Coping with pain: a motivational perspective

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Introduction

‘Coping’ is an alluring idea. In the last 20 years, for example, PAIN has published 4 reviews, 3 editorials, and over 70 empirical studies with the word ‘coping’ in the title, making it one of its most discussed psychological variables. Despite this attraction to researchers it remains a confusing concept, often vaguely defined and poorly operationalized. In this paper we argue that coping will only prove useful as a concept, both theoretically and clinically, if we can operationalize it within a motivational context. Of interest is to understand how people struggle to make sense of unwanted experience, and how they avoid, adapt, or alter the perceived causes of those experiences. In this review our goal is to reinvigorate interest in the idea of coping with chronic pain by recasting it within the literature of life goals and self-regulation [7,16]. We begin by reviewing briefly the use of the coping concept in the pain literature. Next we reformulate it within a motivational context and model how we think it might operate. Finally we consider the clinical and theoretical implications of adopting this model of coping. Our overall objective is simply to perturbate and to provoke further scientific inquiry into human adaptivity in adversity.

Coping

Coping is commonly used to mean any behaviour that can be observed in response to threat, regardless of its success [26]. Lazarus and Folkman [19], writing about stress, narrowed this definition by focussing on controlled forms of behaviour; they define coping as effortful behaviour engaged in response to a

stressor. Chronic pain is an archetypal stressor: primarily it is fundamentally threatening, interruptive and aversive; but secondarily it interferes with the everyday tasks of life [17], and provokes the associated stresses of depression and identity confusion [22].

Given the myriad possible ways of coping, several classification systems have been proposed. A frequently used dichotomy is the 'active' versus 'passive' coping distinction, as captured in the Vanderbilt Pain Management Inventory [4]. Active coping refers to strategies used to control pain or to function despite pain (e.g. "Try to distract yourself from the pain"). Passive coping is related to withdrawing and surrendering control over pain (e.g. "Take medicine to see whether the pain goes off"). A similar dichotomy is between 'approach' versus 'avoidance' coping. Approach coping describes strategies of engaging with pain or its causes, and avoidance describes strategies of engaging efforts away from pain [24]. Another influential way of classifying coping strategies is the distinction between 'problem-focused' and 'emotion-focused' coping, as used for example in the Daily Pain Coping Inventory [1]. Problem-focused coping refers to direct attempts to deal with the pain or to solve the pain problem (e.g. "Did something specific to try to reduce the pain"). Emotion-focused coping strategies deal with the emotional responses to the pain and the stress it evokes (e.g. "Sought emotional support from loved ones, friends, or professionals concerning my pain").

Throughout this literature there is a general assumption that active or problem-oriented coping strategies are likely to be adaptive, whereas passive or

emotion-oriented coping strategies are likely to be maladaptive [6,20]. There are, however, some problems with this approach. First, classification systems commonly focus on structural differences rather than shared functions. Apparently distinct strategies can be classified as alike depending on context [27]. Consider, for example, the taking of pain medication: in some situations this is a passive and avoidant pain management strategy, in others it can be considered active and problem focussed. Second, the value of coping strategies in predicting outcomes may be inflated. Items of active and problem-focused coping are typically formulated in a positive and constructive way, whereas items for passive and emotion-focused coping strategies are often negatively toned [27]. Third, no one repertoire of coping strategies has emerged as clearly more effective than any other for chronic pain patients [21]. In fact, for several coping strategies there is empirical evidence for both beneficial and adverse effects on pain and patient functioning. For example, attempting to control or find a solution for pain is generally associated with better patient functioning [18], but may have negative consequences when actual control is difficult [12]. Similarly, whilst persistence of attempts to stay physically active is considered adaptive for many with simple low back pain, excessive task persistence has been identified as a risk factor for pain-related disability [30].

Behaviour motivated in the pursuit of adaptation.

A structural approach to classification will inevitably lead to a concern with observable features. Coping in the context of chronic pain, we argue, should be

considered functionally. Skinner et al. [27] have divided coping into three classes of functional responses that are all assumed to have adaptive value: (1) responses related to attempts to control a stressor (e.g., problem-solving), (2) responses related to social resources (e.g., social support seeking), and (3) responses related to an adaptation of goals (e.g., acceptance). This approach is interesting because it attempts to capture the purpose of motivated behaviour.

Our motivational re-positioning of coping is heavily influenced by the dual process model proposed by Brandtstädter and Rothermund [3]. Originally developed to describe self-regulatory processes in response to ageing-related problems, the model describes how, as we get older, we naturally remove our efforts to solve encountered problems that block our goals toward efforts to adapt our goals to become more achievable. The first approach they call ‘assimilative’ coping, the second ‘accommodative’ coping.

Coping with chronic pain is recast as attempts to pursue valued activities and life goals. Starting with interruption of ongoing behaviour by pain, individuals appraise the importance of the interrupted activity and the nature of the obstacle. When the blocked goal is important, individuals may simply try to ignore pain and try harder to accomplish their task (task persistence). In other situations, searching for a solution to pain may become a salient goal. The problem of pain is typically framed as biomedical, in which an external solution must be forthcoming [12]. Different behaviours (e.g., bed rest, over the corner medication) may occur, and depend on individual differences in general factors such as habits and skills, and in specific factors such as beliefs about the origins of pain

and perceived controllability. A perceived lack of control typically results in a search for help from others. We have called the attempts to diminish the impact of pain in order to reengage in “pre-pain” activities and life goals the ‘assimilative route ’

Individuals do not easily disengage from assimilative coping. When initial attempts fail, they try often harder and narrow their focus of attention further onto the problem to be solved at the expense of other goals [10]. However, repeated failure in achieving control over pain and attaining valued goals may result in despair, depression, and feelings of identity confusion. Resolving this state of mental disorganisation is considered necessary for coping efforts aimed at accommodating the problem [3]. An ‘accommodative route’ is characterized by a reappraisal of (blocked) goals. Patients may devalue the importance of the blocked goal for their life, or may find more value in the pursuit of life goals that are less affected by pain. Indeed, both attempts at disengaging from unattainable goals and attempts at engaging in new goals have been shown to be beneficial for wellbeing and quality of life in the context of coping with physical illness [32]. Possible responses are acceptance, priority setting, and cognitive restructuring.

Theoretical implications

From this perspective it is important to understand the broad, motivational context of behaviour. Patients cope with chronic pain for a reason: to pursue a meaningful and valued life. Often assimilative coping will be informed by beliefs about the origins and the controllability of pain, but it is equally possible that

attempts to solve pain are fuelled by the value of the goals that are blocked by pain. This might explain why those who catastrophize about chronic pain, persevere in searching for a solution for pain despite a low belief that such solution is available [11].

Additionally, behaviour will emerge to be adaptive or maladaptive depending upon the match between a person's appraisal of their abilities and their real abilities, the accuracy of their appraisal of the threat, and their ability to switch to a different coping approach if their chosen strategy fails. Therefore, neither assimilative nor accommodative routes are 'de facto' the right approach to the problems of chronic pain. Assimilative coping is adaptive to some extent, but may become maladaptive. For instance, excessive task persistence despite severe pain has been argued to have adverse consequences on long term disability [25]. Social support seeking might be adaptive when the available social resources are correctly appraised, but depending too much on a non-helpful environment might instead lead to negative responses and consequently to social isolation [5]. Similarly, accommodative coping is only adaptive when the person's appraisal of control is accurate, and their disengagement from previously desired goals is under their own control. Forced or unwanted goal disengagement fuels depression.

Persistence in ineffective coping has received some research attention. People with chronic pain who identify as patients and present for expert medical help are over-represented in studies of coping because of research interest in clinical samples. Many patients, therefore, are found to engage in assimilative

coping, characterized by attempts to adapt environmental resource when they perceive failure to be highly intolerable and a further stressor [9]. Continuing attempts to control or solve the pain problem when actual control is low, is related to fear, worry, catastrophic thinking, and hypervigilance [8]. Disengagement from unattainable goals and re-engagement to new valuable and realistic goals is beneficial for well-being and quality of life [13,15,21,28]. However, not examined with people with chronic pain is the premature disengagement from valued goals. Coping in this way is not acceptance but surrender. Perhaps for every patient with chronic pain persisting in unrealistic and unsuccessful attempts at solving the insoluble problem of chronic pain, there is a person surrendering to a narrowed life characterized by minimal goals and avoidance of failure.

Clinical implications

Cognitive behaviour therapies for people with chronic pain are replete with techniques and strategies aimed at promoting flexible problem appraisal and solving, and techniques for countering avoidance behaviour [29]. Recent developments have focussed on techniques of acceptance and commitment therapy that promote a willingness to experience adversity and an engagement with valued activities despite adversity [31]. For both of these approaches, a functional analysis of behaviour is important [14].

A motivated coping perspective leads to at least two avenues of investigation in this emerging field of treatment. First, suffering and coping occur

in a developmental context. Understanding how goals, problems, and solutions change over a life course will be important therapeutically. A common observation with patients struggling with pain has been called ‘identity suspension’ in which that natural shedding of the unachievable goals of youth and the adoption of new age-appropriate goals has been arrested [23]. Psychotherapeutic techniques specifically designed to address aspects of identity suspension would be welcome. Second, assessing the dynamic interplay of problem appraisal and coping attempts will be a significant advance. Many of our methods for appraising coping are based on self-report of tendencies, habits, or preferences. Coping is typically characterised as a behavioural style or a personality characteristic. Rarely sampled is the moment to moment variability in coping in which people experiment, persist, appraise, reappraise, receive feedback, ignore consequences, seek new tactics, and stop old strategies. Promoting effective adaptation to chronic pain will mean, we suspect, the assessment of motivated behaviour in context [2].

Conclusion

A motivational perspective of coping focuses on the function of behaviour in context. People with chronic pain are motivated to either remove the blocks from them achieving their goals or to change their goals. Knowing when and how to switch between these two paths is what makes ‘coping’ challenging.

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