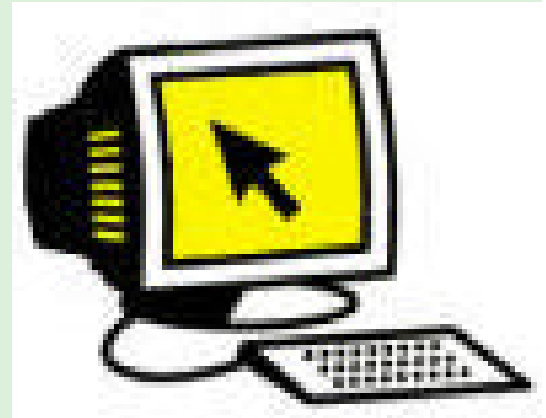


# Using The Limited Capacity Model of Mediated Message Processing To Study and Design Health Communication Messages



Assumption:  
Understanding how people  
process mediated messages  
should create knowledge  
that will allow us to design  
effective media.



# Form & Content

- Structural Features
- Production Pacing
- Complexity
- Rate/Control
- Symbol System
- Emotion
- Difficulty
- Familiarity
- Topic
- Genre

# Impact Processing Variables

- Attention – selection
- Attention – effort
- Arousal
- Encoding
- Storage
- Retrieval

# Operational Model

- Orienting Response
- Cognitive Effort
- Resource Allocation
- Encoding
- Storage
- Retrieval
- Emotional Valence
- Emotional Arousal
- Arousal
- Phasic HR slow down
- Tonic HR slow down
- STRT
- Recognition
- Cued Recall
- Free Recall
- SAM, EMG, Startle
- SAM
- Skin Conductance

# What are message goals?

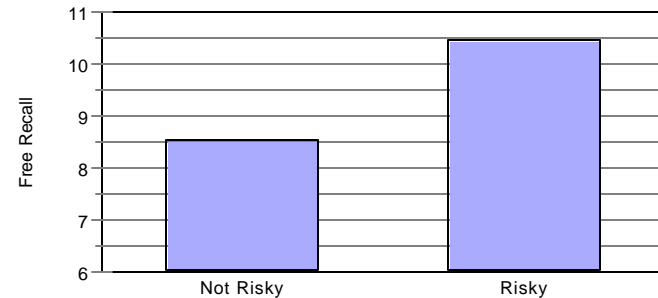
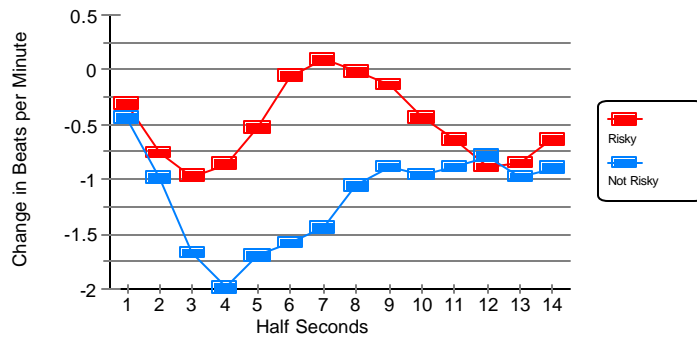
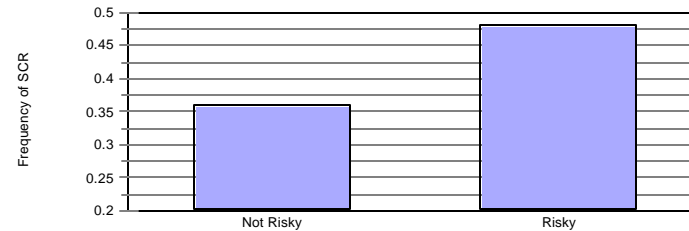
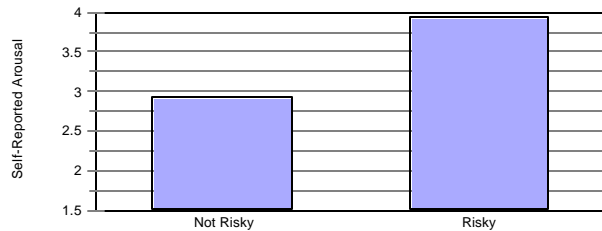
- Attention
- Awareness
- Learning
- Persuasion



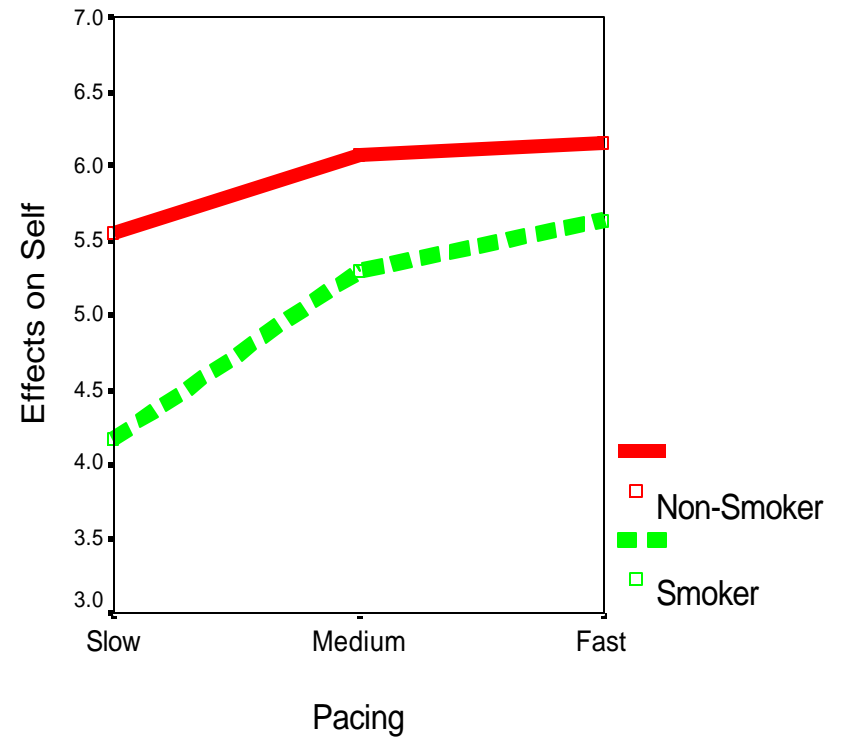
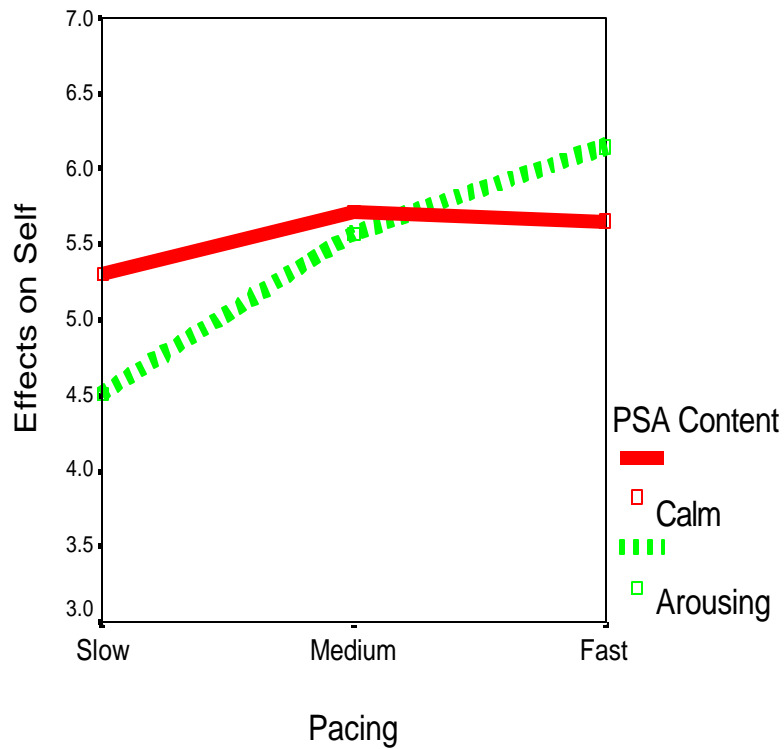
# Applying the Theory to Health Communication Messages

- What is special about health messages?
- What is special about the goal of health messages?
- What is special about the audience for health messages?

# What is special about messages. Risky Behavior Messages.

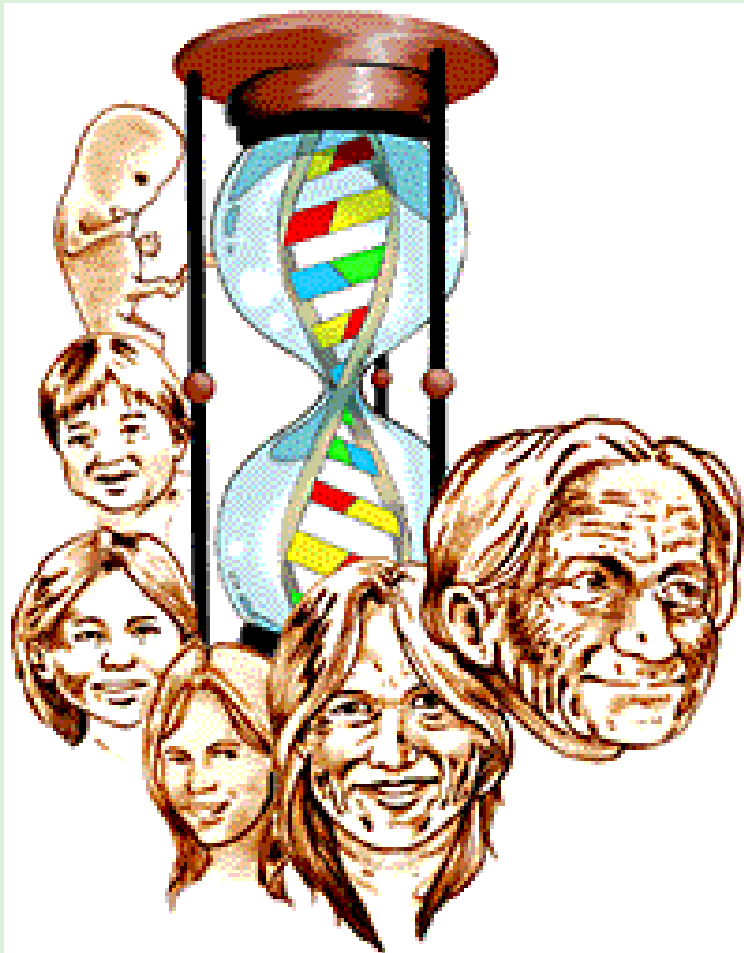


# What is special about the goal?

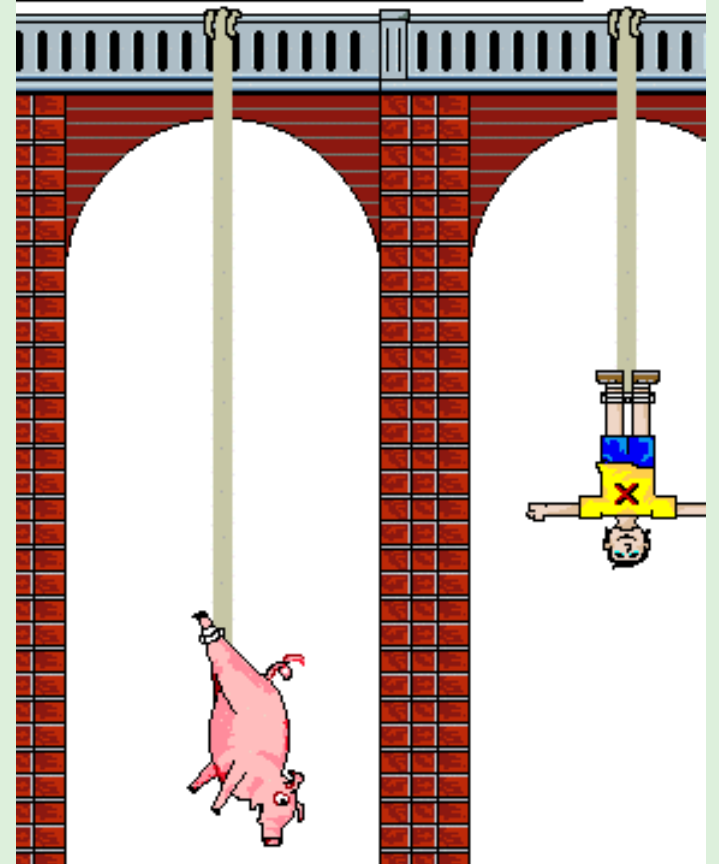




# What is special about the audience?



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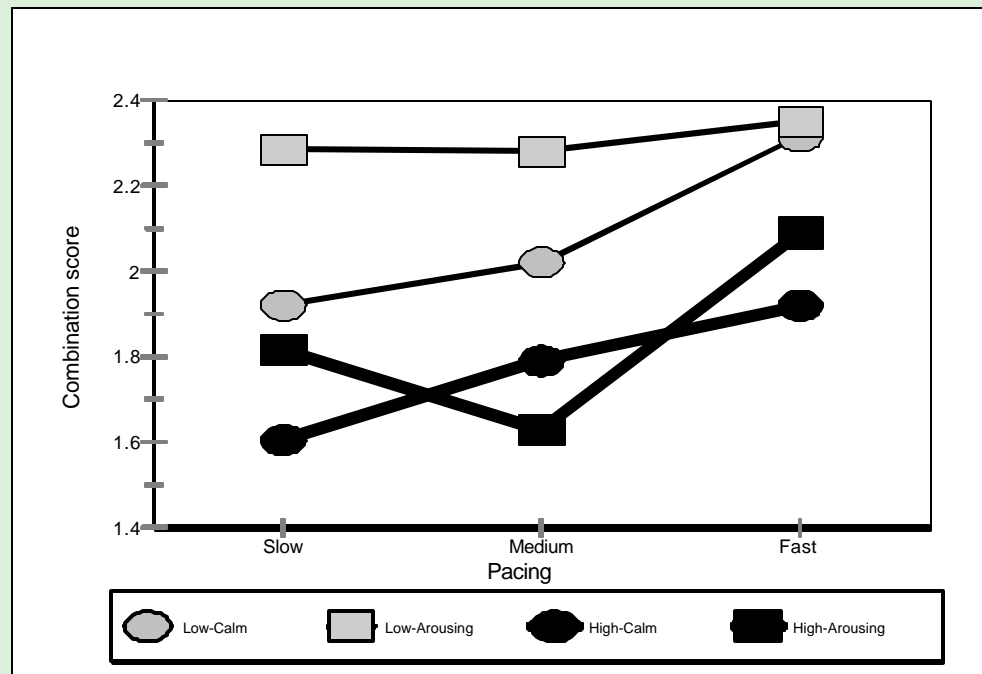


# How does age affect processing?

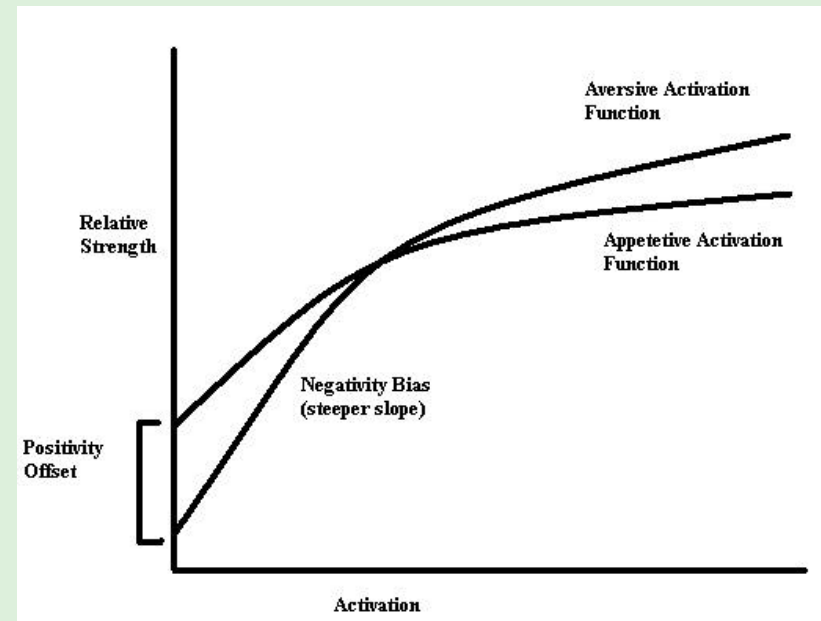
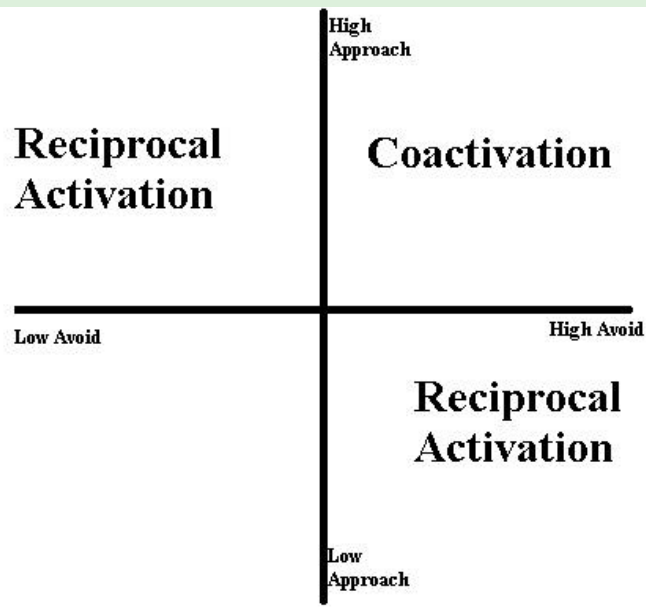
- Adolescents pay more attention to arousing content than college students.
- Adolescents are more aroused by increased production pacing than college students.
- College students show signs of cognitive overload sooner than adolescents.

# How does Sensation Seeking affect processing?

- High SS have more positive valence
- High SS have better recognition
- No difference in attention
- No difference in cognitive overload
- Less arousal – overall and in response to I V



# MAM – Motivation Activation Measure Based on Cacioppo's Coactivation Model



# Motivational Types

|                              | Low<br>Negativity<br>Bias | High<br>Negativity<br>Bias |
|------------------------------|---------------------------|----------------------------|
| Low<br>Positivity<br>Offset  | Inactives                 | Risk<br>Avoiders           |
| High<br>Positivity<br>Offset | Risk<br>Takers            | Coactives                  |

# Relationships among MAM, SS, and Use

| Motivational Types | SS Study 1 | SS Study 2 | Use Study 1 | Use Study 2 |
|--------------------|------------|------------|-------------|-------------|
| Risk Takers        | 22.74      | 25.07      | 40.26       | 43.00       |
| Risk Avoiders      | 15.63      | 19.77      | 17.42       | 32.86       |
| Coactives          | 18.69      | 23.23      | 29.69       | 48.96       |
| Inactives          | 21.92      | 21.09      | 28.23       | 37.81       |

# What's Next?

- Further development work on mini-MAM and Yo-MAM
- Validation work using behavioral & psychophysiological measures (STRT for positivity offset and startle reflex for negativity bias).
- Determine if different motivational types process emotional messages differently.