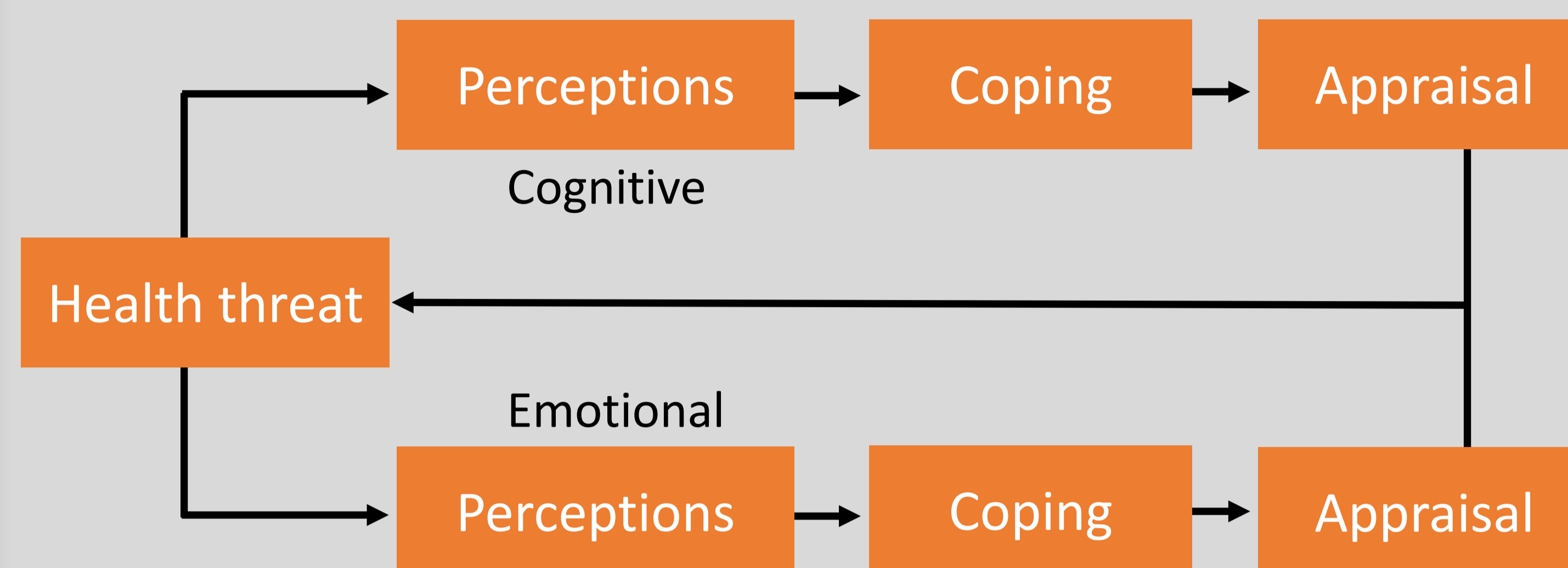


Systematic Review - Illness Perceptions – Musculoskeletal Pain

The Percept Study

Illness Perceptions in patient-centered physiotherapy

The Common Sense Model of Self-regulation of Health and Illness



Chapter

4 Systematic review

Research question

How are Illness Perceptions related to pain or physical function in musculoskeletal pain?

Identification 1448

Screening 1075

Eligibility 102

Included 24

16 cross-sectional and 11 longitudinal studies
374 variables for association or prognosis
uni-, multivariate correlations
Beta's
Odds Ratio and Relative Risks

12 different musculoskeletal disorders

Rheumatoid arthritis - Low back pain - Chronic pain - Chronic headache - Fibromyalgia - Systemic Lupus Erythematosus - Hand problems Chronic RSI - Acute injury - Chronic orofacial pain - Gout - Osteoarthritis knee

Varies questionnaires used

Illness Perceptions 3

Pain 11

Physical Function 8

$I^2 > 50\%$

Heterogeneity => ~~meta-analyses~~

Qualitative syntheses

Risk of Bias

Study Participation

Study Attrition

Prognostic Factor Measurement

Outcome Measurement

Study Outcome

Statistical Analysis and Reporting

Level of evidence Hayden et. al 2014

Strong	Consistent findings (defined as > 75% of studies showing the same direction of effect) in multiple low risk of bias studies
Moderate	Consistent findings in multiple high risk of bias studies and/or one study with low risk of bias
Limited	One study available
Conflicting	Inconsistent findings across studies
No evidence	No association between variables for association of prognosis

Evidence for IP dimensions related to pain or physical function in musculoskeletal pain

IP dimension	Cross-sectional		Longitudinal						
	Pain	Phys F	Pain			Phys F			
			T1	T2	T3	T1	T2	T3	
Consequences	+	+	+	+			+		+
Timeline chronic	+	+		+			+	+	
Time cyclic	+	+					+		
Control personal	+	+	+				+		+
Control treatment	+	+	+					+	
Identity	+	+		+			+	+	+
Concern	+	+					+		+
Coherence	+	+	-				+		
Emotional represent.	+	+	+				+		+

IP = Illness Perception, Phys F = physical function, Time interval; T1 = < 6 months, T2 = 6-12 months, T3 > 12 months

Strong Moderate Limited Conflicting No evidence According to Hayden et al. 2014

Across 12 different musculoskeletal pain disorders, there is evidence of IPs being related to pain or physical function. All studies had high risk of bias, level of evidence varied from limited to moderate. There is consistency in the direction of associations and prognostic values across disorders.

For future research, it is recommended to investigate the longitudinal relationship between IP domains and outcome in more detail. Studying the feasibility and the impact of incorporating IPs in interventions in the management of MP is recommended.

Paper in preparation

Edwin J. de Raaij, Raymond W.J.G. Ostelo, Francois Maissan, Jurgen Mollema, Harriet Wittink