Preparing Master’s Level Students in I/O Psychology for Analyst Level Work: Bridging the Scientist / Practitioner Divide

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Overview

- The MSIO degree and the Scientist / Practitioner divide!
  - Overview of CSUSB’s MSIO program
  - The Scientist / Practitioner Divide
  - Best practices for bridging the divide

Table 6 - *Overall Rankings of Top 20 Institutions/Programs*

<table>
<thead>
<tr>
<th>Institution/program</th>
<th>Ranking score (0 to 1)</th>
<th>Z-score</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Middle Tennessee State University</td>
<td>.87</td>
<td>2.14</td>
</tr>
<tr>
<td>2. Minnesota State University, Mankato</td>
<td>.83</td>
<td>1.84</td>
</tr>
<tr>
<td>3. Florida Institute of Technology</td>
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<td>1.54</td>
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<tr>
<td>4. Southern Illinois University at Edwardsville</td>
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<tr>
<td>5. University of West Florida</td>
<td>.76</td>
<td>1.23</td>
</tr>
<tr>
<td>6. University of Tennessee at Chattanooga</td>
<td>.76</td>
<td>1.19</td>
</tr>
<tr>
<td>7. Saint Cloud State University</td>
<td>.76</td>
<td>1.18</td>
</tr>
<tr>
<td>8. Appalachian State University</td>
<td>.75</td>
<td>1.15</td>
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<tr>
<td>9. George Mason</td>
<td>.75</td>
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</tr>
<tr>
<td>10. Western Kentucky University</td>
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</tr>
<tr>
<td>11. St Mary’s University</td>
<td>.74</td>
<td>1.06</td>
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<tr>
<td>12. San Francisco State University</td>
<td>.74</td>
<td>1.05</td>
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<tr>
<td>13. University of Detroit Mercy</td>
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<td>.93</td>
</tr>
<tr>
<td>14. University of Central Florida</td>
<td>.72</td>
<td>.90</td>
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<tr>
<td>15. California State University, San Bernardino</td>
<td>.71</td>
<td>.80</td>
</tr>
<tr>
<td>16. Central Michigan University</td>
<td>.71</td>
<td>.76</td>
</tr>
<tr>
<td>17. San Diego State University</td>
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<td>.73</td>
</tr>
<tr>
<td>18. Eastern Kentucky University</td>
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<td>.72</td>
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<tr>
<td>19. Illinois State University</td>
<td>.69</td>
<td>.64</td>
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<tr>
<td>20. Angelo State University</td>
<td>.69</td>
<td>.63</td>
</tr>
</tbody>
</table>

SOURCE: *Ranking I-O Master's Programs Using Objective Data From I-O Coordinators – TIP, March 2018*
CSUSB’s MSIO Program
Curriculum – Now vs 2020

- Currently 75 quarter units *(ranked #5 nationally)*
- Will be 46 semester units starting Fall 2020
- Still very stat / research methods / measurement focused *(multivariate optional)*
- Thesis, Internship, and Practicum still required
- Major domains of I/O psychology still required
  - Selection, Job Analysis, Performance Mgt, Training
  - Adding courses in OHP and Diversity/WFB
CSUSB’s MSIO Program
Example Recent Theses Completed

- DEVELOPMENT AND CONSTRUCT VALIDATION OF HOGAN’S RAW MODEL OF EMPLOYABILITY: THE WILLINGNESS TO WORK HARD COMPONENT, Amanda V. Gonzales, 06/2017

- AN EXAMINATION OF THE RELATIONSHIP BETWEEN INCLUSIVE LEADERSHIP AND GENERAL ORGANIZATIONAL MEANS-EFFICACY: THE MEDIATING ROLES OF JUSTICE, TRUST, AND LEADER-MEMBER EXCHANGE, Jazmine M. Bennett, Date: 03/2017

- Organizational Success in the Big Data Era: Development of the Albrecht Data-Embracing Climate Scale (ADEC), Lauren R. Albrecht, 09/2016

- WORKING HARD OR HARDLY WORKING? THE RELATIONSHIP AMONG WORK MEANINGFULNESS, HEAVY WORK INVESTMENT, AND PSYCHOLOGICAL WELL-BEING, Yalda Shefa, 06/2016

- AN EXPLORATORY ANALYSIS OF THE COMMITMENT-TURNOVER INTENTIONS RELATIONSHIP: THE MODERATING EFFECTS OF EMBEDDEDNESS, Michael E. Sisikin, 03/2016

- PERSON-CORPORATE SOCIAL RESPONSIBILITY FIT: CONSIDERING THE EFFECTS OF CORPORATE VALUES ON FIT WITHIN THE ORGANIZATION, Brittney Winters, 12/2015
CSUSB’s MSIO Program

Example Recent Internship Placements

**Public Sector**
- City of Los Angeles
- County of Riverside
- LACOE
- CSUSB – IR, COE
- City of San Bernardino
- UC Riverside
- City of Temecula
- RCC District
- LAUSD
- HLPUSD
- HACU – Washington, DC

**Private Sector**
- Northrup Grumman
- Performance Team LLC
- Disney Headquaters
- Rushmore Loan Mgt Services
- Tokio Marine Mgt
- Target
- AFLAC
- SCE
- LifeStream (non profit)
- HARC (non profit)
- City of Hope (non profit)
CSUSB’s MSIO Program

Example Recent Practicum Projects

- County of Riverside - HR job audits
- First 5 of California – Program Evaluation
- SB City Schools – Job Analyses
- CSUSB – HR, creation of electronic performance appraisal processes
- Private industrial company based in Colorado – Interviews and surveys to align HR practices
CSUSB’s MSIO Program

CSUSB and SIOP Training Guidelines

SIOP Training Guidelines

- Six general knowledge and skills (e.g., statistics, research methods, legal and ethical issues, etc.)
- 18 Core Content areas (e.g., individual differences, selection, recruitment, leadership, performance management, training, OHS, etc.)
- Two related areas (consumer behavior and human factors)
- Now also categorized as Introduced, Practiced, and Demonstrated
Origin of Scientist-Practitioner Model

**Boulder Model**

- Conference in 1949
- Model for graduate student training in clinical
- Train psychologists to integrate science and practice
- One domain would inform activities in the other domain
- Reciprocal relationship between S & P
- Applies just as well to I/O Psychology
Three Pronged Approach to the S-P Model

1. Work with measures that are important
2. Measure outcomes that are important
3. Share knowledge effectively

Both Scientists and Practitioners agree on these three points

But do they always agree on what is most important?
I/O Psyc is Not Alone with the S-P divide

- Other fields have S-P gaps as well
  - Finance
  - Business
  - Healthcare
  - Software Engineers
  - Clinical Psychology
Reasons for the S-P gap

- Practice may underutilize available science
- Science may undervalue innovations in practice
- Science may not produce research findings that are relevant to practice
- Practice might not provide sufficient opportunities to research relevant issues
- Different reward systems for S & P
- Limited organizational resources
- Science is difficult to apply
- Insufficient time or motivation by both researchers and practitioners
Where does the gap exist?

- The Great Divide!
  - Motivation related issues is higher among academics
  - Compensation and Rewards was driven by practitioners

- Equal
  - HR Development
  - Staffing
  - Employee/Labor Relations (in recent years, used to be practitioner driven)
Recommendations for practitioners to bridge the divide...

- Continually read current journals and support academics
- Use research information in applied setting
- Mentor new peers to not accept or tolerate the selling of scientifically questionable tools
- Attend joint forums such as at SIOP or LEC
- Talk to organizational decision makers and suggest scientifically sound methods as “best practice” and valuable
Recommendations for scientists to bridge the divide...

- Continuous practical education and experience
- Focus on “real-life” problems
  - What is the practical implication of this study?
- Ask practitioners to review research questions and suggest revisions
- More flexible criteria for what is accepted in top tier journals and celebrated in academic communities
- Teach grad students how to conduct scientifically sound field research and diagnosis

Make research more digestible to the lay audience
Impediments to Bridging the Divide

- Some research focuses on obscure topics
  - Multilevel modeling with moderators and mediators of nonlinear relationships
  - Practitioners want clear-cut recommendations

- Access to data
  - Some journals are costly $$$
  - Open access journals?

- Slowness
  - *Scientists* - takes forever to write, re-write, and publish
  - *Practitioner* - have to go through legal paperwork and approval just to begin to gather data
What must be done moving forward?

- Publicize collaboration efforts and successes
- Make access to knowledge more accessible in both directions
- Continue to educate graduate students in both science and practice
- Need to avoid dichotomizing the two, instead think of it as a continuum
Discussion on a Path Forward...

- Ideas for how best to prepare students as true scientist-practitioner professionals?

- Ideas for creating an evidence based best practices culture in HR?
Summary and Conclusion

- CSUSB’s MSIO curriculum maps well on the SIOP Guidelines for graduate level training in terms of General Knowledge and Skills, as well as Core Content areas.
- We need to be sure to balance knowledge accumulation and skill building.
- Well trained practitioners are more likely to press for evidence based best practices.
- Continued efforts to bridge the divide will require commitment from both S and P!