Affective Sciences
Perspectives on Cancer Control

Tobacco

Yvonne Hunt, PhD, MPH
Annette Kaufman, PhD, MPH
Heather Patrick, PhD
Tobacco Use Spectrum and Affect

Uptake

- Never Smoker
- First Try
- Experimentation

Maintenance

- Regular Smoker

Cessation

- Cessation
- Former Smoker
- Relapse

Non-Smoker
Trends in Current Cigarette Smoking Among High School Students* and Adults,† United States, 1965–2009

*Percentage of high school students who smoked cigarettes on 1 or more of the 30 days preceding the survey (Youth Risk Behavior Survey, 1991-2009).
†Percentage of adults who are current cigarette smokers (National Health Interview Survey, 1965-2009).
Biopsychosocial Model

Individual

Biological

Contextual
Contextual Example
Graphic Warning Labels

Canada

U.S.

Egypt

Brazil
Feedback Loop

Tobacco Use

Affect
What We Know
Smoking Uptake & Affect

Biological Factors
• Nicotine exposure and mood

Individual Factors
• Mood Variability and Magnitude
• Beliefs about Smoking and Mood
• Affective Normative Feedback

Contextual Factors
• Peer Smoking
• Tobacco Advertising and Promotion
• Anti-Smoking Messages and Emotion
  • Graphic Warning Labels and Emotion
What We Know
Smoking Maintenance & Affect

Biological Factors
• Stress-Precipitated Tobacco Relapse
• Imagery-Induced Cigarette Craving

Individual Factors
• Emotion Regulation
• Beliefs about Smoking and Mood
• Affective temperaments
• Someday Smokers and Emotion

Contextual Factors
• Graphic Warning Labels and Emotion
What We Know
Smoking Cessation

Biological Factors
- Withdrawal and mood regulation
- Cessation medications and limbic activation

Individual Factors
- Affective withdrawal symptoms
- Negative affect and relapse
- Failed quit attempts and mood

Contextual Factors
- Graphic warning labels
- POS advertising
Psychopathology

**Biological Factors**
- Early nicotine exposure and psychopathology
- Antidepressant/anxiolytic effects of nicotine
- Shared pathways (e.g., genetic, dispositional)

**Individual Factors**
- Bidirectional influences
- Smoking uptake and psychopathology
- Nicotine dependence and psychopathology
- Cessation outcomes and psychopathology
- Relapsing mood disorders and cessation
BIG Questions
Smoking and Affect

• How can a better understanding of affective processes help to inform tobacco control efforts and clinical interventions?
• What are the etiological processes linking affect and smoking vulnerability?
• Which affective dimensions are important regarding uptake, maintenance, and cessation (e.g. negative vs. positive)?
• How is mood regulation related to uptake, maintenance and cessation?
BIG Questions
Smoking and Affect

• How do the drug effects of nicotine interact with the neurobiology of affect to influence uptake, maintenance, cessation?
• Which emotions should health communication messages target to influence uptake, maintenance, and cessation?
• What mediators and moderators are important regarding the relationship between affect and uptake, maintenance, and cessation (e.g. peer smoking, sensation seeking, genetics)?
• How do we monitor the influence of tobacco industry activities (e.g. advertising) on affect and uptake, maintenance, and cessation?
Thank you!
U.S. Proposed Warning Labels

1. WARNING: Cigarettes are addictive. 1-800-QUIT-NOW
2. WARNING: Tobacco smoke can harm your children. 1-800-QUIT-NOW
3. WARNING: Cigarettes cause fatal lung disease. 1-800-QUIT-NOW
4. WARNING: Smoking during pregnancy can harm your baby. 1-800-QUIT-NOW
5. WARNING: Cigarettes cause cancer. 1-800-QUIT-NOW
6. WARNING: Cigarettes cause strokes and heart disease. 1-800-QUIT-NOW
7. WARNING: Tobacco smoke causes fatal lung disease in nonsmokers. 1-800-QUIT-NOW
8. WARNING: Smoking can kill you. 1-800-QUIT-NOW
9. WARNING: Quitting smoking now greatly reduces serious risks to your health. 1-800-QUIT-NOW