



Families and Chronic Illness

Officers Club – South Conference Room

Nice to meet you!

Lindsay Satterwhite Mayberry, MA, PhD

Vanderbilt University Medical Center, Nashville TN

Division of General Internal Medicine

Center for Health Behavior & Health Education

Lindsay.Mayberry@vanderbilt.edu

Areas of Interest:

- Identifying and leveraging family behaviors affecting adults' ability to manage type 2 diabetes
- Intervening to improve family contexts in which adults manage type 2 diabetes while also seeking to prevent diabetes-related risk in other family members

Findings thus far

- Describe population & family
- Type mattered more than degree of family member involvement

Independent effects of supportive and obstructive family behaviors on adherence to self-care behaviors among adults with type 2 diabetes.				
Adherence to self-care behaviors (SDSCA)	Supportive		Obstructive	
	β	Unique variance explained (%)	β	Unique variance explained (%)
General Diet	.43***	11.5***	-.39	9.7***
Specific Diet	.22*	3.1*	-.31**	5.5**
Exercise	.50***	15.3***	-.31***	7.6***
SMBG	.20*	2.5*	-.08	0.8
Diabetes Medications	.30***	5.6**	-.28**	4.1**

N=192

*p<.05, **p<.01, ***p<.001. Adjusted for age, gender, race, education, diabetes duration, insulin status, & insurance status.
Unique variance explained = incremental R²

Subgroups more vulnerable to obstructive behaviors:

- Limited health literacy
- Moderate-severe depressive symptoms
- High rates of socioecological stressors

- Obstructive behaviors were associated with A1C, but only in the context of low supportive behaviors (adjusted interaction effect = -.22, $p < .001$).

Next Steps: Develop 3 month intervention & Test for usability

At enrollment & monthly, phone counselors work with patients to identify:

- A measureable, concrete goal to improve adherence to self-care.
- On-going supportive family behaviors relevant to the identified goal.
- Supportive behaviors family members could do to aid the participant in meeting the identified goal.
- Family members' behaviors that may sabotage or interfere with the participant's ability to meet the goal.
- Family members' nagging/arguing behaviors that may decrease the participant's motivation to meet the goal.
- Strategies for the participant to ask for desired behaviors and redirect undesired behaviors.

Text messages to participants & family members to support goals set during phone counseling:

Family-focused intervention components & content examples.		
	Component	Content
Daily	MEMOTEXT® sends a one-way text <ul style="list-style-type: none"> • Content provides goal-focus strategies referencing the goal identified in phone counseling. 	<p><i>Write your goal down and post it in places you will see during your day. This will help you stay focused on your goal.</i></p> <p><i>One strategy to help you reach your goal is to talk to others about it. Call someone you care about and talk to them about your goal.</i></p>
Weekly	MEMOTEXT® sends a two-way text assessing goal achievement for past week	<p><i>Your goal was to walk 15 minutes every day. How many days in the last week did you achieve your goal?</i></p> <p><i>Your goal was to cook at home for dinner each night. How many days in the last week did you achieve your goal?</i></p>
	Participants' response will be followed by feedback	<i>Great job! Last week you only met your goal 4 days. This week you met your goal 6 days! Keep up the good work!</i>
Twice weekly	MEMOTEXT sends texts to family members <ul style="list-style-type: none"> • Participants can invite one or more family members to receive as an additional intervention component. • Initial opt in/out text sent to family members 	<p>The purpose of this content is to provide participants with additional opportunities to practice the skills discussed during the phone counseling.</p> <p><i>Jeremy has set a goal to improve his diet – ask him to tell you about it.</i></p> <p><i>Sometimes we want to help our loved ones with their health but don't know how to best help. Talk to Jeremy about things you could do to make it easier for him to reach his goal.</i></p> <p><i>It's so important to feel that others recognize what we're doing well. Tell Jeremy what he's doing well to meet his goal.</i></p>



Profile

Jakob D. Jensen, Ph.D.

Associate Professor, Department of Communication

Member, HCI, Cancer Control & Population Science



Health communication expert interested in interventions/campaigns designed to improve individual/family health outcomes across the lifespan. Past work has focused primarily on cancer prevention and detection (colorectal, skin, breast, prostate), but Dr. Jensen is interested in other health outcomes as well.

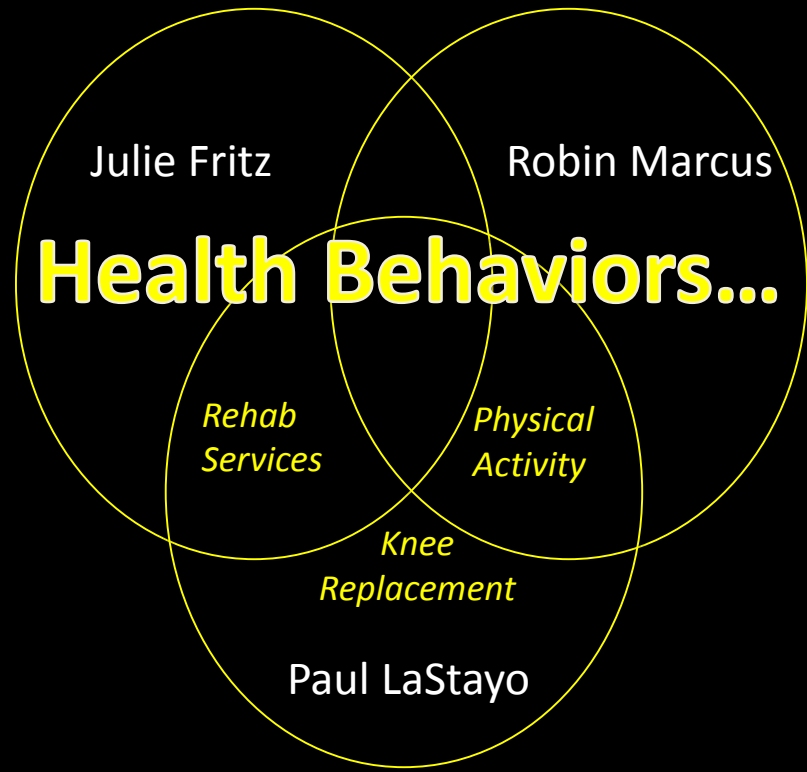
Colorectal Cancer Prevention/Detection

- Designed/Evaluated a worksite RCT comparing colorectal cancer screening interventions that were (a) tailored or (b) narrative. Published in [*Social Science & Medicine*](#).
- Surveyed 1,000 adults nationwide to assess knowledge, attitudes, behaviors concerning low-dose aspirin as a means of colorectal cancer prevention.
- Interested in helping families identify and initiate optimal health behaviors for reducing cancer risk.

Skin Cancer Prevention/Detection

- Designed/Evaluated a series of experiments comparing skin cancer screening interventions.
- Evaluating innovative strategies to improve skin cancer detection. Recent work published in Cancer Epidemiology. <http://www.sciencedirect.com/science/article/pii/S0190962214015333>
- Working with rural adults to develop evidenced based strategies for managing skin cancer risk.
- Launching a project that will evaluate a skin cancer prevention intervention designed for rural/frontier Utah children aged 10 – 12.



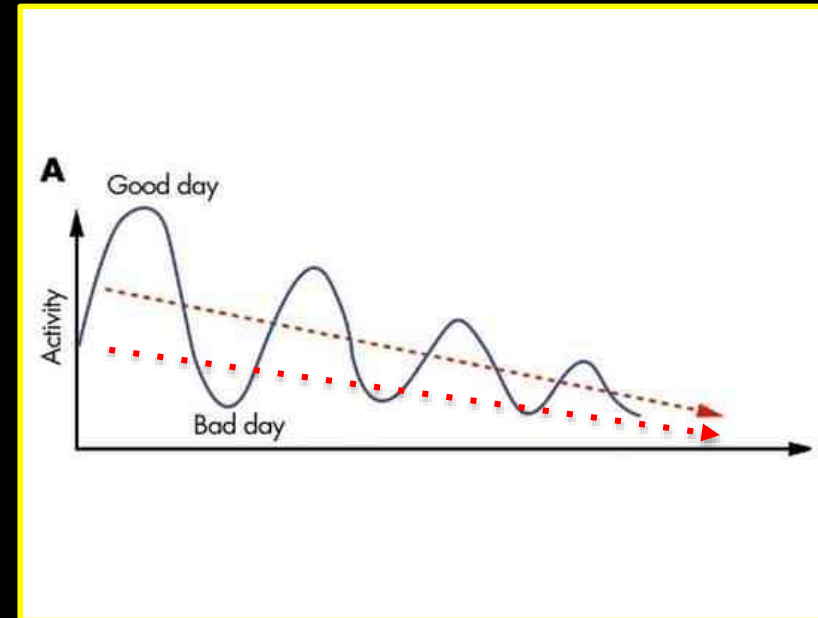
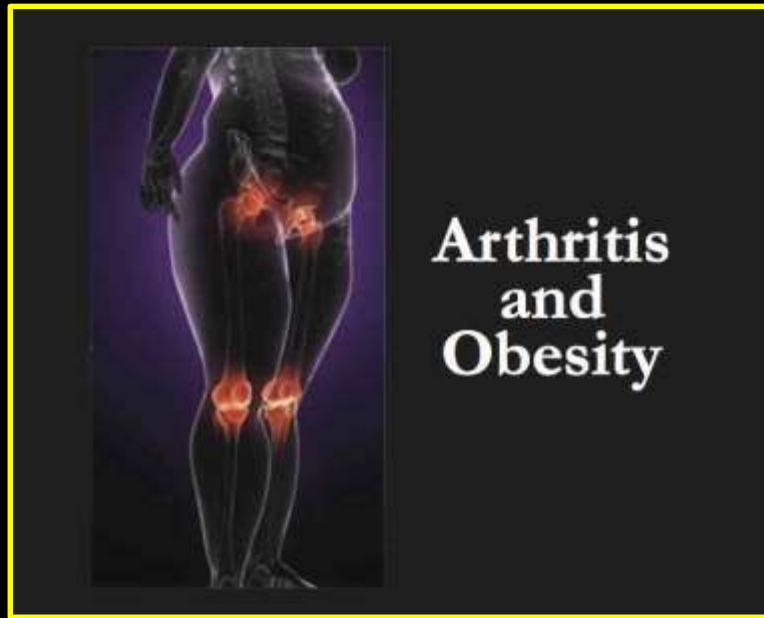


after Knee Replacement

Department of Physical Therapy
College of Health



Physical Inactivity, Obesity and Arthritis



Following Knee Replacement and PT/Rehabilitation

Physical activity fails to improve (or diminishes) in a surprising number of patients de Groot, 2008 and many patients continue to gain weight. Zeni, 2010

Our overall goal is to shift the prevailing knee replacement rehabilitation paradigm from a narrow focus on the surgical knee to a wellness-based (+/- family -based?) approach that capitalizes on the opportunity afforded by pain relief to introduce healthy lifestyle modifications (and incorporate the powerful influence of the family in sustaining effective health behaviors?) aimed at improving physical activity and weight management.



Can the family system/methods be can be utilized?

...to help identify and overcome barriers to the adoption, integration, and sustainability of evidence-based wellness interventions as part of rehabilitation programs designed to reduce health risks associated with {insert health condition(s) here}.



Exercise Research:
Across Disciplines,
Across Family Constellations,
Across the Life Span

Tom Meyer, PhD

Biostatistics and Health Psychology

Past Research Areas

- Multidisciplinary Meta-Analysis of Controlled Studies of Psychosocial Interventions with Cancer Patients.
- Psychometrics: Penn State Worry Questionnaire.
- Teenage Pregnancy in Appalachia.
- Prevention of Health Problems in Latino Adolescents.
- Sociocultural Context of Household Smoking.
- PTSD and HIV Infection in Methadone Patients.
- Using Biological Examples in Physics Teaching.

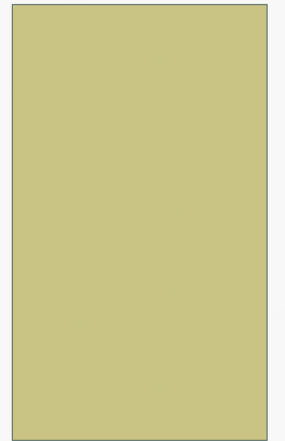
Present and Future Interests

- Exploring and possibly synthesizing exercise research across disciplines (medical/ nursing/ PT, mental health, HPER, nutrition), family constellations, and the life span. Meta-analysis as appropriate?
- Issues in existing exercise research to explore/include targeting introverts vs. extraverts, financial and geographical access, developing habits vs/and special events (e.g., 5K), support during family transitions.
- Relevance of smoking reduction successes.
- Willing to work as a statistical/ methodological volunteer on a few small health or LGBT projects.

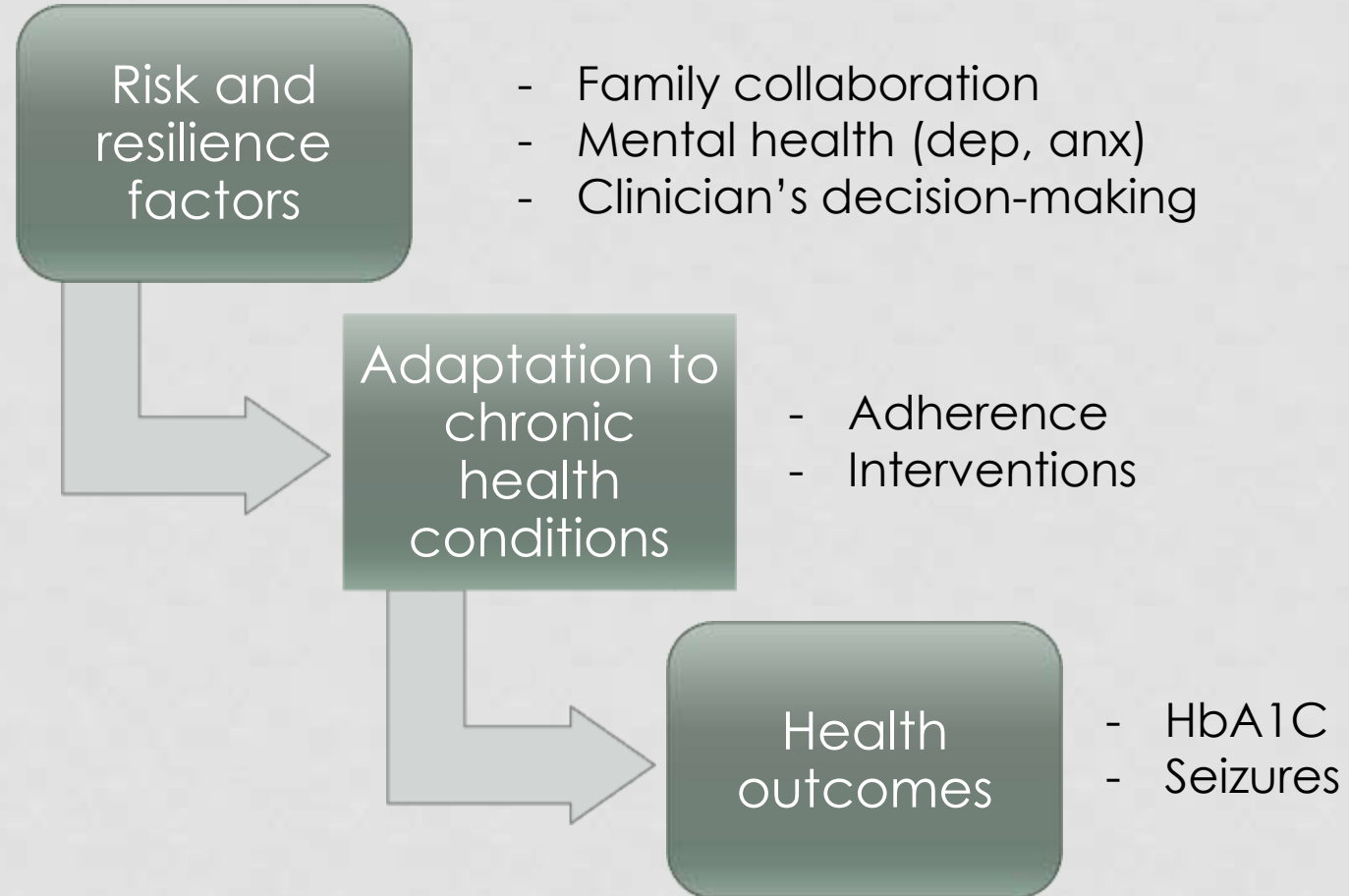


YELENA WU

DEPT. OF FAMILY & PREVENTIVE MEDICINE; HUNTSMAN CANCER
INSTITUTE



PAST WORK: PEDIATRIC HEALTH



CURRENT WORK:

Adherence to medical recommendations across the cancer control continuum



Prevention

- BRIGHT Kids (p16 carriers, melanoma)
- SPARK: Melanoma prevention behavioral intervention



Cancer treatment

- SoMO: Social media use parents of pediatric cancer patients
- A/YA SmartPhone Medication Reminder



Survivorship

- CASH: A/YA health behavior intervention preferences
- Care planning (Kirchhoff)
- Social support and medical appointment follow-up (CCSS)

FUTURE DIRECTIONS & COLLABORATIONS

- Adherence and self-management promotion interventions targeted towards individuals at risk for illness or have illness
 - Behavioral interventions
 - Family-focused interventions
 - Healthcare provider interventions
- Tailoring of risk communication strategies to children across developmental levels
- Adherence measurement
- Survey methods, design
- Family management of illness



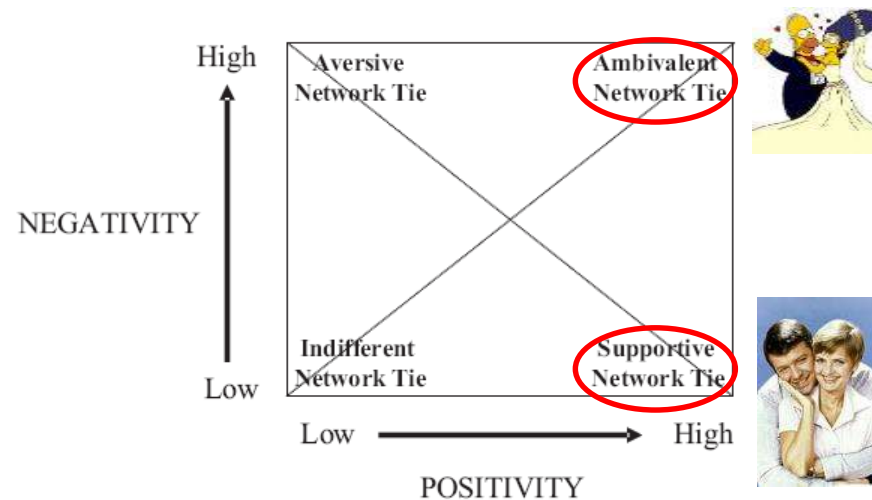
Maija Reblin, PhD

Research Assistant Professor, College of Nursing

HCI Investigator

Health Psychologist: Relationship Quality & Health

Relationship quality in 2 dimensions (Uchino et al, 2001)



Program of Research

- **How does advanced cancer caregivers' social context impact their health?**
 - Identify relationship and communication characteristics associated with increased advanced cancer caregiver psychological and physical stress
 - Use this information to target at-risk individuals or couples for intervention
- **Ongoing Research**
 - Focus on **spouse/partner** in American Cancer Society Mentored Research Scholar Award
 - Focus on **broader social network** in pilot work with neuro-oncology caregivers

Exciting Results

- Relationship quality categories are associated with different communication patterns
 - Reblin, Uchino & Smith, 2010
- Relationship quality categories in hospice spouse/partner caregivers are consistent with proportions seen across lifespan & in non-caregiving samples
- At enrollment to home hospice, RQ is related to cg burden
 - Reblin et al, under review





Internet Mediated Social Support

Jude P. Mikal

Research Assistant Professor, Psychology Dept.

Research Development Consultant, CSBS

Internet Mediated Social Support (IMSS)

Background:

- Early research on IMSS conceived of as superficial due to (1) limited emotional and social cues, (2) inability to communicate material support, (3) absence of physical presence.
- Early research conceptualized support networks as (1) inferior, (2) weaker, (3) less sustainable, and (4) more easily exitable.
- Individuals relying on IMSS were characterized as (1) socially reclusive and anxious, (2) having difficulties in FTF communication, (3) at increased risk for depression, anxiety and social isolation.
- Theoretical limitations, along with the widespread use and availability of Internet technology has shifted research ideologies, and later research associated an active online social life with a more active social life offline.
- Advantages of Social Support Communicated Online: (1) rapid reestablishment of new communities of support, (2) increased congruence with support needs, (3) diminished geographic and other barriers to communication, (3) increased control and increased privacy, and (4) reduced social obligation.
- Nevertheless, few contemporary studies conceive of social support networks as being maintained exclusively on, or offline, and most researchers acknowledge a fluidity between relationships maintained on and offline.

Internet Mediated Social Support (IMSS)

Past Research

- Mikal, et al (2013) models the role of Internet technology in responding changes to support needs: Following a transition, when individuals' offline networks of support are in a state of flux, those individuals may benefit from the constancy and control of interacting online.
- Mikal, et al (2014 & in press) examines the possibility that specific sites become characterized by a “cultural identity” and that this can result in behavioral modification by individual members.

Future Research

- Can an effective support system created and maintained online buttress waning partner support during chronic illness?
- Alongside participation in synthetic, disease-specific environments, how does participation in online social environments change over time in response to transitions in health status?
- What is the perceived quality of support exchanged online? And does the quality of support change based on a sites “culture” – and an individual's ability to fit within that culture?
- Population: Young Adults; Outcomes: Valence, RSA, Self-Reports

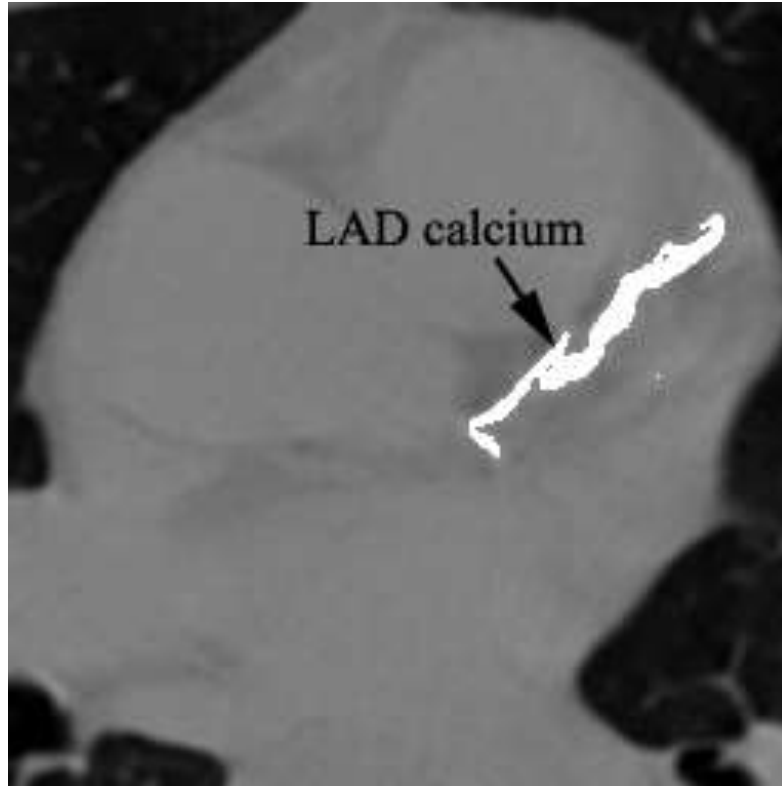


Consortium for Families and Health Research

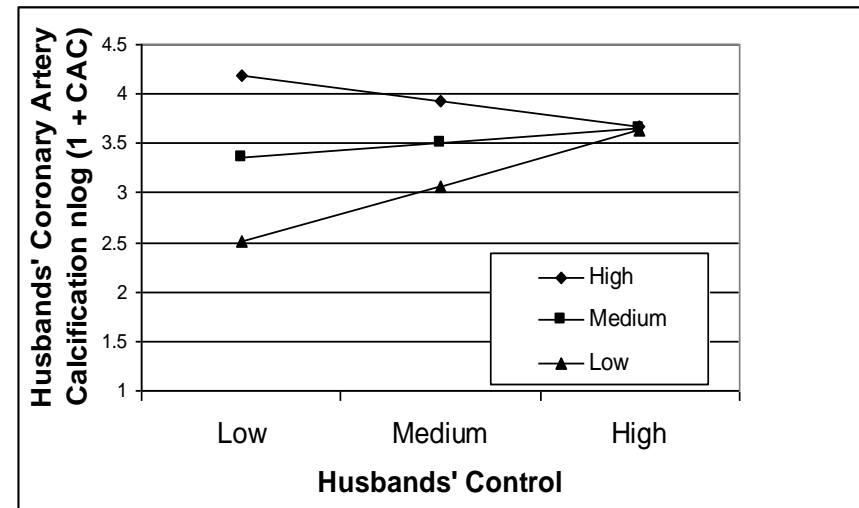
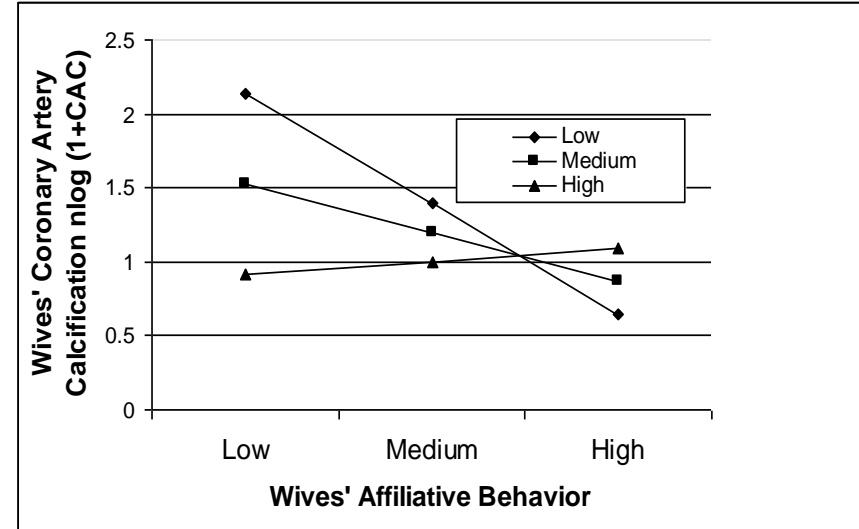
Psychosocial Risk for Cardiovascular Disease:
Close Relationships as a Key Context

Timothy W. Smith
Department of Psychology

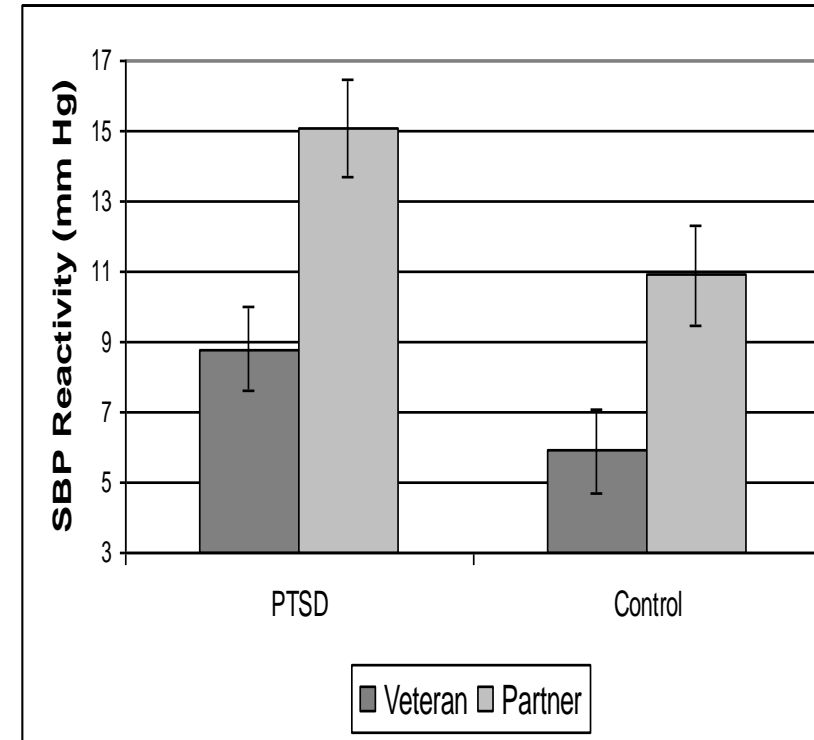
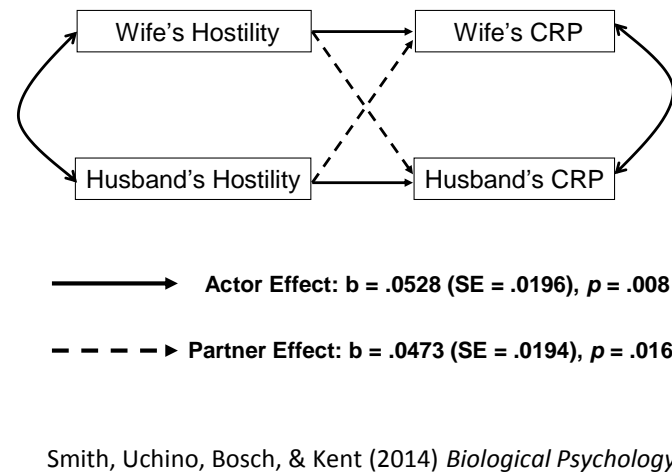
Marital Interaction and Atherosclerosis



Smith, Uchino, Berg et al. (2011).
Psychosomatic Medicine

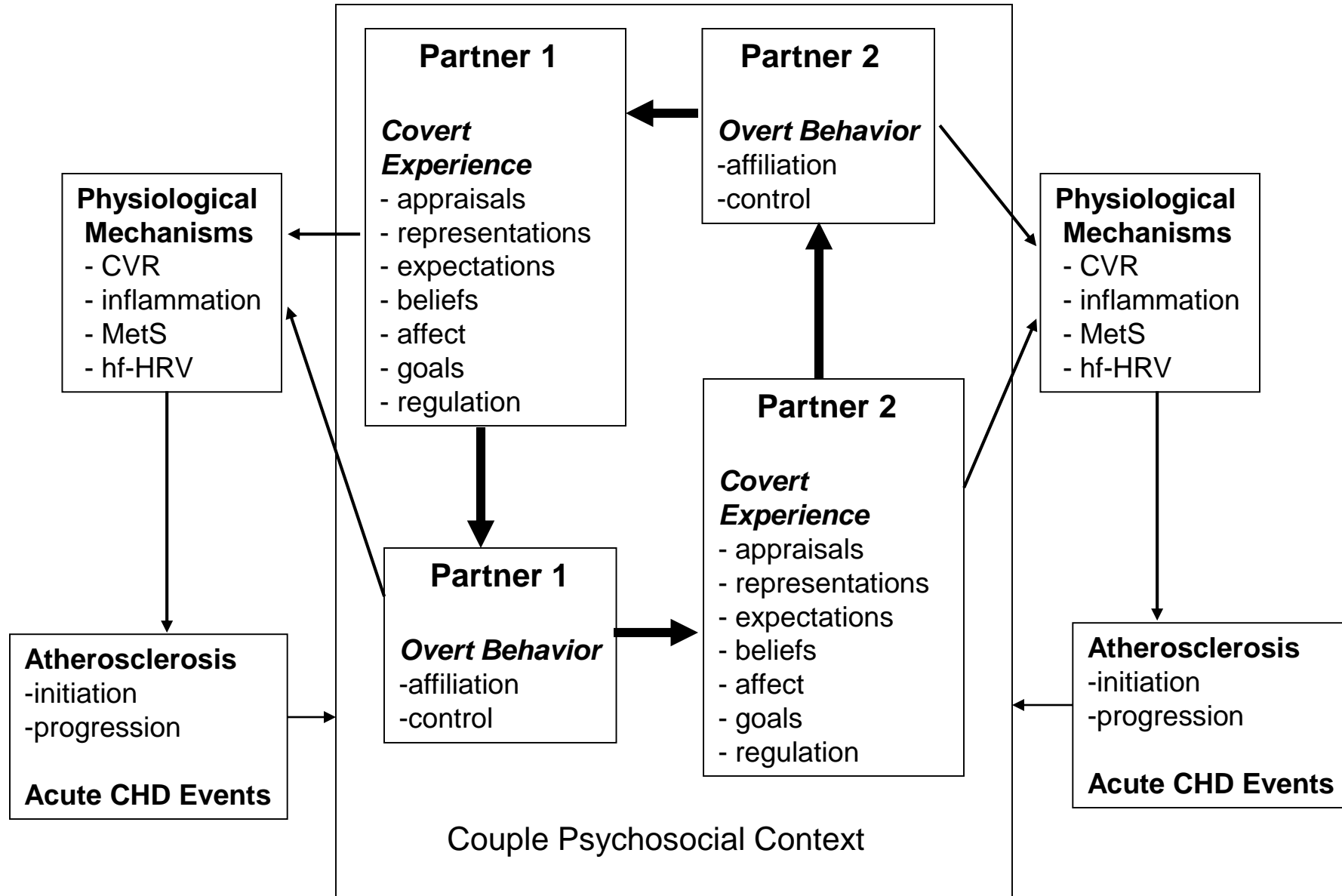


Individual Risk Factors for CHD are Related to Marital Processes



Caska, Smith, Renshaw, Allen, Uchino et al. (in press) *Health Psychology*

Dyadic Transactional Cycle and Coronary Risk





MARISSA DIENER
ASSOCIATE PROFESSOR, FAMILY & CONSUMER STUDIES
PH.D. DEVELOPMENTAL PSYCHOLOGY MARISSA.DIENER@FCS.UTAH.EDU

- Past Research on Children's Socioemotional Well-Being & Family Relationship Quality and Interaction
- **Current Research:** Strength-based, family-focused educational programming for youth on the autism spectrum



Reframing the child's disability in 3 domains (Diener, Anderson et al., 2014; Diener, Wright et al., 2014; Diener, Dunn et al., 2014)



MORE CURRENT RESEARCH

Children's distress during hospitalization and IV insertion

- Use of treatment rooms to create psychological “safe space”
- Child life specialist role and strategies
- Child emotion regulation strategies



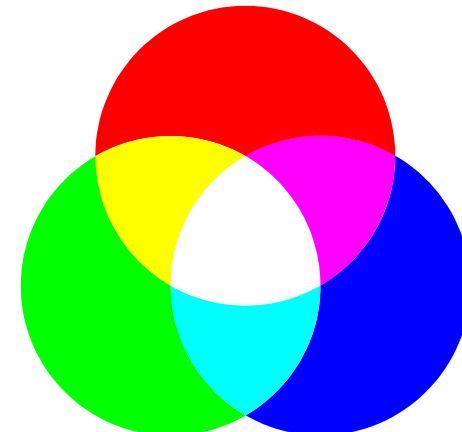
FUTURE COLLABORATION POSSIBILITIES

- **Child outcomes related to chronic health conditions, health disparities, reproductive technologies**
 - Infancy = difficult temperament, attachment security,
 - Toddler/Preschooler = emotion regulation, emergent literacy skills
 - Middle childhood = social and peer competence; academic competence; self-efficacy and self-esteem;
 - Adolescence = social engagement; self-esteem
- **Processes involved in health outcomes – individual differences and mediators**
 - Parent-child interaction, marital conflict
 - Coping, beliefs about emotional expression and emotion regulation
 - Parenting stress, parent personality, social support
- **Indirect costs of health policies, chronic diseases**
 - E.g., parenting stress and CMV testing RO1 with Zick & Park



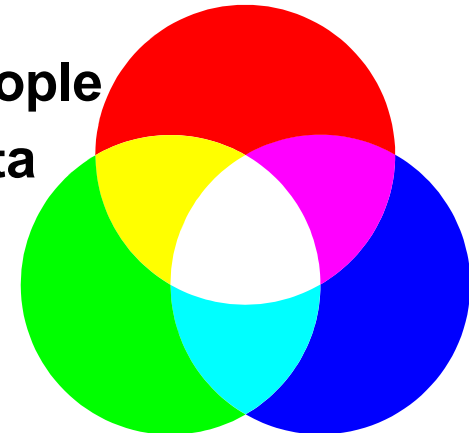
Intersections of Family & Organizational Systems

- **Heather E. Canary, PhD**
 - Associate Professor, Dept. of Communication
 - C-FAHR Executive Committee
 - Utah Center for Excellence in ELSI Research
- **Communication Processes Within & Between:**
 - Families of children with disabilities
 - Families with increased disease risk
 - Health organizations
 - Other relevant organizations
- **Methodological Approaches:**
 - Qualitative: Interviews, Observations
 - Quantitative: Surveys, Coding Systems



Current Projects

- **Families of Children with Autism**
 - With Dan Canary (U of U) & Danielle Jackson (Manchester U)
 - Decision-making for child treatment, education, etc.
 - Marital satisfaction and relational equity
 - Marital conflict and attributions
- **Hospital Discharge Communication**
 - With Victoria Wilkins & Paul Young (PCH)
 - Discharge experiences of parents, hospitalists, PCPs
- **Colon Cancer Screening Interactions**
 - With Anita Kinney (U of New Mexico)
 - Screening intervention conversations with people at increased risk for CRC; 9-month outcome data
 - Developing & applying new coding system, Resource-based Interaction Coding System



Common Theme in Findings

- **Role of Missed or Negative Intersections**
 - **Family & Professional System Intersections Important to Family Processes & Outcomes**
 - **Families of Children with Autism:**
 - **Intersections with medical, education, & support systems frustrating, dismissive, often leading to adversarial attitudes**
 - **Hospital Discharge Communication:**
 - **“Care chasm” characterized by lack of connections between hospital care, primary providers, and home care; parents have clear ideas about what intersections would help**
 - **Colon Cancer Screening Interactions:**
 - **More references to positive intersections by completers than non-completers**
 - **Fewer references to ineffective/negative Intersections by completers than non-completers**

