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Land-owners who adopted watershed-friendly management practices:
A brief study using exemplar case-study methods
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This brief report presents insights from adopters of Whatcom Conservation District's (WCD) watershed-friendly practices in the Terrell Creek watershed, Washington State. Findings from three exemplary participants reveal promising patterns and factors that future behavior change campaigns and research might build upon. Although the number of cases is very small and the data limited in depth, the three profiles at least suggest the understanding and theoretical insight that can be gained by the use of qualitative research methods in understanding exemplary conservation behavior adopters in a diverse and only modestly known population.

Methodology

How can we understand the complex process of people's changes in behaviors and the choices that underlie them? We can refer to various theories which provide general models that we can adapt to particular areas of behavior and social context. This can be helpful, but the broadlevel concepts may miss particular dimensions of the social context of the choices of interest. Another option is to use qualitative methods that can reveal very context-specific factors that can be helpful in understanding change. Several themes in qualitative methods converge around looking in detail at success stories.

Campbell (1975) first advanced the importance of case study methods in the fundamental scientific process of detecting pattern matching between observation and theory. The result is not generalizability from a sample to a population, but rather analytical generalizability, or refining theory through discovery (see also Yin 2013). In other words, case studies can help determine what factors are actually acting in a given process such as adoption of a new behavior, and what contextual or other factors need to be considered. Working from close study of cases can lead to more adequate theories, especially when coupled with grounded theory (Glaser and Strauss, 1967).

Recently a methodology called exemplar research has been developed, which is similar to case studies focused on successful cases or ones that exhibit the phenomenon of interest in a high degree. Extreme examples are inherently rare. But essential features of the phenomenon of interest may be observable only in cases that represent the possible rather than the norm. Further, exemplars may be inherently interesting in questions of social change processes. In studies of adoption of conservation practices in farming, for example, farmers were found to follow the practices of successful peers. The variables in Roger's (1962) theory of diffusion of innovations (access to information, persuasive communication, decisions based on favorable information, etc.) have been offered to explain such patterns, but the theory has been adapted variously, suggesting context-sensitivity in how "exemplars" may be socially effective, and thus the need for qualitative case-studies. More generally such research resembles "condition-seeking" research that aims to identify the specific conditions under which a known effect is obtained (Greenwald et al., 1986).

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Adopters of Best Management Practices (BMP's) for watershed health and water quality were interviewed by the second author using questions in Appendix A. Results were used primarily for promotional purposes, but text from the three cases are examined here through an exemplar case-study lens to characterize patterns of successful cases.

Results

Case one. One couple who opted for hydrological improvements on 3.9 acres of stream banks and wetlands and planting of over 1300 native plants on their property exhibited a pattern of high latent willingness to participate, needs that were met by program services, and well-aligned values. New to the area, but attached already, the couple were highly educated (retired university faculty), but lacked knowledge of the degraded condition of their land with respect to water quality factors. Once program staff explained this to them, and offered a set of services through the Conservation Reserve Enhancement Program (CREP), they "jumped at the opportunity." A further condition for their high willingness to be fulfilled was that since they were aged, they needed WCD's help getting the physical work done. The CREP "package deal" was aligned with their values, as reflected in response to an interview statement that they saw it as "a huge opportunity to do our part for the health and wellbeing of the whole lake and watershed, but aesthetics was one of our primary motivators."

Case two. A mother and father of two girls (mid-childhood to adolescence during their eight years of tenure) show a pattern of novice farmers habitually seeking helpful information, enticement by free services, plus concern for their animals and the wider biotic community. The farm was a family project intended to benefit the family and meet their girls' interest in animal husbandry. Thus seeking information easily extended from youth-oriented sources such as FFA and 4H to the WCD. The free services appeared to be important not in removing barriers as in case one, but in attracting interest upon first exposure (a radio promotional ad): "We asked ourselves... why wouldn't we do this?" Benefits to their animals (alpacas, pigmy goats, chickens, donkeys and a pony) were in the form of mud management and greener pastures. But also important, and reflective of the pastoral values that attracted the family to the country in the first place, was benefiting wildlife by wetland restoration: "We had seen the number of birds decrease in recent years, we hope our efforts will bring the owls, geese, and other animals back to the yard."

Case three. A family with three young children and a horse moved from the nearby town five years ago. While similar pre-existing motivations to the preceding cases included "the health of my family, our animals and the beauty of the land," this case shows a pattern of conflicted motivations due to perceived ideological incompatibility that was eventually overcome. Ease was also important, as in the other two cases. The incompatibility was a belief that there should be less government, and a consistent self-belief expressed in reluctance to accept help, especially if it might have been at a cost to others. This reluctance and what dissolved it are captured in this quote: "[I] don't want to take my neighbors money to help my need, but once I connected with the District they let me know what they do and why they are there and I know we are doing something for a greater good." There were also benefits to themselves and their horse. Mud was a challenge in the winter months: "we struggled to keep him and ourselves

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clean." Afterward, the horse had a heavy-use area that he was comfortable laying down in, something he did not do before. Other benefits included manure containment. The simplicity and ease of obtaining WCD's services were frequently mentioned in the interview. Not only did WCD's framing of the benefits as not only directed at the benefitting family defuse resistance, so did the perception that WCD was highly efficient, perhaps unlike how governmental entities might be perceived.

Discussion

Some themes occurred across these cases. These include the lack of difficulty for the landowner due to WCD's free, tailored, efficient and friendly services. The perception of WCD as highly competent also mattered. Another commonality are underlying high value placed on the rural natural environment as part of a larger common good that participants feel good about contributing to. This did not appear to be a first motivating concern except perhaps for the couple in case one. For all, self-benefiting motivations were strong: either aesthetics, solving land management or improved animal husbandry.

The cases show somewhat different patterns in their process of adopting WCD BMP services. Most notably in case three, a demographically familiar rural U.S. belief in small government and non-dependent self-sufficiency was associated with initial reluctance to accept services. In this case the common factors at play in all the cases mentioned above may have played especially important roles. A strong sense of WCP's efficiency, competence, independence from government, and lack of ideologically unacceptable affiliations may have been important. This is a possible condition-seeking result that could be confirmed by further research. Once subjects accepted help, their choice maybe then was reinforced by existing self-interested values such as meeting goals, cleanliness, caring for one's land and animals, and aesthetics.

With more extensive development of such exemplar-adopter case studies, greater nuance in the meaning of WCD's services to its clients might emerge, and different conditional or interaction patterns leading to the achieved result could be identified. The patterns identified here are merely suggestive.

References

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Appendix A. Sample semi-structured interview questions

- 1. How long have you lived here on this property?
- 2. What brought you to this area, why do you like living here?
- 3. How did you hear about this program? What were your initial thoughts?
- 4. When you were first approach by the Conservation District regarding this assistance what was your initial impression of the prescribed farm plan or BMPs?
- 5. What benefits of the program (cost share, aesthetics, water quality, animal health, etc) were the primary motivators for your project?
- 6. Now that you have installed XX on your property what improvements have you noticed or differences in your animals or pasture management?
- 7. Did you learn anything new about your land or your practices during your time with the Whatcom CD?
- 8. And what sort of animals are you raising here?
- 9. What were your primary motivators for moving forward with the conservation district?
- 10. As you have been working with XX on your project were their aspects of Farm Plan or prescribed practices that were surprising for you?
- 11. Would you recommend working with the conservation district to your friends and neighbors? If so what would you say were the biggest benefits?
- 12. Is there anything else about the process you would like to share?