

The Role of Therapeutic Alliance in Physical Therapy for Chronic Musculoskeletal Pain: A Systematic Review

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Background

- Globally, chronic musculoskeletal pain affects one in five adults.
- In 2016, the CDC recommended conservative therapy as the first line treatment for chronic pain.
- Psychological and cognitive factors have been shown to heavily influence chronic pain presentation and prognosis.
- The therapeutic alliance has been described as the clinician-client relationship founded in reciprocal trust and mutual agreement of goals and interventions.
- A strong, positive therapeutic alliance (TA) is valuable in addressing the psychosocial factors that influence the pain experience.

Purpose

- Determine the impact of TA on chronic musculoskeletal pain.
- Identify elements that both positively and negatively influence the strength of TA for individuals with chronic musculoskeletal pain.
- Determine the working definition of TA across studies.

Methods

- PRISMA guideline for systematic reviews was followed.
- Three databases were searched (PubMed, CINAHL, and Embase).
- **Inclusion Criteria:** Adults with chronic musculoskeletal pain, interventions assessing or manipulating TA, pain-management physical therapy interventions, studies including RCTs, cohort trials, observational trials, case series, and mixed model studies, outcome measures associated with pain, physical function, disability, therapeutic or working alliance, or number of physical therapy visits.

Results

- Electronic database searches yielded 451 unique articles
- Eight articles met inclusion criteria and were included for review.



Results

Table 1: The Impact of the Therapeutic Alliance on Pain Outcomes

Article	Therapeutic Alliance Approach	Therapeutic Alliance Measurement	Pain Measurement	Effect
Cheing, 2014	Motivational Enhancement Therapy	Working Alliance Subscale of PRES	VAS	Benefit (p = .002)
Ferreira, 2013	Measured, but not manipulated.	WATOCI	VAS	Limited Benefit (p = .001)
Fuentes, 2014	Patients exposed to enhanced and limited TA.	Working Alliance Subscale of PRES	PI-NRS	Benefit (p < .01)

PRES = Pain Rehabilitation Expectations Scale, VAS = Visual Analog Scale, WATOCI = Working Alliance Theory of Change Inventory, PI-NRS = Pain Intensity Numerical Rating Scale

Results

Table 2: Operational Definition of Therapeutic Alliance in Individual Studies

Number Of Studies	Definition
4	Therapist and patient (1) agreement on tasks, (2) agreement on goals, and (3) the development of an affective bond.
1	Trusting relationship facilitates effective communication in which individuals feel comfortable airing their concerns, doubts, with the underlying faith that the therapist has their best interests at heart.
1	Positive social connection between patient and therapist, complex interplay of technical skill, communicative competence and the reflective capacity of the therapist to respond to the patient in the moment of therapy. A sense of collaboration, warmth, and support.
1	Warmth, trust, and a shared sense of the presenting problem and therapeutic goals.
1	Empathy, non-judgment and positive regard, collaborative goal setting.

Conclusions

- Beneficial relationship found between strength of TA and improved chronic musculoskeletal pain.
- Positive influences on TA: trust and an individualized treatment plan created with patient values and barriers in mind.
- Negative influences on TA: patient-demonstrated anger expression, hostility, and perceived injustice.
- We suggest an expansion of the definition of TA to include enhanced communication.

Clinical Relevance

- TA deserves attention in the rehabilitation setting.
- Clinicians should understand what factors play a role in its development.
- Communication is a strong driver in developing TA.
- Communication training can help clinicians cultivate skills in efficiently building rapport and trust, as well as redirecting patients who express anger or hostility.

Acknowledgements /Selected References

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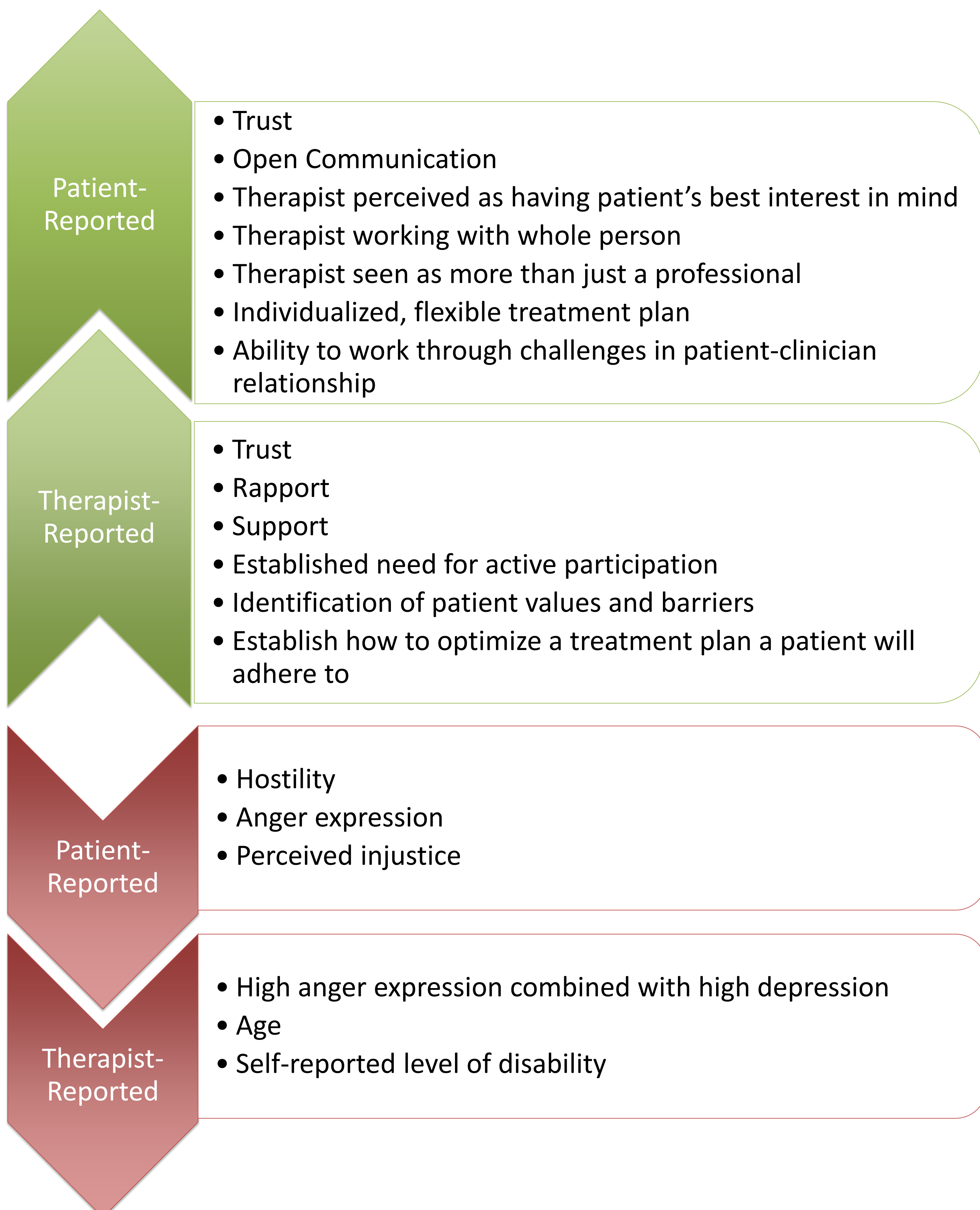


Figure 1: Factors that Positively and Negatively Influence Strength of TA