Factors affecting hunters’ trust and confidence in a state wildlife agency

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Trust
Objectives

1. Develop a theoretical model of trust and confidence in a state wildlife agency
2. Test and refine the model in Michigan...
3. .... working toward a parsimonious model of factors affecting trust and confidence in the Michigan Department of Natural Resources’ Wildlife Division
Hypothesized model

- Value Congruence
- Moral Obligation
- Beliefs About Government
- Interaction with MiDNR WD
- Procedural Justice
- Communication
- Benevolence
- Integrity
- Decision-Making
- Technical Competence
- Trust
- Satisfaction
- Perceptions of MiDNR WD Effectiveness
- Confidence in Future Effectiveness
Methods

• Mail out to 6,825 resident hunting license buyers (any) for 2012 season >18 years old; stratified for MDNR Wildlife Division (WD) administrative regions

• Modified tailored design method

• Administered February – May 2013

• Non-respondent telephone survey May – June 2013; \((n = 159)\)

• MSU IRB approval #x12-1201e
Results

• 2,703 usable responses (40%)
• Respondents were slightly more critical of WD than non-respondents ($n = 159$)
  – “I believe that the WD as a whole is effective at managing Michigan’s wildlife resources”: respondents ($M= 3.00$, $SD=.99$) vs. non-respondents ($M=3.39$, $SD=1.20$); $t(df) = -4.02(170)$, $p=.00$).
• 91% male
• Mean age = 54 years, StD = 14.31
Measurement model

Procedural Fairness

Communicates information to the public in a timely manner.

Is truthful with the public.

Public has influence over outcomes of decisions...

Listens to the public.

Technical Competence

Is operated by employees who are well-qualified.

Is operated by employees who possess technical expertise...

Trust/Confidence

Confident that WD is effective at managing MI's wildlife resources.

Expect WD will make the right decisions regarding wildlife management.

Trust WD to take responsibility for managing MI's wildlife resources.

Trust WD to make decisions on my behalf.

Is truthful with the public.

.26

.69

.66

.79

.73

.81

.90

.88

.89

.85

.67

.76

.80

.85

.87

.39

.26

.76

.80

.85

.87

.39
Procedural fairness items

1. Is truthful with the public. (3 - means)
2. Communicates information (e.g., news, updates, decisions) to the public. (3 - means)
3. Allows the public to have some influence over the outcomes of... (3 - means)
4. Listens to the public. (3 - means)

1 = strongly disagree, 5 = strongly agree
Technical competence items

Is operated by employees who have awareness about the work that needs to be done.

Is operated by employees who possess the technical expertise necessary to manage Michigan’s wildlife resources.

Is operated by employees who are well-qualified.

Means

1 = strongly disagree, 5 = strongly agree
Trust and confidence items

Means

1 = strongly disagree, 5 = strongly agree

1. I trust the Wildlife Division to make decisions about wildlife management on my behalf.

2. I trust Wildlife Division to take responsibility for managing Michigan’s wildlife resources.

3. I expect that Wildlife Division will make the right decisions regarding wildlife management.

4. I am confident that the Wildlife Division will do a good job managing Michigan’s wildlife resources.
Latent factor model of trust and confidence in the MDNR Wildlife Division

Direct effects, standardized path coefficient, z-statistic in parenthesis, *=p<.01 for straight line; covariance, z-statistic in parenthesis, * = p<.01 for curved line ($\chi^2 = 153, df = 38, \chi^2/df = 4.03, p=.00, CFI=.99, RMSEA = .04, 90\% \text{ RMSEA confidence interval} \ .03 – .04$)
Influence of moderators

A) Disagree with Value Congruence

B) Neutral or Agree with Value Congruence

Means
Procedural Fairness = 0
Technical Competence = 0

Means
Procedural Fairness = 2.16*
Technical Competence = 1.21*
A few thoughts...

1. Transparency & procedural fairness matters
2. Engagement skills of employees matter
3. Spatial scale relationships of trust measurement matter
Thank You

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“Active stakeholders”

$n = 137$

Procedural Fairness

Trust/Confidence

Technical Competence

.76 (8.89*)

.68 (11.96*)

.03 (0.35)