So How Different is my Work from Colleagues in Other Disciplines?

Academic Chairpersons Conference
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Plan for this Session

- Explain Biglan Model and Purpose of Study
- Discuss Results of Quantitative Study
- Share Experiences in Finding Common Ground
The Biglan Model of Disciplinary Classifications

One model of distinguishing academic disciplines
The Biglan (1973) Model

- Biglan (1973) study
  - 222 faculty judges across two institutions
  - 36 academic areas
  - Multidimensional scaling

- Dimensions of disciplinary classifications
  - Structure (hard vs. soft)
  - Application (pure vs. applied)
  - Life Orientation (life vs. nonlife)
## Examples of Biglan Classifications

<table>
<thead>
<tr>
<th>Application</th>
<th>Hard</th>
<th>Soft</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pure</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Nonlife</td>
<td>Life</td>
<td>Nonlife</td>
</tr>
<tr>
<td>Astronomy</td>
<td>Botany</td>
<td>English</td>
</tr>
<tr>
<td>Chemistry</td>
<td>Entomology</td>
<td>German</td>
</tr>
<tr>
<td>Geology</td>
<td>Microbiology</td>
<td>History</td>
</tr>
<tr>
<td>Math</td>
<td>Physiology</td>
<td>Philosophy</td>
</tr>
<tr>
<td>Physics</td>
<td>Zoology</td>
<td>Russian</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Applied</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ceramic Engineering</td>
<td>Agronomy</td>
<td>Accounting</td>
</tr>
<tr>
<td>Civil Engineering</td>
<td>Dairy Science</td>
<td>Finance</td>
</tr>
<tr>
<td>Computer Science</td>
<td>Horticulture</td>
<td>Economics</td>
</tr>
<tr>
<td>Mechanical Engineering</td>
<td>Agricultural Economics</td>
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</tr>
</tbody>
</table>
Biglan’s (1973) Findings (faculty)

- Differences by Structure
  - “Hard” > “Soft” in social connectedness
  - “Hard” > “Soft” in emphasis on research/publications
Biglan’s (1973) Findings (faculty)

- Differences by Application
  - “Applied” > “Pure” in social connectedness
  - “Applied” > “Pure” in solving real-world problems
Biglan’s (1973) Findings (faculty)

- Differences by Life Orientation
  - “Life” < “Nonlife” in commitment to teaching
  - “Life” > “Nonlife” in commitment to educating graduate students for research
Smart and Elton’s (1975) Study

Applying the Biglan model to comparing goals of academic departments
Smart and Elton’s (1975) Study

- 1,198 chairs from 32 institutions
- Chair ratings of 11 departmental goals
- Key findings:
  - Hard > soft in facilitating faculty/student research
  - Soft > hard in developing collaborative climate
Smart and Elton’s (1975) Study

Key findings:

- Pure > applied in faculty/student research development
- Applied > pure in faculty/student vocational development
Smart and Elton’s (1975) Study

Key findings:
- Life > nonlife in developing new knowledge
- Nonlife > life in fostering vocational development of students
The Current Study:

A Few Details…
The Purpose of the Study

- Follow-up to Smart and Elton (1975)
- Identify underlying dimensions of 20 administrative responsibilities
- Compare chair ratings of importance of administrative responsibilities
- Compare faculty ratings of chair’s performance of administrative responsibilities
Methods

- Archival data from The IDEA Center
- 644 chairs from 61 institutions completed Chair Information Form
- 14,479 faculty completed Faculty Survey (75.9% response rate)

Inclusion criteria:
- At least 8 faculty respondents
- Only one entry per chair
- Faculty responded to at least 50% of items
## Breakdown of Departments

<table>
<thead>
<tr>
<th>Life-Orientation/Application</th>
<th>Discipline Structure</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Hard</td>
<td>Soft</td>
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<tr>
<td><strong>Life</strong></td>
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<tr>
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<td>19</td>
<td>35</td>
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<tr>
<td>Applied</td>
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<td>92</td>
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<tr>
<td>Total</td>
<td>113</td>
<td>127</td>
</tr>
<tr>
<td><strong>Non-life</strong></td>
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<td></td>
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<tr>
<td>Pure</td>
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<td>58</td>
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<tr>
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<td>46</td>
<td>78</td>
</tr>
<tr>
<td>Total</td>
<td>77</td>
<td>136</td>
</tr>
</tbody>
</table>
Factor Analysis of 20 Administrative Responsibilities

- PC with varimax rotation yielded 4 factors:
  - Personnel Management & Development
    - 6 items ($\alpha = .80$)
  - Developing Positive Climate
    - 4 items ($\alpha = .84$)
  - Academic Support/Program Leadership
    - 5 items ($\alpha = .76$)
  - Building Image
    - 2 items ($\alpha = .84$)
Personnel Management and Development

- Stimulates research and scholarly activity
- Guides development of procedures for assessing faculty
- Facilitates obtaining grants and contracts
- Recognizes and rewards faculty for their contributions to dept.
- Takes the lead in recruiting promising faculty
- Guides development of sound organizational plan
Developing Positive Climate

- Develops collegiality/cooperation among faculty
- Establishes trust between self and faculty
- Fosters development of faculty talents or interests
- Stimulates/rejuvenates faculty vitality/enthusiasm
Administrative Support/Program Leadership

- Attends to essential administrative details
- Communicates expectations of campus administration
- Guides curriculum development
- Fosters good teaching in the department
- Acquaints new faculty with department procedures
Building Image

- Improves department image with off-campus constituencies
- Improves department image within campus community
Statistical Analyses

- MANOVA on chair ratings of importance
  - Univariate ANOVA follow-ups
- MANOVA on faculty ratings of performance
  - Univariate ANOVA follow-ups
Results: Chair Ratings of Importance

- No significant two- or three-way interactions
- Main effect for life-orientation
  - Personnel Management & Development
    - Life-oriented (e.g., botany, psychology) > nonlife-oriented (e.g., geology, accounting)
  - Developing Positive Climate
    - Life-oriented > nonlife-oriented
Results: Chair Ratings of Importance

- Main effect for structure
  - Personnel Management & Development
    - Hard (e.g., chemistry, agronomy) > Soft (e.g., English, special education)
Results: Faculty Ratings of Performance

- No significant two- or three-way interactions
- No significant main effects
Similarities with Smart & Elton (1975)

- Chairs from life-oriented departments place more importance on research and faculty development than do non-life oriented.
- Chairs from life-oriented departments place more importance on supporting faculty talents and interests than do non-life oriented.
SUMMARY

- More similarities than differences in importance of administrative responsibilities
- Faculty ratings of the chair’s performance are similar across departmental classifications
- The IDEA Department Chair system is generalizable across disciplines
- Chairs have much in common with their colleagues in other departments
Discussion

- Departmental goals are more similar than 35 years ago. Why?
- What are your experiences in finding common ground with colleagues in other departments?