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Valuation of Scholarly Activities for Physical Therapy Faculty

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Valuation of Scholarly Activities for Physical Therapy Faculty

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Introduction

- Physical therapy faculty are required to participate in scholarly endeavors. Scholarly productivity is frequently evaluated based on quantity of production.[1,3,6]
- This approach fails to account for quality such as authorship order, presentation audience or funding agency.[5]

Aims of this study:

1. Compare physical therapy education program scholarly productivity valuations between programs of varying Carnegie Classifications
2. Establish a scholarly activity measure which accounts for quality
3. Provide an applied example of the new measure

Methods

- Online surveys were sent to 226 Physical Therapy Education Program Directors at CAPTE accredited institutions utilizing Dillman's Survey Protocol.[2]
- Institution Basic Carnegie Classifications[4] were determined.
- Respondents were asked to value 30 scholarly activities (e.g. grants, publications, presenations and patents) on a 0-20 scale (Figure 1). Nine additional questions asked about bonus value (0-100%) for impact factor, authorship order, role on a grant, and grant competetiveness (Figure 2)
- The mean for each scholarly component was the value that component contributed to the Scholar Score.
- Comparisons were performed via ANOVA models

Figure 1. Example question

This question asks you to place a value on EXTERNAL grant funding. Please assign a value between 0 and 20 for each of the five options. For this question, consider grants to be competitive in nature and include the total grant amount (direct + indirect). Later in the survey you'll be asked about non-competitive grant funding. These values should reflect the importance of each type of grant activity for physical therapy faculty.

As a reminder, a peer reviewed journal article (value of 10) is the measuring stick that all other items are to be compared against.

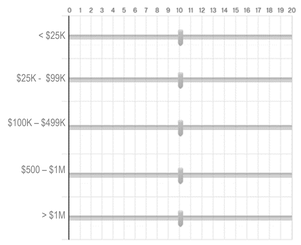
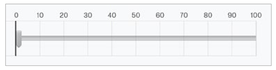


Figure 2. Example question showing a bonus value.

This question asks you to place a value on the IMPACT FACTOR of journals. Move the slider to a percentage value between 0% - 100% that reflects the added bonus you assign to the impact factor of the journal in which a physical therapy faculty member is published.

Choosing 0% would indicate the Impact Factor of a journal is unimportant and carriers no weight while a score of 100% indicates that impact factor carries significant weight and has great value.



Components of Scholarly Activity Examined

Publication		
Journal Article • Peer-reviewed[a] • Non-peer reviewed Abstract • Peer-reviewed • Non-peer reviewed	Book • Authored • Edited • Reviewed Book Chapter • Authored	Authorship Order • First • Second • Last • Not 1st, 2nd, or last
Grant		
Internal Grant Funding • Less than $10K • $10K - $24K • $25K - $49K • $50K-$100K • Greater than $100K	External Grant Funding • Less than $25K • $25K - $99K • $100K - $499K • $500K-$1M • Greater than $1M	Role on a Grant • Research Assistant • Co-Investigator • Principal Investigator (PI) & Co-PI
Presentation		
Type • Poster or Platform • Education session	Selection Method • Peer-reviewed • Invited	Audience • Local • State/Regional • National • International
Patent		
• Pending • Received		

[a] Publication type that all other items were compared against.

Results

- Potential respondent pool = 222 because 4 of 226 e-mails were undeliverable
- Response Rate = 27% (59/222)
- Academic rank of respondents: Professors (n=28), Associate Professors (n=28) and Assistant Professors (n=3)
- Carnegie Classifications[4] of respondents' institutions are shown in Figure 3
- Significant effects of Classification were observed for two bonus items. Post hoc comparisons using the Bonferroni correction are shown in Figure 4

Figure 3. Basic Carnegie Classifications[4] of respondent's institutions

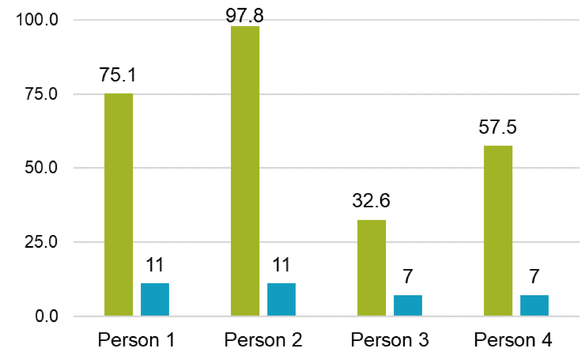
Carnegie Classification[4]	Surveys Sent	Surveys Received	Response Rate (%)
Doctoral	93	26	44%
Special Focus	36	11	19%
Masters	93	22	37%
Baccalaureate	4	0	0%
Total	**222**	**59**	**27%**

Figure 4. Differences of scholarly activity components

Scholarly Activity Component	Carnegie Classification[4]	Mean % Bonus	SD	p-value
Authorship Order: Last	Doctoral Masters	53.5 25.9	±34.4 ±28.7	0.015
Grant Role: PI/Co-PI	Doctoral Masters	77.3 49.0	±36.7 ±32.5	0.030

Applied Example of the Scholar Score

Responses were used to develop a Scholar Score based on perceived quality. Scholarly achievements from curriculum vitae of four early-career physical therapy faculty demonstrates the application of this new measure.



Conclusions

- The Scholar Score was developed from Physical Therapy Program Director input. Directors from different Carnegie Classified institutions reported similar values for most components.
- This indicates the Scholar Score may be generalizable to PT faculty across all Carnegie Classifications. Our application example demonstrates how quantity and quality-based descriptions differ.

A Scholar Score offers a clear and uniform, peer-validated approach to the valuation of scholarly activities for PT educators.

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