

Using Acknowledgments to Demonstrate Impact in STEM: An Underutilized Altmetric?

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Acknowledgments - Definition

“an author's statement of indebtedness to others”
(Acknowledgment, 2017)

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(Peterson & Scholthof, 2010)

Acknowledgment Studies

- Earliest studies of acknowledgments
 - Mackintosh (1972) and Chubin (1975)
- Blaise Cronin pioneered the field in the 1990s
 - Let the Credits Roll (1991)
 - The Scholar's Courtesy (1995)
 - About 20 articles from 1991 to 2012
- Types of Acknowledgment Studies (IMHO)
 - Typology
 - Textual Analysis
 - Funding Sources
 - Sociology of Science

See Desrochers, Paul-Hus, and Pescoskie (2017) for a meta-analysis of acknowledgment research.

Acknowledgment Studies (con't)

- Using acknowledgments to demonstrate the impact of libraries: (Finnell, 2014; Scrivener, 2009; Stigberg et al., 2015; Hubbard and colleagues)
- Articles focused on acknowledgments, libraries, and STEM:
 - Demonstrating Library Impact Through Acknowledgment: An Examination of Acknowledgments in Theses and Dissertations. (Hubbard, Laddusaw, Kitchens, & Kimball, 2018)
 - Representation of Libraries in Funding Acknowledgments. (Hubbard & Laddusaw, 2019)
 - Acknowledgment of Libraries in the Journal Literature: An Exploratory Study. (Hubbard & Laddusaw, 2020)

Acknowledgment Typologies

- Citing Cronin et al. (1992), Costas and van Leeuwen (2012) list the following types of acknowledgments:
 - Moral Support
 - Access
 - Clerical Support
 - Technical Support
 - Financial Support
 - Peer Interactive Communication
- Other typologies exist (e.g. Paul-Hus & Desrochers, 2019)

Acknowledgment Sources

- CiteSeer and AckSeer (Giles & Council, 2004, Khabisa et al., 2012)
- Web of Science
 - Includes funding acknowledgment text
 - SCI (2008), SSCI (2015), AHCI (2017)
(Mangan, 2019; J. Figueroa, personal communication, July 10, 2020)
 - Only acknowledgments with funding information
- Scopus
 - Funding acknowledgment text added in 2017 (Beatty, 2017)
 - See Liu (2020) for a Scopus - Web of Science comparison
- Dimensions
 - Includes all acknowledgments, not just those with funding
 - No field searching, though using an API may be an option

Acknowledgments as an Altmetric?

- Altmetrics are “generally understood as metrics that measure impact beyond citations...” (Haustein et al., 2016 p. 374)
- Acknowledgments fit that definition, but almost never mentioned.
- Acknowledgment-based metrics mentioned in the 1990s, then discussed for the next 30 years.
- I personally believe that acknowledgments can provide information for richer qualitative assessments and narratives, though probably not as a metric or indicator.

Selective Use Cases in STEM (Impact)

- **Funding Acknowledgments**

- Funding Organizations
 - Locating research funded
- National or Global
 - Examining funding trends
- University
 - Exploring funding awarded
- Individual
 - Identifying areas funded

Selective Use Cases in STEM (Impact)

- **Acknowledgment of Individuals**

Case: A researcher may provide support to others (access, technical, etc.), though it doesn't rise to the level of co-authorship.

Approach: Search acknowledgments for the researcher by name.

Example: "We thank [Named Professor] for valuable comments and for sharing computational resources."

Selective Use Cases in STEM (Impact)

- **Acknowledgment of Centers, Core Facilities, etc.**

Case: A unit within the university, like a center or core facility, may provide technical support to researchers and they may want to verify that support is being acknowledged.

Approach: Search acknowledgments for the name of the center, core facility, etc. Like name searches, consider name variants.

Example: “The authors also want to acknowledge [Named Researcher] for valuable discussion and the Laboratory for Molecular Simulation at Texas A&M University for providing computing resources.”

Selective Use Cases in STEM (Impact)

- **Acknowledgment of STEM Librarians and Libraries**

Case: A librarian or library may provide technical expertise to researchers, though it doesn't rise to the level as co-authorship.

Approach: Search acknowledgments for the name of the librarian or library. Like the previous searches, name ambiguities and variants exist.

Examples:

(1) "The authors would like to thank [Named Librarian] for her guidance on systematic literature review methods..."

(2) "Maps were generated with help from the Map and GIS Collections and Services at the Texas A&M University Libraries. State boundaries, coastline and bathymetry data are from Tobin Global Planner..."

Conclusion

- Acknowledgments are an important aspect of the scholarly communications that are worth exploring.
- Web of Science and Scopus include the full text of funding acknowledgments, which is readily searchable through the Advanced Search. Dimensions includes the full text of all acknowledgments, but not as easily searchable.
- Acknowledgments may be used to demonstrate impact of STEM organizations, researchers and librarians.
- The number of acknowledgments is often small, but may provide a means for richer qualitative information for assessments and narratives though probably not as a metric or indicator.

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Questions?