

## Impact of religious coping on pain processing in chronic pain patients

René Hefti, M.D., Department for Psychosomatic Medicine, Clinic SGM, Langenthal/Switzerland

Matthias Laun, M.D., Center for Pain Medicine, Nottwil/Switzerland



### Background

Several studies have shown the beneficial effect of religiosity in pain patients<sup>1,2</sup>. Religious coping is seen as a “key” mechanism in promoting adaptation to chronic pain<sup>3</sup>. The present study seeks to further understand how positive and negative religious coping (RCOPE<sup>4</sup>) interact with psychological mechanisms affecting pain control (FESV<sup>5</sup>) and acceptance of pain (CPAQ).

### Method

183 chronic pain patients admitted to a center for pain medicine in Switzerland were surveyed. All patients completed a series of pain questionnaires (CPAQ, DSF, MPSS, FESV, NRS), the Hospital Anxiety and Depression Scale (HADS) as well as two religious measures (RST, Brief RCOPE). The interaction between religious coping, psychological symptoms and coping with pain was assessed using Pearson and Spearman correlations and linear regression.

Positive Religious Coping Subscale Items	
1.	Looked for a stronger connection with God.
2.	Sought God's love and care.
3.	Sought help from God in letting go of my anger.
4.	Tried to put my plans into action together with God.
5.	Tried to see how God might be trying to strengthen me in this situation.
6.	Asked forgiveness for my sins.
7.	Focused on religion to stop worrying about my problems.
Negative Religious Coping Subscale Items	
8.	Wondered whether God had abandoned me.
9.	Felt punished by God for my lack of devotion.
10.	Wondered what I did for God to punish me.
11.	Questioned God's love for me.
12.	Wondered whether my church had abandoned me.
13.	Decided the devil made this happen.
14.	Questioned the power of God.

Diagram 1 Items of Brief RCOPE for positive and negative religious coping.

### Results

Correlations revealed significant relationships between positive religious coping and the cognitive as well as behavioral dimensions of coping with pain ( FESV, German Pain Coping Questionnaire): Action-Oriented Coping ( $r = .163^*$ ), Cognitive Restructuring ( $r = .312^{**}$ ), Self-Efficacy ( $r = .304^{**}$ ), Mental Distraction ( $r = .206^{**}$ ) and Counter-Activities ( $r = .149^*$ ).

Using a linear regression model that included age, sex, anxiety, depression, pain intensity and impairment as confounders confirmed an impact of positive religious coping on cognitive restructuring ( $R^2$  korr = .132,  $\beta = .280$ ,  $p = .000$ ) and self-efficacy ( $R^2$  korr = .271,  $\beta = .268$ ,  $p = .000$ ). An inverse relationship was found between negative religious coping and acceptance of chronic pain ( $r = -.286$ ,  $p = .000$ ), suggesting that negative religious coping may be maladaptive in chronic pain patients.

	RCOPE; pos	RCOPE; neg	Centrality of R/S
FESV - Action-oriented coping	.163(*)	0.011	-0.059
FESV - Cognitive restructuring	.312(**)	0.043	0.097
FESV - Self-efficacy	.304(**)	-0.084	.153(*)
FESV - Mental distraction	.206(**)	.178(*)	0.063
FESV - Counter-activities	.149(*)	0.117	0.028
FESV - Relaxation	-0.118	0.036	-0.116
CPAQ - Pain willingness	0.002	-.274(**)	0.141
CPAQ - Activities engagement	.170(*)	-.198(**)	.156(*)
CPAQ - Total score	0.125	-.286(**)	.187(*)
HADS - Anxiety	0.054	.336(**)	0.029
HADS - Depression	-0.041	.207(**)	-0.009

\* p-value < .05, \*\* p-value < .01

Table 1 Correlations between religious coping/centrality of religion, coping with pain and psychological symptoms (FESV = German Pain Coping Questionnaire, CPAQ = Chronic Pain Acceptance Questionnaire, HADS = Hospital Anxiety and Depression Scale)

### Conclusion

Present study confirms the association between religiosity and coping with chronic pain. Positive religious coping had a significant positive impact on cognitive pain processing, mainly on cognitive restructuring and self-efficacy. Negative religious coping was inversely related to cognitive processing of pain, and therefore appears to be maladaptive. Both positive and negative religious coping are relevant for the treatment of pain patients.

### References

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