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Editorial comment

Towards a structured examination of contextual flexibility in persistent pain

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In this edition of the *Scandinavian Journal of Pain*, Ida Flink and her colleagues validate a new questionnaire measuring context insensitivity [1]. Their findings show that the sub-scale of context insensitive avoidance was the only one to reach criterion and construct validity, however this still is a highly interesting questionnaire. It is a first step towards a structured measure of adaptation to contextual cues. The term *context sensitivity* was defined by Steven Linton as "the degree to which a response is in tune with the ever changing demands of the context" [2]. There, it is argued that this concept could provide us with a mechanism explaining the high co-occurrence of pain and emotional distress.

1. It is all about the context

The term *context insensitivity* stems from an ever-growing body of research, which taps into context dependent activation of pain-related behaviour. Alternatively, stated plainly: it is your ability to be flexible in your behaviour depending on cues given by the situation in which you find yourself. Dating back to Skinner and the behaviourists before him, studying contextual cues and how they shape our behaviour, this is by no means novel [3]. However, this line of research has resurged, yielding new potential for treating patients with persistent pain. Pain psychologists have been focused on operant conditioning for many years; however, developments like Acceptance and Commitment Therapy (ACT) have introduced the understanding of patients as psychologically flexible or inflexible into this an operant conditioning framework [4]. Psychological flexibility, commonly defined as the ability to be fully present in the moment while acting in line with your chosen values, point to the patients' inner life determining how they respond to contextual cues. The patients' inner workings (thoughts and emotions) draw them away from noticing important information from the context in which they are. This effectively reduces the ability to experience situations as something new or different, and subsequently limit your behavioural repertoire. For example, patients want not to experience pain, and this causes them to avoid all situations that can increase or produce pain, giving the patient a very narrow behavioural repertoire.

ACT sees context and contextual cues as essential for improving persistent pain conditions, and the concept of values in ACT is intended to reshape internal behaviour in an appetitive (or positive) manner. When acting in line with your values, you are willing to experience pain, because you get to do the things that matter the most. If you on the other hand avoid situations that could be meaningful because you want to avoid pain or painful thoughts, you become what ACT practitioners call experientially avoidant. Experiential avoidance is defined within ACT as failing attempts to change the form or frequency of thoughts and physical sensations, and that these attempts to control thoughts and symptoms in fact exacerbate distress [5]. The goal of ACT is therefore to change this behaviour through increasing psychological flexibility, defined as the ability to be fully present in the moment while acting in line with your chosen values.

2. Avoidance is key

In their comprehensive assessment of this new instrument, we are left with the notion that avoidance is still one of the most relevant constructs for persistent pain patients. The instrument tested by Ida Fink and her co-workers [1] was to assess context insensitive disclosure vs. avoidance of expression in a sample of people with persistent pain. The study had four hypotheses regarding how the scale measuring context insensitivity represented different constructs and how these constructs would correlate to other measures included in the study. Only the scale measuring context insensitive avoidance of expression showed satisfactory criterion and construct validity. While avoidance is adaptive in certain contexts, it is certainly not universal for all contexts persistent pain in which patients find themselves. We only have to look to data on emotional distress and descending inhibition to underline this notion [6].

The reported finding indicates that avoidance is a key concept in context insensitivity. This is supported by data on patients with anxiety. Work from Michelle Craske and co-workers has shown how the flexibility of behavioural response is key when treating phobia [7]. Their inhibitory learning model hypothesises that fear learning is not extinguished from exposure. Instead, what happens

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is that people learn new associations with what they fear, and this new learning *inhibits* old learning (such as fearful responding) [7]. Exposure is one of the most powerful and effective methods therapists have to help patients with persistent pain, and the current questionnaire gives us a tool to investigate systematically how the patient could potentially benefit from exposure [1].

3. Reaching solid ground

While the work presented by Ida Flink and colleagues is comprehensive [1], we are left with some unanswered questions. First, as they point out themselves, the sample they have included is heterogeneous. As an example, they do not differ between socially and unsocially accepted forms of persistent pain. Genital pain could cause the patient to be more avoidant than if they have back pain. Moreover, it would be interesting to see this instrument compared with the Acceptance and Action Questionnaire-II as this questionnaire explicitly measures the concept of experiential avoidance and psychological flexibility. The chosen psychological flexibility measure here (CPAQ-8), measures activity engagement, the degree to which the person engages in activities with pain present, and pain willingness, the degree to which the person refrains from attempts to avoid or control painful experiences. However, this process, is only one part of a the wider process called psychological flexibility. Also, while this 8 item measure does retain two subscales, it is only when they are combined that they show the essential processes of pain acceptance in a theoretically consistent fashion [8]. The authors have chosen to report results based on the subscales rather than the combination, posing the question of whether the combination was non-significant or if that could have yielded different results. Given that context insensitivity is intuitively linked to psychological flexibility, a further exploration combining these models could yield exciting results and expand this enticing concept.

Conflicts of interest

None declared by the author.

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