

Symposium S-H8

Dissecting social relationships and biological consequences: Interdisciplinary dyadic approaches

Saturday, February 15, 2014, 3:30 PM - 4:45 PM, Room 18 A/B

Chair: Meanne Chan, Northwestern University

Co-Chair: Lauren Human, University of British Columbia

Social relationships are known to have important health implications. However, less is known about the specific dyadic processes that enable social relationships to get under the skin. We present data using interdisciplinary dyadic approaches across multiple relationship contexts to examine how social relationships impact biological correlates and disease development.

Warmth, Control, and Restraint during Marital Disagreement: Dyadic Mechanisms in Cardiovascular Risk

Timothy W. Smith

University of Utah

Although being married is associated with reduced cardiovascular risk, marital strain (e.g., conflict, disruption) confers increased risk. Utilizing data from three dyadic studies, this presentation illustrates gender differences in behavioral and psychophysiological mechanisms linking low marital quality and cardiovascular risk. In dyadic analyses of couple disagreements, interactions characterized by low warmth are associated with greater coronary atherosclerosis for women, but not men. Marital disagreements characterized by high levels of control are associated with greater atherosclerosis for men, but not women. Cardiovascular stress responses during marital interactions show parallel sex differences in this mechanism. Restraint and couple regulation efforts during potentially stressful marital interactions have beneficial initial effects on the tone of marital conflict discussions, but measures of parasympathetic functioning suggest that such efforts can lower women's subsequent resting parasympathetic functioning after conflict. This could be an additional biobehavioral mechanism that works differently for men and women in influencing cardiovascular risk.

Communal Coping in Couples with Chronic Illness

Vicki S. Helgeson

Carnegie Mellon University

Research on chronic illness often fails to consider the interpersonal context. This presentation focuses on the impact of communal coping on illness adjustment among couples in which one person has been recently diagnosed with type 2 diabetes. Communal coping is conceptualized as the perception of the illness as "our" problem rather than "my" problem. We hypothesize that communal coping leads to greater accuracy in understanding feelings/thoughts, greater support provision, enhanced patient self-efficacy, and better patient adherence. We have self-report, language, and behavioral measures of communal coping. Analyses of 50 couples revealed that patient self-reported communal coping was related to greater spouse support, patient self-efficacy, and patient adherence. Patient communal pronouns were associated with better adherence, and spouse communal pronouns were associated with greater support and less patient depression. For this presentation, we will examine links of communal coping to empathic accuracy and communal coping behaviors assessed through videotaped illness discussions.

Dyadic Coping with Rheumatoid Arthritis: Spouse Responses Moderate the Effect of Patient Coping on Pain

Anita DeLongis, David B. King, Ellen Stephenson

University of British Columbia

We employed an intensive longitudinal design to examine the influence of spouse support on catastrophizing among patients with rheumatoid arthritis (RA). Couples in which one spouse was diagnosed with RA participated twice daily in telephone interviews for a period of one week. Multilevel modeling was used to examine interactions between patient catastrophizing and three types of spouse responses: being there for the patient when needed, love and acceptance, and avoidance. Simple slopes analyses revealed that the relationship between patient catastrophizing and pain was attenuated when spouse reports of love and acceptance were high and when their reports of avoidance were low. In sum, findings support a model of dyadic coping in which both patient and spouse responses need to be considered in union to determine the outcomes of stress, and further underscore the value of including the support provider in clinical interventions.

Threat Vigilance Tendencies in Parent-adolescent Dyads: Implications for Cardiovascular Health

Meanne Chan, Edith Chen

Northwestern University

Documented cross-over effects and risk for disease have centered on the contagion of stress in couples, while less is known about stress response pre-cursors within other family relationships. In a sample of 259 parent-adolescent dyads, we examined threat vigilance, a specific social-cognitive process that may underlie psychobiological responses to stress, and cardiovascular health indicators, including metabolic symptoms (cholesterol, glucose, blood pressure, waist circumference, body composition) and inflammatory markers. Threat vigilance was measured with an implicit paradigm to capture automatic processing of environmental cues. Threat vigilance was associated with greater metabolic symptoms in adolescents, and with greater synthesis of inflammatory proteins by lipopolysaccharide stimulated peripheral blood mononuclear cells in parents. Cross-over analyses revealed that threat vigilance in parents predicted metabolic symptoms in children, but children's threat vigilance did not predict parents' cardiovascular health indicators. The importance of considering dyadic characteristics when examining family relationships and biological correlates will be discussed.