Profiling outdoor leadership

Wayne Cotton
wgc01@uow.edu.au

Tonia L. Gray
University of Wollongong, toniag@uow.edu.au

Cathryn Carpenter
Deakin University

Eric Brymer

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Eric Brymer

Queensland University of Technology

Tonia Gray

University of Wollongong

Wayne Cotton

University of Sydney

Cathryn Carpenter

Deakin University

This paper examines the role outdoor recreation and education plays in the development of generic leaders who have a positive relationship to the natural world. Three questionnaires (Multifactor Leadership Questionnaire - MLQ; the New Ecological Paradigm Scale - NEP; and the Connectedness to Nature Scale - CNS) were administered online to 104 international outdoor leaders through five online networks. The three instruments assessed the nexus of transformational leadership theory and outdoor leadership. A descriptive analysis of early findings from the project are outlined in this paper. The results can be viewed as an appropriate platform for understanding outdoor recreation and education leaders' ecological perspectives and the generic, transformational leadership skills.

KEYWORDS: connectedness to nature, ecological attitudes, outdoor leaders, transformational leadership, transactional leadership

Introduction

The nexus of research and practice in outdoor leadership is often centered around studies undertaken in the 1980's (Priest & Gass, 1997). Around the same time, leadership research in other fields advanced with a different foci and perspective (Bass, 1985; Burns, 1978). Recently, Brymer and Gray (2006) applied the transactional-transformational model in an attempt to better understand notions of outdoor leadership and broaden professional awareness of such developments.

The aims of this paper are twofold: (1) to introduce research findings using the transactional-transformational leadership model and show how this model is appropriate for understanding and exploring outdoor leadership; and (2) to provide research on the relationship between outdoor leaders and the natural world. Our hope being that the transactional-transformational model might eventually add further insights into leadership and how we can better prepare individuals for work in the outdoors. Further, by introducing these concepts into outdoor leadership training we may ensure the profession has a positive commitment to the natural world and sustainability.

Transactional-Transformational Leadership

For over two decades, the transactional-transformational leadership model has featured in leadership theory and practice (Barling, Weber, & Kelloway, 1996; Bycio, Hackett, & Allen, 1995; Sosik, Avolio, & Kahai, 1997). The terms were coined by the seminal work of Burns (1978) and then further clarified by Bass (1985). Incorporating varying aspects of this model into outdoor leadership can strengthen and broaden our understanding of leadership effectiveness (Brymer & Gray, 2006). It is widely accepted that exceptional leaders are likely to employ both methodologies at varying times depending on the context (Bass & Steidlmeier, 1999; Robbins, Millet, Cacioppe, & Waters-Marsh, 1988). However, many researchers purport that transformational leadership enhances transactional leadership (Bass & Steidlmeier, 1999; Brymer & Gray, 2006; Podsakoff, MacKenzie, & Bommer, 1996). According to Cerni, Curtis, & Colmar (2008) "transformational leadership augments the effectiveness of transactional leadership; it does not replace transactional leadership" (p. 62).

Transactional Leadership

Transactional leadership is the traditional form of leadership which encompasses the leader-follower relationship (Hsu, Bell, & Cheng, 2002). It is based on a transaction or interchange of information between followers and their leaders (Howell & Avolio, 1993). According to Brymer and Gray (2006), there are generally two key factors ascribed to transactional leadership: Contingent reward leadership and management-by-exception.

Contingent reward leadership is both an active and positive interchange between the leader and follower. Upon successfully completing previously agreed goals or objectives (Bycio et al., 1995) followers are rewarded or recognized for their efforts. In some instances, followers may receive bonuses, merits or recognition. Contingent reward leadership is self-limiting as followers only achieve the negotiated level of performance (Kraaft, Engelbrecht, & Theron, 2004). The reward provided is reliant on the satisfactory completion of the task (Howell & Avolio, 1993). While the leader and follower are agreeable with the pre-arranged relationship, the status quo will continue, performance will suffice and rewards will be consistent. Cerni, et al. (2008) and Klimoski and Hayes (1980), have found that under certain circumstances in the workplace, this type of leadership can enhance performance and heighten employee satisfaction.

Transactional leaders primarily approach followers when mishaps, mistakes or problems become evident. In this way, they avoid intervention until something has gone awry, amiss or wrong. Transactional leadership in this format is termed management-by-exception and can be either active or passive. In the active management-by-exception form, leadership hinges around the continual monitoring of followers performance with the anticipation of monitoring mistakes before they become a serious problem. At the outset the leader clarifies standards, expectations and criteria for assessment and benchmarking. Corrective action can be more immediate as the leader is continually measuring performance against expectations in an attempt to determine deviations.

In passive management-by-exception, the leader waits until the culmination of the task before assessing or determining whether a problem exists. Expectations and standards are only made apparent once a mistake has manifested. As a natural corollary, intervention is taken only after the problem has been identified or the mistake made (Howell & Avolio, 1993). This form of leadership has demonstrated negative impacts on leader and follower satisfaction and performance, however, as Howell and Avolio (1993) noted:

[I]t is hard to conceive of an effective leader who would not monitor performance and take corrective action when such action was required. At the very least, contingent negative, or aversive, reinforcement serves to clarify roles for followers and, in that sense, represents an important feature of leadership. (p.892)

According to Gerstner and Day (1997) transactional leaders are principally motivated to satisfy their own self-interests. This has far-reaching ethical implications for outdoor leadership in that leaders may subtly direct or maneuver their approach to influence participants for self-centered gains.

Transformational Leadership

The type of leadership that has in the past been labeled charismatic or inspirational (Howell & Avolio, 1993) and goes beyond the concept of performance for reward is now termed transformational leadership. Increased motivation and job satisfaction is evident under a transformational leader (Cerni et al., 2008). For Howell and Avolio (1993) transformational leadership develops thinking (intellectual stimulation), supports individuals (individualized consideration) and provides inspiration, faith and respect (charismatic leadership) (Barling et al., 1996).

Hsu et al. (2002) contend that elements of intellectual stimulation allow the leader to inspire followers to develop curiosity, problem solving and creative thinking. Individualized consideration encompasses both developmental orientations and individual orientations. When the leader assigns tasks that enhances motivation and extends innate abilities and potential it is classified as developmental orientation. Alternatively, individual orientation includes personal relationships, mutual understandings, familiarity and two-way communications. Charismatic leadership is divided into two distinct elements (Hsu et al., 2002). The first, inspirational leadership is the ability to inspire and encourage a greater emotional attachment to the leader and the leader's vision. The second, idealized influence is the behavioral aspect of charisma, which gains the whole-hearted commitment from followers.

Developing a vision for the future and focus on longer term goals is a hallmark of transformational leadership (Kirkpatrick & Locke, 1997). They are comfortable pursuing risk, challenging the status quo and they demonstrate high internal locus of control (Howell & Avolio, 1993). Systems are seen as flexible and dynamic to meet the requirements of

the vision and goals. Transformational leaders stimulate followers and encourage them "to transcend their own self-interests for a higher collective purpose, mission, or vision" (Howell & Avolio, 1993, p. 891). They focus on facilitating self-development and growth (Gerstner & Day, 1997; Peterson, 1996). Motivation for this type of leadership is based on "higher order values and beliefs" (Gerstner & Day, 1997; p.838). Maude (1997) espoused that becoming an effective leader was synonymous with becoming oneself.

Transformational leaders enhance commitment (Barling et al., 1996), develop acceptance of responsibility and increase followers' effort (Howell & Avolio, 1993). Invariably, performance eclipses the expected or negotiated levels. For Howell and Avolio (1993) this is inextricably linked to the level of commitment, intrinsic motivation, personal development and sense of purpose demonstrated by the leader.

Human-Nature Relationship

The relationship between humans and nature is based on the assumption that there is some degree to which humans and nature are separate entities. Dewey (1958) suggested that the very attempt by humans to define and describe their subjective experience of life emphasizes the need for this separation since an "unanalyzed world does not lend itself to control" (p. 13). Humans tend to separate themselves from the natural world in which they evolved, and this shapes the ways in which they define their relationship with nature. The motivation to control, conserve or protect nature is determined by our perception of this relationship.

Since the industrial revolution, the development of a lifestyle lived predominantly indoors has resulted in even less contact with nature. Research over the last twenty years has gradually been identifying the human health benefits attributed to re-connecting with the natural environment. The significance of feeling connected to natural environments, families and friends are described as a foundational requirement for human health and wellbeing (Maller et al., 2008).

Schroeder (2007) indicates that the moral judgments made upon human actions are indicated by the degree to which humans are seen as either part of, or apart from, nature. When considering outdoor leadership it seems critical to determine the exact ways in which people perceive their relationship with nature in order to gain a sense of the actions they may or may not be encouraging. The early findings of Schultz's (2002) work indicated that by feeling connected to the natural world a person is more likely to be committed to positively interact with and protect the natural world. However, whilst it has been posited

that an essential role of the outdoor leader is to foster ecological care in others (Martin, Cashel, Wagstaff, & Breunig, 2006) there is currently no empirical data on outdoor leaders' experiences of connectedness to the nature or their beliefs about the natural world.

The aim of this project was to explore the character of outdoor leaders with specific reference to leadership qualities as determined by transformational leadership research and their beliefs, feelings and intentional behaviors towards the natural world.

The specific research questions were:

What is the outdoor leader's relationship to transformational leadership, emotional feelings about the natural world and beliefs about the natural world?

Are the leadership characteristics different from the general population and other studies on outdoor leadership? (e.g. Hayashi & Ewert, 2006).

Method

Participants

Participants in this study were outdoor leaders from all over the world. An email invitation was sent to five online networks (the society of park & recreation educators, the outdoor and adventure education research network, the Google outdoor leadership network and the sustainability and environmental education network) requesting volunteers to contribute to an online survey. The email outlined the study and participant requirements and asked those who identified themselves as an outdoor leader to complete the survey. The survey was completed anonymously and online. Participants were also asked for demographic information and to identify what type of outdoor leader they were (education, tourist, camping, recreational, therapeutic or other).

Instruments

The online survey consisted of three questionnaires: the Multifactor Leadership Questionnaire, leader form (MLQ) (Avolio & Bass, 1995), the Connectedness to Nature Scale (CNS) (Mayer & Frantz, 2004) and the New Ecological Paradigm Scale (NEP) (Dunlap, Van Liere, Mertig, & Jones, 2000).

The MLQ was developed by Avolio and Bass (1995) as a means to measure the leadership components identified in the transactional-transformational leadership model and has become the most reliable research tool for measuring transformational leadership (Lowe, Kroeck, & Sivasubramaniam, 1996; Muenjohn & Armstrong, 2008). The scale

allows measurement of a range of qualities and outcomes identified as: 1) transformational leadership (idealized attributes, idealized behaviors, inspirational motivation, intellectual stimulation and individualized consideration); 2) transactional leadership (contingent reward and management-by-exception (active)); 3) passive/avoidant leadership (management-by-exception (passive) and laissez-faire); and 4) outcomes of leadership (extra effort, effectiveness and satisfaction). The outcomes of leadership categories relate to a leaders perception of how effective they are as leaders, how satisfied they are as leaders and whether they are able to empower others to achieve more than they expected. The MLQ is based on a Likert scale from 0-4 (Not at all; Once in a while; Sometimes; Fairly often; Frequently, if not always). Scores from 2-4 inclusive would indicate a positive response.

The NEP and CNS are two scales most commonly used to explore beliefs and feelings of connectedness to the natural world (Schultz, 2002). The NEP was developed over thirty years ago by Dunlap and Van Liere (1978) and originally termed the New Environmental Paradigm. The NEP is now the foremost International tool for measuring beliefs about the natural world (Dunlap, 2008; Vikan, Camino, Biaggio, & Nordvik, 2007). The CNS measures an individual's trait levels of emotional connection to the natural world. It is a relatively new tool for understanding ecological behavior based on ecopsychology theory and a reliable gauge of intended behavior (Mayer & Frantz, 2004; Mayer, Frantz, Bruehlman-Senecal, & Dolliver, 2009). Both questionnaires are based on a 1-5 Likert scale (Strongly disagree to Strongly agree). By combing both scales the researchers aim to develop a snap shot of beliefs and emotional feelings towards the natural world and therefore an idea of intended behavior. The three questionnaires were combined as one online survey with the additional material asking for demographics and self-assessments of type of leader included before the surveys. A basic descriptive statistical analysis was used to interpret data.

Results

One hundred and four surveys (male n = 70, female n = 34) were completed with an additional twelve questionnaires started but not completed. The highest representation as determined by self-assessment was from the Education sector with seventy-one (68.3%) participants claiming to focus on education (Table 1).

Table 1
Descriptive Statistics for Study Participants

Gender (N = 104)	Male	N = 70 (67.3%)
	Females	N = 34 (32.7%)
Average Age		39.8 years
Area of Expertise	Tourism	N = 4 (3.8%)
	Education	N = 71 (68.3%)
	Recreation	N = 14 (13.5%)
	Camping	N = 4 (3.8%)
	Therapy	N = 7 (6.7%)
	Other	N = 4 (3.8%)

Transformational Leadership

Results from the MLQ show that outdoor leaders score highly in the transformational characteristics and contingent reward and lower in the management by exception and laissez-faire characteristics. Outdoor leaders also scored highly for perceptions of satisfaction, effectiveness and extra effort (Table 2 and Figure 1).

Table 2
Detailed Results Multifactor Leadership Questionnaire (MLQ) – Leader Form

| Category	Combined Mean (SD)
Idealized Influence (Attributed)	2.89 (0.64)
Idealized Influence (Behaviour)	3.06 (0.59)
Inspirational Motivation	3.13 (0.58)
Intellectual Stimulation	3.06 (0.63)
Individualized Consideration	3.45 (0.55)
Contingent Reward	2.89 (0.71)
Management-by-Exception (Active)	1.91 (0.82)
Management-by-Exception (Passive)	1.09 (0.63)
Laissez-faire Leadership	0.81 (0.55)
Extra Effort	2.88 (0.64)
Effectiveness	3.07 (0.57)
Satisfaction	3.24 (0.59)
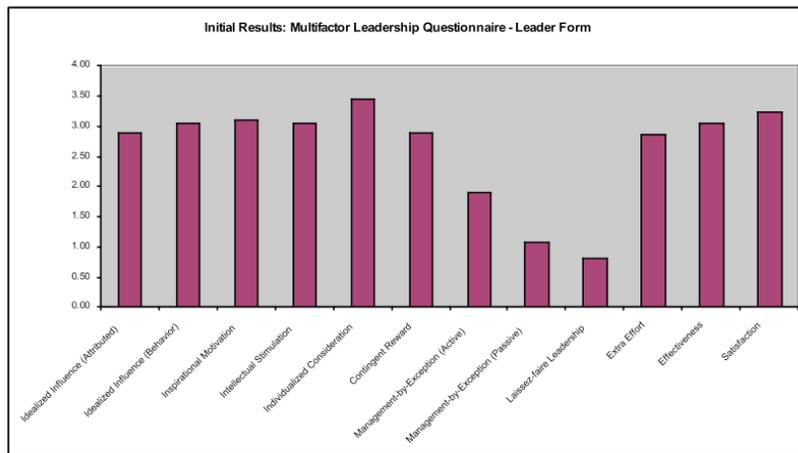
Figure 1. Results for the Multifactor Leadership Questionnaire

Comparison with general population and Hayashi and Ewert (2006)

Findings from the MLQ were compared with the general population and with previous scores from Hayashi and Ewert (2006) (Table 3). A basic evaluation of the results from outdoor leaders in this study demonstrated a higher level of transformational leadership qualities than either the general population or those obtained by Hayashi and Ewert (2006). Results also indicated a lower level of transactional leadership qualities except for the contingency reward which was higher than those reported by Hayashi and Ewert but slightly lower than the normative values.

Table 3
Comparison of Multifactor Leadership Questionnaire (MLQ) Results

Leadership Style	Brymer et al. MLQ Scale Scores Mean & (SD)	Hayashi & Ewert (2006) (n=46) Mean & (SD)	Mean Diff.	Norm (n=1545) Mean	Mean Diff.
Transformational Leadership					
Idealized Influence (Attributed)	2.89 (0.64)	2.78 (0.55)	0.21	2.91	-0.3
Idealized Influence (Behaviour)	3.06 (0.59)	2.91 (0.53)	1.5	2.76	0.3
Inspirational Motivation	3.13 (0.58)	3.03 (0.45)	0.1	2.89	0.24
Intellectual Stimulation	3.06 (0.63)	2.85 (0.56)	0.21	2.76	0.3
Individualized Consideration	3.45 (0.55)	3.16 (0.56)	0.29	2.84	0.6
Transactional Leadership					
Contingent Reward	2.89 (0.71)	2.77 (0.42)	1.2	2.91	-0.03
Management-by-Exception (Active)	1.91 (0.82)	1.64 (0.64)	0.27	1.65	0.26
Management-by-Exception (Passive)	1.09 (0.63)	1.49 (0.63)	-0.3	1.06	0.03
Nontransactional Leadership					
Laissez-faire Leadership	0.81 (0.55)	1.08 (0.38)	-0.27	0.71	0.1
Outcome Factors					
Extra Effort	2.88 (0.64)	2.75 (0.53)	0.13	2.74	0.14
Effectiveness	3.07 (0.57)	2.90 (0.47)	0.17	3.06	0.01
Satisfaction	3.24 (0.59)	3.03 (0.41)	0.21	NA	NA

The individual itemized results from both the NEP and CNS (Tables 4 & 5) demonstrated that outdoor leaders in this study had positive attitudes, beliefs and emotional connections to the natural world.

Table 4
Results from New Ecological Paradigm Scale

Central Aspects	Mean/(SD)
Human Domination over Nature	
Humans have the right to modify the natural environment to suit their needs	2.47 (1.11)
Plants and animals have as much right as humans to exist	4.52 (0.98)
Humans were meant to rule over the rest of nature	1.92 (1.11)
Human Exemptionalism	
Human ingenuity will insure that we do NOT make the earth unliveable	2.45 (1.08)
Despite our special abilities humans are still subject to the laws of nature	4.47 (0.78)
Humans will eventually learn enough about how nature works to be able to control it	1.91 (0.93)
Balance of Nature	
When humans interfere with nature it often produces disastrous consequences	4.07 (0.87)
The balance of nature is strong enough to cope with the impacts of modern industrial nations	2.33 (1.26)
The balance of nature is very delicate and easily upset	3.76 (1.08)
The Risk of Ecocrisis	
Humans are severely abusing the environment	4.30 (0.89)
The so-called 'ecological crisis' facing humankind has been greatly exaggerated	1.92 (0.98)
If things continue on their present course, we will soon experience a major ecological catastrophe	3.88 (0.98)
Limits to Growth	
We are approaching the limit of the number of people the earth can support	3.79 (1.14)
The earth has plenty of natural resources if we just learn how to develop them	2.60 (1.20)
The earth is like a spaceship with very limited room and resources	3.62 (1.06)

Table 5
Results from Connectedness to Nature Scale

Question	Mean/(SD)
1. I often feel a sense of oneness with the natural world around me	4.50 (0.76)
2. I think of the natural world as a community to which I belong	4.55 (0.75)
3. I recognize and appreciate the intelligence of other living organisms	4.45 (0.82)
4. I often feel disconnected from nature	1.67 (0.79)
5. When I think of my life, I imagine myself to be part of a larger cyclical process of living	4.26 (0.97)
6. I often feel a kinship with animals and plants	3.99 (1.09)
7. I feel as though I belong to the Earth as equally as it belongs to me	4.00 (1.13)
8. I have a deep understanding of how my actions affect the natural world	4.44 (0.72)
9. I often feel part of the web of life	4.14 (0.92)
10. I feel that all inhabitants of Earth, human, and nonhuman, share a common 'life force'	3.70 (1.18)
11. Like a tree can be part of a forest, I feel embedded within the broader natural world	4.04 (0.89)
12. When I think of my place on Earth, I consider myself to be a top member of a hierarchy that exists in nature	2.38 (1.03)
13. I often feel like I am only a small part of the natural world around me, and that I am no more important than the grass on the ground or the birds in the trees	3.58 (1.19)
14. My personal welfare is independent of the welfare of the natural world	2.25 (1.31)

Further analysis was conducted after reverse coding the seven negatively worded items in NEP and the three negatively worded items in the CNS. In the NEP the corrected mean scores for each item were summed to create an environmental concern score between 15 (low) and 75 (high). The accumulated mean scored in this study was 58.52 (SD

8.83), which indicated an above average endorsement of the New Ecological Paradigm (Grendstad, 1999). Similarly, the calculated scores in the CNS measured the intensity of feeling emotionally connected to the natural world on a scale from 14 (low) to 70 (high). The results in this study revealed a score of 57.36 (SD 8.07), which also suggested an above average result.

Discussion

The findings of this current study provide a general overview of transformational leadership qualities and attitudes, beliefs and emotional connection to the natural world. The results from the MLQ survey were also compared to a normative sample and a previous exploration of outdoor leaders (Hayashi & Ewert, 2006). Data obtained from the outdoor leaders in this study suggest that they have a stronger overall transformational leadership style than the general population and those obtained by the Hayashi and Ewert (2006) study. The notable exception to this is that the leaders in this study were slightly lower than the norm in attributed idealized influence. This would indicate support for the suggestion made by Hayashi and Ewert (2006) that outdoor leaders value developing others and have the ability to inspire and motivate, however, they were less reliant on personal charisma.

Results from the contingency reward scale were higher than the Hayashi and Ewert (2006) findings but lower than the norm. Hayashi and Ewert (2006) suggested that as outdoor leaders were less likely to be reliant on contingency rewards they were less likely to reward the achievement of agreed goals, instead leaders would rely on the intrinsic abilities of others. Results from this study indicate that whilst outdoor leaders are concerned about individuals and wish to support individual growth they are also comfortable providing reward or recognition for goal achievement. The difference in the two studies might be related to the nature of the reward offered, that is, explicit recognition is also deemed a contingent reward. Outdoor leaders may use positive recognition as a means to promote intrinsic motivation.

The findings from the management by exception (passive) and laissez faire categories were lower than those found by Hayashi and Ewert (2006) and higher than the normative values. Hayashi and Ewert proposed that outdoor leaders were more likely to wait until something goes drastically wrong before intervening, an idea not matched by results from the current study. Outdoor leaders in this study demonstrated a weaker response to the management by exception and laissez faire concepts. Data from this study indicates that leaders would be more likely to monitor the situation in order to ensure a disaster does not

happen. This would signify that leaders in the field are more comfortable supporting the growth of the people they lead, ensuring disasters do not happen and less interested in watching for mistakes or taking a back seat.

Comparing to the general population it would seem that outdoor leaders in this study demonstrated slightly greater transformational leadership qualities in all areas except the idealized influence (attributed). Leaders in this study were also slightly higher in transactional qualities except contingent reward. However, the significance of the difference has not been assessed. Still it would seem that outdoor leaders do demonstrate qualities that are accounted for under the transactional-transformational leadership model.

Connectedness to Nature Scale and New Ecological Paradigm

Results obtained from this study indicate that outdoor leaders are very positively related and emotionally connected to the natural world. According to Schultz (2002) this would indicate that outdoor leaders are more likely to interact favorably with the natural world and be committed to protect the natural world. Perhaps as this is a career that they have chosen these results would be expected.

By combining results from the MLQ, CNS and NEP it seems that leaders in this study do match the transformational leadership model and they also have positive ecological qualities. Outdoor leaders are able to positively motivate others to undertake more than they expected and to connect to a vision. Thus, outdoor leaders might be perfectly placed to encourage others to foster ecological care.

Summary

Research focusing on leadership indicates that transformational leadership is strongly linked to effectiveness as measured by individual, social and organizational factors. Research on the relationship between the natural world and humanity indicates that positive beliefs and feelings of connectedness the natural world has positive ramifications for mood, cognitive processing and socio-emotional wellbeing (Mayer et al., 2009). Equally positive beliefs and feelings of connectedness have a strong correlation to the desire to care for the natural world. The preliminary findings from this project show that outdoor leaders are both transformational and positively oriented to the natural world. This would indicate that outdoor leaders might have qualities that would benefit the community as a whole. The next stage is to explore whether

outdoor leadership education develops these skills, if this is so, how outdoor leadership courses may inform leadership development.

The main limitation to this study is that volunteers were solicited based on an email outlining self-select criteria sent to members of particular online networks. This might have meant that those leaders based in the field or those not belonging to one of the networks may not have had the opportunity to volunteer.

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