

Society & Natural Resources >

An International Journal

Volume 21, 2008 - Issue 3

1,020 92

Views

CrossRef citations to date

5

Altmetric

Articles

Hunter Perceptions of Similarity and Trust in Wildlife Agencies and Personal Risk Associated with Chronic Wasting Disease

Mark D. Needham  & Jerry J. Vaske

Pages 197-214 | Received 24 Jan 2006, Accepted 19 Mar 2007, Published online: 15 Feb 2008

 Cite this article  <https://doi.org/10.1080/08941920701816336>

Sample our
Environment and Sustainability
Journals

>> [Sign in here](#) to start your access
to the latest two volumes for 14 days

 Full Article Figures & data References Citations Metrics Reprints & Permissions

Read this article

Abstract

Theory suggests that risk perceptions are influenced by trust in managing agencies. Shared goals and values (i.e., perceived similarity) are foundations of trust. This article examines the extent to which hunters perceive personal health risks associated with chronic wasting disease (CWD) (e.g., become ill from CWD) and the influence of perceived similarity on risk perceptions. Data were obtained from a survey of hunters in Montana, North Dakota, and South Dakota. Results indicate that hunters perceived a higher risk of CWD from elk than from deer. Hunters who trusted wildlife agencies perceived a lower risk of CWD than those who did not trust the agencies. The variation in risk perceptions was explained by the variation in trust in wildlife agencies, but not by perceived similarity. Hunters who perceived a higher risk of CWD from elk than from deer still perceived a higher risk of CWD from elk than from deer.

About Cookies On This Site

We and our partners use cookies to enhance your website experience, learn how our site is used, offer personalised features, measure the effectiveness of our services, and tailor content and ads to your interests while you navigate on the web or interact with us across devices. You can choose to accept all of these cookies or only essential cookies. To learn more or manage your preferences, click "Settings". For further information about the data we collect from you, please see our [Privacy Policy](#).

Accept All

Essential Only

Settings

This article is based on a project of the Human Dimensions Committee of the Western Association of Fish and Wildlife Agencies (WAFWA). The authors thank Chris Burkett (Wyoming Game and Fish Department), Dana Dolsen (Utah Division of Wildlife Resources), Jacquie Ermer (North Dakota Game and Fish Department), Larry Gigliotti (South Dakota Department of Game, Fish and Parks), Ty Gray (Arizona Game and Fish Department), Larry Kruckenberg (Wyoming Game and Fish Department), Bruce Morrison (Nebraska Game and Parks Commission), Jordan Petchenik (Wisconsin Department of Natural Resources), Duane Shroufe (Arizona Game and Fish Department), and Linda Sikorowski (Colorado Division of Wildlife) for their assistance. The four anonymous reviewers are also thanked for comments on this article.

Notes

Note. Range represents lowest to highest means, factor loadings, and Cronbach alpha reliability coefficients among all 22 strata. Average represents the mean across all strata. Individual item statistics for each of the 22 strata are reported in Needham (2006).

^a Confirmatory factor analyses based on Satorra-Bentler robust estimation for multivariate nonnormality. All loadings are standardized and significant at $p < .001$. Range of measurement model fit indices: NNFI* = .89 to .94, CFI* = .90 to .95, RMSEA* = .06 to .09.

^b Variable 1 = 1 = disagree, 2 = moderate risk, 3 = slight risk, 4 = moderate risk, 5 = slight risk, 6 = slight risk, 7 = slight risk, 8 = slight risk, 9 = slight risk, 10 = slight risk, 11 = slight risk, 12 = slight risk, 13 = slight risk, 14 = slight risk, 15 = slight risk, 16 = slight risk, 17 = slight risk, 18 = slight risk, 19 = slight risk, 20 = slight risk, 21 = slight risk, 22 = slight risk.

^c Variable 1 = 1 = disagree, 2 = moderate risk, 3 = slight risk, 4 = moderate risk, 5 = slight risk, 6 = slight risk, 7 = slight risk, 8 = slight risk, 9 = slight risk, 10 = slight risk, 11 = slight risk, 12 = slight risk, 13 = slight risk, 14 = slight risk, 15 = slight risk, 16 = slight risk, 17 = slight risk, 18 = slight risk, 19 = slight risk, 20 = slight risk, 21 = slight risk, 22 = slight risk.

About Cookies On This Site

We and our partners use cookies to enhance your website experience, learn how our site is used, offer personalised features, measure the effectiveness of our services, and tailor content and ads to your interests while you navigate on the web or interact with us across devices. You can choose to accept all of these cookies or only essential cookies. To learn more or manage your preferences, click “Settings”. For further information about the data we collect from you, please see our [Privacy Policy](#).

Accept All

Essential Only

Settings

^d Variable coded on 9-point scale: 1–2 = not concerned, 3–4 = slightly concerned, 5–7 = moderately concerned, 8–9 = extremely concerned.

Note. Based on Satorra–Bentler robust estimation for multivariate nonnormality; β = standardized path coefficients; * $p < .05$, *** $p < .001$.

Most risk perception studies involve technologies or activities that have both benefits and negative consequences (e.g., nuclear power provides electricity, but accidents harm humans). Hazards have no obvious benefits (Slovic [1987](#); Sjöberg [2000a](#)). Given that CWD is always fatal in animals and is similar to TSE diseases that can cause human death, few hunters would likely contend that CWD has benefits. CWD, therefore, is considered a hazard in this article.

The questionnaire was pretested in each state in 2003 with hunters who purchased a license to hunt in 2002 ($n = 659$). Details are reported in Needham et al. ([2004](#)). Potential overlap of strata (e.g., deer hunters who also hunted elk, hunted in more than one state) was minimized by deleting duplicate cases in samples across strata before questionnaire administration. This study was supported by the Western Association of Fish and Wildlife Agencies (WAFWA). Arizona and North Dakota belong to WAFWA and do not have CWD, but are surrounded by regions with CWD (e.g., New Mexico, Saskatchewan, South Dakota, Utah).

Ancillary analyses revealed no substantive differences in results presented in this article between data that were weighted and not weighted based on the nonresponse bias check.

In addition to tests of direct effects, mediation analyses were conducted (Baron and Kenny [1986](#)). Mediation was not present in 21 of the 22 strata, as the predictor (similarity) was not related significantly to the criterion (risk). Social trust fully mediate

ent elk
hunted in each
stratum (Table 2).

About Cookies On This Site

We and our partners use cookies to enhance your website experience, learn how our site is used, offer personalised features, measure the effectiveness of our services, and tailor content and ads to your interests while you navigate on the web or interact with us across devices. You can choose to accept all of these cookies or only essential cookies. To learn more or manage your preferences, click “Settings”. For further information about the data we collect from you, please see our [Privacy Policy](#).

Accept All

Essential Only

Settings



People also read

Recommended articles

Cited by
92

Information for

- Authors
- R&D professionals
- Editors
- Librarians
- Societies

Opportunities

- Reprints and e-prints
- Advertising solutions
- Accelerated publication
- Corporate access solutions

Open access

- Overview
- Open journals
- Open Select
- Dove Medical Press
- F1000Research

Help and information

- Help and contact
- Newsroom
- All journals
- Books

Keep up to date

Register to receive personalised research and resources by email

 Sign me up



About Cookies On This Site

We and our partners use cookies to enhance your website experience, learn how our site is used, offer personalised features, measure the effectiveness of our services, and tailor content and ads to your interests while you navigate on the web or interact with us across devices. You can choose to accept all of these cookies or only essential cookies. To learn more or manage your preferences, click “Settings”. For further information about the data we collect from you, please see our [Privacy Policy](#).

 Accept All

Essential Only

Settings