

Current Approaches to Norms Research

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Abstract—The dialogue session was a continuation of a debate about norms and the application of normative standards to wilderness management that has taken place throughout the 1990s at national meetings and in the research literature. Researchers who have made significant contributions to the normative approach to wilderness recreation management presented three approaches to the norm problem. Doug Whittaker and Bo Shelby presented the structural norm approach, Robert Manning presented the evaluative standards and photo approach, and John Heywood presented the behavioral norm approach. Each presenter gave an overview of their approach and presented several resolutions concerning future research.

Wilderness is legally defined as a place where humans are visitors and the imprints of their actions are to be substantially unnoticeable. In addition, Wilderness is to provide outstanding opportunities for solitude and primitive and unconfined types of recreation. Other wild and primitive areas and rivers generally are subject to similar requirements. When recreational use of Wilderness, primitive areas and wild rivers results in environmental impacts, changes to natural conditions and perceptions of crowding, managers are faced with perplexing challenges to maintain or restore wild conditions, solitude and primitiveness. Early research on wilderness and primitive area users showed that they were sensitive to the environmental and social conditions found in wilderness and had definite preferences about wilderness conditions (Lucas 1964; Stankey 1973). An important contribution to wilderness management was made by Thomas Heberlein, Jerry Vaske and Bo Shelby when they began to translate users' preferences into standards that could be used as management objectives (Shelby & Heberlein 1986; Shelby & Vaske 1991; Shelby and others 1996). The theoretical basis for identifying users' standards was Jackson's (1966) Return Potential Model (RPM) of social norms. Consequently social norms became an important area of research that has contributed much to our understanding of desired wilderness conditions and recreation use.

Background

In the early 1990s, however, Roggenbuck and his colleagues questioned whether the structural norm approach adapted from Jackson's RPM was actually measuring norms (Roggenbuck and others 1991). Since then other researchers

have attempted to refine the measurement of users' standards and norms (see special issues of *Leisure Sciences*, 18, 1 and 2 (1996) on Normative Perspectives on Outdoor Recreation, Parts I and II; and Manning and others 1999; Heywood & Aas 1999; Donnelly and others in press) and have addressed theoretical issues of the meaning and definition of social norms (Heywood, 1996a, 1996b). A vigorous debate about normative theory, norm measurement, and the application of normative standards to management problems has taken place throughout the 1990s at national meetings and in the research literature.

The dialogue format as one component of the Wilderness Science Symposium seemed like an ideal means to continue the debate and discussion of social norms. Three approaches to the norm problem were identified that were linked to the work of particular researchers or groups of researchers. These were: 1) the structural norm approach based on an adaptation and expansion of Jackson's RPM as developed by Bo Shelby and Jerry Vaske and their colleagues; 2) an evaluative standards approach by Robert Manning and his colleagues that has addressed the various meanings of measurement terms and has introduced and developed a photo approach; and 3) a behavioral approach that has sought to clarify normative theory and develop measures of behavioral norms, sanctions, and behavior/condition links by John Heywood. Individuals from each of the three approaches were contacted and asked to participate in the dialogue session. Doug Whittaker and Bo Shelby agreed to represent the structural norms approach, Robert Manning agreed to represent the evaluative standards approach, and John Heywood agreed to represent the behavioral approach. Each representative was asked to develop an abstract based on one to several resolutions or issues that captured an important component of their approach and the direction research should be taking in the future. The abstract and resolutions/issues were presented in the dialogue session and provided the basis for discussion among the representatives and participants.

The dialogue session was opened and moderated by Michael Patterson. Mike introduced the topic, giving information similar to the introduction above, and introduced the representatives for each of the normative approaches. Doug Whittaker and Bo Shelby started the session with an overview of the structural approach and their issues/resolutions. Bob Manning followed with a presentation on the evaluative standards approach and his four resolutions, and John Heywood concluded the session with a presentation on his behavioral approach and resolutions.

The Structural Norms Approach: Doug Whittaker and Bo Shelby

A fundamental task in wilderness management is defining natural resource health and experiential quality through

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standards that establish limits of acceptable behavior or conditions. The ideas developed within the “structural norm tradition” are useful for measuring and organizing information about evaluations of behavior and conditions. Structural norm theory was initially developed to explore behavior evaluations, but natural resource applications have extended some concepts and methods. Some of these extensions have led to debate over norm definitions and applications. This presentation reviews the approach and responds to two issues in the debate using examples from studies in wilderness.

The Structural Approach

As applied in natural resources, this approach developed both from Jackson’s RPM and Hall’s (1968) work on proximics—the distance between people in different social situations. The focus in either case was evaluating behavior along a continuum—the acceptability of more or less of a certain behavior; the acceptability of being closer or further away in a social situation. The most common application in wilderness has focused on encounter norms, a condition evaluation that links to proximics, but focuses on how many contacts people should have for a given situation, rather than on how far apart people should be during those contacts. The approach views norms as evaluative mental states held by an individual toward an object. Structural norm techniques have people evaluate behavior (or conditions) on acceptability scales to define their “personal norms.” Taken together in aggregate, personal norms that show shared agreement within a group are said to define “social norms.”

Norms differ from attitudes (which are also evaluative mental states) in their injunctive focus. Norms are about degrees of should/should not (what is acceptable/unacceptable), while attitudes are about degrees of good/bad. In addition, norms are thought to be communicated within groups through sanctions, which are often internalized as a sense of obligation. Obligation, sanctions, and shared agreement about evaluations are thus central to the norm concept, although only the latter has received much measurement attention with the structural approach.

Issue 1: The Concept of a Normative Continuum—Critics of the structural norm approach have focused on the need to measure sanctions and obligation. They have advanced the notion of a continuum of regular behaviors (from social conventions to emerging norms to norms), and suggest these two dimensions define which label should apply. We support the notion of a continuum, and are impressed with recent attempts to measure obligation and sanctions. However, we believe there are several dimensions that measure “normative strength,” including obligation, sanctions, and structural tradition measures such as intensity, shared agreement, and prevalence. More importantly, we think all of these characteristics should be treated as variables rather than establishing thresholds, which define norm existence. The question is whether an evaluation is more or less normative, not whether it exists or not.

Resolution 1: Future research should measure a range of characteristics that may indicate its norm strength along a normative continuum.

Issue 2: Extensions from Behavior to Conditions, and from the Individual to the Collective—Structural norm applications in natural resources have extended the focus from behavior evaluations to condition evaluations. A simple case suggests that if there is a norm against building a fire ring of certain size in a wilderness area, there can be a norm against having fire rings of that size in the same place. Critics recognize utility in this extension, but suggest it is theoretically flawed since you can’t measure obligation of a wilderness area, nor can you sanction it. However, a broader view that considers collective and institutional behavior offers an alternative conceptualization.

In many natural resource settings, problems are caused by collective behavior. Management standards are set to define how much impact is too much, and thus define when collective behavior should be constrained. Structural norm researchers can help in this process by exploring the acceptability of collective impacts among individuals and groups. These are normative because visitors report how conditions should be (whether they are acceptable or unacceptable). With structural norm methods, visitors specify their personal condition norms, which are aggregated to empirically define social condition norms, which managers can use to establish management standards. These standards, in turn, define when institutional actions are needed to constrain the collective behavior that is causing the unacceptable impact.

Sanctions can be conceptually understood within this framework. Individuals with personal norms at dissonance with existing conditions may apply sanctions toward the managing agency rather than toward fellow users who are collectively causing the problem. Similarly, staff and decision-makers within the agency may very well internalize such sanctions (feeling guilt and uneasiness) if their actions fail to maintain quality conditions.

Resolution 2: Future work should distinguish between behavior and condition norms which do have theoretical differences.

Resolution 3: Future work should attempt to measure evidence of alternative types of sanctions or obligations, particularly those directed toward agencies or internalized by agencies.

The Evaluative Standards Approach: Robert Manning

Contemporary approaches to carrying capacity—and outdoor recreation management more broadly—focus on indicators and standards of quality. Indicators of quality are measurable, manageable variables that define the quality of the recreation experience. Standards of quality define the minimum acceptable condition of indicator variables. Carrying capacity and outdoor recreation are managed by monitoring indicators of quality and taking management actions to ensure that standards of quality are maintained. Normative theory and related empirical methods have been used to help managers with the difficult task of formulating standards of quality.

“Norms” or “Evaluative Standards”?—A variety of empirical methods have been derived and adapted from normative theory and applied to outdoor recreation

(Heberlein 1977; Shelby & Heberlein 1986; Vaske and others 1986; Manning and others 1996). Generally, these methods ask respondents to judge the acceptability of a range of impacts, such as crowding, that can be caused by increasing levels of recreation use. Resulting “personal norms” are aggregated to derive “social norms.” Calculation of social norms is designed to provide a strong, quantitative basis for formulating standards of quality.

However, the terms personal norms and social norms have been subject to increasing scrutiny in the outdoor recreation literature (Roggenbuck and others 1991; Shelby & Vaske 1991; Noe 1992; Heywood 1993a; Heywood 1993b; Heywood 1996a; Heywood 1996b; McDonald 1996; Shelby and others 1996). As traditionally defined in sociology, norms address behaviors that are based on a sense of obligation and have social sanctions associated with them to help ensure broad compliance (Homans 1950; Blake & Davis 1964; Cancian 1975; Rossi & Berk 1985; Biddle 1986). In other words, they are strongly prescriptive. Recreation norms may not fully meet these definitional criteria in that they generally focus on conditions rather than behaviors, they do not necessarily involve a sense of obligation on the part of the respondent, and there may be no form of sanctions to reward or punish associated behavior. Moreover, as described later in this paper, measurement of recreation norms has not included explicit consideration of the tradeoffs associated with judgments of acceptability. That is, judgments of acceptability describe how increasing impacts of recreation may affect the recreation experience, but do not necessarily indicate how the recreation experience should be managed. Therefore, recreation norms may be less prescriptive than norms as they are traditionally defined and measured. To the extent that these differences and limitations are valid, use of the term norms may misrepresent or overstate the character of such studies and resulting data. This suggests that alternative terminology—such as personal evaluative standards” and “social evaluative standards”—might be developed and applied to current studies designed to help formulate standards of quality. Such terminology avoids the implications associated with the term norms, and reflects the more purely evaluative nature of such judgments. Alternative terminology is not intended to diminish the value and usefulness of information derived from empirical studies of standards of quality. However, it may be a move accurate description of such studies and resulting data.

Resolution 1: Findings from current studies designed to help formulate standards of quality might best be termed personal and social evaluative standards rather than personal and social norms.

Implications of Alternative Measurement Approaches—Experimentation within studies designed to help formulate standards of quality has led to development and application of several empirical methods. For example, questions can be asked in a close-ended “long” or “repetitive item” format, or in an open-ended format designed to reduce respondent burden. Moreover, information on the range of impacts under study can be described to respondents through a narrative and numerical format, or can be represented visually through photographs. Finally, alternative evaluative dimensions, such as preference, acceptability, and tolerance, have each been used to rate the impacts under study.

Study findings suggest that the methods used to measure evaluative standards can influence resulting data (Manning and others 1999). For example, the open-ended question format may result in lower evaluative standards than the close-ended format, especially when visual measurement approaches are used. Visual measurement approaches may result in higher evaluative standards than narrative/numerical approaches, especially in relatively high use contexts. Alternative evaluative dimensions can result in evaluative standards that range from a low associated with preference to a high associated with tolerance. None of the measurement approaches described above may be more valid than any others, but researchers and managers should be conscious of these measurement effects and exercise appropriate care and caution in interpreting and applying study findings.

Resolution 2: Researchers and managers should exercise appropriate care and caution in selecting alternative measurement approaches for evaluative standards, and interpreting and applying resulting study findings.

Tradeoffs Associated With Judgments of Acceptability—As discussed above, norms traditionally have a strong prescriptive meaning; that is, they describe what “ought” to be. This suggests that measurement of norms, or evaluative standards, should adopt prescriptive wording and related response scales. The potential importance of this issue is magnified by consideration of the tradeoffs implicit in prescriptive questions. For example, current studies of evaluative standards ask respondents to judge the acceptability of a range of recreation-related impacts. However, these judgments are typically rendered without explicit consideration of the tradeoffs, necessarily associated with such judgments. If respondents report being relatively intolerant of recreation-related impacts such as crowding, then visitor use levels and public access may have to be restricted. If respondents report being relatively tolerant of such impacts, then public access may not have to be restricted. Initial research indicates that when respondents are made more explicitly aware of the tradeoffs between the level of impacts judged acceptable and potential restrictions on visitor use levels, evaluative standards are substantially higher than when such evaluative standards are measured in isolation (Manning and others 1999). Explicit introduction of the tradeoff’s associated with judgments of acceptability is more in keeping with the prescriptive spirit of norms and evaluative standards, and may offer more realistic guidance to management agencies that formulate standards of quality.

Resolution 3: Measurement of evaluative standards should include explicit consideration of the tradeoffs associated with judgments about the acceptability of recreation-related impacts.

Alternative Theoretical and Methodological Approaches—Research on evaluative standards in outdoor recreation has been based primarily on norm theory and methods as developed in sociology and as explicated by Jackson (1965). Studies derived from this approach have been designed to provide a strong, quantitative basis for formulating standards of quality. However, other conceptual and empirical approaches to measuring evaluative

standards should be explored. The theoretical and methodological issues described above suggest strengths and weaknesses of the normative approach, and indicate ways in which other approaches may be especially useful (Mac Gumman & Toda 1969; Prudyck & Rubinfeld 1995). For example, the issue of tradeoffs between the acceptability of impacts and the desire to maintain reasonable, convenient access to outdoor recreation resources suggests that a tradeoffs based economic theoretical framework such as indifference curve analysis may be useful. Indifference curve analysis asks respondents to express their preferences for alternative combinations of two goods such as lack of crowding and accessibility to parks and related areas. Other theoretical frameworks and associated empirical techniques arising out of multiple academic disciplines should be explored as a supplement to norm theory and methods.

Resolution 4: Alternative theoretical and methodological approaches to measuring evaluative standards should be explored as a supplement to norm theory and related empirical techniques.

The Behavioral Approach: John Heywood

The importance of norms is their applicability to wilderness use and management. Norms are standards that can be used by managers to develop management objectives and prescriptions. In doing so managers need to understand that norms are of two different types (Cialdini and others 1990). One type is descriptive norms that define what is normal or typical. The other type is injunctive norms that define how one ought to behave. For example, low impact standards for wilderness and primitive areas could be considered as both types of norm. The descriptive norm would depict the conditions found as being consistent or not consistent with low impact standards. The injunctive norm would characterize the behaviors of users as being consistent or not consistent with an obligation to follow low impact methods and standards. The injunctive norm is a more powerful concept for management purposes because it provides a basis for educating, guiding, or directing users towards appropriate behaviors. Considering the low impact example, the descriptive norm is more likely to be consistent with low impact standards when the injunctive norm is operative (Cialdini and others 1990).

In the behavioral approach normative behavior is viewed as one end of a continuum of regular behaviors where behavioral regularities may begin as social conventions, which may become increasingly obligatory as emerging norms that eventually become normative obligations (Heywood 1996a). Behavioral norms are defined as prescriptive obligations (something that should never be done) or proscriptive obligations (something that should always be done) that are internalized and enforced through sanctions. The measures developed for the behavioral approach use the word obligation in the question and the normative term should in the response scale (Heywood & Aas 1999). When norm measures use unambiguous normative terms there is a clear logical connection between theory, measurement, and application.

Resolution 1: When measuring social norms, normative terms and concepts like obligation, should, ought, and must, should be used in questions and response scales.

A second critical norm concept is sanction. Norms are a powerful social concept because they provide standards that are more than simply collective preferences and opinions. The power of norms is in their sense of social obligation and that there is a benefit or cost for compliance or non-compliance through sanctions (Heywood & Aas 1999). Sanctions are the rewards or punishments for correct or incorrect behaviors. For norms to have any effect or influence on a person's behavior they must be internalized. Consequently, behavior is guided by internal sanctions, i.e., the anticipations or feelings of anxiety, guilt, embarrassment for failure to comply with the norm, or the anticipations or feelings of pride, comfort, acceptance for compliance with the norm. The norm measures in the behavioral approach use semantic differential scales to tap internal sanctions (Heywood & Aas 1999). For example, the respondent is asked whether they would feel uneasy or comfortable, embarrassed or admired, ashamed or proud, guilty or guiltless for either complying or not complying with the obligation. Sanctions can also be external and as such are part of the on-going process of socialization. External sanctions can be informal, like a smile or a frown, and formal, like a reward or a fine. Other users would apply informal sanctions, while managers would apply formal sanctions. Some interesting attempts have been made to measure external sanctions, but more needs to be done to empirically validate this concept.

Resolution 2: We need to test and refine measures of internal sanctions and develop and validate measures of external informal and formal sanctions.

A person's behavior may be observed by others or can be inferred from the artifacts or evidence left behind. Consequently a person's behavior can influence social and environmental conditions whether they are present or not. For example, I may come into contact with other wilderness users on trails and at campsites (social conditions), or I may see evidence, e.g., fire rings, braided trails, of other users' past behaviors (environmental conditions). There is an assumed link between the behavior and the social or environmental condition that results, but this link has not been put to rigorous empirical test.

Resolution 3: We need to empirically test the link between behavioral norms, and social and environmental condition norms.

Conclusion

Normative research in wilderness and outdoor recreation has made much progress over the past ten years. Normative theory in the social sciences has been explored in depth and its relevance to wilderness recreation and management has been clarified and expanded. Several normative models have been used and continue to be refined and tested. New measurement techniques—alternative evaluative dimensions, the photo approach and behavioral approach—have been developed as well as refinements to the structural approach—norm prevalence. Progress in normative research has been made because researchers have explored different components of normative theory and have vigorously debated new approaches and techniques. The issues that have been raised have not been resolved and the debate will very likely continue.

A continuing debate about the application of different normative models to wilderness recreation and management may frustrate and perplex wilderness managers. This may be an unfortunate by product of the debate, but the researchers intentions are ultimately to provide managers with normative information that is theoretically and scientifically valid as well as being applicable to wilderness issues and management problems. A scientific, scholarly approach to normative research is based on peer review and acceptance of innovations and research findings that are incremental and cumulative. While such an approach may be messy, it is the best way we know of to develop reliable and valid knowledge that is applicable to wilderness recreation and management.

References

- Biddle, B. 1986. Recent developments in role theory. *Annual Review of Sociology*. 12: 67-92.
- Blake, J.; Davis, K. 1964. Norms, values, and sanctions. *Handbook of Modern Sociology*, Chicago: Rand McNally.
- Donnelly, M. P.; Vaske, J. J.; Whittaker, D.; Shelby, B. In press. Toward an understanding of norm prevalence: A comparative analysis of 20 years of research. *Environmental Management*.
- Cancian, F. 1975. What are norms? A study of beliefs and actions in a Maya community. New York: Cambridge University Press.
- Cialdini, M. P.; Reno, R. R.; Kallgren, C. A. 1990. A focus theory of normative conduct: Recycling the concept of norms to reduce littering in public places. *Journal of Personality and Social Psychology*. 58: 1015-1026.
- Hall, E.T. 1968. Proximities. *Current Anthropology*. 9: 83-107.
- Heberlein, T. 1977. Density, crowding, and satisfaction: Sociological studies for determining carrying capacities. *Proceedings: River recreation management and research symposium*. USDA Forest Service General Technical Report NC-28: 67-76.
- Heywood, J.L. 1993a. Behavioral conventions in higher density, day use wildland/urban settings: A preliminary case study. *Journal of Leisure Research*. 25: 39-52.
- Heywood, J.L. 1993b. Game theory: A basis for analyzing emerging norms and conventions in outdoor recreation. *Leisure Sciences*. 15: 37-48.
- Heywood, J.L. 1996a. Social regularities in outdoor recreation. *Leisure Sciences*. 18: 23-37.
- Heywood, J.L. 1996b. Conventions, emerging norms and norms in outdoor recreation. *Leisure Sciences*. 18: 355-363.
- Heywood, J.L.; Aas, Ø. 1999. Social norms and encounter preferences for cross country skiing with dogs in Norway. *Leisure Sciences*. 21: 133-144.
- Homans, G. 1950. *The human group*. New York: Harcourt, Brace.
- Jackson, J. 1965. Structural characteristics of norms. *Current studies in social psychology*. New York: Hold, Reinhart, Winston.
- Jackson, J. 1966. A conceptual and measurement model of norms and roles. *Pacific Sociological Review*. 9, 35-47.
- Lucas, R.C. 1964. The recreational capacity of the Quetico- Superior area. USDA Forest Service, Research Paper LS-15.
- MacGummon, K.; Toda, M. 1969. The experimental determination of indifference curves. *Review of Economic Studies*. 36: 433-451.
- McDonald, C. 1996. Normative perspectives on outdoor recreation behavior: Introductory comments. *Leisure Sciences*. 18: 1-6.
- Manning, R.; Lime, D.; Freimund, W.; Pitt, D. 1996. Crowding norms at frontcountry sites: A visual approach to setting standards of quality. *Leisure Sciences*. 18: 39-59.
- Manning, R.E.; Valliere, W.A.; Wang, B.; Jacobi, C. 1999. Crowding norms: Alternative approaches. *Leisure Sciences*. 21, 97-115.
- Noe, F. 1992. Further questions about the management and conceptualization of backcountry encounter norms. *Journal of Leisure Research*. 24: 86-92.
- Prudyc, R.; Rubinfeld, D. 1995. *Microeconomics*. Englewood Cliffs, NJ: Prentice Hall.
- Roggenbuck, J.W.; Williams, D.R.; Bange, S.P.; Dean, D.J. 1991. River float trip encounter norms: Questioning the use of the social norms concept. *Journal of Leisure Research*. 23: 133-153.
- Rossi, P.; Berk, R. 1985. Varieties of normative consensus. *American Sociological Review*. 50: 333-347.
- Shelby, B.; Heberlein, T. 1986. *Carrying capacity in recreation settings*. Corvallis, OR: Oregon State University Press.
- Shelby, B.; Vaske, J. 1991. Using normative data to develop evaluative standards for resource management: A comment on three recent papers. *Journal of Leisure Research*. 23: 173-187.
- Shelby, B.; Vaske, J.; Donnelly, M. 1996. Norms, standards and natural resources. *Leisure Sciences*. 18: 103-123.
- Stankey, G.H. 1973. Visitor perception of wilderness recreation carrying capacity. USDA Forest Service, Research Paper INT-142.
- Vaske, J.; Graefe, A.; Shelby, B.; Heberlein, T. 1986. Backcountry encounter norms: Theory, method, and empirical evidence. *Journal of Leisure Research*. 18: 137-153.