

# Consumer Decision Making in Medical Contexts

Barbara Kahn  
The Wharton School

## The context changes our paradigm

- Fortune cookie game....



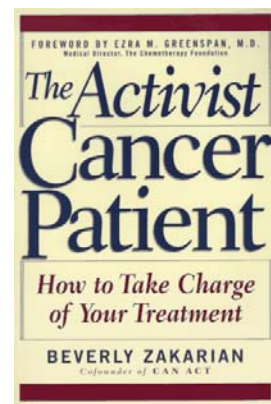
- Similarly, with consumer decision making in medical contexts (Kahn, et.al. Choice Conference Session, *Marketing Letters*)

## Role of Patient is changing

- Rise of patient as consumer, primary decision-maker
- Proliferation of new screening tests and treatment options
  - Diagnoses can be made on asymptomatic patients
  - Tests are calibrated for high sensitivity (high false positive rates (e.g., Luce & Kahn, Kahn & Luce)

## Consider being diagnosed with possibility of cancer....

- Rapid learning process
- Uncertainty and risk
- Mortality salience
- Credence good
- Marketing Mix variables differ
  - Insurance payments
  - Cost of lives?
  - Branding?
  - Legislation and ethics



## Stressful Environment

- High involvement category but stress alters usual behaviors
- Quite different behaviors in the lab vs. real environment
- These types of emotions are difficult to simulate in hypothetical situations
- Patients frequently rely on heuristic cues (Chaiken, Liberman and Eagly)
- Expect experts to use different decision-making rules than patients would for themselves (Kahn and Baron)
  - Use of compensatory rules
  - Preference for human interaction over systems

## Role of Information

- Affected by **ability to cope** with stress
- **Individual differences**: types of coping strategies and desire for control
- **Accuracy** of information can be a **double-edged sword** (Miller, Luce, Kahn & Conant)
  - Diagnostic mammogram: accuracy → less stress
  - Screening mammogram: accuracy → more stress

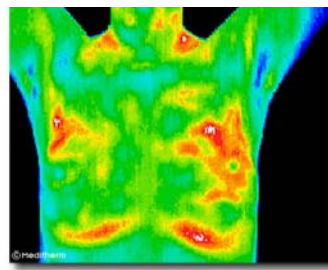


## Risk and Uncertainty

- **Difficulty with tradeoffs**
  - **Inherent stress** with making tradeoffs (Luce, Bettman & Payne)
  - **Outrage or moral resistance** to certain types of transactions or trade-offs – “taboo trade-offs” (McGraw and Tetlock, Fiske and Tetlock, Irwin & Baron)
  - **Inability or reluctance to quantify** such decisions, e.g., assign probabilities (Kahn&Baron) or punitive monetary damages (Sunstein, Kahneman and Schkade)

## Risk and Uncertainty

- Mis-use of **conditional probabilities** (Gershoff)
- **Significant gaps** between intended message and message received in physician risk communications (Gurmankin)



## Directions for Future Research

- **Who is the decision-maker?**
  - doctor (medical software) vs. patient (who is the expert?)
  - caretaker vs. patient
  - Experienced vs. inexperienced (information used in decision varies) (Shanteau, Brien & Haverfield)
- **Pricing the Unpriceable**
  - Organ donations (Shanteau and



## Directions For Future Research

- **Fairness & Ethical Issues**
  - privacy issues, placebo, informed consent
- **Maximize the rationality of decision making**, increase use of normative models
  - Set appropriate default levels (Johnson et. Al)
  - Framing
  - Vary preference elicitation techniques
- **Provide Effective Coping Mechanisms**