

Emotions and Pro-environmental Behaviour in Organisations

Sally V Russell

UQ Business School

The University Of Queensland

s.russell@business.uq.edu.au

ABSTRACT

This paper examines the role of emotions in driving pro-environmental behaviour within organisations. Current literature is reviewed that examines emotions in relation to the natural environment, from both management and psychology perspectives. These literatures are integrated using the theories of issue ownership and organisational identification in order to suggest possible explanations for contrasting empirical findings. In doing so, a conceptual model and a set of testable propositions are presented as a basis for future research. It is argued that examining extant research through the lens of issue ownership and identification makes a unique contribution to literature in both management and environmental psychology.

Key words: Pro-environmental behaviour, emotion, issue ownership, identification

Environmental issues are becoming more commonplace within organisations. Current concerns over global warming and increasingly common severe weather events have increased the global significance and public awareness of the negative impacts and costs of environmental degradation (Loh & Wackernagel, 2004). Scholars such as Bebbington (2001) and Dunphy, Griffiths and Benn (2003) argue that the proportion of environmental degradation and global warming caused by organisations is a large part of the problem, and that organisations must therefore play a role in addressing environmental issues. Exactly what this role entails is much less certain. Prescriptions in the literature range from advocating technical change, such as introducing environmental auditing and reporting, to more transformational change involving the creation of an organisational culture that is 'ecocentric' and supportive of pro-environmental initiatives (Fineman, 1996; Shrivastava, 1995). Despite variation in what pro-environmental change is prescribed, it is clear that organisations and their managers are now facing increasing pressure to respond to environmental issues (KPMG, 2005). The dominant focus of the literature on environmental issues in organisations has been at the organisational and institutional level (Hart, 1995; Russo & Fouts, 1997; Sharma & Vredenburg, 1998). However, scholars have recently urged a shift in research focus from changing collective organisational behaviour to changing individual behaviour within organisations (Sharma, 2002; Vining & Ebreo, 2002). Particularly, it has been noted that "the role of individuals in affecting environmental change in organisations has been under-researched" (Sharma, 2002: 11). I aim to address this issue, and the focus of this paper is therefore at the individual level of analysis.

Organisations and the Natural Environment (ONE) researchers who examine individual-level phenomena, such as Marshall, Cordano and Silverman (2005), and Ramus and Killmer (*in press*), often employ cognitive theories as a basis for their studies of individual pro-environmental behaviour. Similarly, environmental psychology literature also relies heavily on attitude theories to inform their research (Jones, 1990; Kantola, Syme, & Campbell, 1983; Luzar & Diagne, 1999). One of the main limitations of extant studies reliance on attitude theories is that they have been primarily focused on the cognitive aspects of attitude, and have largely neglected the emotional or affective aspects (Vining & Ebreo, 2002).

Research on the affective domain of organisational behaviour has continued to receive growing attention in environmental psychology literature (Grob, 1995; Vining & Ebreo, 2002), and management literature more generally (Ashforth & Humphrey, 1995; Ashkanasy, Hartel, & Zerbe, 2000a). While ONE research does mention emotive components of pro-environmental behaviour (Andersson & Bateman, 2000; Bansal & Roth, 2000; Ramus & Steger, 2000), there are very few studies that examine emotion directly. I suggest that adding an affective element into the context of ONE research makes a unique contribution to this research area. This draws on theoretical and empirical development in wider management literature that suggests emotion is an inescapable part of work life (Ashforth & Humphrey, 1995).

I also make a second contribution to research on pro-environmental behaviour by attempting to reconcile competing from ONE and environmental psychology. In doing so I draw on the theory of issue ownership (Pratt & Dutton, 2000) and suggest that the strength of environmental issue ownership is useful in explaining why some issues are owned and acted upon in organisations, and others are not. Furthermore, I suggest that an individual's emotional reaction to an issue is a strong predictor of their ownership of that issue. I also draw upon the theory of identification (Dutton, Dukerich, & Harquail, 1994) which provides a useful framework in explaining differences in issue ownership due to different targets of identification. Finally, I introduce pro-environmental behaviour as a key moderating variable that is likely to influence the relationship between the emotional reaction and issue ownership within organisations.

In the first section of this paper I define two main constructs of pro-environmental behaviour and emotion. While I do not attempt to discount other definitions, or definitional debates, the definitions selected for this paper are considered to be the most elegant choices to address the research problem; namely reconciling competing findings on the role of emotions across two research areas. Following the outline of definitions, I review current research that examines emotions and pro-environmental behaviour from the fields of environmental psychology and ONE. These literatures are then drawn together using the theoretical frameworks of identification (Dutton et al., 1994) and issue ownership (Pratt & Dutton, 2000), and propositions are developed.

PRO-ENVIRONMENTAL BEHAVIOUR

There is much disparity in how pro-environmental behaviour is described, measured and reported across different fields of research. Environmental psychology research generally defines pro-environmental behaviour narrowly and most often measures these variables using quantitative data.

For example, previous research has measured water consumed and conserved through household water meters (Aitken, McMahon, Wearing, & Finlayson, 1994; Kantola et al., 1983). Similarly, energy consumption has been studied with the participation of local electricity distributors who provided reports from household electricity meters (Kantola, Syme, & Campbell, 1984). Other studies have measured the proportions of general waste and recycling on a per household basis (Jones, 1990).

In contrast, researchers in ONE generally measure pro-environmental behaviour more broadly. For example, Ramus and Steger (2000: 606) define ecoinitiatives as “any action taken by employees that she or he thought would improve the environmental performance of the company”. In a more recent paper, Ramus and Killmer (*in press*) again define their dependent variable broadly; as “corporate greening behaviours... defined as the changing of organisational practices to more environmentally sound ones”. Similarly, Egri and Herman (2000: 572) define their dependent variable of environmental leadership “as the ability to influence individuals and mobilise organisations to realise a vision of long-term ecological sustainability”. Other studies have avoided definitional debates and used behavioural intent as a proxy for pro-environmental behaviour (Cordano & Frieze, 2000; Cordano, Frieze, & Ellis, 2004).

For the purposes of this paper I follow Ramus and Steger’s (2000: 606) definition; that pro-environmental behaviours are “any action taken by employees that she or he thought would improve the environmental performance of the company”. I argue that this definition is broad enough to capture a wide range of behaviours. Furthermore, it also allows the inclusion of literature from both environmental psychology and ONE. For example, this definition would include behaviours common in environmental psychology literature such as conservation of resources such as water and energy (Aitken et al., 1994; Kantola et al., 1983); and it is also inclusive of behaviours described by ONE literature, such as environmental championing (Andersson & Bateman, 2000), recycling or pollution prevention (Cordano & Frieze, 2000; Egri & Herman, 2000).

AFFECT, MOOD AND EMOTION

Within this paper I predominantly use the term emotion, however, I note that there are many conceptions and indeed confusions regarding the meaning of the terms affect, mood, and emotion. Emotions can be described as being directed at a specific object or person, and are generally considered to be quite intense. Conversely, moods are thought of to be longer lasting, less intense and lacking in object specificity (Forgas, 1994). Affect on the other hand is often used as an umbrella term for both mood and emotion (Forgas, 1994; Weiss & Cropanzano, 1996). Within this paper I predominantly use the term 'emotion' as it is the object specificity towards environmental issues that I am most interested in. I therefore consider the term *emotion* to be most representative of the construct under study.

Another important distinction is that emotion is derived of two components; namely valence and intensity. Intensity is described as the strength of the emotional experience (Pratt & Dutton, 2000). The second component is direction, or valence; whether the emotion is positive or negative (Weiss & Cropanzano, 1996). In the following review of the literature, I describe evidence that leads us to propose that greater emotional intensity can lead to pro-environmental behaviour and that the valence of emotion is also an important antecedent to pro-environmental behaviour when taken into consideration with identification.

EMOTION AND MOTIVATION

Researchers within environmental psychology have demonstrated that behaviour change can be accomplished through interventions designed to cause negative emotion. For example, Aronson (1980) argued that persuasive attempts that generate negative emotion by direct challenges to a person's self-concept are more effective in stimulating behavioural change than persuasive communications, which are merely informational in nature. Other researchers have had similar results. For example, in their study of water conservation behaviour, Dickerson and colleagues (Dickerson, Thibodeau, Aronson, & Miller, 1992) found that participants were more likely to display pro-environmental behaviour if they made conservation commitments directly after being aroused into a negative emotional state. Similarly, Kantola, Syme, and Campbell (1984) and Aitken, McMahon,

Wearing, and Finlayson (1994) used experimental methodologies to examine the effect of provoking negative emotion on residential energy (Kantola et al., 1984), and water (Aitken et al., 1994) conservation behaviours. The results from both studies show that the participants who received a negative emotion invoking intervention achieved the most significant improvement in resource conservation.

There is also empirical evidence to suggest that *both* positive and negative emotions play a significant role in motivating pro-environmental behaviour. For example, Vining (1992) argued that emotional affinity for nature was a strong motivational force for individuals who entered careers in environmental and resource management. Pooley and O'Connor (2000) also examined emotion as an antecedent of motivation and found that the inclusion of both cognitive and affective variables as antecedents for environmental attitudes greatly improved the strength of their model predicting pro-environmental behaviour. Similarly, Kals, Schumacher and Montada (1999) found that pro-environmental behaviour, or nature protective behaviour as they term it, could not be sufficiently explained using a purely rational-cognitive approach; rather, they found that both positive and negative emotions serve as predictors of conservation behaviours.

One of the few researchers that have investigated the role of emotion in motivating pro-environmental behaviour in organisations is Fineman (1996). In his study of supermarket managers, Fineman found that both positive and negative emotions play a strategic role in the adoption of pro-environmental behaviours within organisations. In the more environmentally proactive organisations he studied, he found that managers spoke of positive emotions in relation to commitment to environmental issues, citing emotions such as belonging, respect, awe, and loyalty. However, he also found that negative emotions, such as fear and embarrassment, also played a role. In explaining these findings he suggests that the most proactive organisations, and those with the highest public profile, had the most to fear from public embarrassment. The managers in these organisations had “invested their image and reputation in claims for environmental care, loss of face could be a blow to role identity, to professional status within the company and to corporate image” (Fineman, 1996: 491).

EMOTION AND COMMUNICATION

In addition to its role in motivation, emotion is also important in interpersonal communication and persuasion, and this is another area that has been considered in research examining environmental issues. Emotion has been shown to be an important signal of message importance or relevancy in communication (Clore, 1994). Similarly, emotions displayed via facial expressions, voice tone, and body language have also been shown to indicate the importance of a message (Ekman, 1982). The communicative function of emotion has received attention in both environmental psychology and management research.

Evidence from environmental psychology suggests that valence and intensity of emotion in communication has an impact on pro-environmental behaviours. For example, Lord's (1994) findings show that both positive and negative messages have a significant impact on pro-environmental behaviour and attitudes. In his experimental study of recycling behaviour, he found that those messages that were positively framed tended to engender positive attitudes, belief in the recycling message, and inducement of pro-environmental behaviour. However, contrary to his hypotheses, he found that fear-based and negatively framed appeals were also an effective means of increasing recycling behaviour. Such findings suggest that both positive and negative emotions can be inducements of pro-environmental behaviour.

Vining (1987) has also conducted experimental research using variables of emotional communication. In this case, however, she did not test the valence of emotion, but, rather, the intensity. In her study she presented scenarios where participants were forced to decide for or against a development application based on the environmental information they were given. Vining found that individuals presented with information using a "hot" emotional style were more likely to make a pro-preservation decision, compared to those who received information that was less emotive, or "cool". Based on these findings, it is possible that the intensity of emotion (hot or cool) is likely to impact on the pro-environmental behaviours of individuals.

There is, however, some conflicting evidence from within the management literature. In their study of environmental champions, Andersson and Bateman (2000) hypothesised that the use of a dramatic and emotional style in presenting environmental issues to gain top management support

would be positively related to championing success. What they found, however, was that the use of drama and emotion was not a significant predictor in the outcome of any championing episodes. Additionally, their results were in the opposite of their hypothesised direction, suggesting that the use of drama and emotion may have a negative impact on the success of the championing episode. Their qualitative results also support this conclusion, as they state none of the interviewed champions mentioned the use of dramatic or emotional language as contributing to their success; in fact, several champions attributed their success to the use of formal and businesslike, rather than dramatic and emotional, language.

Furthermore, Andersson and Bateman (2000) also found that when the environmental paradigm of the organisation was strong, drama and emotion *was* a significant predictor of champion success. In their study, they define the environmental paradigm as the “collective values and beliefs of an organisation’s members” in relation to the environment (Andersson & Bateman, 2000: 553). In other words, champions employing drama and emotion in issue selling were successful only when the organisational paradigm was supportive of environmental concerns. These findings suggest that champions may have assessed their organisations’ environmental paradigms and decided whether or not to use emotion and drama in their issue presentation.

Other research examining organisations suggests that emotion may be tempered in relation to environmental issues. For example, Fineman (1997) suggests that regulatory inspectors commonly managed emotions in their interpersonal relationships with representatives of the regulated organisation. He demonstrated that the emotional dynamics of interactions around environmental issues were important considerations “even when they appear not to be strongly felt or displayed” (Fineman, 1997: 660). Similar to Andersson and Bateman’s (2000) findings, Fineman suggests that the control of emotion within organisations is likely to be context specific. This finding is also supported by the work of Egri and Herman (2000) who found that the presence of an environmental policy signalled an organisation’s encouragement of pro-environmental behaviour. Together, these studies imply that the context of the organisation influences the propensity of individual’s to perform pro-environmental behaviours. I propose that many of the studies that examine contextual variables at the

organisational level are in fact measuring the same construct, which I term the *organisational pro-environmental climate* to refer.

ORGANISATIONAL PRO-ENVIRONMENTAL CLIMATE

Studies that examine pro-environmental behaviour within organisations, often examine contextual variables at the organisational-level. Studies have described concepts such as commitment to the environment (Fineman, 1996), the environmental paradigm (Andersson & Bateman, 2000) and the environmental policy of the organisation (Ramus & Steger, 2000). I examined how each of these concepts was used and it became evident that they describe a common construct. Based on this comparison I suggest that each definition is in effect describing the same construct; that of the organisation's underlying characteristics that are supportive of issues of the natural environment, which I term the pro-environmental climate of the organisation. This is a broad term that encompasses many of the previously used contextual variables and therefore allows the consideration of a wide range of studies to inform this paper.

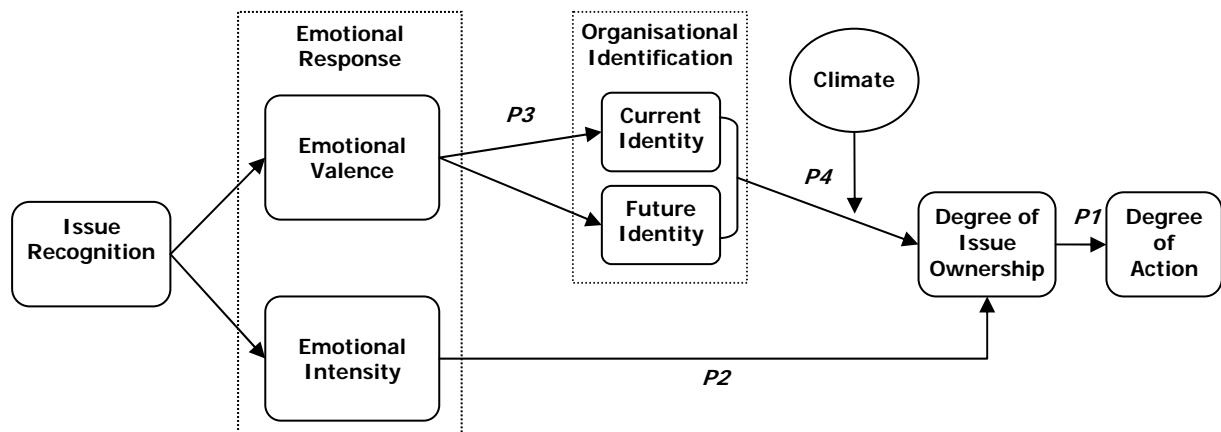
In addressing debate regarding the differences and similarities between the concepts of climate and culture I suggest that climate is the most appropriate concept for the purposes of this paper and most accurately reflects the use of this concept in previous studies. Climate can be said to refer to the social processes and attitudes, and is predominantly examined quantitatively (Ashkanasy, Wilderom, & Peterson, 2000b; Denison, 1996). In contrast the concept of culture is more strongly related to underlying values and assumptions within the organisation, and is often researched using a qualitative methodology (Ashkanasy et al., 2000b; Denison, 1996). Most studies I refer to within management and environmental psychology examine the collective attitudes and processes within the organisation, rather than the underlying values and beliefs. Therefore, the term climate is considered to be the most appropriate term for this concept.

MODEL OF PRO-ENVIRONMENTAL BEHAVIOUR

I have examined extant research that describes some part of the role of emotion in pro-environmental behaviour from research streams of environmental psychology and ONE. I now draw on the theories of organisational identification (Dutton et al., 1994) and issue ownership (Pratt &

Dutton, 2000) to frame the sometimes incongruous results from both areas. In this section of the paper, testable propositions are derived to explain the role of emotion in pro-environmental behaviour based on these two theoretical frameworks, and the empirical findings from psychology and management literature reviewed thus far. The propositions developed are graphically represented in Figure 1 below.

Figure 1: Conceptual Model of Antecedents of Pro-environmental Behaviour



Source: Based on Pratt and Dutton, 2000.

In their study of social issues, Pratt and Dutton (2000) developed theoretical insights into how organisational members deal with social issues that impact on the organisation. The focus of their study was on the social issue of homeless people occupying space in a public library; however, they also gave the example of environmental issues being a social issue relevant to their theory. They found that the strength of issue ownership in their study explained why some issues were strongly owned and acted upon within the organisation, but others were not. They defined issue ownership as “a concept that involves a feeling of possession of an issue, and a feeling that the issue is a legitimate action focus” (Pratt & Dutton, 2000: 123). Furthermore, they suggest that emotional reactions to, and interpretations of, organisational issues can either promote or retard an individual’s sense of issue ownership. They link emotional reactions to social identities in order to explain differences in issue ownership. The work of Pratt and Dutton (2000) builds upon research on issue interpretation in organisations and subsequent links to patterns of action. I examine this notion further and apply their theoretical frame to current research in environmental issues and emotion. I find the application of this

theory useful in explaining seemingly contradictory results between environmental psychology and management research findings.

One of the main assumptions underlying Pratt and Dutton's (2000) work is that there is a strong relationship between issue ownership and action. While their findings imply that such a link exists, they also assert that there were not sufficient data to thoroughly examine this relationship. Research in the area of ONE also relies heavily on similar assumptions. Many studies rely on the use of intention to perform behaviour as a direct predictor of actual behaviour, without measuring the outcome of behaviour directly (Cordano & Frieze, 2000; Do Valle, 2005). There is evidence from within environmental psychology, however, to suggest that this relationship may not be as strong as many assume (Aitken et al., 1994; Kantola et al., 1984). The conceptual model presented in Figure 1 also rests largely on this assumption. In order to strengthen the research and the applicability of findings, this assumption needs to be tested empirically; thus the first proposition is,

Proposition 1: The degree of environmental issue ownership is strongly related to the degree of pro-environmental behaviour.

One of the key findings from Pratt and Dutton's (2000) study was that emotional intensity differentiated issues that were fully owned from those that were not. They found that those issues that were strongly owned were associated with a narrow range of similar emotions with a high average intensity. Conversely, issues that were not owned, or had limited ownership, were associated with a low average intensity and ambivalence. Interestingly, their findings also suggest that both positive and negative emotions resulted in strong ownership, and it was shown that the intensity of the emotion was more important than the valence of emotion in determining whether an issue was strongly owned. This is likely also true for environmental issues.

For example, Vining's (1987) study of environmental decision making found that "hot" emotional messages were more likely to elicit pro-conservation decisions by respondents. Additionally, other studies have shown that both positive and negative emotions are significant predictors of pro-environmental behaviour (Kals et al., 1999; Lord, 1994; Pooley & O'Connor, 2000). Within an organisational context, Fineman's (1996) findings also hint at the issue of emotional intensity. For example, in describing his findings in relation to fear, he suggests that those managers in

less environmentally committed organisations did not display the same level of fear from embarrassment as did those in more 'green' organisations. Based on these findings I suggest that,

Proposition 2: Individuals who display greater emotional intensity toward an environmental issue are likely to have stronger ownership of the issue.

Pratt and Dutton (2000) found that while emotional intensity was most important in differentiating issue ownership, the valence of emotion also became important when it was examined in relation to the social identities of the individuals in their study. They identified both work and non-work identities as relating to social issues. For example, where issues were strongly owned, participants identified a small range of negatively valenced emotions (annoyance and frustration) with the current organisational identity, and a small range of positively valenced emotions (hope and excitement) with the ideal organisational identity. In contrast, issues that were not strongly owned were associated with general ambivalence, with no clear differentiation between the current and ideal organisational identities (Pratt & Dutton, 2000).

These findings may also be relevant to environmental issues, and I argue that this is an area worthy of further research. As noted, there is evidence to suggest that both positive and negative emotions can result in pro-environmental behaviour (Aitken et al., 1994; Fineman, 1996; Kals et al., 1999; Lord, 1994; Pooley & O'Connor, 2000). However, it is not clear from these studies how the valence of emotion impacts on individual action, only that both positive and negative valences were observed (Fineman, 1996) or could be used to induce pro-environmental behaviour (Aitken et al., 1994; Kals et al., 1999). Therefore, based on Pratt and Dutton's findings, I suggest that,

Proposition 3: An individual's issue ownership is dependent on the valence of emotion associated with their perception of current and ideal organisational identities.

In the organisation they studied, Pratt and Dutton (2000) also found that issues were only fully owned by organisational members when issues were linked to organisational identities. A tight connection between an organisational identity and an organisational issue allows members to feel connected, attached, and part of the issue. Therefore, I suggest that identification with the organisation is likely to be an important variable when examining ownership of environmental issues within organisations. Organisational identification is defined by Dutton and her colleagues (1994: 239) as the

cognitive connection that occurs when a person's self-concept contains the same attributes as those they perceive to be in their organisation. In other words, it is the degree to which an individual defines themselves by the same attributes that they believe define the organisation (Ashforth & Mael, 1989; Mael & Ashforth, 1992).

Using this definition of organisational identification, there is support for the proposition that organisational identification can result in stronger issue ownership. Bansal (2003) conducted an ethnographic study of the flow of environmental issues in two organisations. Her findings suggest that the congruence between an individual's concern about an issue and the values of the organisation were key variables in the success of addressing environmental issues; that is, without alignment between the values of the individual and the organisation, the issue would remain unresolved. It is likely that what Bansal is suggesting could also be described through the framework of organisational identification (Ashforth & Mael, 1989; Dutton et al., 1994). I argue that the congruence Bansal describes between the values or concerns of an individual and their organisation suggests strong organisational identification. Both Bansal's (2003) work and the theoretical framework of identification (Ashforth & Mael, 1989; Dutton et al., 1994; Pratt & Dutton, 2000) suggest organisational identification is a necessary condition for organisational action.

There is also evidence to suggest that the pro-environmental climate of the organisation may moderate the relationship between identification and environmental issue ownership. For example, in Fineman's studies of supermarkets (1996) and the automotive industry (1997) he found considerable variance in the emotions and action taken in response to environmental issues from managers in different organisations. Particularly, he found that those managers who were members of organisations with strong commitment to environmental issues displayed more intense emotion and greater orientation toward pro-environmental behaviour, and were also likely to display stronger environmental issue ownership. Andersson and Bateman's (2000) study supports this notion. They found that emotional communication was a predictor of pro-environmental behaviour only when the environmental paradigm of the organisation was strong.

In contrast, individuals are perhaps just as likely to identify with organisations that do not have a strong pro-environmental climate. For example, in Fineman's (1997) study of the automobile

industry, his respondents did not display strong emotional commitment or values towards natural environment issues. This is not to say, however, that they did not strongly identify with their organisations. It is possible, and perhaps also likely, that those who identify strongly with an organisation climate that is not pro-environmental will be less likely to show strong ownership of environmental issues. I therefore suggest that for those who have strong identification with their organisation, a pro-environmental organisational climate is a necessary condition for environmental issue ownership.

Proposition 4: *The relationship between organisational identification and issue ownership is moderated by the pro-environmental climate of the organisation.*

More specifically,

Proposition 4a: *Where the pro-environmental climate of the organisation is strong, individuals who identify with the organisation are likely to have stronger ownership of environmental issues.*

Proposition 4b: *Where the pro-environmental climate of the organisation is weak, individuals who identify with the organisation are less likely to display ownership of environmental issues.*

DISCUSSION

I have argued that examining environmental issues through the lens of issue ownership (Pratt & Dutton, 2000) is a useful framework for examining pro-environmental behaviour within organisations. Empirical research that examines environmental issues from both psychology and management perspectives align well with this theoretical framework, and I suggest it is a useful platform for the development of future research. In order to test the propositions further empirical research is necessary. Particularly, I argue for research that examines the role of emotional intensity, identification, personal values, and the pro-environmental climate of the organisation as antecedents of environmental issue ownership and subsequent pro-environmental behaviour.

I make a unique contribution to the literature by integrating environmental psychology findings into the context of organisations. As Pratt and Dutton (2000) suggest, individuals may

identify more strongly with personal values in a non-work identity when interpreting organisational issues. This makes findings from environmental psychology particularly relevant to an organisational context, as it gives unique insights into the cognitive and affective process of environmental issue interpretation in a non-work context. Furthermore, in examining emotions it is clear that individuals do not turn off their moods and emotions on coming to work (Ashkanasy, Zerbe, & Hartel, 2002). I therefore argue that future research that examines emotions in the context of ONE research would make a significant contribution to the expansion of this field.

By integrating the management and psychology research in relation to environmental issues I have developed a set of four propositions. These represent just a small part of the many potential research questions that could be examined regarding the role of emotion as it relates to environmental issues. For example, I have offered a broad perspective on emotions and pro-environmental behaviour and I have not focused on any particular group within the organisation. There is, however, some evidence to suggest that top management teams have a particularly salient role in the dissemination of pro-environmental behaviour within organisations (Fineman, 1996; Ramus & Steger, 2000). Further research would benefit from a focus on the emotionality of this group and how this impacts on the organisational response to environmental issues.

Other research areas could include research on specific emotion groups. For example, Vining and Ebreo (2002) suggest that self-conscious emotions may be particularly relevant to environmental issues. The findings from Fineman's (1996) studies certainly reflect the prevalence of fear, embarrassment, shame and pride. These emotions are self-conscious in that they are derived from evaluations of the self against social or personal norms (Tangney & Fischer, 1995). Evidence showing links between environmental values and behaviours may benefit from also considering the self-conscious emotions that result from evaluation of the self against these values and norms. I therefore argue that this category of emotion offers numerous avenues for future research.

Testing assumptions on which the propositions are based would also be a fruitful area for future research. The main assumption, in line with Pratt and Dutton (2000), is that strong environmental issue ownership will result in pro-environmental behaviour. While many studies use intention to perform behaviour as a direct predictor of behaviour itself (Cordano & Frieze, 2000; Do

Valle, 2005), the assumption of a strong correlation between issue ownership and behaviour is yet to be tested empirically. Studies that conduct this test would be a valuable avenue for the development of this research area.

CONCLUSION

The role of emotions in relation to the pro-environmental behaviour of individuals within organisations is an area worthy of further investigation. I have reviewed current literature that examines emotions in relation to the natural environment, from both management and psychology research perspectives. These empirical findings were integrated using the theories of issue ownership and organisational identification in order to suggest possible explanations for the seemingly contradictory evidence. In doing so I developed several propositions that provide several interesting avenues for future empirical and theoretical considerations. I argue that environmental issue ownership is a concept that assists in reconciling empirical findings from environmental psychology and management research. Particularly, I argue for research that examines the role of emotional intensity, identification, personal values, and the pro-environmental climate of the organisation as antecedents of environmental issue ownership and subsequent pro-environmental behaviour. These arguments highlight the importance of emotion in developing pro-environmental behaviours in organisations.

REFERENCES

- Aitken, C. K., McMahon, T. A., Wearing, A. J., & Finlayson, B. L. 1994. Residential water use: Predicting and reducing consumption. *Journal of Applied Social Psychology*, 24: 136-158.
- Andersson, L. M. & Bateman, T. S. 2000. Individual environmental initiative: Championing natural environmental issues in U.S. business organizations. *Academy of Management Journal*, 43(4): 548-570.
- Aronson, E. 1980. Persuasion via self-justification: Large commitments for small rewards. In L. Festinger (Ed.), *Retrospections on social psychology*. New York: Oxford University Press.
- Ashforth, B. E. & Mael, F. 1989. Social Identity Theory and the organization. *Academy of Management Review*, 14(1): 20-39.
- Ashforth, B. E. & Humphrey, R. H. 1995. Emotion in the workplace: A reappraisal. *Human Relations*, 48(2): 97-125.
- Ashkanasy, N. M., Hartel, C. E. J., & Zerbe, W. J. 2000a. Emotions in the workplace: Research, theory, and practice. Westport: Quorum Books.
- Ashkanasy, N. M., Wilderom, C. P. M., & Peterson, M. F. 2000b. Introduction. In N. M. Ashkanasy & C. P. M. Wilderom & M. F. Peterson (Eds.), *Handbook of Organizational Culture & Climate*: 1-18. Thousand Oaks: Sage Publications.

- Ashkanasy, N. M., Zerbe, W. J., & Hartel, C. E. J. 2002. Managing emotions in a changing workplace. In N. M. Ashkanasy & W. J. Zerbe & C. E. J. Hartel (Eds.), *Managing Emotions in the Workplace*. New York: M. E. Sharpe.
- Bansal, P. & Roth, K. 2000. Why companies go green: A model of ecological responsiveness. *Academy of Management Journal*, 43(4): 717.
- Bansal, P. 2003. From issues to actions: The importance of individual concerns and organizational values in responding to natural environmental issues. *Organization Science: A Journal of the Institute of Management Sciences*, 14(5): 510-527.
- Bebbington, J. 2001. Sustainable development: A review of the international development, business and accounting literature. *Accounting Forum*, 25(2): 128-157.
- Clore, G. C. 1994. Why emotions are felt. In P. Ekman & R. J. Davidson (Eds.), *The Nature of Emotions*: 103-111. New York: Oxford University press.
- Cordano, M. & Frieze, I. H. 2000. Pollution reduction preferences of U.S. environmental managers: Applying Ajzen's theory of planned behavior. *Academy of Management Journal*, 43(4): 627.
- Cordano, M., Frieze, I. H., & Ellis, K. M. 2004. Entangled affiliations and attitudes: An analysis of the influences on environmental policy stakeholders' behavioral intentions. *Journal of Business Ethics*, 49: 27-40.
- Denison, D. R. 1996. What is the difference between organizational culture and organizational climate? A native's point of view on a decade of paradigm wars. *Academy of Management Review*, 21(3): 619.
- Dickerson, C. A., Thibodeau, R., Aronson, E., & Miller, D. 1992. Using cognitive dissonance to encourage water conservation. *Journal of Applied Social Psychology*, 22: 841-854.
- Do Valle, P. O. 2005. Combining behavioral theories to predict recycling involvement. 37(3): 364-396.
- Dunphy, D. C., Griffiths, A., & Benn, S. 2003. *Organizational change for corporate sustainability: A guide for leaders and change agents of the future*. London: Routledge.
- Dutton, J. E., Dukerich, J. M., & Harquail, C. V. 1994. Organizational images and member identification. *Administrative Science Quarterly*, 39: 239-263.
- Egri, C. P. & Herman, S. 2000. Leadership in the North American environmental sector: Values, leadership styles, and contexts of environmental leaders and their organizations. *Academy of Management Journal*, 43(4): 571.
- Ekman, P. 1982. *Emotion in the human face* (2nd ed.). Cambridge: Cambridge University Press.
- Fineman, S. 1996. Emotional subtexts in corporate greening. *Organization Studies*, 17(3): 479-500.
- Fineman, S. 1997. Constructing the green manager. *British Journal of Management*, 8(1): 31.
- Forgas, J. P. 1994. The role of emotion in social judgements: An introductory review and an Affect Infusion Model (AIM). *European Journal of Social Psychology*, 24: 1-24.
- Grob, A. 1995. A structural model of environmental attitudes and behaviour. *Journal of Environmental Psychology*, 15: 209-220.
- Hart, S. L. 1995. A natural-resource-based view of the firm. *Academy of Management Review*, 20(4): 986.
- Jones, R. E. 1990. Understanding paper recycling in an institutionally supportive setting: An application of the theory of reasoned action. *Journal of Environmental Systems*, 19: 307-321.
- Kals, E., Schumacher, D., & Montada, L. 1999. Emotional affinity toward nature as a basis to protect nature. *Environment and Behavior*, 31(2): 178-202.
- Kantola, S. J., Syme, G. J., & Campbell, N. A. 1983. The effects of appraised severity and efficacy in promoting water conservation: An informational analysis. *Journal of Applied Social Psychology*, 13: 164-182.
- Kantola, S. J., Syme, G. J., & Campbell, N. A. 1984. Cognitive dissonance and energy conservation. *Journal of Applied Psychology*, 69: 416-421.
- KPMG. 2005. KPMG International Survey of Corporate Responsibility Reporting 2005. In S. Peters & C. Extercatte (Eds.). Amstelveen: KPMG International.
- Loh, J. & Wackernagel, M. 2004. Living planet report 2004. Cambridge: WWF–World Wide Fund For Nature.
- Lord, K. R. 1994. Motivating recycling behavior: A quasiexperimental investigation of message and source strategies. *Psychology & Marketing*, 11(4): 341-358.

- Luzar, E. J. & Diagne, A. 1999. Participation in the next generation of agriculture conservation programs: The role of environmental attitudes. *Journal of Socio-Economics*, 28: 335-349.
- Mael, F. & Ashforth, B. E. 1992. Alumni and their alma mater: A partial test of the reformulated model of organizational identification. *Journal of Organizational Behavior*, 13(2): 103-123.
- Marshall, R. S., Cordano, M., & Silverman, M. 2005. Exploring individual and institutional drivers of proactive environmentalism in the US wine industry. *Business Strategy and the Environment*, 14(2): 92-102.
- Pooley, J. A. & O'Connor, M. 2000. Environmental education and attitudes: Emotions and beliefs are what is needed. *Environment and Behavior*, 32(5): 711-723.
- Pratt, M. G. & Dutton, J. E. 2000. Owning up or opting out: The role of emotions and identities in issue ownership. In N. M. Ashkanasy & C. E. J. Hartel & W. J. Zerbe (Eds.), *Emotions in the workplace: Research, theory, and practice*. Westport: Quorum Books.
- Ramus, C. A. & Steger, U. 2000. The roles of supervisory support behaviors and environmental policy in employee 'ecoinitiatives' at leading-edge European companies. *Academy of Management Journal*, 43(4): 605.
- Ramus, C. A. & Killmer, A. B. C. *in press*. Corporate greening through prosocial extrarole behaviours - A conceptual framework for employee motivation. *Business Strategy and the Environment*, in press.
- Russo, M. V. & Fouts, P. A. 1997. A resource-based perspective on corporate environmental performance and profitability. *Academy of Management Journal*, 40(3): 534.
- Sharma, S. & Vredenburg, H. 1998. Proactive corporate environmental strategy and the development of competitively valuable organizational capabilities. *Strategic Management Journal*, 19(8): 729-753.
- Sharma, S. 2002. Research in corporate sustainability: What really matters? In S. Sharma & M. Starik (Eds.), *Research in corporate sustainability: The evolving theory and practice of organizations in the natural environment*: 1-29. Cheltenham, UK: Edward Elgar.
- Shrivastava, P. 1995. Ecocentric management for a risk society. *Academy of Management Review*, 20(1): 118-138.
- Tangney, J. P. & Fischer, K. W. 1995. *Self-conscious emotions: The psychology of shame, guilt, embarrassment, and pride*. New York: The Guilford Press.
- Vining, J. 1987. Environmental decisions: The interaction of emotions, information, and decision context. *Journal of Environmental Psychology*, 7: 13-30.
- Vining, J. 1992. Environmental emotions and decisions: A comparison of the responses and expectations of forest managers, an environmental group, and the public. *Environment and Behavior*, 24(1): 3-34.
- Vining, J. & Ebreo, A. 2002. Emerging theoretical and methodological perspectives on conservation behavior. In R. B. Bechtel & A. Churchman (Eds.), *Handbook of environmental psychology*: 541-558. New York: J. Wiley.
- Weiss, H. M. & Cropanzano, R. 1996. Affective events theory: A theoretical discussion of the structure, causes and consequences of affective experiences at work. *Research in Organizational Behavior*, 18: 1-74.