The Self in Pain

Stephen Morley MPhil, PhD
Leeds Institute of Health Sciences.

SUMMARY POINTS:

- The self is not a unitary concept but has different facets, encompassing potentially contradictory states, intentions or desires.
- The ensuing contradictory facets of the self lead to internal discrepancies which can have both motivational and emotional consequences.
- Self-Discrepancy Theory (SDT) explains emotional consequences by considering discrepancies between the actual, ideal or ought self.
- Depression can be partly predicted by considering the extent an individual regards their self as enmeshed with their pain.
- Individuals who place a high value on independence or social interaction are more likely to experience a high anxious state in the presence of the “mere threat” of pain enmeshment.
- Consequently pain can rapidly come to infiltrate and affect a person’s sense of self.

Introduction

Our everyday language is riddled with references to the self: selfish, self-aware, self-regarding, selfless, self-obsessed, self-centred, self-conscious, self-sufficient. These are just a few of the self-referent compound words that I generated but *The Shorter Oxford English Dictionary* (SOED) devotes almost 3 pages to them. I was a little concerned the examples I generated were for the most part, rather negative and perhaps influenced by the greater likelihood of my having encountered them in a clinical context. However a quick count of words in the *SOED* roughly confirms the preponderance of negatively toned words.

Not surprisingly the self has been the subject of study by psychologists almost since the modern inception of the academic discipline at the end of the 19th century. William James famously made a distinction between the two aspects of the self that is still current today and underpins some contemporary thinking on the topic (the self as object and the self as agent). In the clinical context Freud’s distinction between aspects of the self refers to the motivational characteristics that we might recognise. The Id is the pool of ‘primitive’ urges that seeks to maximize pleasure and avoid pain – the pleasure principle. The task of the Ego is to moderate the uncensored impulses of the Id according to the reality principle. Metaphorically speaking it takes a longer-term view balancing immediate gratification against possible loss. Finally, the Superego is the repository of our ideals and moral standards. It superimposes these conditional constraints on the Ego. Freudian theory is more

complex than this minute and inadequate summary; and it is not widely endorsed by many contemporary psychologists. The main point is that Freud’s view of the self introduced the key idea that the self may not be a coherent entity and that it may encompass contradictory information (states, intentions and desires). There are two obvious consequences of this state of affairs. First, discrepancies between states might serve as a motivational ‘push’ to engage in behaviour that will reduce the discrepancy, and second, the discrepancy might have emotional consequences.

Pain Interrupts, Interferes & May Affect Your Identity

There is surprisingly little research on the self and pain given the close relationship between pain and suffering. We recognise the threatening nature of pain, even if that pain is merely momentary and delivered as part of an experiment. Contemporary research emphasises the interruptive effect of pain on both behavioural and cognitive performance. Such research has demonstrated that the extent of interruption is a function not only of the stimulus characteristics of the pain but also of the threat appraisal i.e. the meaning of the pain for the individual. Momentary experimental pain and acute pain is unpleasant but it has little impact on one’s sense of self. Pain that lasts for a few days will continue to interrupt and it will also cause *interference* with behavioural tasks: seen as an inability to perform them, or as degraded performance. Society tolerates brief periods of non-performance and sociologists have labelled this the ‘sick role’. Pain that persists and continues to impose

interruption and interference may be much more damaging to one's sense of self or identity. Eric Cassell has written widely about suffering and defines it as *"the state of severe distress associated with events that threaten the intactness of the person."* It is relatively easy to see that within this definition persistent pain can be one, if not the major condition, that leads to suffering.

There is one area where there has been considerable amount of research over the past 10 years and it has been defined by methodology - qualitative research - rather than any substantive theory of the self. The studies have examined the pain sufferer's perspective on their experience. A few years ago we conducted a literature search and identified between 30 and 40 published accounts, excluding presentations at various conferences. The findings from these studies do not appear to have been integrated formally in any publication but in reading them one is struck by several aspects that relate to the way in which sufferers of chronic pain have their sense of self challenged and are forced to evaluate their positions. Figure 1 illustrates some of the themes we extracted when we began to investigate one aspect of the self in pain using a different, quantitative methodology.

Self and Pain: The Self-Pain Enmeshment Model

Our recent studies were stimulated by reviewing a series of experiments on cognitive bias: that is the tendency to preferentially respond to some types of information. Cognitive bias can be shown in attention, interpretation and memory processes. When Tamar Pincus and I reviewed these studies we were struck by the fact that pain patients with associated distress seemed to be particularly

susceptible. We suggested that the biases were the result of the combination of information about pain and aspects of the self that became intertwined (psychologists use the term schema to denote these representations). We conjectured that information relating to pain was associated with information about key aspects of the self and vice versa. Our account was essentially *post hoc* and, in all truth, not particularly refined. For example, although we referred to the self as if it were a single entity, we were aware that this is not the way in which contemporary psychology views the self. Although researchers have continued to explore cognitive bias in chronic pain using information processing paradigms, the research at Leeds has taken a different turn.

Self-Discrepancy Theory

After some deliberation we decided to use the framework of Self Discrepancy Theory (SDT) developed by Higgins in the 1980s, as a starting point. There were several reasons for this. First, the theory was well articulated and perhaps more importantly it refers to normal processes. This was important because we were essentially interested in knowing how the experience of pain might hi-jack normative processes. Second, the findings were reasonably robust and the methodology was simple enough and transportable to a clinical setting. Third, we noticed some parallels between clinical observations of chronic pain patients, the emerging qualitative literature and SDT.

SDT implies that the self can be constructed from a number of different perspectives. The basic building blocks of the original theory were three self-aspects: *the actual self* (the characteristics of the self as

Themes from Qualitative studies

Figure 1. Schematic Representation of Some of the Themes Found in Qualitative Studies

it is now), *the ideal self* (the characteristics you would like to possess at some point in the future), and the *ought self* (the characteristics you think you ought to possess). These aspects of the self can be viewed from two positions: your own reflections and how you think somebody else who knows you might think of you. SDT proposes that discrepancies between the actual self and the ideal and ought selves have two implications. First, the discrepancy will act as a self-guide directing actions to 'close the gap', and second, the presence of a discrepancy will have emotional sequelae. Discrepancies between the actual and ideal self will be associated with emotions of dejection (depression), while actual-ought discrepancies will be associated with the experience of agitation. SDT says nothing about the presence of pain or other adverse circumstances and we concluded that, all things being equal, people with chronic pain should show the same relationship between discrepancies and emotions that non-pain samples do^a. Indeed there is evidence that this is the case. Our view on this was that while the distance between the self-aspects might be important, the degree to which a person experienced their self enmeshed by pain might also be an important determinant of their emotional adjustment.

Assessing Self-Pain Enmeshment

To test this we had to modify the standard procedure in which participants generate lists of up to 10 words that describe each of their self-aspects. University students seem to do this with alacrity; it's actually quite a difficult task for many people. We therefore borrowed a technique from a related line of research that is concerned with possible selves i.e. the sort of person that you think you might become. Participants generate lists of words describing themselves as they actually are; a list of words describing their hoped-for self, and another list describing what they feared they might become^b. It is possible to compute how discrepant a person's description of different self-aspects is by measuring the similarity between the sets of words used to describe the self-aspects. To measure enmeshment we asked our participants to do another task. They were asked to read through the list of hoped-for self characteristics they generated and for each word to answer the question "could I be this if I still had pain?" with a Yes/No response. We simply defined enmeshment as the proportion of No responses i.e. the more characteristics of the hoped-for self are not realisable if pain continues.

Some Findings

In the statistical analysis we controlled for many possible confounds such as age, duration of pain and the degree of self-reported disability. The expected relationship between depression and the actual/hoped-for self-discrepancy as predicted by SDT was present. But independently of that the extent to which a person regarded her- or him- self as enmeshed with the pain also predicted depression. Indeed it did slightly better as a predictor than the discrepancy measure. We also included a measure of pain acceptance

and observed an expected relationship between enmeshment and acceptance: the more accepting a person was, the less enmeshed they were.

In a second study we set out to replicate and extend the first set of findings. First, we demonstrated that our hoped-for self did correspond reasonably closely to the ideal self of SDT. Second we replicated the basic observations relating enmeshment to depression. The third and main aim was to test an idea about the importance of various aspects of the self. Thus far we had treated the different descriptions within the self as having equal weight but it seems clear that this is not so. Some aspects are more important than others. This idea has been expressed several times before, for example by Chapman and Gavrin who captured it as follows:

"Painful arthritis in the fingers would have a minor impact for most middle aged people, but could be devastating for a professional concert musician ..."

We tested this by examining the variation in two common motivational needs, autonomy (the desire to be independent) and sociotropy (the desire to interact with others). We reasoned that if, for example, you had a strong need for autonomy and if many of your autonomous characteristics were enmeshed by pain you would experience greater distress than someone with a low need for autonomy who was equally enmeshed. Similarly, people with a high sense of sociotropy would be more vulnerable to distress if their sociotropic characteristics were enmeshed. We measured sociotropy and autonomy using a standard questionnaire and the degree of enmeshment for autonomy using the task I have already described. To measure sociotropic enmeshment we asked participants to make judgments about what they thought that someone close to them wanted them to be.

The results partly supported our conjecture but not quite in the way we expected. First, we only found an effect for anxiety. Second it was very clear that if a person reports a high level of enmeshment then it doesn't seem to matter whether or not they place a high value on the enmeshed characteristics, as high levels of enmeshment are associated with high levels of anxiety and depression. Surprisingly we also found that if you highly valued autonomy or sociotropy then even a low level of enmeshment resulted in levels of anxiety that were as high as those observed in highly enmeshed individuals. It seems with highly valued characteristics, the mere threat that they might become trapped by pain is associated with anxiety.

Future Research

Both the studies described above used patients with chronic pain and cannot answer questions about the development of enmeshment or whether it changes in time. A recent study with Karoline Vangronsveld and Dutch colleagues has given some insight into this. We recruited people within one month of them having a whiplash injury and followed them for 3 weeks. At the onset of the

^a Most of the published research is on American college students but other research on people with psychiatric disorders has shown the same pattern of relationships.

^b For reasons of space I have not given more details about this aspect but interested readers can find a preliminary account in the Morley & Eccleston (2004) reference.

study many of them showed some degree of enmeshment but this dissipated as time passed and pain reduced. Importantly we also assessed self-discrepancies and these did not change overtime – as we had predicted. This study raises interesting questions about the temporal relations between pain and enmeshment. The fact that we could detect it so early on in a person's pain experience suggests that the threat of pain penetrates a person's sense of self very quickly. Are some people more resilient than others to this apparent assault? When does enmeshment become 'fixed' and more resistant to change? What is the relationship between behavioural activity and enmeshment at the level of a person's self-description (trait)?

We have recently completed a study that examines enmeshment at different levels; roughly speaking, the behavioural and conceptual level, but the data are still being analysed. Another small study considering adolescents with chronic pain indicates that growing-up with pain may not be as threatening to the self as one might expect.

How does this idea of an enmeshed self relate to therapy? At an anecdotal level it is apparent that the possible selves interview is often an emotional experience for participants as it captures their central hopes, aspirations and fears in a way not experienced by them when completing standard questionnaires. Several participants have found it helpful, realising that they can 'be' what they want to 'be' even in the continuing presence of pain. The connection between this line of research and acceptance and commitment therapy (ACT) is obvious but not formal. Whereas much ACT research is both behaviourally informed and focused on therapy, the current research is grounded in methods and theories of social psychology.

ACKNOWLEDGMENTS

I would like to thank Tamar Pincus and Stephen Barton for discussions about the idea of self-pain enmeshment; Caitlin Davies, Ruth Sutherland, Ali Fogg and Kirsty Abbas for their collaboration and data collection skills; and Karoline Vangronsveld, Marielle Goossens, Hanne Kindermans and colleagues in Maastricht for their generous collaboration.

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