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Towards the Confirmation of the MOA Model: An Applied Approach

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Abstract

The aim of this paper is to develop a grounded understanding of the role that the MOA constructs play in influencing environmentally responsible behaviour. Data collected is used to qualitatively confirm the MOA Model (Rothschild, 1999) in an environmental management application and provide a basis to inform the development of a comprehensive quantitative causal investigation. This study will seek to determine the specific contributions of each MOA factor in the study context. The case study chosen for this investigation is representative of other social marketing applications for the MOA framework. The case study concerns the behaviour of agrarian land managers with respect to the rabbit pest problem affecting rural Australia. The paper concludes by confirming the appropriateness of the constructs within the MOA Model.

Key words: MOA model, Social Marketing, Environmental Management.

Introduction

In this paper we outline the exploratory research that was undertaken to determine whether the MOA model could be used as a basis from which to develop effective strategies aimed at achieving responsible environmental behaviour by rural land managers. Despite the substantial expenditure on these programs there has not been a significant improvement (Cary, Webb and Barr, 2002) and a solution through social marketing has been suggested (Hastings, 2003; Kotler, Roberto and Lee, 2002). The MOA (Motivation, Opportunity, and Ability) Model was conceptualised as a guiding model to understand and prescribe social marketing interventions (Rothschild, 1999). The key factors hypothesised as driving social behaviour, namely, the motivation, opportunity, and ability of target individuals forms the basis of the MOA framework which suggests that an understanding of these three factors should permit program developers to formulate better and more effective social change strategies.

Literature review

The first of the MOA factors is motivation. In building on Rothschild's (1999) conceptualisation of the factor, other writers have suggested that the motivation construct could be interpreted as comprising of two sub-constructs based on the type of motivation i.e., intrinsic and extrinsic motivation (Ryan and Deci, 2000; Osbaldiston and Sheldon, 2003; DeYoung, 2000). Such a notion was incorporated in this study. While Extrinsic motivation is defined as motivation that has low internalisation of the underlying motives and is controlled by externalities that are not part of the behaviour (Petri, 1986; Ryan and Deci, 2000; Reeve, 2001; Urdan, 2003). To identify and learn about underlying motives and the external influences on the environmental management behaviour of land managers, specifically the determinants of control behaviour, were grouped into three

main areas; financial reasons for action or non-action; the influence of neighbours and the behavioural response to specific directions and/or the threat of prosecution.

Intrinsic motivation is defined as enacting behaviour for its inherent satisfaction rather than for some separable consequence and there is high internalisation of the underlying motives for the behaviour (Deci, 1975, 1985; Deci and Ryan, 2000; Ryan and Deci, 2000). When intrinsic motivation is influencing behaviour, the satisfaction derived from the behaviour is important to the individual. Individuals who are intrinsically motivated are inclined to take a personal responsibility for the control measures without relying on the government authority or other land managers to instigate and maintain the control measures.

Opportunity is defined as the extent to which an individual can obtain and process information and is not limited in their desire to act by factors in their external environment. These factors include access to information, the financial resources and restrictions caused by time availability (MacInnis, 1991; Rothschild, 1999).

Ability refers to individuals' skill or proficiency at solving problems or their knowledge of how to act (MacInnis *et al.* 1991; Pieters *et al.* 1998; Pieters, 1991; Rothschild, 1999). There are a range of control measures that can be used for rabbit control and those land managers with greater ability can distinguish between the various control practices. Knowledgeable operators know when control should be applied, can distinguish which control measure is appropriate for given situation, and know the relative effectiveness of each of these controls.

Methodology

The methodology was based on a Grounded Theory approach and comprising of five focus groups (Carson *et al.* 2001). Three focus groups with land managers and two focus groups with professional field staff of the Victorian Department of Natural Resources and Environment were conducted. In addition in-depth interviews were held with both the land managers and field staff as required to clarify issues that had not been covered satisfactorily in group discussions. The sampling frame was pragmatically determined in that possible attendees were invited from lists of names supplied from field staff and local Land-care management volunteer groups that operated in rural and semi-rural areas. Potential focus group participants were contacted by telephone and a series of screening questions were used to ensure that each qualified for inclusion. A strict procedure was followed to ensure that participants were fully informed about the location, timing and researchers' expectations for the focus group meeting (Kleiber, 2004). Participants were offered food and beverage during the discussion and a cash payment as goodwill gesture. Kruger (1988) has highlighted that there are many reasons why participants will readily participate in groups including, allowing the opportunity to participate in an important research activity, opportunity to share opinions, a natural curiosity about a topic of personal concern and the opportunity to attend builds on some existing social, community and/or business interests.

Transcripts of the discussions were recorded and subsequently analysed to determine the extent to which participants underlying feelings supported the MOA Model. Verbatim examples reproduced from the transcripts were categorised according to the major themes of the study namely, motivation, opportunity and ability. Examples of these data are provided in the next section.

Results

Extrinsic Motivation

Financial Reasons for Being Motivated

Financial reasons for control and non-control of rabbits was discussed in the groups. Some participants indicated that they saw control management expenditure as an essential budget priority each year.

You have to do it...I reckon that rabbit control should always be a high priority in my budget each year. It's no good growing good crops and letting these little buggers chew hell out of them. Down the back of my property near the bush you never get a decent yield [of crop] in the years I have let them [the rabbits] go [uncontrolled].

Neighbours and Community

Many participants felt that they were motivated to control rabbits on their land because of the influence of their immediate neighbours and the community. There was a strong sense of community within many of these groups of land managers.

I think I'd feel as though I'm letting the community down if I have not controlled my rabbits.... I can't understand how some don't do more [rabbit control].

Prosecution

The external threat of prosecution was discussed at length in the groups.

Yeah....you have to say the main reason why I [use poison] bait is to keep the DNRE [Department of Natural Resources and Environment] off my back. I don't think it [the poison bait] works [kills the rabbits] but if I don't [use the baits] they're gunna be watching me like a hawk.

Intrinsic Motivation

Personal responsibility

Individuals who are intrinsically motivated are inclined to take a personal responsibility and are self-motivated.

You can't rely on the government [environmental authority] to sort out the problem....you need to do it yourself. They do a bit then slacken off. Then someone new [authority staff member] comes in and they fire up again...meanwhile the rabbits are back to where they were a couple of years ago.

Satisfaction

By being in control these individuals said that they felt personal satisfaction and self-esteem.

I suppose you'd have to say you get a great deal of satisfaction by having rabbits cleaned out of the place....and ...I would see it as great personal achievement to have my rabbits under control...it's a tough call but I think we are getting there.

Opportunity

Access to Information

Various degrees of restriction in gaining access to information concerning the intended behaviour can present a barrier to the adoption. The discussions explored the availability of, and the sources used to access, the relevant information.

Yeah, you can ring the [environmental authority's] office and find out what you need to know.....they're helpful really.

Subsidies and Financial Assistance

There were a range of opinions about access to subsidies and financial assistance. Some land managers suggested that were not satisfied with the availability of financial assistance and would like to obtain funds. Some actually said that they could not afford to carry out some of the expensive control work requested by the environmental authority staff.

Always like a little more [financial] help. A few dollars to offset some of the costs would be nice. ... And ... They could help us with at least supplying the carrots [for the poison baits]! They're expensive you know.

Time and Labour Availability

While many interviewees felt that the time available for rabbit control was limited because of the competing demands of their farming activities. This placed restrictions on the availability of time and labour and this in turn restricted the control activity that could be completed each year.

Some farmers have trouble just running the property and trying to find the time to that little extra is difficult... it just doesn't get done. ... and ...Usually try to do a bit each year but there always seems to be a stack of other jobs on the go that can't wait.

Ability

Knowledge of the Appropriateness of Control Measures

The complexity of the situation is influenced by circumstances for individual land managers, the seasonal situation and the physical nature of the land that is under threat from the rabbit infestation. A sound knowledge of rabbit control was demonstrated by the land manager's ability of being able to identify control measures that are appropriate for a given situation. The following comment is evident of some of these diverse requirements.

We have rough country and the only way to fix 'em [the rabbits] is to fence off the rocky outcrops and gas the burrows. Takes a lot more work but it is the only way.

Discussion

This grounded approach confirmed that it was appropriate to make the distinction between the types of motivation as suggested by Ryan and Deci (2000), Osbaldiston and Sheldon (2003) and DeYoung (2000). There are three main aspects of extrinsic motivation that influence the control behaviour of land managers. There were financial reasons for action or non-action; the

influence from their neighbours and the community and, land managers' response to the threat of prosecution by the environmental management authority.

The data relating to intrinsic motivation provided evidence that some land managers have taken a personal responsibility for their goals and had derived personal satisfaction from their involvement in rabbit control behaviour. This type of motivation is an important influence on both their short and long-term land management activities.

Opportunity was shown to be important as land managers that have the desire to engage in control behaviour, can be restricted by certain factors. These factors can include access to information, the required financial resources and restrictions caused by time availability.

Finally, ability was shown to be important as the land managers highlighted that there was a range of control measures that could be used for rabbit control and that those land managers with greater ability could distinguish between the various control practices. It was also established that knowledgeable land managers knew why there should be rabbit control; when to conduct rabbit control and could make the distinction as to which control practices were appropriate for any given situation, as well as knowing the relative effectiveness of each of these controls.

Conclusions and Future Directions

The qualitative research reported in this paper provided a deeper understanding of the MOA constructs and the environmental behaviour of land managers drawn from a specific region. These insights confirmed the appropriateness of the MOA model as a framework with which environmentally responsible behaviour of land managers could be studied. As such this study contributes substantially not only to the Social Marketing discipline but also to managerial practice as it provides a foundation upon which more detailed studies into the development of effective change strategies may be based.

The outcome of this research suggests a number of exciting research opportunities. First, there is a need to conduct a comprehensive study in order to develop a causal model which may be used to identify the specific contributions that each factor in the MOA model makes towards the realisation of land managers' environmentally responsible behaviour. A second research opportunity would involve an extension of the previously mentioned causal model to a simulation model which could be used to test various change management strategies in order to determine a short list of best-bet strategies for effecting environmentally responsible behaviour among land managers.

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