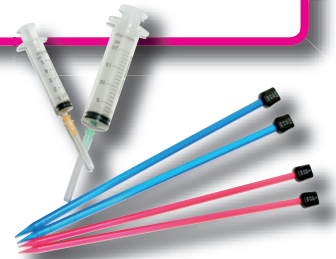


# Exploring the Effects of Knitting on the Experience of Chronic Pain – a Qualitative Study

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**“I feel valid not in-valid. Able not dis-abled.”**

## Research Questions

- Does knitting affect the experience of chronic pain?
- What part does ‘the knitting group’ play in terms of social stimulation and networking?

## Information

The experience of chronic pain involves an interaction between biological processes, a dynamic nervous system, psychological and social factors<sup>1</sup>. Its unremitting nature often results in feelings of hopelessness, isolation, loss of control and identity and there is a close correlation with depressed mood<sup>2</sup>. Local attention to pain increases the experience<sup>3</sup>. Emphasis in treatment is on a multi-disciplinary, bio-psycho-social approach<sup>4</sup>, so an effective intervention needs to address the psycho-social issues as well as physical symptoms. Anecdote on the benefits of knitting for the management of chronic pain abounds and is consistent globally. It tells of repetitive movements inducing meditative-like calm and enabling symptom distraction, as well as psychological and social benefits. It is not clear to what extent existing self-reported benefits would translate into measurable clinical outcomes or psychological variables. This exploratory pilot aimed to explore the viability of further in-depth studies.

## Method

Two-level case study:

[1] Individuals with pain who knit.

Qualitative analysis of narratives from a self-selected sample of 60 individuals with chronic pain via an online survey.

[2] Face-to-face knitting group.

Ethnographic observations of group discussions, interactions and outputs from a weekly knitting group at a pain management unit.

## Results

Three major themes were identified in narratives collected from 60 online participants. The first, **Esteem**, has six sub-themes. The second, **Rhythmic Movement**, has three sub-themes and the third, **Stimulation**, has two sub-themes (see Thematic Analysis right). ▶

Observation of 15 group members identified positive patterns of interaction and minimal pain behaviour. Participants reported no pain kick-back following prolonged sitting whilst knitting, suggesting distraction is not the sole mechanism at work. Members formed close bonds which extended outside meeting times to form an effective social support network. All chose to knit at home for charity which appears to have aided the development of new, positive identities.

## Discussion

Results identify a positive phenomenon in the chronic pain experience which merits further in-depth research. This is needed to identify and investigate the complex mechanisms which may be involved, such as rhythmic repetitive movements and their role in meditation and serotonin release<sup>5</sup>; the effect of bilateral patterns of hand movement on brain maps<sup>6</sup>; automatic movements on rumination; the ‘end product’ and its effect on the reward system<sup>7</sup>; the effect on cognitive function; stimulation from colour, texture and being creative<sup>8</sup>.

Our findings suggest that knitting as an individual or group activity has the potential to facilitate well-being, to improve the personal environment and build positive identity. Group activity augments the benefits of knitting as an individual and provides an opportunity to build social capital and safe support networks. New members are quickly integrated. The end product is rewarding and the actual items knitted often have a symbolic attachment which aids feelings of contribution, belonging and usefulness.

Knitting and knitting groups have the potential to be a multi-dimensional, accessible, cost effective intervention in the management of chronic pain and merit further, in-depth research.

## References

1. Wall P, Jones M. Defeating Pain: The War Against a Silent Epidemic. New York: Plenum, 1991.
2. Tunks ER, Crook J, Weir R. Epidemiology of chronic pain with psychological comorbidity: prevalence, risk, course, and prognosis. *Can J Psychiatry* 2008; 53(4):224-234.
3. Eccleston C, Crombez G, Aldrich S, Stannard C. Attention and somatic awareness in chronic pain. *Pain* 1997; 72:209-15.
4. Gatchel RJ, Bo Peng Y, Fuchs PN, Peters ML, Turk DC. The biopsychosocial approach to chronic pain: scientific advances and future directions. *Psychological Bulletin* 2007; 133(4):581-624.
5. Jacobs B, Casimir A. Activity of serotonergic neurons in behaving animals. *Neuropsychopharmacology* 1999; 21:2S.
6. Draganski B, Gaser C, May A et al. Neuroplasticity: Changes in grey matter induced by training. *Nature* 2004; 427:311-312.
7. Lambert KG. Rising rates of depression in today’s society: consideration of the roles of effort-based rewards and enhanced resilience in day-to-day functioning. *Neuroscience and Biobehavioral Reviews* 2006; 30:497-510.
8. Malchioldi C. *The Soul’s Palette: Drawing on art’s transformative powers for health and well-being*. Boston: Shambhala Publications Inc 2002.

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### ESTEEM

- ▶ Purpose/  
Meaning
- ▶ Achievement/  
Pride
- ▶ Belonging/  
Friendship/  
Identity
- ▶ Contributing/  
Usefulness
- ▶ Development/  
Skills
- ▶ Control

### RHYTHMIC MOVEMENT

- ▶ Meditation/  
Calming
- ▶ Distraction/  
Refocusing
- ▶ Addictive/  
Motivating

### STIMULATION

- ▶ Colour/  
Texture
- ▶ Visualisation/  
Anticipation

“Knitting has enabled me to challenge my own stereotypes about myself. I can’t be useless if I can knit. My concentration can’t be bad if I can knit lace and complicated patterns.”

“I can make things for those in need instead of lying around being a person in need.”

“Knitting requires me to think creatively, to plan, prepare, organise, coordinate and control just one small aspect of my life. Then other changes are manageable.”

“I am convinced that knitting has somehow reset my brain. The repetitive, meditative and creative aspects are what has gently helped me back to a more fulfilling life.”

“Every time I want to reach for my pain pill, I reach for my knitting instead. It allows me some measure of control when it comes to medications and allows me to be an active participant in managing my pain and from there my health.”

“I can subjugate pain to the status of discomfort. The movement needed by knitting seems to create a state of mind in which I’m more able to downgrade pain to a background feature.”

“The only time I could significantly reduce the pain was either when I took a large amount of painkillers or when I could concentrate on knitting. Knitting became my drug of choice.”

“Knitting has opened up the creative side of my brain which was being stifled by drugs and illness.”

“I look forward to waking up, I can imagine how my projects will turn out and be excited by the prospect.”

