

Application of VBN Theory in the National Park context: tailoring social marketing interventions to individuals' values and environmental worldview

Rosvaldas Povilionis
University of Derby

Acknowledgements:
Barbara Tomasella

Cite as:

Povilionis Rosvaldas (2024), Application of VBN Theory in the National Park context: tailoring social marketing interventions to individuals' values and environmental worldview. *Proceedings of the European Marketing Academy*, 52nd, (119396)

Paper from the 53rd Annual EMAC Conference, Bucharest, Romania, May 28-31, 2024



Application of VBN Theory in the National Park context: tailoring social marketing interventions to individuals' values and environmental worldview.

Abstract

This research applies the Value-Belief-Norm (VBN) model in a qualitative exploration to understand and address pro-environmental behaviors among travellers in the Peak District National Park. The research applies a profiling framework which results in the formation of two distinct personality extremes: Supporters and Objectors. Supporters are motivated by altruistic and biospheric values. Objectors respond better to interventions highlighting personal impacts. Three targeted interventions emerge from the findings: Firstly, for Objectors, visual depictions of realistic outcomes of specific behaviors can foster Awareness of Consequences (AC). Second, government involvement, particularly in addressing issues like litter, can strengthen the link between AC and Ascription of Responsibility (AR), encouraging Objectors to accept responsibility. Third, a Foot-in-the-Door (FITD) technique, starting with a campaign targeting Supporters and evolving into a broader commitment.

Track: Social Responsibility & Ethics

Keywords: Value-Belief-Norms, Behaviour change, Social marketing

1. Introduction

The UK's oldest national park, the Peak District National Park, is a sanctuary for biodiversity and home to endangered species. It contributes substantially to the national economy. However, as a major tourist destination, the park faces notable challenges. With 38,000 residents and a population of 20 million within an hour's travel time, the influx of visitors has raised pressing issues. Tourist hotspots within the park cause traffic congestion, impacting residents' daily lives. Additionally, concerns such as litter, moorland erosion due to climate change, unauthorized parking, and path erosion pose significant threats to the park's delicate ecosystem (Peak District Authority, 2022). Effectively addressing these challenges is crucial to maintaining a harmonious balance between tourism, environmental preservation, and local communities' wellbeing.

This research aligns with Raworth's (2017) perspective, emphasizing the necessity of analyzing existing social dynamics to find a compromise that achieves the common good. Raworth defines social dynamics as "the values, heuristics, norms, and networks that currently shape human behaviour" (p. 123). Recognizing the importance of understanding both natural factors and human-induced impacts, the study focuses on nurturing or nudging social dynamics rather than eroding or ignoring them.

The research pursues two primary objectives. Firstly, it aims to explore how travellers' values and environmental worldview (EWV) influence their beliefs and norms regarding environmentally responsible behaviours. Secondly, based on these findings, the research suggests social marketing (SM) techniques that PDNP authorities can employ to encourage travellers to adopt pro-environmental behaviours. The model guiding this investigation is constructed based on Stern et al. (1999) value-belief-norm theory (VBN).

2.0 Literature Review

Research on the VBN model in social marketing extends beyond the traditional belief that information dissemination alone induces behavioral change. According to Ross (2022), information dissemination typically focuses on altering attitudes, but the VBN model recognizes that changing attitudes doesn't always lead to improved behaviors. Applied in social marketing, the VBN model enables marketers to move beyond influencing attitudes or providing information, helping predict the conditions under which societal norms are established (Ross, 2022). This approach delves into understanding people's core values, emotional triggers, barriers to pro-environmental behaviors, and how this knowledge can be

applied to achieve desired outcomes, as noted by Stern et al. (1999), Brennan et al. (2014), and Wynveen et al. (2015).

2.1 Social marketing and key techniques.

Rosenbloom (2021) defines social marketing as a technique aimed at positively influencing human behavior for societal betterment. Belz and Peattie (2012) elaborate on this, characterizing social marketing as addressing macro-marketing issues within a micro-marketing perspective. Domegan and Hastings (2023) emphasize leveraging marketing tools and consumer behavior understanding to tackle social issues. Emery (2011) notes the challenge of engaging consumers, who often prioritize personal benefits over societal interests. Successful social marketing campaigns leverage consumers' self-interest to drive voluntary behavioral change (Emery, 2011). This aligns with Rosenbloom's (2021) assertion that social marketing primarily promotes voluntary behavioral change.

Additional techniques involve leveraging customers' responsibilities toward a social issue, categorized as basic and extra responsibilities. Basic responsibilities include respecting traditions, following regulations, minimizing costs, and maintaining neutral behavior. Extra responsibilities, demanding more investment, can be encouraged through the foot-in-the-door technique (FITD) (Comello et al., 2016). Freedman and Fraser (1966) explain FITD as starting with a small, easily accepted request, paving the way for more significant commitments. This works by establishing norms and personal obligations, especially in regulated contexts like health, tourism, and public spaces such as national parks (Comello et al., 2016). Trust in government is crucial for adopting socially responsible behaviors, particularly in regulated contexts. Trust decline, attributed to a lack of transparency and accurate communication, poses challenges to behavioral change (Han et al., 2017). Enhancing overall trust in the government within a specific SM intervention can evolve as knowledge accumulates (Llewellyn et al., 2013).

2.2 VBN Theory

To contextualize the use of such different SM techniques, this research introduced the Value-Belief-Norm (VBN) theory, as proposed by Stern et al. (1999). This theory stands as a foundational framework, emphasizing the importance of values, beliefs, and norms in influencing individual behaviour for societal betterment. The VBN theory, a prominent framework in SM, posits that an individual who embraces a movement's fundamental values,

perceives a threat to the valued object, and believes their actions can contribute to restoring that value, will develop a sense of obligation to behave responsibly (Stern et al., 1999). This model was originally conceived to comprehend behaviours that deviate from reported attitudes and intentions (Brennan et al., 2014), establishing a direct causal relationship between values, beliefs, norms, and behaviours (Stern et al., 1999), as seen in Figure 1.

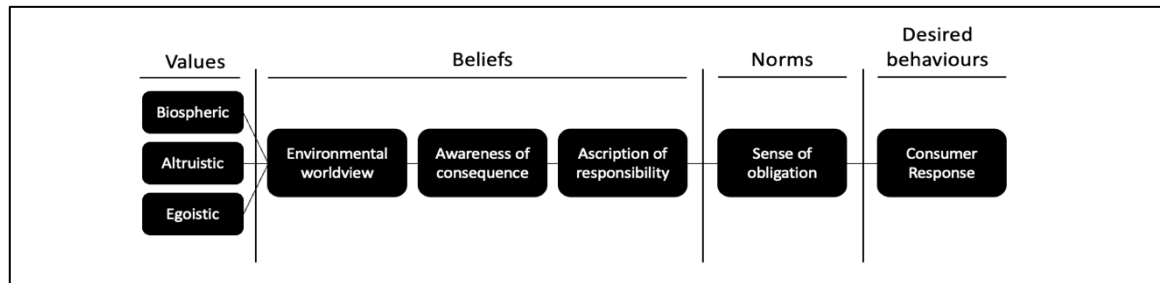


Figure 1 Stern's VBN model. Stern et al. (1999)

The values component serves as the starting point in the VBN chain, with Wynveen et al. (2015) asserting that values are stable, general, and often formed early in life. Numerous studies have explored personal values to predict attitudes and behaviours (Oreg and Gerro, 2006). The research suggests that individuals subscribing to biospheric and altruistic values—motivating the limitation of personal preferences for the benefit of society and all living things—are more likely to adopt responsible behaviours (Harring, Jagers, and Matti, 2017). Moving on to the beliefs component, it encompasses three sets of beliefs. The first is the Environmental Worldview (EWV), representing an individual's general beliefs and attitudes about the Earth and human-environment relations. EWV includes biocentric and anthropocentric dimensions, with the former advocating for the harmonious coexistence of all living creatures and the latter only measuring nature's value in its contributions to human society (Alberro, 2020). The second part of the beliefs component is Awareness of Consequence (AC), indicating an individual's awareness of the negative impact on others or the environment when not acting responsibly (Han et al., 2017). Following AC, the beliefs component incorporates Ascription of Responsibility (AR), representing an individual's attitude toward their ability to mitigate negative impacts on the environment (Wynveen et al., 2015). The norms component, the third and final step in the VBN, shapes behaviour (Brennan et al., 2014). This implies that the sense of responsibility plays a crucial role in forming personal norms; if an individual believes it is someone else's responsibility and not theirs to address an issue, they are less likely to engage in the desired action (Brennan et al., 2014).

2.3 VBN application in social marketing

The VBN model goes beyond the notion that information alone changes behavior, as argued by Ross (2022). The author notes that information dissemination in SM aims at changing attitudes, but the VBN model recognizes that attitudes may not necessarily lead to positive behavioral changes. Geller et al.'s (1983) early study on water consumption education found no significant difference in changes compared to those without education. Carrico and Riemer's (2011) study on energy efficiency postcards revealed increased energy consumption when people only receive educational material, challenging the effectiveness of information dissemination. It has also been successfully applied in the tourism industry context for instance discovering potential for interventions in cultural heritage tourism (Megeirhi et al., 2020). This presents VBN model's usefulness in enabling marketers to predict conditions for norm formation (Ross, 2022). Kotler, Roberto, and Lee (2002) identify three essential components for every SM intervention: core product (benefits), actual product (desired behavior), and augmented product (tangible objects/services). VBN supports these products by considering variables influencing them. Wynveen et al. (2015) emphasized the practicality of VBN, enabling the establishment of SM strategies and communication techniques relevant to the situation. It helps understand individuals' core values, emotional connections, barriers to pro-environmental behaviors, and how this knowledge can be applied for desired outcomes (Stern et al., 1999; Brennan et al., 2014; Wynveen et al., 2015).

In summary, given the benefits the model provides this research aims to tailor an enhanced SM intervention, based on insights emerged through the VBN Theory, in the National Park context. The specific research objectives are:

RO1: to explore how travellers' values and EWV impact their beliefs and norms about environmentally responsible behaviours.

RO2: to suggest social marketing techniques the National Park authorities can use to encourage travellers adopt pro-environmental behaviours.

The present research is furthermore unique, in that although many researchers previously have applied the VBN model in various settings (e.g., Stern et al., 1999; Oreg and Katz-Gerro, 2006; Wynveen et al., 2015), yet the model has not been utilised to explore alternative explanations and opinions related to the components of the VBN model using qualitative research method.

3. Methodology

Recognising the limitations of quantitative research on VBN, this study applied quantitative methods to guide SM practitioners towards practical application of the theory. This was facilitated through structured interviews that utilised questionnaires from past research to effectively form the structure of interviews. The structured script covered 24 questions in each interview, lasting 40 minutes. Transcripts ranging from 20 to 30 pages captured the richness of conversations. Follow-up questions contributed to the value of this research proving that VBN model has potential to be applied by tourism industry professionals. Combining convenience and snowball techniques, the study targeted 18-25-year-olds. Barton (2012) justifies this choice by noting the generational shift away from nature, making insights from this demographic particularly relevant. The researcher scrupulously documented the research procedure, ensuring that the techniques employed in this study are transferable to other areas within the industry.

4.0 Findings and Discussion

The research findings were derived and interpreted by profiling participants using responses to a structured set of questions proposed by Denley et al. (2020, p. 1870) and Ripper and Kyle (2014, p. 292). During the profiling process, participants were asked to elucidate their societal role, connection to nature, and perspective on the human-nature relationship. This process ultimately revealed two distinct personality extremes – Supporters and Objectors.

Supporters: these travellers possess altruistic (A) and biospheric values (B) as well as biocentric EWV (B).

Objectors: these travellers hold egoistic (E) and non-biospheric values (NB) as well as anthropocentric EWV (A). Importantly, this research only focused on the extremes, although most people will be within the scale and possess a mix of characteristics from both (Figure 2).

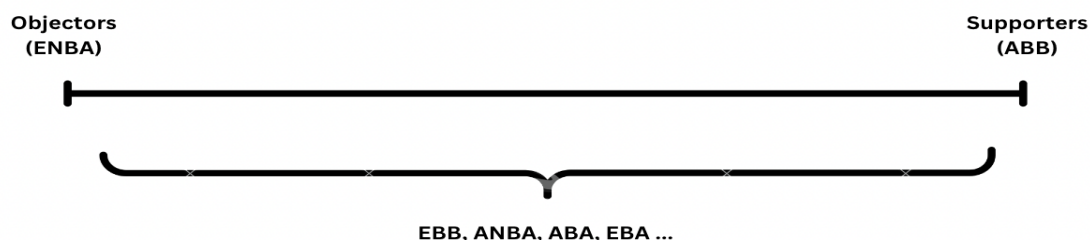


Figure 2 consumer characteristics based on their values and EWV

Based on the interview findings, supporters assert that life is already challenging for many, and their aim is to avoid increasing these difficulties. This group believes that with only one

planet, it is fundamental to foster harmony in our coexistence with it. They are inclined to promote responsible behaviour among others, they support environmental organisations, and their challenge for adopting pro-environmental behaviours lays in rational limitations:

“As a student for some people, money is an important thing and sometimes you just can't pay the money to be helpful, you know, to reduce the damage that we cause to nature”.

Objectors show less concern for the issues affecting others, prioritizing their own self-development. They define themselves as indoor people, however, nature can act as a retreat as long as it provides sufficient comforts. Objectors are more receptive to SM interventions that highlight the negative impacts of behaviours on their personal experiences rather than on someone else's.

“Personally, I don't care much about [something bad happening to nature], but it would be such a shame to lose the beauty, especially if you've been there before, you can see the comparison”.

As a result of the inductive approach to data collection and the profiling framework this research proposes three interventions to holistically strengthen the VBN chain and to form new norms among travellers visiting the Peak District National Park.

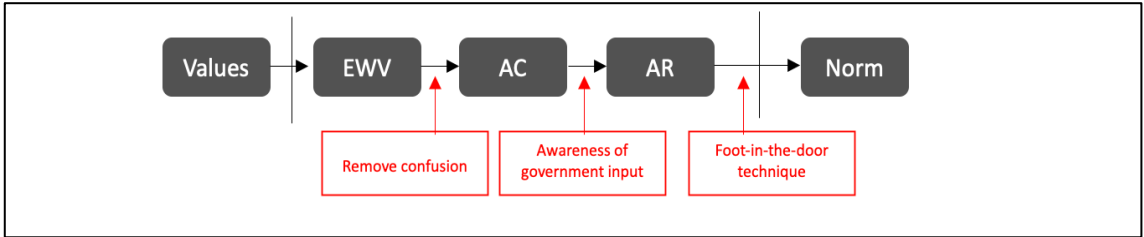


Figure 3 Proposed SM interventions

Remove confusion. To foster AC among Objectors, raising awareness about realistic outcomes of specific behaviours is crucial. For example, instead of only issuing warnings about parking on grass, presenting a visual depiction of the impact one vehicle leaves and the cumulative effect of multiple vehicles can be more impactful. Given the Objectors' limited proclivity to seek alternative behaviours, information must be clearly visible and readily accessible, such as on the Peak District National Park website or at eye level within the park. Furthermore, it's imperative to avoid overwhelming this group with excessive information. This can lead to confusion and decreased willingness to adopt behaviours, which in turn affects AR. Negative information overload drives them to escape and reject the message. Therefore, interventions should present specific solutions, and the positive impact of taking

action. Consistent with past research, this study reaffirms that disseminating information is an ineffective approach for Objectors. Instead, individuals should be provided with a clear and specific action plan. This includes placing directional signage in the parking area alongside posters cautioning against parking on grass.

Awareness of government input. The successful implementation of the VBN model in this research highlights the need to reinforce the linkage between AC and AR, particularly for Objectors. The study reveals that irrespective of an individual's connection to nature, EWV, or values, most people are aware of environmental concerns and issues. While basic responsibilities are generally manageable, extra responsibilities require visible government involvement and clear actions to address these matters. One major issue Peak District National Park visitors attribute to the government is litter due to insufficient bins. Therefore, to facilitate behavioural change the government should either install more bins in the park or provide travellers with trash bags in areas prone to waste pollution. The study reveals that Objectors tend to accept responsibility when they see collective efforts addressing environmental issues. Therefore, raising awareness about community or government actions to mitigate negative effects can effectively encourage people to join the movement.

Foot-in-the-door technique. As a result of successful norm establishment, desired behaviours will be achieved. The present study found that most people are willing to encourage others to behave sustainably; however, it is critical for them to have a clear understanding of the matter. Using this knowledge, the recommendation is for the Peak District to initiate a campaign targeting Supporters. This campaign should encourage them to comply with specific, clear requests and share them with their peers to inspire Objectors. A similar approach to the Icelandic Pledge can be employed, which entails travellers pledging to seven simple statements, holding them accountable for respectful behaviour on the island. The Pledge has been distributed to various tourism stakeholders, making it accessible through multiple websites. In a later phase, travellers could be introduced to a concept akin to the Iceland Academy. This would encourage prospective visitors to engage in an interactive course on responsible behaviour in the country. While that requires more effort, it could be the second step of the campaign and a more significant commitment. In this case, FITD would act as norm activation.

5.0 Conclusion

The present research is unique in that although many researchers previously applied the VBN model in various settings (e.g., Stern et al., 1999; Oreg and Katz-Gerro, 2006; Wynveen et al., 2015), the model has not been utilised to explore alternative explanations and opinions related to the components of the VBN model using qualitative research methods. Consequently, the study provides a valuable contribution to the existing literature. The paper draws a framework for profiling people based on their values and EWV as a strategy to examine which links of the VBN model need strengthening. It also discusses techniques to change Supporters' and Objectors' behaviours. Although this paper applied the theory in the PDNP context, the method of profiling people and identifying the weak links in the VBN chain as well as practical applications can be reused in any setting.

6.0 Limitations and Future Research

This study analysed travellers' intention to adopt pro-environmental behaviours; however, past research suggests that intention does not always translate into action. Thus, more accurate results could be achieved through a longitudinal study observing participants' behaviour compared to their intention throughout a longer period of time. Furthermore, this study did not consider travellers' gender or background as a variable and rather attempted to generalise the results. Therefore, cross-cultural study could add more knowledge about behavioural intentions based on upbringing.

References

- Alberro, H. (2020). 'Valuing Life Itself': On Radical Environmental Activists' Post-Anthropocentric Worldviews. *Environmental Values*, 29(6), 669-689.
- Barton, K. S. (2012). Colorado's millennial generation: Youth perceptions and experiences of nature. *Journal of Geography*, 111(6), 213-223.
- Belz, F. M., & Peattie, K. (2012). *Sustainability Marketing: A Global Perspective*. (2nd ed.). Hoboken, N.J: Wiley. pp. 26 – 29.
- Brennan, L., Binney, W., Parker, L., Aleti, T., & Nguyen, D. (Eds.). (2014). *Social Marketing and Behaviour Change: Models, Theory and Applications*. Edward Elgar Publishing.
- Carrico, A. R., & Riemer, M. (2011). Motivating energy conservation in the workplace: An evaluation of the use of group-level feedback and peer education. *Journal of Environmental Psychology*, 31(1), 1-13.
- Comello, M. L. N. G., Myrick, J. G., & Raphiou, A. L. (2016). A health fundraising experiment using the "foot-in-the-door" technique. *Health Marketing Quarterly*, 33(3), 206-220.
- Denley, T. J., Woosnam, K. M., Ribeiro, M. A., Boley, B. B., Hehir, C., & Abrams, J. (2020). Individuals' intentions to engage in last chance tourism: Applying the value-belief-norm model. *Journal of Sustainable Tourism*, 28(11), 1860-1881.

- Emery, B. (2011). *Sustainable Marketing*. Harlow: Financial Times Prentice Hall. pp. 5 – 14.
- Freedman, J. L., & Fraser, S. C. (1966). Compliance without pressure: The foot-in-the-door technique. *Journal of Personality and Social Psychology*, 4(2), 195.
- Geller, E. S., Erickson, J. B., & Buttram, B. A. (1983). Attempts to promote residential water conservation with educational, behavioral, and engineering strategies. *Population and Environment*, 6, 96-112.
- Han, H., Hwang, J., & Lee, M. J. (2017). The value–belief–emotion–norm model: Investigating customers’ eco-friendly behavior. *Journal of Travel & Tourism Marketing*, 34(5), 590-607.
- Harring, N., Jagers, S. C., & Matti, S. (2017). Public support for pro-environmental policy measures: Examining the impact of personal values and ideology. *Sustainability*, 9(5), 679.
- Hastings, G., & Domegan, C. (2023). *Social Marketing: Principles and Practice for Delivering Global Change*. Taylor & Francis.
- Kotler, P., N. Roberto, & N. Lee. (2002). *Social Marketing: Improving the Quality of Life*. (2nd ed.). Thousand Oaks, CA: Sage.
- Llewellyn, S., Brookes, S., & Mahon, A. (Eds.). (2013). *Trust and Confidence in Government and Public Services*. Routledge.
- Megeirhi, H. A., Woosnam, K. M., Ribeiro, M. A., Ramkissoon, H., & Denley, T. J. (2020). Employing a value-belief-norm framework to gauge Carthage residents’ intentions to support sustainable cultural heritage tourism. *Journal of Sustainable Tourism*, 28(9), 1351-1370.
- Oreg, S., & Katz-Gerro, T. (2006). Predicting proenvironmental behavior cross-nationally: Values, the theory of planned behavior, and value-belief-norm theory. *Environment and Behavior*, 38(4), 462-483.
- Peak District National Park Authority. (2022). *Peak District National Park Management Plan, Peak District National Park Management Plan 2023 - 2028*. Available at: <https://reports.peakdistrict.gov.uk/npmp2023/> (Accessed: 26 May 2023).
- Raworth, K. (2017). *Doughnut Economics: Seven Ways to Think Like a 21st-Century Economist*. Chelsea Green Publishing.
- Rosenbloom, A. (2021). *The Sustainability Marketing Framework: A Tool for Teaching and Learning about Sustainability Marketing*. River Forest, IL: Dominican University. pp. 15 – 18.
- Ross, E. C. (2022). Reducing greenhouse gas emissions: Using community-based social marketing to identify targets for behavior change (Doctoral dissertation, Colorado State University).
- Stern, P. C., Dietz, T., Abel, T., Guagnano, G. A., & Kalof, L. (1999). A value-belief-norm theory of support for social movements: The case of environmentalism. *Human Ecology Review*, 81-97.
- Van Riper, C. J., & Kyle, G. T. (2014). Understanding the internal processes of behavioral engagement in a national park: A latent variable path analysis of the value-belief-norm theory. *Journal of Environmental Psychology*, 38, 288-297.
- Wynveen, C. J., Wynveen, B. J., & Sutton, S. G. (2015). Applying the value-belief-norm theory to marine contexts: Implications for encouraging pro-environmental behavior. *Coastal Management*, 43(1), 84-103.
- Yin, K. R. (2018). *Case Study Research and Applications: Design and Methods*. (Sixth edition) London: SAGE Publications Ltd.