



Psychosocial factors influencing the experience of sustainability professionals

Journal:	<i>Sustainability Accounting, Management and Policy Journal</i>
Manuscript ID	SAMPJ-09-2015-0080.R1
Manuscript Type:	Research Paper
Keywords:	environmental sustainability, psychosocial, organisation, coping, resilience, effectiveness , motivation, cognition, identity, emotion, values

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Abstract*Purpose*

The study seeks to gain insight into psychosocial factors influencing sustainability professionals in their work to lead by influencing and improving pro-environmental decision-making in their organisations.

Approach

Using Interpretative Phenomenological Analysis as a framework, the study enquires into the lived experience of sustainability professionals and leaders from the UK and Canada. The primary data source is semi-structured interviews, analysed with frame and metaphor analysis.

Findings

Key psychosocial factors involved in participants' experience are identified, specifically psychological threat coping strategies, psychological needs, motivation and vitality, finding complex interactions between them. Tensions and trade-offs between competency, relatedness and autonomy needs and coping strategies such as suppression of negative emotion and 'deep green' identity are modelled in diagrams to show the dynamics. How these tensions are negotiated has implications for psychological wellbeing and effectiveness, as well as for pro-environmental cognition and behaviour.

Implications

The concepts and models presented in this paper may be of practical use to sustainability professionals, environmentalists and organisation leaders, for example in identifying interventions to develop inner resources, support authentic and effective action and disrupt maladaptive responses to ecological crisis.

Originality/value

The paper contributes insight to understanding of underlying processes shaping environmental cognition and behaviour, particularly in relation to psychological threat coping strategies and interacting factors. With a transdisciplinary approach, the methodology enables nuanced interpretation of complex phenomena to be generated, and addresses gaps in psychology and organisation studies sustainability research, with implications for the future study of sustainability leadership.

Keywords: psychosocial, organisation, environmental sustainability, coping, motivation, needs, values, emotion, identity, cognition, resilience

INTRODUCTION

This paper draws upon insights from a study investigating psychosocial factors influencing the experience of sustainability professionals (Andrews, Fahy & Walker 2016), and contributes to understanding of factors influencing responses to ecological crisis in organisational contexts.

In this paper 'psychosocial factors' refer to psychological processes interacting with social contextual forces to shape behaviour. 'Ecological crisis' means changes in environment that destabilise continued survival, and is the term used to describe the situation currently facing humanity (Crompton & Kasser 2009; Ceballos et al 2015). The human response to ecological crisis has been grossly inadequate to date, with severe negative consequences for humans and other living beings increasingly likely (Ceballos et al 2015; Klein 2014; Foster 2015). This paper argues that developing understanding of psychosocial factors and how they influence environmental cognition and behaviour is critical for supporting appropriate and effective action. Yet this is an area that has been under-explored in both psychology and organisational studies literature.

Within organisational studies, research tends to take organisational, institutional and global levels of analysis (Sharma & Starik 2002; Lülfs & Hahn 2014). A related field where individuals are analysed more closely is leadership studies. At times, leadership research has drawn from psychology, often to critique assumptions within organisation and management (Felfe and Petersen 2007). The importance of drawing more widely from psychology in the development of our understanding of leadership is now recognised (Jackson and Parry, 2007). As we seek to understand leadership for sustainability in particular, we can therefore employ more insights from psychology. Importantly, therefore, within the discipline of psychology, there is relatively little research on the environmental behaviour of individuals in their organisational contexts: it tends to focus on individuals in other contexts such as in the home or as consumers (Stern 2000; 2011). Yet in industrialised societies, people spend most of their lifetime at work (Uzzell & Rätzl 2009) and as Stern (2000 p410) points out, "individuals may significantly affect the environment through... influencing the actions of organizations to which they belong". Furthermore, sustainability research at the individual-level of analysis has also focused on cognition, behaviour, and interventions to change behaviour (Wright, Nyberg & Grant 2012; Spence, Pidgeon & Uzzell 2009). The underlying drivers of behaviour have tended to be overlooked (Bartlett 2011; Lertzman 2015; Norgaard 2006). The research participants were six environmental sustainability managers and leaders with formal roles with regard to environmental policy, strategy and practice. The organisations are in the UK and Canada in the public and third sectors in local government, social housing, credit union and health care. The research participants' work ranged from producing environment strategies and policies, delivering energy efficiency programmes to conserving habitats.

The study has three research questions:

1. What is the experience of sustainability professionals oriented to pro-environmental values of working to influence and improve pro-environmental practices in their organisations?
2. What psychosocial factors can be identified that influence the participants' enactment of pro-environmental values in their work? How do these factors interact as processes?
3. What are the consequences/implications of the findings for individual effectiveness in improving organisational environmental practices, otherwise known as leadership for sustainability?

In this paper key themes in participant experience are identified and an analysis of psychosocial factors affecting their motivation and effectiveness is offered, interpreted through the lens of psychological threat (e.g. Crompton & Kasser 2009; Lertzman 2015), environmental identity (e.g. Clayton & Opatow 2003) and self-determination theory (Deci & Ryan 2000). The dynamics of interacting processes are modelled, highlighting tensions and feedback loops.

The findings show that these tensions arise as the participants' consciously and unconsciously seek to satisfy basic psychological needs of competency, autonomy and relatedness, and to cope with psychological threats that can be brought on by living and working in the context of ecological crisis. How these tensions are negotiated has implications for their psychological wellbeing and their effectiveness in achieving results, as well as for shaping the nature of their responses as either ecologically adaptive or maladaptive. For example, whilst positivity about achieving results is motivating, unrealistic optimism is maladaptive. Suppressing difficult emotions about ecological crisis is also maladaptive if prolonged. On the other hand, out-sourcing a threatened 'deep-green' identity to an external like-minded environmental partner could be an adaptive strategy. These findings enrich our understanding of the complex processes involved in environmental behaviour.

1 Gaining awareness and understanding of how psychosocial processes can interact and what the impacts and
2 implications of these dynamics might be, allows for sustainability professionals to consciously – mindfully -
3 design interventions to support their efforts to influence organisational responses to ecological crisis.
4

5 The paper begins with an overview of some relevant research and theories to situate the study within the
6 wider field and to provide background information that may enhance understanding of the findings. It
7 follows with a summary of the approach used to conduct the study, and then discusses some of the key
8 findings. Concluding comments are made about the practical and academic contributions of the study.
9

10 **PREVAILING THEORIES**

11 ***Values and other attitudinal factors***

12 Numerous studies find correlations between pro-environmental attitudinal factors such as values, concerns,
13 goals and beliefs, and between these aspects of attitude and pro-environmental behaviour (e.g. Schultz et al
14 2005; Bardi & Schwartz 2003; Brown & Kasser 2005; Sheldon & Kasser 2011). It has been argued (e.g. by
15 Kasser & Crompton 2011) that it is through activating and strengthening these pro-environmental values,
16 which involve concern beyond the individual self to other people and the natural world, that enduring pro-
17 environmental behaviour can be motivated. On the other hand, social marketing-based campaigns that
18 appeal to self-interest and use extrinsic incentives such as financial reward or social status to encourage
19 energy efficiency in the home for example may be effective in that particular goal but are understood to
20 diminish motivation to engage and persist with other kinds of pro-environmental behaviours. This could be
21 an explanation for the rebound effect, which has serious implications for climate change mitigation policy
22 (Jenkins et al 2011). The phenomenon of rebound occurs when some of the benefits from energy efficiency
23 are cancelled out by changes in behaviour in other areas, for example money saved on energy bills being
24 used on flights abroad or using the car more.
25

26 Stern (2000) observes that environmentally significant behaviour is “dauntingly complex, both in its variety
27 and in the causal influences on it” (p422). Stern explains that not only do different causal variables appear to
28 work in different ways in influencing behaviour; the variables themselves interact with each other.
29

30 So whilst attitudes may be reliable predictors of behaviour they are not the sole determinants, meaning that
31 actions may well diverge from dominant values (Steg & Vlek 2009; Whitmarsh & O’Neill 2010; Holmes et al
32 2011). There have been various studies investigating the influence of a variety of other factors that interact
33 with attitudes in shaping behaviour (e.g. see Kollmuss & Agyeman 2002; Clayton et al 2015). Of most
34 relevance to this paper is work on the role of identity, psychological threat coping strategies, and the
35 influence of context.
36

37 ***Identity and context***

38 It seems that identity is a key factor moderating the relationship between pro-environmental values and
39 behaviour (Schultz et al 2005; Schultz & Tabanico 2007). According to a study by van der Werff et al (2013),
40 values need to be linked to the self in order to be influential in choices that are made. Clayton & Opatow
41 (2003) emphasises that identity is fundamental to understanding human relationship with the natural world.
42

43 A number of studies show that environmental identity or sense of self as part of and connected with nature
44 is linked with pro-environmental behaviour (e.g. Clayton 2003; Mayer & Frantz 2004; Nisbet, Zelenski &
45 Murphy 2009). Social identity theory states that people tend to show bias towards those they see as being
46 part of their in-group and prejudice and discrimination to those they see as part of their out-group. Seeing
47 nature as part of one’s in-group or out-group is therefore regarded as a key factor influencing sustainable
48 behaviour (Crompton & Kasser 2009).
49

50 However, as Clayton (2003) reminds us, because we have different sources of identity, an environmental
51 identity is not enough to ensure environmental responsibility: it has to be salient, and it has to motivate us
52 to gain the knowledge we need to understand our impact on the environment (p60).
53

54 Identities are understood to be arranged hierarchically in the mind and the salience of a particular identity at
55 any moment is dependent on context and on commitment to that identity (Zavestoski 2003; Clayton &
56 Opatow 2003). These multiple identities may be integrated and unified to varying extents. Kahn (2003)
57 studied developmental aspects of identity formation. A sense of unity in identity at any given time Kahn says
58 is due to underlying cohesion in cognitive structures, with transformations in the cognitive structures helping
59 to create a sense of a changing identity over time. Self-Determination Theory (SDT) considers humans to
60

1 have an inherent tendency toward growth development and integrated functioning (Deci & Vansteenkiste
2 2004). There are ways of constructing narrative identity or self-concept that are more likely to support the
3 growth-strivings and need satisfaction of the self, and ways of constructing the self-concept that will impede
4 or distract from this.

5
6 In their study of identity in organisations with regard to sustainability managers engaging with climate
7 change, Wright, Nyberg & Grant (2012) find that this engagement challenges dominant and privileged
8 discourses in the organisation of shareholder value and economic growth. Due to this conflicting discourse,
9 sustainability specialists are situated in a contradictory space. They conclude that the possibility to politically
10 influence the organisation is dependent on how the individual negotiates these conflicts and how they
11 manage their identities. The authors also propose that the possibility to experience and present a coherent
12 pro-environmental narrative identity is undermined by a "consumption-oriented and media-driven world
13 based upon technological and (dis)connected relationships" (p.1453)

14 Studying ethical blindness in organisations, Palazzo et al (2012) find that the temporary loss or inability to
15 see that one is deviating from one's values is context bound. They argue that the frame people use to
16 interpret the world and to make decisions is strongly influenced by the contexts in which they make those
17 decisions. Context, they find, can be stronger than reason, values and good intentions. It is proposed that
18 the main driver of ethical blindness is fear: fear of being humiliated, marginalised, of not meeting others'
19 expectations and so on (Palazzo & Hoffrage 2014).

20 This brings us to consider one further factor that plays a significant part in shaping pro-environmental
21 behaviour: how one deals with psychological threat.

22 ***Coping with psychological threat***

23
24 The environmental challenge facing humanity is thought to pose a profound psychological threat for
25 example existential threat, threat to the integrity and stability of self-identity, and threat to self-esteem by
26 threatening life plans and subverting internalised expectations of the future, reminding us of the fact of our
27 eventual death, and challenging the morality of our ecologically destructive or apathetic behaviours
28 (Hamilton & Kasser 2009; Crompton & Kasser 2009; Weintrobe 2013; APA 2009).

29
30 The disequilibrium caused by psychological threat is stressful and unpleasant; the tendency is to attempt to
31 alleviate stress and decrease negative emotions through defence mechanisms and coping strategies in order
32 to return to baseline functioning as soon as possible (Cramer 1998). These responses are understood to be
33 part of normal human development but as with any psychological function, a normal process may as Cramer
34 1998 says, come to serve pathological ends if overused or situationally inappropriate. And in terms of
35 addressing environmental issues, defences and coping strategies may be adaptive or maladaptive (Crompton
36 & Kasser 2009). There is often a fear that allowing oneself to feel despair, for example, will break us apart,
37 that we will get stuck in a dysfunctional state. Despair, Macy (1993) says, is "tenaciously resisted because it
38 represents a loss of control, an admission of powerlessness. Our culture dodges that by demanding instant
39 solutions when problems are raised" (p18).

40
41 Psychological threat is not a simple phenomenon. Interaction of psychological threat with other variables can
42 lead to different outcomes. For example, existential threat tends to motivate people to seek to enhance their
43 sense of self through prioritising extrinsic goals of material wealth and success, which could be interpreted
44 as a maladaptive coping strategy in terms of increased consumerism. But Fritsche & Häffner (2011) found
45 that existential threat loses its negative effect on pro-environmental behaviour if one's self-identity as being
46 part of nature is strong.

47
48 There is relatively little qualitative research on psychological threat responses to ecological crisis, and within
49 the psychoanalytic field more generally it seems there is not much consensus about what is and is not a
50 coping strategy (Cramer 1998; Skinner et al 2003).

51
52 Adaptive strategies have been defined as those that promote psychological adjustment and stimulate actions
53 appropriate to the new reality (Crompton & Kasser 2009; Macy & Brown 2014). Examples are seeking
54 information, engaging with and regulating emotions, and collaborative problem-solving and taking action.

55
56 Maladaptive strategies are those that work against this in some way. There has been much focus on the
57 threat response of denial (e.g. Stoll-Kleeman et al 2001; Norgaard 2006) which is when facts are not
58 allowed to be accepted in the conscious mind. Thoughts or feelings that would be upsetting if accurately
59 perceived are negated, ignored or misrepresented (Cramer 1998). However, people may both deny and
60 acknowledge facts at the same time but with different parts of the mind in a process known as disavowal

(Randall 2013). Other maladaptive strategies include distortion of facts e.g. by reinterpretation, shifting responsibility, self-enhancement e.g. materialistic behaviour or self-protection, emotional avoidance through e.g. suppression, escapism, numbing and pleasure-seeking, Diversionary activity such as minor behaviour change and displaced commitment, resignation, passivity and other forms of non-action, wishful/magical thinking and unrealistic optimism, active catastrophism and self-destructive actions (Crompton & Kasser 2009; Hamilton & Kasser 2009; APA 2009; Weintrobe 2013; Hoggett 2011).

In advocating a psychoanalytic understanding of humans as 'conflicted beings with high capacity for contradiction', Lertzman (2015) places the focus of research on how conflicts and dilemmas are negotiated, supported and 'worked through' towards greater alignment and behavioural changes (p7).

Mindfulness has been proposed as a tool to help people respond in an adaptive way to psychological threat (Crompton & Kasser 2009). This is because through practicing mindfulness, practitioners cultivate the ability to be aware of emotions, physical body sensations, thoughts, and sensory information, moment-by-moment. Emotions and body sensations are information, and attending to feedback signals is vital for self-regulation (Shapiro & Schwartz 1999). Instead of reacting automatically to psychological threats, which may involve resisting or suppressing difficult emotions, practitioners learn to accept these emotions and ultimately work through them (Kabat-Zinn 1990). This is important because emotion plays an important role in directing attention and guiding behaviour (Stangor 2010; Deci et al 2015). And as explained by Rogelberg (2006) regulating strong negative emotion through suppression takes emotional and physical effort, which may affect the ability to think as cognitive resources are diverted away from other tasks. Cognitive functioning may also be impaired due to stress induced by dissonance between felt and expressed emotions.

Macy & Brown (2014) insist that is precisely *because* we are interdependent and connected with nature that we feel pain about its destruction. It is in honouring this pain and accepting these emotions as legitimate indeed as *appropriate* responses, they argue, that we are better able to act adaptively in bringing the world towards ecological balance. Randall (2013) holds that it is this working through of difficult emotion that will bring the strength to make the personal, social and political changes that are needed.

Psychological threats can also be understood in relation to basic need satisfaction. Self-Determination Theory (SDT) is a macrotheory of human motivation that proposes humans have three basic psychological needs that require satisfying for psychological wellbeing: competency, relatedness and autonomy. These needs are drivers of behaviour. Deci & Ryan (2000) define competency as feeling competent and efficacious, having an effect on the environment as well as attaining valued outcomes within it, engaging in optimal challenges and experiencing mastery of effectance in the world. Competency requires feedback, which can supportive or undermining of autonomy in the way it is given. Autonomy is defined as the desire to self-organise experience and behaviour and for activity to be concordant with one's integrated sense of self and intrinsic choices. Relatedness is seeking attachments and experiencing feelings of security, belongingness and intimacy with others. The extent and the manner in which these needs are satisfied have consequences for vitality and psychological wellbeing. The social context can either support or undermine needs satisfaction.

Bringing this discussion of theory back full circle to where it started with values, it has been suggested that mindfulness supports congruent enactment of values because in a mindful state, behaviours tend to be regulated autonomously in accord with chosen interests and values rather than socially derived forces or pressures (Brown et al 2007).

Summary

The literature introduced above demonstrates the complex nature of environmental behaviour, involving underlying drivers of values, identity, needs, mindfulness, emotion regulation and other psychological threat coping strategies. These factors interact in often unconscious processes (Vignoles et al 2011; Breakwell 1986; Willig & Stainton-Rogers 2010). This means they are not as readily accessible to the conscious mind and are less easy to articulate directly than opinions (Swim et al 2011), which is perhaps the reason why opinions and intentions are researched more often. Psychology research into environmental behaviour tends to favour correlational and experimental approaches (Lertzman 2015; Willig & Stainton-Rogers 2010), which do not lend themselves to investigating unconscious processes. Organisational studies of environmental behaviour rely on explanatory frameworks like Azjen's theory of planned behaviour that have been critiqued for assumptions about rationality and the narrow focus of variables considered (Kolmuss & Agyeman 2002; Lorenzoni et al 2007; McDonald 2014).

1 The methodology used in this study was designed to address these issues and get below the surface of
2 descriptive accounts and conscious cognition.
3

4 5 **STUDY APPROACH** 6

7 The study focuses on six individuals with pro-environmental values who have formal roles in their
8 organisation with regard to environmental policy, strategy and practice. One was a chief executive where
9 such concerns are part of a broader responsibility, and the other five were environmental sustainability
10 managers. The organisations were in local and regional government, social housing, credit union and
11 hospital sectors in the UK and Canada. The table below provides some contextual information about each
12 participant.
13

14 [Table 1 here]
15
16
17

18 ***Recruitment, selection and ethics***

19 Research participants were recruited according to three key criteria: currently working in formal roles
20 involving influencing environmental decision-making, holding strong pro-environmental values that motivate
21 them to do this work, and propensity and willingness to be mindful (so that they would be able to give rich
22 accounts of their subjective experience). This created some homogeneity in the sample.
23

24 A variety of local, national and global marketing channels were used to reach a wide number of sustainability
25 professionals including mailing lists of professional bodies and sustainable business social networks, social
26 media posts, and the researcher's personal and professional contacts. Basic information was provided via a
27 link to a website but details of the theories underpinning the study were not revealed. Candidates were
28 invited to complete an online survey that included questions about their organisation, role, motivation for
29 taking part in the study, motivation for working in environmental sustainability sense of connection with
30 nature, and mindfulness. Eight candidates that fitted the criteria and completed the survey were selected, of
31 which six (three females and three males) ended up completing the full study over the course of one year.

32 A sample size of six participants is regarded as a sufficient for a qualitative study into lived experience using
33 close detailed analysis of each case (Smith, Flowers & Larkin 2009).

34 Ethical approval for the study was obtained prior to recruitment and all participants completed consent
35 forms. The main ethical issues considered related to treatment of confidential or organisationally sensitive
36 information, and sharing research findings with participants i.e. what information and how it is
37 communicated. The latter is a central ethical question in psychosocial research, to which there are no easy
38 answers (Clarke & Hoggett 2009 p46). Fictitious names are used in this paper to protect the participants'
39 anonymity, and other identifying information has also been removed.
40
41

42 ***Data generation, analysis and interpretation***

43 The main method for generating data was semi-structured interviews but other sources such as participant
44 diary, organisational documents, and indirect observation via audio recordings of meetings were also
45 analysed, and a reflexive diary was kept by the researcher. The 2-hour interviews were audio recorded and
46 transcribed verbatim. The aim of the interview was to obtain detailed accounts of the participants' lived
47 experience of influencing their organisation. Topics included personal relationship with nature, views on the
48 environmental situation, views on their organisation's environmental impact, their experience of influencing
49 decision-making, and their experience of attending mindfully to their inner and outer experience during a
50 significant event such as a strategy meeting.
51

52 Data was analysed using the framework of Interpretative Phenomenological Analysis (IPA) integrated with
53 frame and metaphor analysis.

54 IPA is concerned with gaining insight into how someone experiences and makes sense of a given
55 phenomenon. It takes a critical hermeneutic approach that allows for the development of alternative
56 narratives beyond mere description, informed by extant theory, and also leaves space for both intuitive and
57 intersubjective approaches to data analysis (Smith, Flowers & Larkin 2009). The premise behind the critical
58 hermeneutic stance is that people may not be consciously aware of all the processes involved in their
59 behaviour and experience (Willig & Stainton-Rogers 2010).
60

1 Frame and metaphor analysis is concerned with analysing cognitive frames that are used in the text, and
2 analysing the effect these structures might have on how people think and act upon the broader issue under
3 enquiry. This cognitive linguistics method recognises that the use of frames and metaphors is often
4 unconscious (Lakoff & Johnson 1980). Frame and metaphor analysis is a detailed micro-discourse analysis
5 where the text is marked up sentence-by-sentence, and often word-by-word, using largely abductive
6 reasoning. The findings relating to cognitive frames are not covered in this paper.
7

8 The interview transcripts were analysed and interpreted for values and identity salience; coping strategies,
9 emotions and mindfulness; needs, motivation and vitality; conflicts and ambivalence; cognitive frames and
10 metaphors. This was a highly iterative process involving several stages: close reading of text, exploratory
11 coding, emergent coding, clustering of emergent themes into higher order themes, cross-case analysis and
12 synthesis. The analysis and interpretation is informed by theories of psychological threat coping, Self-
13 Determination theory, environmental identity, and cognitive frames, and draws on literature from various
14 domains of psychology, environmental philosophy, cognitive and ecolinguistics and organisational studies in
15 a transdisciplinary research design.

16 The higher order themes that eventually emerged are common to all participants but there are
17 convergences and divergences in the way that the subthemes manifest. The themes are shown in the table
18 below, with illustrative quotes. These nuances in experience are a key feature of the narrative provided in
19 this paper. Insights were generated about key psychosocial factors influencing the participants' cognition
20 and behaviour, and the dynamics of interactions between factors were modelled in diagrams.
21

22 [Table 2 here]
23
24
25

26 After data analysis and interpretation, a final debrief conversation was held with the participants to share the
27 theoretical framework for the study, which had not been disclosed to avoid unnecessary bias, and to share
28 key findings as a stakeholder check for credibility and trustworthiness (Thomas 2006; Lincoln & Guba 1985).
29

30 ***Limits and epistemology***

31 In-depth qualitative research of this type with a small number of case studies is largely concerned with
32 nuanced interpretation of lived experience that is situated in a specific context at a particular moment in
33 time. The participants were from public and third sector organisations in the UK and Canada with English as
34 a first language; none worked within the private sector or in non-Western societal contexts. This paper does
35 not make any claims about the generalisability of the results of the study for a wider population, including in
36 other industry sectors or in non-English speaking cultures, or for the applicability of the findings in all life
37 domains.
38

39 The epistemological approach of IPA and cognitive linguistics (Johnson & Lakoff 2002) is neither objectivism
40 nor subjectivism. Individuals are essentially embedded, intertwined and immersed in the world, and meaning
41 is generated through these ongoing embodied interactions (Johnson & Lakoff 2002; Larkin, Watts & Clifton
42 2006). This is also consistent with the psychosocial approach takes the view that psychic and social
43 processes are always implicated in each other and cannot be studied separately in a meaningful way (Clarke
44 & Hoggett 2009). Objective assessments of the organisational context are therefore not relevant.
45

46 The study methodology involved the use of abductive reasoning and drew inferences from a small number
47 of people with whom the researcher had fairly brief encounters. From a phenomenological perspective
48 however this does not discount its validity, and there is potential for something meaningful, tangible and
49 significant to be revealed (Larkin, Watts & Clifton 2006). As a systemic and multifactor study there were also
50 limits to the depth with which every factor could be studied. It presents a conceptual framework that can be
51 used as the basis for further exploration.
52

53 **FINDINGS AND DISCUSSION**

54 The theory outlined above was used to guide data analysis and interpretation, which resulted in a narrative
55 that should be understood as just one possible interpretation of the participants' experiences: it is not
56 intended to represent an objective truth. However, debriefs with the participants confirm the interpretations
57 that follow to be accurate, insightful and useful, to them at least.
58
59
60

1 The study identified key psychosocial factors in participant experience, including how these factors interact
2 as processes creating tensions and feedback loops. A diagram modelling these processes is used to structure
3 this narrative, and the interpretation is grounded in the phenomenological evidence of extracts from
4 participants' accounts (Smith, Flowers & Larkin 2009).

5
6 Conflicts and tensions are a feature of human life (Searles 1972; Lertzman 2015), and have been found to
7 be part of the experience of change agents in organisations (Wright, Nyberg & Grant 2012; Meyerson &
8 Scully 1995). How these tensions are negotiated has implications for psychological wellbeing and
9 effectiveness, as well as for pro-environmental cognition and behaviour. The ecological implications of
10 coping strategies used by the participants are therefore considered.

11 In explaining this diagram, the first thing to note is the presence of self-reinforcing feedback loops between
12 several of the factors. Arrows between items mean 'leads to' or 'influences'. These relationships can be
13 supportive or undermining in their influence on the subject, depending on how the processes manifest.

14
15
16 [Figure 1 here]

17
18
19 The factors labelled competency, autonomy and relatedness refer to basic psychological needs, as previously
20 discussed. Competency has been placed at the centre because effectiveness in achieving environmental
21 results was a key concern for the participants. With the financial pressures that most public and third sector
22 organisations are under, proving one's worth to the organisation by delivering results is critical in order to
23 keep one's job. Environmental work is not a statutory duty for local authorities in the UK.

24 *Ash: These aren't the times when you can afford, just someone going around being the green
25 conscience of the organisation you know, got to deliver results to justify your own existence really*

26
27
28 The participants sought to achieve results through the process of influencing thinking and decision-making,
29 which involves being in relationship. As shown earlier (see Table 2), relationship with the organisation is a
30 key theme in participants' accounts, with a subtheme of (in)congruence between the individual's pro-
31 environmental values and goals and those of the organisation. Incongruence may lead the individual to
32 adopt coping strategies to deal with threat to competency and relatedness needs.

33 34 **Identity work**

35
36 One strategy is suppression of identity, specifically a 'deep green' identity in order to fit in with colleagues
37 (relatedness needs) and conform to the dominant organisational culture. To be effective in influencing
38 colleagues and senior managers, they consciously chose to project a particular image that they think
39 conveys professionalism and credibility. This positive perception is likely to make the individual more
40 effective in influencing their decision-making and consequently in achieving the results they want, thus
41 satisfying competency needs. If this works, then the individual is likely to keep suppressing this identity,
42 creating the larger self-reinforcing feedback loop linking the coping strategy with relatedness and
43 competency as shown. The following extracts from Ash illustrate this strategy:

44
45 *I think the idea of a kind of deep green where you get into an almost spiritual sense of it, of every
46 species has its right to life and should be respected and so on um I have some sympathy with that
47 view*

48
49 *I've made a priority in my role getting the ear of (senior executives) which requires get- being
50 credible... so early days fresh out of university very clear I'm not going to wear sandals bring lentil
51 sandwich to work and have a beard... So being seen as being credible and professional*

52 So perceived threat to competency triggers a coping strategy that involves suppressing an identity that
53 might jeopardise credibility. However it may not work with everyone in the organisation:

54
55 *Ash: I could, I could call myself Ash Corporate, you know and I live at number 1 Corporate Street
56 Corporate Town and I love doing corporate and just talk about- and he still wouldn't believe I was
57 anything other than Friends of the Earth in residence and he's just got that despite my best efforts
58 not to you know wear a green shirt and uh open toed sandals or try and speak with too much
59 passion or emotion about why we need to act, which is why I find it difficult-because I so
60 consciously shut that out*

This extract also indicates that suppressing identity takes conscious effort (*best efforts, try, so consciously*), which has implications for vitality (Rogelberg 2006).

Where there is high compatibility with the organisation, the need to suppress such an identity is not a particular issue because authentic expression would not affect their relationship with colleagues or damage perceptions about their professionalism and credibility. Heather was the only participant with high compatibility and congruence; she had chosen to join the organisation specifically for this reason. In her position as chief executive she says:

I'm trying to get an environment where every single person can participate, they can contribute, they can be themselves

Suppressing an identity to which the subject has a level of commitment can have implications for autonomy need satisfaction because their sense of inner coherence may be diminished. This may trigger feelings of self-doubt.

Ash: Ah occasionally I wonder I think about it less now but occasionally sense of whether I did the right thing. Harking back to a sense, I was leaving university and I remember reading stuff by Jonathan Porritt... whether you can be part of the system and change it from within... And another view saying no it's like everything else that starts outside the system as a force for change all of these things they just get absorbed and you know you'd have been out there on the barricades and instead they've got you in a nice professional job sitting in an office maintaining the status quo broadly

Suppression involves sacrificing a part of oneself. The etymology of the term 'harking back' is interesting to consider. It originally referred to hounds returning along a track when the scent has been lost, till they find it again (OED Online 2015). Was the decision on leaving university to work 'within the system' the point when the full scent of inner coherence was last smelled?

Robin expresses low commitment to a 'deep green' identity that he appears to regard as incompatible with being pragmatic:

I'm not a deep green kind of person probably, I wouldn't describe myself as that. I'm probably relatively pragmatic and I'm pushing for the environmental side but also understand some of the other pressures and compromise on some of those things... I guess what I'm saying is hopefully through working with me they'll see that I'm not just going to force green ideas down their throat.

Robin's concern for a non-confrontational relationship with his colleagues is also expressed in this extract. The pragmatic compromise to which Robin refers can also be found in the accounts of other participants. For example:

Hazel: I've changed my approach to embrace that culture which moves slowly... so I can see that um I'm fine with the way that things are progressing. It's not the hill that I want to die on. They're going to move slowly, I will work at their pace

Yet suppression in order to fit in may not fully satisfy relatedness needs anyway. All the participants who had some incongruence with the organisation expressed a sense of isolation or being different. For example:

Ash: I work with lots of people across the organisation but their priority is saving a million quid for the Property budget or you know they'll do the carbon stuff but we're not peas in a pod or birds of a feather or anything you know so they're not really in the same place as me

Where relatedness was not satisfied sufficiently through work relationships, an alternative strategy of close relationships with external third sector partners or like-minded friends and social networks was adopted. With two participants, there also appeared to be an 'out-sourcing' of the suppressed identity to external partners who can be and do what they themselves feel unable to:

Rosemary: I have been able to generate much more influence because of that (partnership) and potentially feed some information out to allow people to come back in and say things on essentially my behalf

Ash: I work very closely with the (name of organisation deleted) on food and they're a bunch of real radical greens who you know their previous lives were arrested by police at road demos and stuff and very committed kind of purist very consciously ideologically driven whereas mine's more up in the attic a bit

The finding that individuals may suppress an identity in service of relatedness and competency needs is consistent with Self-Determination Theory (SDT), which states that people tend to internalise the values and regulations of their social groups, facilitated by feelings of relatedness and competency (Deci & Ryan 2000). Breakwell (1986) provides a similar explanation, stating that individual values cannot be independent of social stereotypes and that threat arises when the individual learns that a social position carries a negative social value. Suppression is a response type that targets the threatened identity and restructures identity to make it less of an object for potential harm (Breakwell 1986; Petriglieri 2011).

The salience of a pragmatic professional identity is echoed in Wright & Nyberg (2015) who find a 'rational manager' to be one of the key identities enacted by sustainability managers in corporations: "Confronted by the discourses of 'professionalism' and 'productivity', they (some interviewees) found the identity of the rational manager not only more appropriate but also liable to prove politically effective in convincing others of the merits of pro-environmental action" (p131), however this study indicates the strategy of suppression may not be effective with everyone in the organisation. The association of the pragmatic professional identity with credibility is consistent with Ashforth & Humphrey (1995) who explain that rationality has become institutionalised in the form of 'norms of rationality' such that organisations must at least publicly conform to these norms to be perceived as legitimate.

Compromise is discussed in literature on change agents (Wright, Nyberg & Grant 2012; Meyerson & Scully 1993). This literature highlights the risk of co-option for those to compromise in order to avoid isolation and marginalisation. This is clearly indicated in the extract from Ash who in expressing self-doubt shows that competency and autonomy needs are not fully satisfied by this strategy.

The importance of support from external partners is consistent with the literature on SDT. Weinstein & Ryan (2011) report that many workers experience low need satisfaction on the job and that need satisfaction, especially relatedness, plays an important role in stress regulation.

Emotion regulation

Expression / suppression of emotion has been included with identity in the same part of the diagram because it is a coping strategy that works in a similar way. The research participants accepted the facts of ecological crisis, as might be expected of people working professionally in environmental sustainability and who are motivated by pro-environmental values. When asked to think about the natural world and the effect of human actions, they described emotions such as *sadness, frustration, angry, worrying, overwhelmingly distressing, depressing, upset, gloomy, melancholy* and *deeply disturbing*. These emotions are common responses (e.g. see Wright & Nyberg 2015) however they tended to be suppressed in service of meeting competency needs. There seemed to be a fear that engaging fully with such difficult emotions would lead to dysfunction and an undermining of their effectiveness, which gives support to Macy's (1993) assertion that "we are afraid that we might break apart or get stuck in despair if we open our eyes to the danger (p31). It is also consistent with Ashforth & Humphrey (1995) who state that in organisational contexts there is an assumption that rationality is required for accomplishing tasks and that emotions have disruptive effect on effectiveness.

Robin: *I think the initial emotion is anger or frustration. But I try and not retain those feelings really because they're quite self-destructive... I try to remain positive... I try to find reasons to be optimistic*

Ash: *Emotions I suppose when I think about it which I try and avoid think- it's rare that I- it makes me feel sad. Uh... I think I just feel a sense of melancholy about it really... Um... I tend not to explore them or I think I've got them in a box in my head... so I don't think its particularly helpful to explore because its kind of disabling in a way really and disheartening. So I think I put it in a box in the attic*

Ash: *Generally I'm an optimist though, I need that otherwise I'd give up I think, so*

Heather: *I think negative emotions is is sort of it's healthy to feel a reaction to it but em I think it's trying to sort of then turn it into either a positive action or a way of dissipating that negative sensation in your body so you're not carrying carrying it too much, which I think makes you less effective because the more you worry and get tense em and feel unwell you cant do positive change can you, you cant make a difference so*

Jay: *And I don't want to get distressed. I can't watch distressing programmes, habitat destruction or. I suppose that's what I've done really... Because I'm powerless to do anything about them and I put too much I've invested too much emotional energy in them in the past.*

That suppression of emotion takes effort is indicated by use of the word *try*. This is consistent with the research on emotion (e.g. Rogelberg 2006). *Disheartening* is an interesting term, invoking not just a physical feeling in the body but also a weakening of resolve. The effort involved to suppress identity and emotion takes energy, which impacts on vitality - the available energy needed to act, with subsequent implications for effectiveness and competency need fulfilment. The extract from Jay indicates that feeling both distress about something and powerless to do anything about it is experienced as energy depleting. From a SDT perspective, needs satisfaction maintains or enhances vitality (Ryan & Deci 2008). Randall (2013) suggests that powerlessness and distress is likely to trigger a defence reaction, which in Jay's case manifests as selective attention and emotional avoidance.

Emotional avoidance strategies may be beneficial in the short term in reducing stress but over longer time periods they are associated with poorer health (Weinstein & Ryan 2011). Engaging with and working through difficult emotions about ecological crisis is considered an adaptive coping strategy (Macy & Brown 2014; Crompton & Kasser 2009; Randall 2013; Lertzman 2015). But the organisational context may not provide a safe container for holding these emotions:

Ash: *(silence) how do I feel about it (in quiet voice) as local government officers it's all bashed out of us in our day job because what we feel about things is completely irrelevant its about what the business case is, and you know pragmatic*

In this quote, the organisation is perceived as violently hostile (*bashed out of us*) to emotion. Expressions of negative or intense emotion in the workplace tend to be unacceptable and emotion is regulated by neutralising, buffering, prescribing or normalizing (Ashforth & Humphrey 1995) In this extract emotion is regulated by prescribing what is socially acceptable, with low tolerance for emotional displays.

Motivation and vitality

To create personal meaning and greater inner coherence, which as discussed may have been undermined by identity suppression and compromise, the research participants tell themselves a story that justifies their experience. A story common to all was 'doing good' and 'making a difference'. As long as there is strong enough belief that this is the case, this story provides motivation to keep doing what they are doing and to withstand any pressures and stress. Consider these statements by Rosemary:

And then you know for me I'm working in the environment in an organisation that is doing exactly the opposite of what I believe to be right a lot of the time. And then trying to be the person that's dragging that up and changing it, it's just... oophh (sighs) why would you do that to yourself? (laughs) you know

I think I can make a difference and I think the people that we've got around us now we can make a difference, which is suppose is why I keep doing it

The more struggle I've had with what we're all doing and yeah the harder that's got the more determined I suppose I've got to want to do something about it

The question arises of what happens if the story collapses? As Rosemary herself appears to realise:

My worth is wrapped up in how successful I am about protecting the environment of the region. Risky! (laughs)

The diagram shows influences on vitality from organisational pressures and from the subjects' own personal values. For example:

Rosemary: *I feel the full pressure of having a job where there is quite a lot of expectation around it*

Rosemary: *Being in the system and trying to alter it is energetically exhausting... maybe it (environmental strategy document) takes quite a lot actually of the personal energy that's going in not just from me but from other people within the sector trying to hold back this tide... Because I care about that (the environment) I want to do a really good job so the pressure is immense*

These quotes clearly show how much energy and effort is going in to achieve competency, in an organisational context that as the earlier quote indicates is at odds with her personal values and beliefs. As Kaplan & Kaplan (1989) say, 'to be effective in an environment that undermines compatibility requires

considerable effort" (p186). A sense of working against a much larger and unstoppable force - *holding back this tide* - presumably increases the feeling of effort and mental fatigue.

Strategies for maintaining and enhancing vitality is critical for the participants in being effective in achieving results, for with depleted energy cognitive functioning is likely to be impaired (Rogelberg 2006).

Participants cited various ways they nourish and revitalise themselves. Common to all was going outside and being in natural places rich with wildlife. These experiences involve close observation and multisensory interaction with the natural world, recognising its intrinsic value. With these kinds of intimate embodied experiences, such appreciation is not just an intellectual abstract idea it is subjectively felt. These practices are located externally in a physical place and they stimulate internally a sense of mental spaciousness and emotional stability.

Jay: *because working in the woods sometimes is incredibly relaxing because you're just at one with what you're doing and you're relaxing with it*

There is a considerable body of research on the wellbeing benefits of nature connection (e.g. Kaplan & Kaplan 1989; MIND 2007; Mayer et al 2009; Nisbet et al 2011; Ryan et al 2010). This is a fully embodied interactive sensory experience of being in the world:

Heather: *when I feel most at peace, calmest and happiest is sort of being outside with some sort of natural environment. I think when I'm outside particularly if I'm sort of in the Lakes on a mountain I feel completely and utterly at one, you can almost feel like the earth beats I know that sounds a bit sort of em a bit odd but I when you can hear everything and you can sort of smell outdoor smells and you can sort of touch the grass I just feel completely at one with sort of the rest of the planet really, which is quite nice. Em it re-energises me, em gives me sense of peace, it just feels fantastic so that's why I try and get outside when I can*

For some this activity also renews motivation – it reminds them why they are doing the work:

Rosemary: *Tremendous sense of calm actually and starts to... give I don't know help me reflect... So its em yeah just going outside just being outside reminding me that's why I come and do this stuff because that's quite hard sometimes to you know well battling within a public organisation that's going through massive budget cuts and lots of pressure to do this quickly and we've got to do that, to just remember ok that's why I'm doing it out there um*

This effect on motivation is in accord with literature that states that positive encounters with the natural world can strengthen environmental identity and intrinsic goals (Schultz 2000; Brown & Kasser 2005; WWF 2011; Weinstein et al 2009).

However, this sense of connectedness with nature is not consistent and there are times when the participants feel closer to or more part of nature and instances when they feel more distant or detached. Sense of connection was more likely to be weaker in urban environments, when indoors, or when preoccupied with thoughts. It is outside the scope of this paper to explore factors that may be contributing to this inconsistency; this will be discussed elsewhere (e.g. see Andrews, Fahy & Walker 2016).

Adaptive and maladaptive coping strategies

In the diagram and the discussion above, some of the key strategies used for coping with psychological threat have been identified: identity suppression, pragmatic compromise, emotional avoidance and suppression of felt emotions, construction and maintenance of a motivational story, and nature connection.

The adaptive and maladaptive outcomes of these strategies will now be considered.

a) 'Deep green' identity suppression

This strategy is in service of meeting competency and relatedness but the findings show the strategy does not necessarily work completely and is likely to leave some deficiency in satisfaction of relatedness needs, and may also affect inner coherence and thwart autonomy, creating conflict between needs satisfaction. Suppression also takes effort, which has implications for vitality. Given the link between environmental identity and behaviour, suppression of a 'deep green' identity is unlikely to motivate radical pro-environmental responses. From a SDT perspective, if an identity has been suppressed it is not integrated with other aspects of the self, and so is less likely to be experienced as coherent and autonomous, making associated behaviours less likely to be performed effectively and to persist over time (Osaldiston & Sheldon

2003; Deci & Ryan 2000). The 'out-sourcing' of the identity to external environmental partners could be an ecologically adaptive strategy if the organisation is receptive to being influenced by the external partner.

Reduced saliency of 'deep green' identity at the individual level allows the organisation to avoid ways of conceptualising human relationship with nature that might lead to uncomfortable realisations about current practices. Ultimately, a possible maladaptive consequence is that the strategy helps to relieve the organisation of the need to act and make radical pro-environmental changes.

b) Pragmatic compromise

Adaptation and compromise were adopted in order to achieve results in organisational contexts of incongruence of values and goals. But whilst compromise may help satisfy competency and to some extent autonomy needs, it may also have a negative impact on inner coherence and only partially satisfy relatedness, thus creating conflicts between needs. As illustrated with one participant, there is a risk of co-option by the organisation for change agents who compromise to satisfy relatedness and competency needs. This would make it an ecologically maladaptive coping strategy: it allows the organisation to avoid transformational changes, whilst at the same time mollifying guilt (Hamilton & Kasser 2009).

c) Emotional avoidance

Negative emotions about ecological crisis were suppressed because they were perceived to be a threat to competency. In one case, the organisational context was not perceived as a safe container for expressing these emotions. There was evidence of effort being used to suppress the emotions, and this has implications for vitality and effectiveness. As has already been discussed, emotional avoidance is viewed in the literature as a maladaptive coping strategy. However, the strategies could have an ultimately ecologically adaptive dimension if it creates temporary mental space to retreat from the intensity of the experience of working in environmental sustainability, especially in an organisational context of incongruence. This retreat may be therapeutic in allowing for healing and restoration of vitality so that engagement with the work is possible without suffering burnout or illness caused by prolonged stress. The key word here is 'temporary' because at some point the emotion would need to be engaged with for healthy functioning. Barrett & Gross (2001, cited in Brown & Cordon 2009) argue that effective emotion regulation requires being able to accurately track ongoing emotional states and know when and how to intervene to alter those states as needed (p70). Mindful awareness of mind-body feedback signals could help with judging when to retreat and how long to stay there (Deci et al 2015). When mindful, retreat is an intentional conscious choice not an automatic unconscious defence reaction.

If emotional avoidance is not temporary, then the organisation does not have to confront, accept, and engage with the difficult emotions associated with facing up to the reality of ecological crisis. Suppression of emotion at an organisational level is likely to work against development of adaptive practices. As Rust (2008) says: "when we block out our feelings we lose touch with the urgency of the crisis" (p160).

d) Motivational story

The participants' stories serve to enhance their inner coherence. Focussing on positive aspects of the work and being optimistic was an important feature of the story. This could be ecologically adaptive or maladaptive depending on whether the optimism is realistic or not. If it denies the reality of the speed and scale of the transformations needed, and instead allows changes in organisational practices to be minor, then it could be considered maladaptive (Foster 2015). In this situation the outcome for the organisation is that it is able to carry on with business more or less as usual.

e) Nature connection

Unlike the other coping strategies, this appears to be a straight forwardly adaptive response bringing restorative benefits at the personal level. Employees that are healthy and vital have greater capacity to cope with stress (Weinstein & Ryan 2011) and avoid burnout. The outcome for organisations is adaptive if the strategies supports employees to be resilient and effective in influencing pro-environmental change. Nature connection could also serve to strengthen pro-environmental values and environmental identity, which is adaptive for the organisation if these values are enacted in decision-making. Organisations with employees with a pro-environmental orientation are more likely to take environmental concerns seriously (Spanjol, Tam & Tam 2015).

CONCLUSION

Through the process of in-depth qualitative enquiry into the lived experience of sustainability professionals, a rich and complex set of interrelating psychosocial factors have been identified that impact on the research participants' effectiveness in influencing pro-environmental change. In this paper, the processes of psychological threat coping strategies, psychological needs satisfaction, and ways of maintaining or enhancing vitality have been discussed, with tensions and trade-offs between these aspects of experience highlighted. How these tensions are negotiated has implications for the effectiveness of the participants in influencing their organisations with respect to pro-environmental decision-making, as well as for their own psychological wellbeing.

The diagram included in this paper highlights some key dynamics in these processes. Although representing aspects of experience in simplified form, it demonstrates the highly nuanced insight that can be generated from micro-discourse analysis and interpretation of phenomenological accounts of lived experience from a psychosocial perspective. Such a design is under-used in sustainability research yet it has the potential to make a significant contribution to our understanding of human cognition and the underlying drivers of behaviour.

Given that the field of leadership studies is increasingly exploring the matter of "purpose" (Kempster, et al 2011) and the field of sustainability leadership in particular is exploring how purpose can shape organisational change (Bendell and Little, 2015), this paper makes specific contributions by exploring psychological dynamics of environmental managers. It brings new systemic insight to our understanding of the tensions that arise for sustainability managers in their work to influence organisational practices, types of coping they use to negotiate these tensions, and possible adaptive and maladaptive outcomes of these responses for the individual and the organisation. It also contributes new knowledge about how psychosocial processes interact. Psychology and organisational studies literature is reliant on rational explanatory frameworks such as the theory of planned behaviour. This means that models of environmental behaviour, no matter how integrative of past literature, are still limited in their scope of factors. They do not include emotions about ecological crisis and how they are regulated, environmental identity (sense of self as part of nature), needs or vitality (e.g. see Steg & Vlek 2009; Reser & Swim 2011; Whitmarsh & O'Neill 2010; Gatersleben et al 2012; Norton et al 2014; Lülfs & Hahn 2014; McDonald 2014; Ciorcirlan 2016). Literature on environmental behaviours in organisation does not acknowledge the important role of external environmental partners in needs satisfaction, nor nature connection as an adaptive coping strategy. The literature also tends to assess outcomes in terms of value to the organisation (e.g. Norton et al 2014; Hoffman 1993), rather than value to the natural world. This observation is also made by Ciorcirlan (2016) in her review of environmental workplace behaviour literature. It also approaches the subject from a perspective that is concerned with how the organisation can improve employee green behaviour (e.g. see Lülfs & Hahn 2014; McDonald 2014), and not so much with how the individual can improve organisational behaviour. This paper therefore enriches these fields by broadening the scope of the debate to include other psychosocial factors and theoretical perspectives. The paper demonstrates how psychosocial factors are important for further understanding the practice of sustainability leadership and associated discourses.

This paper reports on the findings of a study of six cases, but it may be that the findings have wider relevance although this has yet to be tested. The study has only just scratched the surface of the complexity of environmental behaviour and its drivers, and further research to probe into each aspect would be useful.

The diagram could potentially have practical use as a diagnostic tool for sustainability professionals to help make sense of the tensions and conflict they are experiencing, and assist them in identifying points of intervention to flip a 'vicious circle' into a 'virtuous circle' and to support their negotiation of the tensions between needs and coping strategies in ways that are adaptive on both personal and ecological levels. Working in stressful organisational situations of low values congruence is not easy. One option is to leave out of frustration, tiredness or burnout and work somewhere more congruent, as one participant had already done and another subsequently did. However, the task of influencing change in organisations remains. The findings discussed here could help change agents to remain in their organisations, and keep healthy, vital and effective. Therefore, the diagram and the thinking it represents could be deployed in leadership development programmes that include sustainability matters or professionals (Bendell and Little 2015). It may also be helpful in efforts to understand and promote resilient in leadership (Southwick et al 2017).

With awareness of these psychosocial factors and how they may interact with each other, and by choosing to provide ourselves with sufficient inner resources to act effectively and authentically in disrupting

1 pathological responses to ecological crisis, we can help instil new adaptive patterns at individual,
2 organisational and societal levels.

6 **ACKNOWLEDGEMENTS**

7 The study has been conducted as part of a PhD degree with HighWire Centre for Doctoral Training at
8 Lancaster University UK. HighWire is funded by the Research Council UK Digital Economy Theme.

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Figure 1 Dynamics of interrelating factors affecting competency

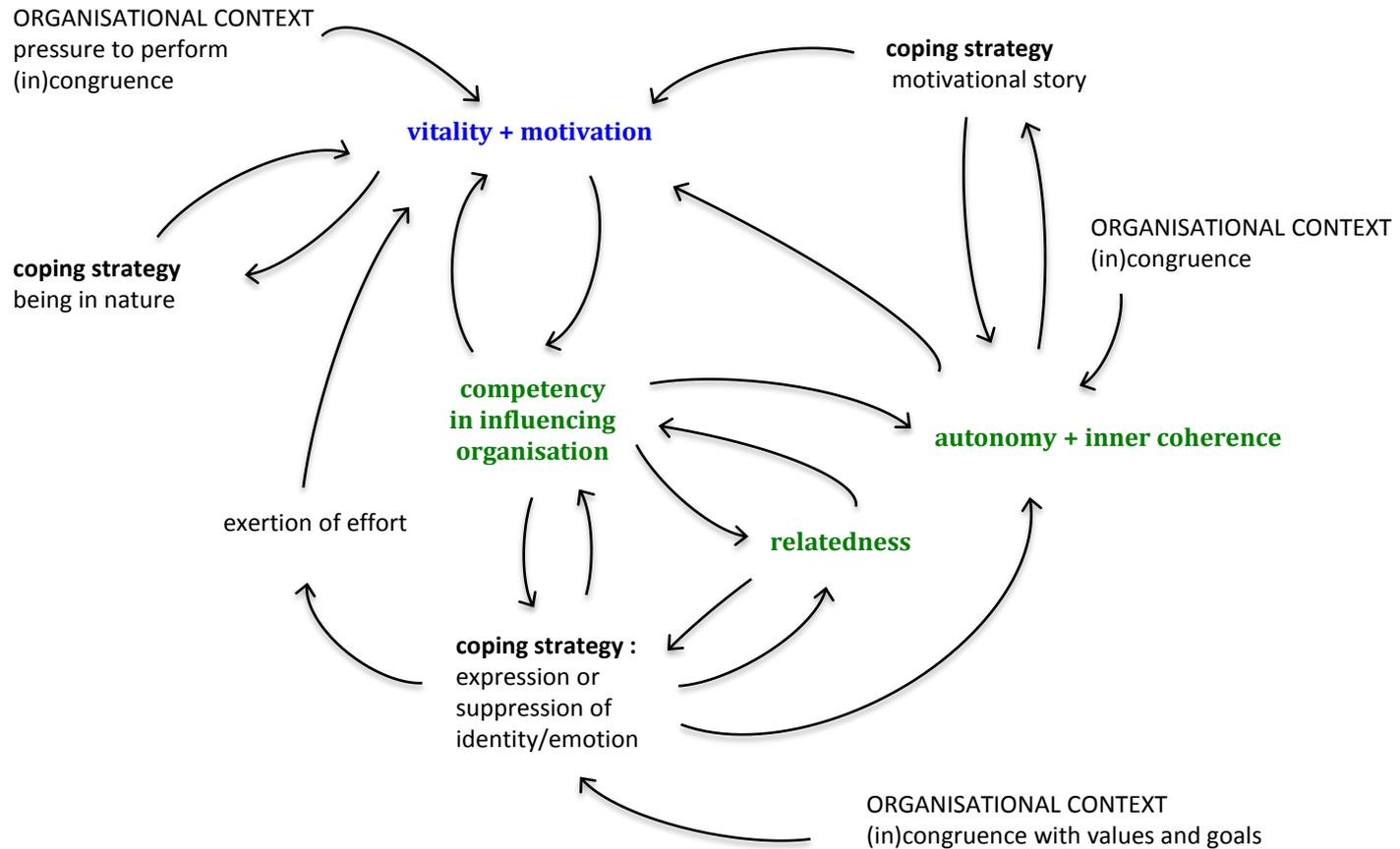


Table 1: Participant contextual information

Pseudonym	Sector	Job title and role in organisation
Rosemary	Local government UK (public sector)	Strategic Environment Manager Producing regional environmental strategy and influencing decision-making about how natural 'assets' are devolved to local government, in a context of severe cuts in public funding. Seeking to protect these 'assets' from 'irresponsible' decision-making of senior managers
Jay	Local government UK (public sector)	Ranger Conserving and restoring nationally important habitat in a context of major on-going organisational restructuring and job losses as a result of severe cuts in public funding. Seeking to ensure restructure does not adversely affect effective site management
Ash	Local government UK (public sector)	Sustainability Manager Delivering renewable energy programmes in the town and influencing decision-making about 'greening' the town. Seeking to reduce organisation's direct and indirect carbon emissions and increase 'green infrastructure'
Robin	Social housing UK (third sector)	Environmental Sustainability Officer Delivering energy efficiency programmes with social housing residents and influencing decision-making about building design. Seeking to reduce organisation's direct and indirect carbon emissions and development on greenbelt land and increase creation of wildlife habitats around their properties
Hazel	Healthcare Canada (public sector)	Energy Steward Leading programmes to reduce waste and energy use in organisation. Seeking to reduce organisation's impact through culture change
Heather	Credit Union UK (third sector)	Chief Executive Ultimately responsible for organisation's activities, working with Board to produce an environmental policy. Seeking to reduce organisation's direct impact and its indirect impact by financially supporting more environmental organisations

Table 2. Themes in participant experience

HIGHER ORDER THEME	SUBTHEMES	ILLUSTRATIVE QUOTES
Motivational story	Doing good, achieving results, making a positive difference	<i>I like to think that I'm making a positive difference towards my own beliefs in terms of environmental issues and generally as well</i>
	Optimism, focus on positive	<i>If I think about it too much it gets a bit bleak so I try and go, I try and go, "I'm doing good things for the environment!"</i>
	Hero, Protector, Helper narratives	<i>Can't be you know having my pants outside my trousers (laughs) you know for the rest of my days I'm holding the baton for the environment</i>
Relationship with organisation	(In)congruence of values/goals with organisation,	<i>I'm working... in an organisation that is doing exactly the opposite of what I believe to be right a lot of the time</i>
	Support, connection	<i>My immediate boss is very absent he's very very involved in all sorts of other things so we get very very little support</i>
	Oppositional dynamic: fight, competition, game, challenge, conflict	<i>you know you wont win every battle, and accept that you lose some</i>
	Adaptation, compromise, acceptance, prioritising goals	<i>I'm pushing for the environmental side but also understand some of the other pressures and compromise on some of those things</i>
Identity salience	Expression, suppression, projection of 'deep green' identity	<i>The more they get to know me- well the more I get to know me, the deeper green I'm becoming!</i>
	Credibility, professionalism, pragmatism v 'deep green' identity	<i>I'm not going to wear sandals bring lentil sandwich to work and have a beard. So being seen as being credible and professional</i>
	Reason-emotion duality	<i>It used to have a much more emotional impact on me whereas now I'm a bit more - slowly - I'm a bit more of a realist</i>
Engagement with negative emotions	Suppression, avoidance of negative emotion	<i>I think I probably try to repress a lot of those emotions because doing the work that I do you have to sort of stay optimistic and hopeful</i>
	Reason-emotion dualism	<i>how do I feel about it (in quiet voice) as local government officers it's all bashed out of us in our day job because what we feel about things is completely irrelevant it's about what the business case is, and you know pragmatic</i>
Mindful awareness & embodied cognition	Self-regulation	<i>I'm getting better at recognising when I feel that sense of tension or worry, so if I can recognise it I'll try to do something quickly about it</i>
	Mind-body (dis)connection	<i>The desire is to move, like often it's to move to bring it back into my body to allow it to process but oft-uh it doesn't always allow it</i>

Tensions in experience	Experience of pressure, conflict, struggle, difficulty etc.	<i>Because I care about that (environment strategy) I want to do a really good job so the pressure is immense</i>
	Desire for wellbeing, comfort, balance, support	<i>I've put too much effort into work because I've needed to so I don't get any time at home now. So that's a rebalance I need to make</i>
	Coping strategies	<i>I'll go home and get drunk (laughs) to get out the frustration</i>
Relationship with nature	Multi-sensory	<i>You can hear everything and you can sort of smell outdoor smells and you can sort of touch the grass</i>
	Spiritual/transpersonal experience	<i>I feel completely and utterly at one</i>
	Restorative benefit	<i>It gives me a sense of calm and wellbeing</i>
	Motivational	<i>Just being outside reminding me that's why I come and do this stuff</i>
	Appreciate intrinsic value of nature	<i>When natural spaces are lost its sad that its not there as intrinsic value</i>
	Inconsistencies in sense of connectedness	<i>I have less relationship with it at work because I'm probably, I don't feel like I'm in it in some ways</i>