Common Scientific Sources and Best-Use Cases

Source	Best Uses	Audience	What to Consider
Social Media	• Exposure to popular scientific thought • Pre-prints (publications submitted for peer-review) • Locating web articles/current news	• Varies-- ranges general to scholarly • #scicomm • #sciencetwitter	• Authors or content creators can be ANYONE, including researchers and database companies • Breaking/trending news may need to be corrected for accuracy
Websites	• Often "news" or current information • Grant/Funding Information • Finding different opinions • Government/Non-profit information	• Varies-- ranges general to scholarly	• Credibility and accuracy may be more difficult to determine • Bias depending on author(s)/publisher(s) • Sources rarely cited or cited "in-text" as URLs
Preprints	• Finding cutting edge research ahead of t he information cycle timeline for articles	• Computer scientists, physicists. mathematicians, chemists, biologists, and much more.	• Preprints are not peer reviewed and may never be published in a scholarly journal. • Some preprint servers have more rigorous standards than others (i.e., arXiv)
Posters	• IMRaD format for research • Uses visuals to demonstrate trends/evidence/findings	• Professionals, researchers, students	• Format of the poster • Research may/may not be up for publication
Conference Proceedings	• Identifying current research trends • Specialized information related to a particular profession or discipline	• Professional organizations, researchers, government orgs, grant agencies	• May only be an abstract without a paper (a talk) • Could be an interview or panel transcript w/ different levels of panel member expertise
Scholarly Journals	• In-depth and specific research • Focused and peer-reviewed articles • Statistics, data, charts, graphs, and analysis • Mostly sorted into Original Research Articles and Review Articles.	• Scholars, researchers, professionals, and students	• Authors are experts and their credentials are provided • Terminology may be difficult for inexperienced readers or those outside the field of study • Double-check peer-review status of the journal on Ulrich's Web
Books	• Comprehensive overview of a topic • Background and historical context • Commonly field guides or picture-based	• Varies-- ranges general to scholarly	• Information may be quickly outdated • Bias (depending on authors and publishers) • Written to inform AND/OR entertain • Should include an "endnotes" or works cited section in the back if scientific in nature

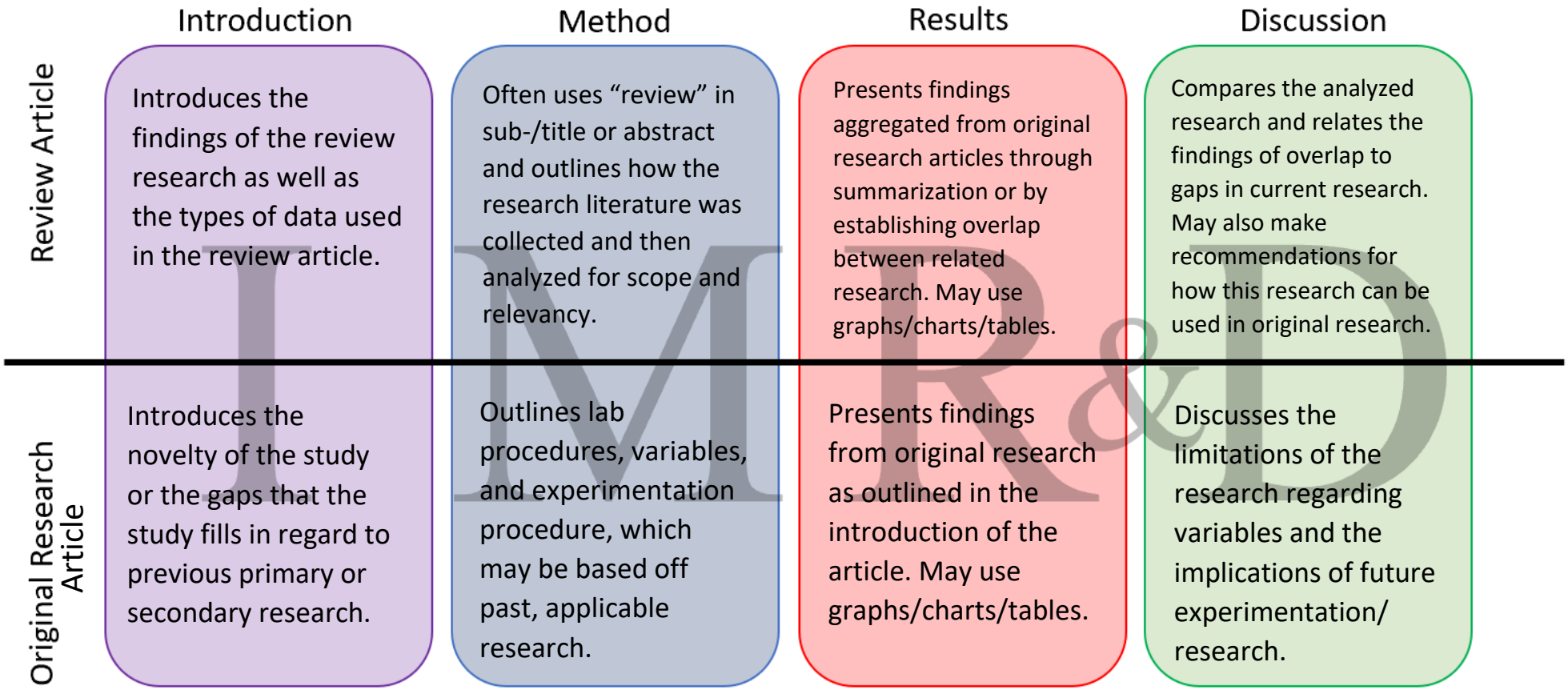
Using IMRaD Format to Identify Original Research from Review Articles

Original research articles (primary) are great for:

- Establishing methods of research.
- Discovering current topics (date dependent).
- Citing research to back up your research ideas/proposals.

Review articles (secondary) are great for:

- Reading about past/historical research.
- Obtaining a broad overview about a topic.
- Grounding yourself in the literature.
- Review articles may not have these distinct sections/headings, but are often organized in a similar manner.



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