying and dealing with risk.
- Dealing appropriately with risk involves grasping the norms.
  - Norms grasped may be formal (Philosophy, Economics, Decision Science), social (Epidemiology), biological, or psychological (Psychology).
  - Formal norms defined in terms objective (Philosophy, Economics) or subjective (Decision Science) processes.
  - In the case of Psychology, the standards reflect overcoming psychological or biological factors undermining the standards.

III. MEANING OF RISK

D. Differences

- There are two critical differences in the approaches to study risk.
  D.1 Perspective: From whose perspective is risk being assessed?
    - The issue addresses whether risk is considered from the perspective of logic and mathematics (Philosophy, Economics), society (Epidemiology), the self (Decision Science) or biological/psychological processes (Psychology).
    - Depending on the approach adopted, studies of risk-taking may not be compatible with each other.
    - Decision Scientific (self-based assessment) is incompatible with Epidemiological (societal-based assessment) approaches.

III. VIEWS OF RISK TAKING

A. Problem Behavior

- These different views of risk are embedded in different approaches to the study of adolescent risk-taking.
- Jessor’s Problem Behavior approach to risk taking
  - Describe Jessor’s Problem Behavior approach to risk taking?
  - How is problem behavior defined?
  - Which view of risk does Jessor subscribe to?
  - In what ways does his view of risk influence his approach to risk taking?
III. VIEWS OF RISK TAKING
   A. Exploratory Behavior

   - These different views of risk are embedded in different approaches to the study of adolescent risk-taking.
   - Michaud Exploratory Behavior approach to risk taking
     - Describe Michaud Exploratory Behavior approach to risk talking?
       - How is problem behavior defined?
     - Which view of risk does Michaud subscribe to?
     - In what ways does his view of risk influence his approach to risk taking?