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# Posttraumatic Growth and Acceptance : Two Different Pathways to Cope with Chronic Pain ?

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## Background

Although chronic pain (CP) is a distressing condition, it is important to note that it may give rise to posttraumatic growth (PTG), a rebuilding of assumptions about the world, the others and oneself.
Mindfulness processes are supposed to foster this type of growth while developing a non-judgmental stance of acceptance and increasing savouring in life.
This study aims to extend research on PTG in the context of CP by examining how dispositional mindfulness and specific features of a mindful attitude towards pain contribute to PTG.

## Participants & methods

French-speaking participants were recruited through social network gathering people living with chronic pain and completed online questionnaires.
N = 913 participants (female : 90 % ; mean age [SD]= 42.4 [11.5] years).

- Severity of pain was assessed using several items from the French version of Brief Pain Inventory.
- Anxiety symptoms were evaluated by the French translation of the 20-item Spielberger Inventory-trait (form Y-B).
- Depressive symptoms were assessed using the Patient Health Questionnaire-9 (PHQ-9).
- Posttraumatic stress disorder Symptoms were assessed using the Posttraumatic stress disorder CheckList Scale (PCL-S).
- Inflexibility in pain was measured using the French version of the Psychological Inflexibility in Pain Scale (PIPS-12).
- Acceptance of chronic pain was measure using the Chronic Pain Acceptance Questionnaire-8 (CPAQ-8) composed of two subscales: activities engagement and pain willingness.
- Dispositional mindfulness was assessed using the French version of the Five Facet Mindfulness Questionnaire (FFMQ).
- Posttraumatic growth was evaluated using the Posttraumatic Growth Inventory (PTGI).
- Socio demographic data were gathered.

## Results

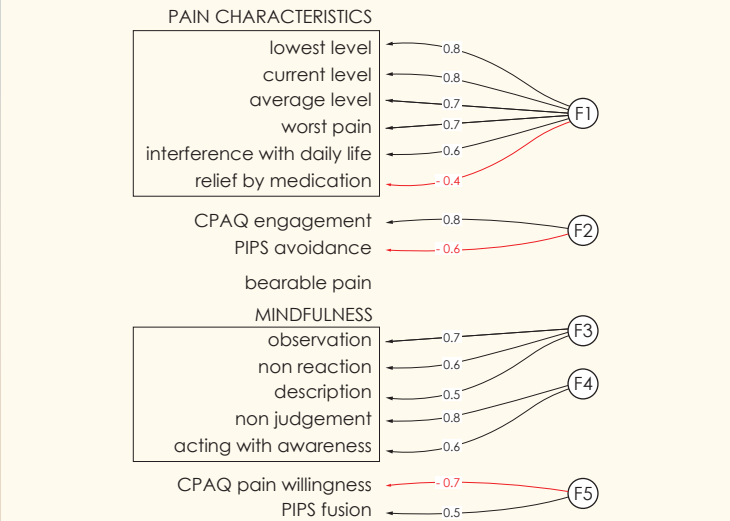


Figure 1. Exploratory factor analysis based on measure of pain severity, acceptance and inflexibilty in pain, and dispositional mindfulness in a sample of 913 participants.

A residualization procedure was made to compute a measure of PTG for which the influence of depressive, anxiety and posttraumatic symptoms was withdrawn.

Table 1. Multiple regression on emerging factors on PTG score (residualized form) in a sample of 913 participants.

| | *β* | SE | t-values | *p*-values |
|---|---|---|---|---|
| F1 | .514 | .601 | .856 | .392 |
| F2 | 1.257 | .610 | 2.061 | .039 |
| F3 | 4.707 | .601 | 7.830 | <.001 |
| F4 | -1.86 | .601 | -3.097 | .002 |
| F5 | 2.763 | .602 | 4.590 | <.001 |
| bearable pain | -0.066 | .289 | -0.228 | .819 |

The model was significant ($F(6, 906) = 16.18$, $p < .001$). It explained around 10% of the variance ($R^2$=.09678).

## Conclusions

- PTG and mindful acceptance of pain appear as two different meanings made through chronic pain.
  - While they seem to depend on their own mechanisms, they could share some overarching meaning making processes.
    - Nevertheless, as PTG refers to a positive reconstruction of fundamental assumptions through suffering, mindful attitude toward pain may be associated with only one side of the coin.
    - Future research is warranted to explore chronic pain as a source of posttraumatic reactions to better assist patients in their struggle.

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