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How Do I Empathize With You? Let Me Count the Ways: Relations Between Facets of Pain-Related Empathy

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Abstract: This study examined the extent to which components of empathy (ie, empathic accuracy, empathic tendencies, and empathic responses) were correlated within the context of chronic pain couples. Additionally, the interrelationships between these empathy variables and spouse responses to pain were investigated. Participants were 57 couples in which at least 1 spouse reported chronic musculoskeletal pain. Each couple participated in a videotaped interaction about the impact of pain in their lives together, after which they completed an empathic accuracy procedure. The interactions were coded for the spouse's use of empathic responses. Couples also completed surveys about pain severity, pain interference, empathic tendencies, marital satisfaction, and perceived spousal responses (ie, solicitous and punishing responses) to pain. Spousal empathic responses and empathic accuracy were not related to one another nor were they related to spousal empathic tendencies, or solicitous spouse responses. Spousal punishing responses were negatively related to empathic responses. The association between solicitousness and empathic responses was moderated by spousal marital satisfaction. The findings suggest that there are not clear associations among these empathy variables. The results also indicate that the climate in which solicitousness is provided may influence the extent to which spouses display empathic responses.

***Perspective:** The findings have implications for models of pain empathy and suggest that future research is needed to understand relations between aspects of empathy. Moreover, interventions aimed at addressing the empathic climate in which support is delivered may help spouses more empathically and effectively communicate with and assist partners with pain management.*

***Key words:** Empathic accuracy, empathic tendencies, empathic responses, instrumental support, chronic pain.*

Empathy is an important interpersonal process in pain adjustment.[17,19] Yet empathy has many definitions and meanings (eg, empathic accuracy, empathic tendencies, empathic responses) and little is known about the extent to which these empathic variables are interrelated in the context of pain. Drawing from multiple models of empathy, both general and pain-specific, we examined the extent to which various components of empathy are correlated and how empathy variables are interrelated with more commonly assessed variables such as solicitous and punishing responses. To date, little is known about the associations among different facets of empathy in the context of pain, which limits the utility of empathy models and the ability of clinical researchers to make recommendations regarding the value of empathy in pain management efforts.

There are at least 3 ways to define empathy within the context of pain. Goubert et al[19] define empathy as a sense of knowing the pain experience of another, or empathic accuracy. Empathic accuracy is considered as one's ability to infer the content of another person's private thoughts and feelings.[23] Empathy has also been described as a set of attitudes and tendencies.[8] According to Davis, there are 2 empathy tendencies: perspective taking (ie, a cognitive tendency to understand another's point of view) and empathic concern (ie, an affective tendency to experience feelings of compassion for others). Empathy has also been conceptualized as an observer's affective or behavioral responses to a person

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with pain.[3,6] Validation, an empathic response, consists of responses that convey acceptance or attempted understanding of the other's experiences whereas invalidation conveys hostility, nonacceptance, or inattention.[17]

Empathy for pain can be seen as an understanding of the other person's experience, a traitlike tendency or attitude, and/or a response. One would expect these facets of empathy to be intercorrelated; however, research findings on this topic are scant and mixed. Two studies of empathic accuracy have shown no relationship between empathic accuracy and empathic concern or perspective taking,[24,41] while another showed an association between perspective taking and empathic accuracy.[29] Other research has shown that empathic accuracy is unrelated to empathic responses.[42] Furthermore, no studies to date have simultaneously examined these 3 facets of empathy in a chronic pain sample. Thus, the interrelations between empathy concepts in the context of pain are not clear, which hampers the further development of empathy models. In the current study, we expected that these empathy facets—empathic accuracy, empathic tendencies, and empathic responses—would be positively related to each other in chronic pain couples.

A second aim of this study was to understand whether pain empathy variables correlate with solicitous and punishing spouse responses. Solicitousness includes providing concrete help with tasks. These instrumentally supportive behaviors do not necessarily require empathy and can be delivered in a hostile manner.[6,33] Preliminary work suggests that empathic and unempathic responses are distinct from these instrumental responses, but are related to punishing or hostile responses,[3] yet additional research is needed. Therefore, we next examined relations between empathy variables and spouse responses to pain. In the current study, we hypothesized that the empathy variables would correlate with spouse responses. We also expected that, under certain conditions (eg, an empathic climate), the association between instrumental support and empathic responses may be stronger. Specifically, providing instrumental support in an empathic climate, which would include being a relationship in which the spouse reported empathic tendencies, a satisfying relationship, or personal experience of pain, was expected to correlate with greater empathic responding on the part of spouses.

Methods

Participants

A total of 57 couples, in which at least 1 of the couple members had a chronic musculoskeletal pain condition, participated in the study. Couples were recruited to participate in a larger study on empathy, pain, and mood from both the community and a large metropolitan hospital system. The pain patients in the sample were predominately female (57.9%, n = 33) and had been in pain an average of 10.85 years (SD = 9.71). The sample was diverse for both pain patients (56.1% African American, 42.1% Caucasian, 1.8% other [Hispanic/Latino, Native American, Asian, mixed]) and spouses (52.6% African American, 42.1% Caucasian, 5.3% other [Hispanic/Latino, Native American, Asian, mixed]). On average, couples were married 21.54 years (SD = 15.77) and overall were well educated. The mean age reported was 53.25 years (SD = 12.64) for pain patients and 53.47 years (SD = 13.41) for spouses.

Patient pain diagnoses included osteoarthritis (8.8%), spine problems (26.3%), fibromyalgia (1.7%), nerve problems (5.3%), arthritis not otherwise specified (15.8%), migraines (5.3%), other (26.3%), or unknown diagnosis (10.5%), and it should be noted that some patients endorsed more than 1 pain diagnosis. The 3 most common pain locations in patients included the lower back (74.5%, n = 41), knee (54.5%, n = 30), and hip (50.9%, n = 28). Fifteen (26%) patients reported taking a narcotic pain medication. In terms of work status, 22.8% (n = 13) were employed part-time, 14.0% (n = 8) worked full time, 7.0% (n = 4) were students, 14.0% (n = 8) were retired because of health-related reasons, 22.8% (n = 13) were retired for non-health-related reasons, 28.1% (n = 16) were receiving disability, 24.6% (n = 14) were unemployed, and no one reported receiving worker's compensation. These percentages do not add up to 100% because some participants endorsed more than 1 employment status.

In order to be eligible for the study, 1 couple member needed to report chronic musculoskeletal pain; however, 27 (47.4%) couples included a husband and wife who were both experiencing chronic pain. Thus, there were 2 naturally occurring groups of couples in the current study: 1 in which only 1 partner was in pain and the other where both partners were in pain. Because the analyses required that 1 spouse be designated as the patient, we asked each couple member separately during the telephone screening to identify which spouse had the more severe or debilitating pain problem. This couple member was identified as the "patient" and the other couple member was identified as the "spouse." As part of the study protocol, both patients and spouses were asked to rate their pain on a numerical rating scale (0–10). Analyses confirmed the assignment of couple members to the "patient" and "spouse" designations by showing that patients reported greater pain (M = 5.55, SD = 1.75) than their spouses (M = 4.03, SD = 2.14), t (32) = −3.55, $P < .001$).

Measures

Each partner was asked to report his/her gender, date of birth, date of marriage, ethnicity/race, education, and income.

Spouses' empathic tendencies were assessed using the Davis Interpersonal Reactivity Index (IRI[9]). This study utilized 2 of the 4 IRI subscales: The perspective-taking scale (ie, tendency or ability to adopt the perspective or point of view of another) and the empathic concern scale (ie, tendency to experience a feeling of warmth, compassion, and concern for others undergoing negative