

## **Couples-Based Approaches to Enhance Initiation and Maintenance of Physical Activity for Adults with Osteoarthritis**

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### **Overview Provided by Presenters:**

1. Purpose and theoretical basis for PALS study, focusing on importance of variability in couples' ability to benefit from a couples-based intervention and reasons why acknowledging and addressing this variation could promote development of more effective behavioral interventions
2. Overview of the couples-based lifestyle physical activity intervention used in PALS—how it seeks to address variation in how couples work together in the study and the effectiveness of their efforts
3. Experiences with couples, illustrating variation in motivation, beliefs, and behaviors relevant to working together to complete study activities

### **Roundtable Discussion—Possible Topics:**

1. How relationship science and social support theories can inform physical activity interventions
2. How social support from a partner can make an intervention more (or less!) effective—the social context matters!
3. Developing interventions that target both focal participants and their partners
4. Tips and experiences for working with couples in a couples-based physical activity intervention
5. What interests you?

### ***Every couple is different...***

- ❖ **Researchers and practitioners develop behavioral interventions that target couples, rather than individuals, because we believe they will help people make more lasting changes in health-related behaviors**
- ❖ **This approach implicitly assumes that all couples are equally willing and able to work together and that they can do it effectively, despite challenges and barriers**

### ***Getting and giving social support for lifestyle change is a complex task...***

- ❖ **Support recipients must understand and communicate their changing support needs, then manage ineffective support attempts**
- ❖ **Support providers must figure out the other person's support needs, decide how to meet them, then do so sensitively and skillfully**

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### **Brief Background about the Partners in Active Living Study (PALS):**

#### ***The Partners in Active Living Study***

- PALS is part of a 5-year, NIH-funded Multidisciplinary Clinical Research Center funded through the Thurston Arthritis Research Center at the University of North Carolina at Chapel Hill; it is charged with mitigating the public health impact of osteoarthritis
- It was designed to address the following public health problem: Physical activity is the best non-drug treatment for osteoarthritis pain and disability. Yet, in the United States about 76% of people with osteoarthritis are insufficiently active—they do not get recommended levels of physical activity (Hootman, et al., 2003)
- This ongoing 12-month study focuses on insufficiently active people with osteoarthritis (“main” participants) and their partners. It is investigating the ways that couples seek and provide social support for physical activity, and how the effectiveness of that support is associated with the main participant’s success at making and maintaining increased levels of physical activity
- Findings will be used to describe variability in the effectiveness of couples’ social support for physical activity, understand the support-related skills and motivations that underlie this variability, and translate that knowledge new ways to help people with osteoarthritis make lasting, health-promoting changes in physical activity

#### ***Participants***

- 170 couples that includes at least one person with hip or knee osteoarthritis (or joint symptoms suggesting early stage hip/knee osteoarthritis) who is insufficiently physically active and willing and medically able to try to become more active.

#### ***Why couples?***

- Increases in physical activity must last a lifetime to provide maximal benefit to people with osteoarthritis. Because partners in a couple share a lifestyle, and also because evidence shows that social support—especially support from a partner—is the most robust predictor of initiating and maintaining more physical activity, we hypothesize that a partner’s support will be a key factor influencing whether insufficiently active people with osteoarthritis are able to initiate and maintain a more active lifestyle in response to a behavioral physical activity intervention.

#### ***The effectiveness of partner support may be critical***

- Despite the theoretical potential for couples interventions to promote more lasting health behavior change than individual interventions, evidence suggests that including partners in interventions does little to improve outcomes (producing only small effect sizes) (Martire et al., 2010)
- In our view, couples-based interventions could be made more powerful by recognizing that not all couples are equally equipped to benefit from a couple-based intervention. Some may not be motivated to work together to make lifestyle changes. Even if motivated, some will not be very skilled at giving and getting support for physical activity; it is a complex interpersonal challenge, and not all attempts to get and give support for physical activity within a relationship are equally effective at promoting positive behavior change (e.g., emotional support can feel encouraging or smothering and intrusive, informational support can involve helpful or unhelpful advice, and instrumental support can “backfire” if provided at the wrong time, or in the wrong way).

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### **Procedures**

- **Baseline assessment:** Eligible couples learn about the study, provide consent, get the baseline questionnaire, and learn how to use an accelerometer. Both members of each couple wear this device daily for 2 weeks after this assessment.
- **Active Living Class** (2½ hour group class with 2-7 couples): The content of this class was based on feedback gathered in focus groups, to ensure its relevance to participants. A Class Guide was developed to ensure fidelity to the curricular content regardless of instructor (available upon request). Numerous motivational and behavior change strategies are incorporated in the Class Guide, with the intent to leverage behavioral science theory to enhance behavior change. Participants learn about OA, physical activity, and ways to work together as a couple in the study. They receive a workbook-based, cognitive behavioral physical activity intervention (*Active Living Every Day*) with instructions to complete a chapter a week over 12 weeks. They also receive a short booklet created for the study about social support and communication, with instructions to read the two sections in the subsequent 2 weeks. In addition, participants receive other informational brochures about OA and physical activity and an inexpensive pedometer to track physical activity. At the end of the class, participants complete a brief questionnaire assessing their responses to the class (to be used as research data and to refine the class format and content).
- **Follow-Up assessments:** Time 1 occurs one week after the Active Living Class and Times 2-4 occur 3-, 6-, and 12 months later. At each assessment, participants complete a mailed questionnaire and wear an accelerometer for a week to measure their physical activity.

### **Application of Theory to an Active Living Class for People with Osteoarthritis and Their Partners:**

- We encourage emotional and informational support by routinely urging participants to share thoughts, knowledge and experiences about venues for and ways to increase physical activity.
- There are one-on-one exercises where couples work together to discuss ideas and problem-solving (informational support) for adding physical activity into their week. We role model providing “instrumental support” for physical activity by giving participants a step-counter to monitor their walking and many reading materials that discuss arthritis and exercise.
- To help couples focus on what kind of social support they want and can give each other, we present a scenario about a couple and have participants read and discuss various “canned” responses that reflect positive and counterproductive social support messages.
- We designed a booklet titled, “Working Together as a Couple in the PALS Study” that provides concepts, tips and “thought exercises” on how to give and get social support and how to communicate when there is a problem with social support that is too much, too little or not appropriate.

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### “Lessons Learned” and Experiences:

- Expect a lengthy and burdensome recruitment period. We found that recruitment to be more time and labor intensive than initially planned. Couples sometimes struggled to find common times when they could both attend the two in-person visits. During recruiting, some individuals told us they were interested in the study but that their partner was either uninterested or was unable to join the study (due to the time commitment, medical issues, etc).
- Each member of the couple can have a different level of motivation in the study. Sometimes both members of the couple are very motivated while other times one member of the couple is joining only because their partner is interested. During screening, be sure to assess each partner’s level of motivation to determine if additional coaching might be needed to keep lesser motivated partners in the study.
- It is important to communicate to both members of the couple about study expectations, activities, and deadlines. Do not assume one person will tell the other!
- Find opportunities to make each person in the couple feel valued and important in the study.

### For Further Information or Access to PALS Resources:

Contact: Christine Rini, PhD, Department of Health Behavior, 319C Rosenau Hall, CB#7440, Chapel Hill, NC 27599-7440, (919)843-6580, [christine.rini@unc.edu](mailto:christine.rini@unc.edu).

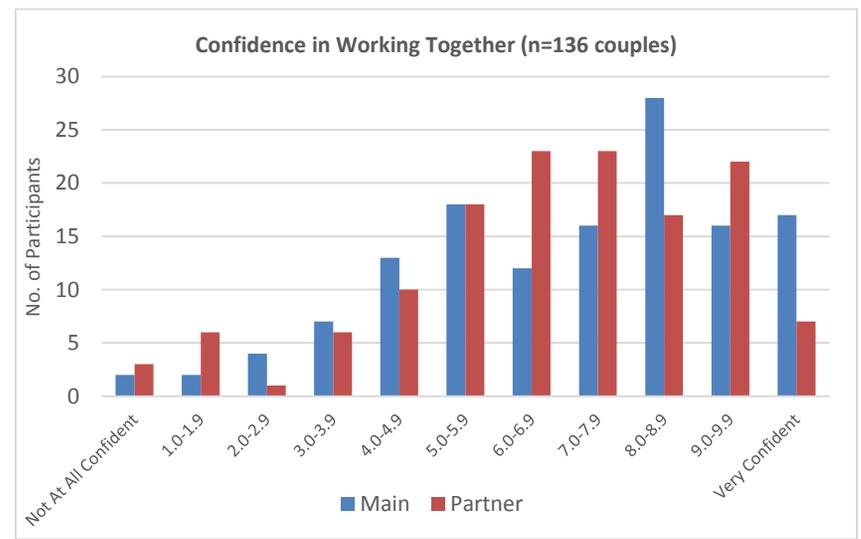
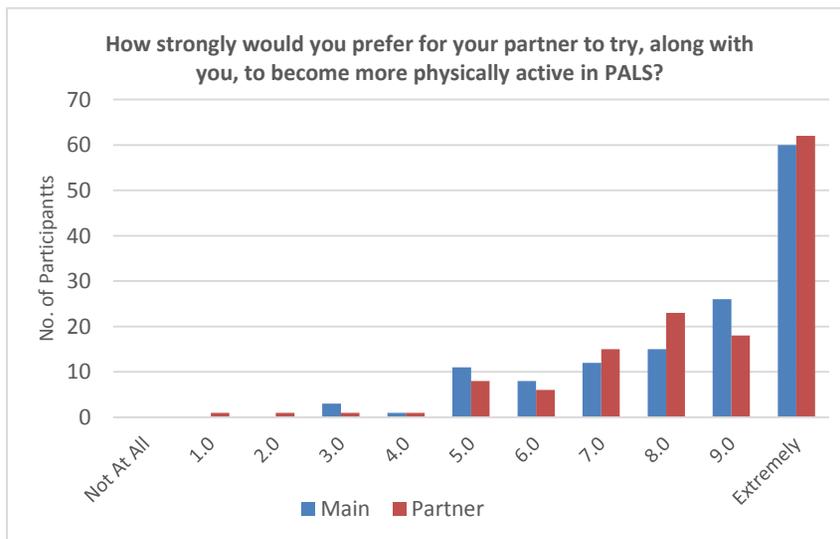
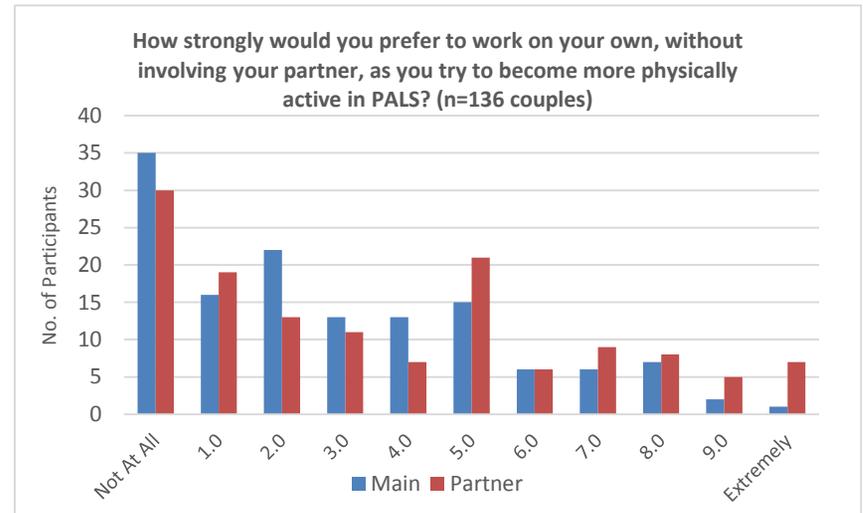
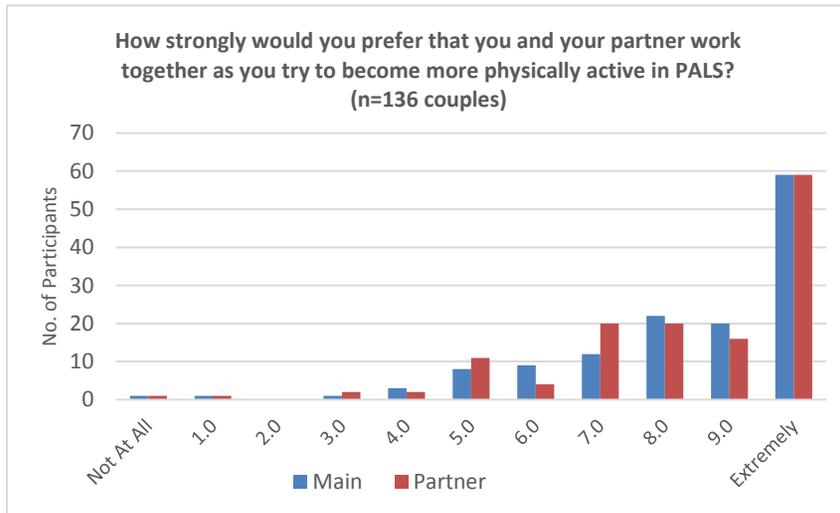
### Speaker biographies:

**Christine Rini, PhD**, is a Research Associate Professor in the Department of Health Behavior at the UNC Gillings School of Public Health, a Research Scientist at the UNC Thurston Arthritis Research Center, and a member of the UNC Lineberger Comprehensive Cancer Center. Her major scholarly interests concern the interplay between people’s dispositional or psychological characteristics and the social context in which they respond to health-related stressors and make health decisions.

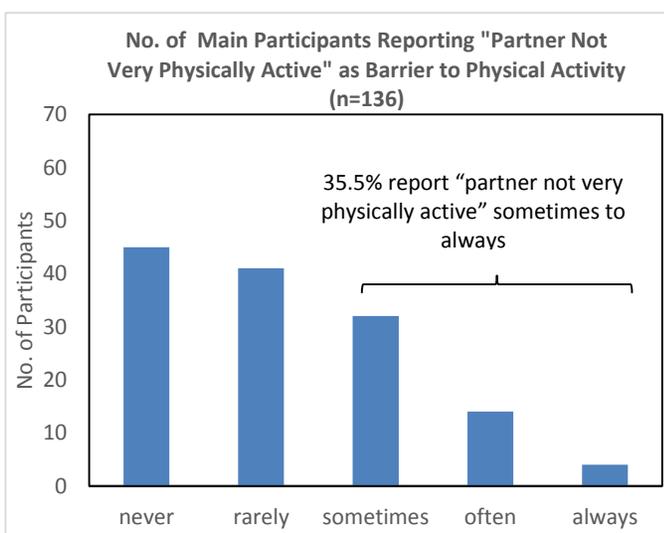
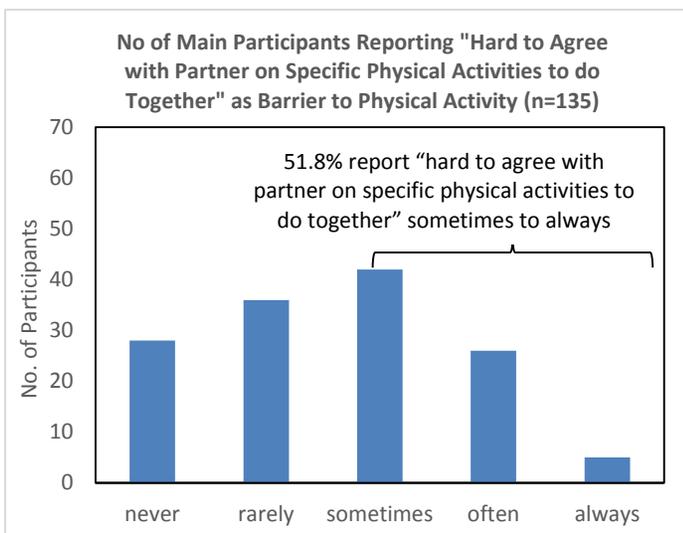
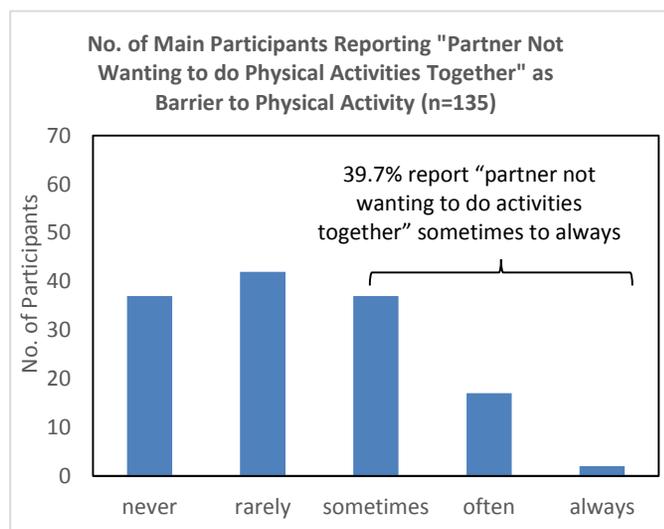
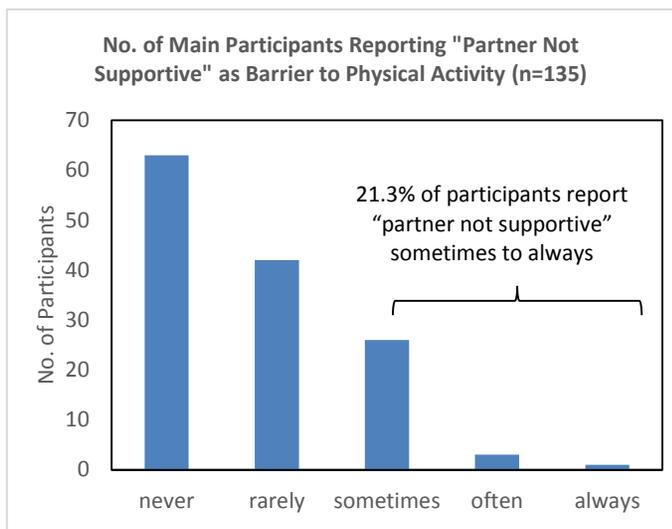
**Mary Altpeter, PhD, MSW, MPA** is a Research Scientist at the UNC Center for Health Promotion and Disease Prevention and the UNC Thurston Arthritis Research Center. She has over 30 years of experience working with national, state and community partners to design, implement and/or evaluate health promotion interventions for middle-aged and older adults. Dr. Altpeter has served as PI, co-investigator, or consultant on numerous community-based health promotion intervention research projects focusing on physical activity, arthritis, fall prevention and dementia caregiving.

**Marjorie Margolis, BA** is a Research Assistant and Doctoral Student at the Gillings School of Public Health/Health Behavior at UNC Chapel Hill. Her research interests currently focus on physical activity, healthy aging, and designing and evaluating behavior change interventions. She previously worked for 5 years at a nonprofit research organization.

Both **main participants** (people with osteoarthritis who were trying to become more physically active in PALS) **and their partners** were asked to rate their preferences for working together in the study on a scale of 0 (*Not at all--you definitely prefer that you and your partner not work together*) to 10 (*Extremely--you definitely prefer that you and your partner work together*). We also assessed each person's confidence in their ability to work together as a couple to be more physically active.



We also asked main participants to report whether they experienced certain barriers related to physical activity on a scale ranging from “never” to “always”. The tables below describe how participants responded to several barriers specific to their partner.



**Although the majority of couples express preferences for and confidence in working together, a significant group of them report that barriers occur "sometimes," "often," or "always" in working with their partners.**