JOB SATISFACTION, WELL-BEING AND CHANGE IN RHODE ISLAND FISHING COMMUNITIES

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The only researchers responsible for contents
Objective of Study

To examine relationships between changes in the fishery, job satisfaction & well being among Rhode Island fishermen.

To provide suggestions concerning the implications of these relationships as a guide to future management efforts.

The non-economic social impact assessment model.
Figure 1. NESIA model with sector indicators.

EXTERNAL FORCES
- Status of summer flounder and other targeted stocks
- Conservation groups (NGOs)

MANAGEMENT
- TAC
- Sector plan

OCCUPATION ATTRIBUTES
- Annual rounds
- Fishing units & gears
- Cost of entry
- Resource use level
- Ownership patterns
- Location
- Safety

JOB SATISFACTION

INDIVIDUAL ATTRIBUTES
- Sense of stewardship
- Conservation ethic
- Fishing tradition
- Attitudes, beliefs & values concerning sectors

SOCIAL PROBLEMS
- Potential conflict resulting from contrasting views of sector impacts and actual sector impacts.

SOCIAL-COMMUNITY ATTRIBUTES
- Social stratification
- Power structure
- Occupational structure
- Community solidarity
- Social groups

WELL-BEING
Job satisfaction through time
What could have impacted job satisfaction?

**Figure 1. NESTA model with sector indicators.**

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**WELL-BEING**
Let’s look at management

• FCMA 1976
• Changes in stocks result in changes in rules & regulations
• Recently rules becoming stricter, more complex & subject to rapid change
• Introduction of entirely new methods of management (e.g., catch shares & sectors)
Views on Management

• Are the rules clear & straightforward?
• What are the impacts on fishing families?
• Does participation make a difference?
• Do meetings influence management plans?
Clarity of rules and regulations
3 is the mid-point, most are below 3.
Regulations that Impact Families

- All
- Days at Sea
- Groundfish Regulations
- Gear Restrictions
- Quota System
- Size/Sex Restrictions
- Catch Shares
- Area Closure
- Species Closure
- Don't Know
- Catch Limits (trip/day)
- Monkfish Regulations
- Licenses
- Limits on Crew Size
- MSA
- Other
- Too Many
- None
Impacts on Families

• Change in income
• Inability to fish
• Time spent away from home
• Stress and conflicts
• Safety
• Decreased independence
Job satisfaction through time
All advise young to fish
\[ p < 0.001 \]

All fish again
\[ p < 0.05 \]
Lobster advise young to fish
p < 0.001

1977: 66.6
2010: 40.6

Dragger advise young to fish
p < 0.001

1977: 96.8
2010: 35.6

Lobster fish again
p > 0.05

1977: 95.8
2010: 81.2

Dragger fish again
p < 0.05

1977: 93.5
2010: 73.3
Satisfaction with management
5 point scale
p<0.001

1977: 2.54
2007: 1.68
Correlation between attitudes towards management and job satisfaction (1977 & 2007).

<table>
<thead>
<tr>
<th>Needs</th>
<th>Performance of Management</th>
</tr>
</thead>
<tbody>
<tr>
<td>Basic Needs</td>
<td>0.386***</td>
</tr>
<tr>
<td>Social-psychological Needs</td>
<td>0.243*</td>
</tr>
<tr>
<td>Self Actualization</td>
<td>-0.138</td>
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</tbody>
</table>

***p<0.001   *p<0.05  N=104
ALL REGULATIONS IMPACT VERSUS OTHERS 2010
Correlations between job satisfaction and attitudes towards management process.

<table>
<thead>
<tr>
<th></th>
<th>Basic</th>
<th>Social-Psych Needs</th>
<th>Self Actualize</th>
</tr>
</thead>
<tbody>
<tr>
<td>Participation Makes a Difference</td>
<td>0.115</td>
<td>0.172</td>
<td>0.109</td>
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<tr>
<td>Meetings Influence Management</td>
<td>0.230</td>
<td>0.158</td>
<td>0.169</td>
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<tr>
<td>Regulations are Clear</td>
<td>0.279</td>
<td><strong>0.348</strong></td>
<td>0.123</td>
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</tbody>
</table>

***p<0.001  **p<0.01  *p<0.05
Correlations between job satisfaction scales and well-being indices.

<table>
<thead>
<tr>
<th>Well-being Index</th>
<th>Basic Needs</th>
<th>Social-Psychological Needs</th>
<th>Self Actualization</th>
<th>Advise Young to Fish</th>
<th>Fish Again</th>
</tr>
</thead>
<tbody>
<tr>
<td>0.394***</td>
<td>0.554***</td>
<td>0.398***</td>
<td>0.206*</td>
<td>0.367***</td>
<td></td>
</tr>
</tbody>
</table>

***p<0.001  **p<0.01  *p<0.05
WHAT HAPPENS TO JOB SATISFACTION IF FISHERMEN LEAVE THE OCCUPATION

• Does job satisfaction decrease?
• It increases on the social-psychological component but decreases for self-actualization. No difference for basic needs.
Table 5.4. Correlations between change in job satisfaction levels and individual well being.

<table>
<thead>
<tr>
<th>Change in Needs</th>
<th>Well-being</th>
</tr>
</thead>
<tbody>
<tr>
<td>Change in Basic Needs</td>
<td>-0.105</td>
</tr>
<tr>
<td>Change in Social-Psychological Needs</td>
<td>0.008</td>
</tr>
<tr>
<td><strong>Change in Self Actualization</strong></td>
<td><strong>0.517</strong>*</td>
</tr>
</tbody>
</table>

*p<0.05 (1-tail test)
So what?

• The majority of fishermen feel that participation makes little difference in management process. This indicates problematic social relationships and inadequate communication between the fishing community and management officials.

• Some fishermen find management rules and regulations unclear, especially groundfishermen. Outreach efforts aimed at facilitating greater understanding of rules and regulations would be helpful.

• A significant number of fishermen reported that “all” rather than specific regulations have had the greatest impact on families.

• This presents a challenge for the conduct of social impact assessment. It appears that cumulative impacts rather than specific management measures have had the greatest impact.
So what again?

- Management has clearly had a negative impact on job satisfaction, which we found is strongly related to fishermen’s subjective well-being.
- Although the sample of fishermen who had left fishing was small, we found a strong negative impact on the self-actualization component of job satisfaction.
- These impacts on job satisfaction are important!
Figure 6.1. Multiple impacts of job satisfaction.

WELL-BEING

LONGEVITY

HEART DISEASE

MENTAL HEALTH
  ANXIETY
  LOW SELF-ESTEEM
  WORRY
  TENSION

PSYCHOSOMATIC ILLNESS

TURNOVER

ABSENTEEISM

JOB PERFORMANCE

ACTIVITY CHARACTERISTICS

JOB SATISFACTION

FAMILY VIOLENCE

IMPAIRED INTERPERSONAL RELATIONSHIPS
Thank you

- NOAA supported expansion of this study to Northeastern US.
- Over 600 interviews between Maine and North Carolina.