

A41 The Impact of Forensic Anthropology Manuscripts in the *American Journal of Physical Anthropology*

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Learning Overview: After attending this presentation, attendees will have learned the frequency and impact of forensic anthropological manuscripts in the *American Journal of Physical Anthropology (AJPA)*.

Impact on the Forensic Science Community: This presentation will impact the forensic science community by highlighting the type of forensic anthropology manuscripts published in, and thus valued by, the *AJPA*, a flagship journal for biological anthropological research.

Dissemination of research is essential to any scientific discipline. In forensic anthropology, advances in methodology improve identification efforts, and the validation of such methodology ensures the discipline maintains *Daubert* compliance. In accordance with *Daubert*, the standard for peer-review necessitates publication in suitable journals, but until recently no such journal existed solely for forensic anthropological research. In particular, the *AJPA* serves as a prestigious publication venue due to its high publication count, averaging over 200 manuscripts per year since 2010, and high(er) impact factor (2.414). However, while the *AJPA* has been at the forefront of biological anthropological research since its inception in 1918, forensic anthropology's position is questionable. Forensic anthropology is only one small part of biological anthropology, focusing on individuals rather than populations and adhering to *Daubert* standards of validation not required by the rest of the discipline. Understanding how these differences may affect the structure of forensic anthropological manuscripts published in the *AJPA* is crucial. The primary purpose of this study was to assess the presence, impact, and structure of forensic anthropological articles in the *AJPA* to ultimately determine whether the *AJPA* should remain a pivotal journal for forensic anthropological research.

Descriptor data (e.g., manuscript titles, authors, keywords, citation counts) and abstracts for all research articles in the *AJPA* were obtained using the “rvest” package in R. Forensic anthropology articles were identified using the keyword *forensic* to assess presence over time and the average citation count. Text analysis in R using the “tidytext” package assessed word frequency, correlations, and predictors (via term frequency-inverse document frequency (tf-idf) scores). A second sample of abstract text from all research articles published in the journal *Forensic Anthropology (FA)* was used as a neutral control for comparison between forensic and non-forensic articles in the *AJPA*; these data underwent the same text analysis procedures.

Results suggest that while the *AJPA* is respected as a prestigious publication venue in forensic anthropology, forensic articles make up less than 2% of all *AJPA* articles. Interestingly, forensic anthropology manuscripts accrue relatively large citation counts, representing 13% of the most-cited *AJPA* articles and making up the top three most-cited articles in the *AJPA*, overall. When word frequency is assessed, non-forensic articles in the *AJPA* were characterized by: “age,” “data,” “populations,” “study,” and “human” most often, while articles from *FA* were characterized by “forensic,” “individuals,” “remains,” “age,” and “skeletal.” Forensic articles in the *AJPA* focus on “age,” but are similar to the *FA* manuscripts through commonalities such as “forensic,” “individuals,” and “skeletal.” These word frequencies reflect a broad focus on human populations in biological anthropology and a more specific focus on skeletal individuals in forensic anthropology. Next, tf-idf scores were calculated for non-forensic *AJPA*, forensic *AJPA*, and *FA* articles. Of the top ten selectors in the non-forensic *AJPA* articles, four relate to primates and three to dentition. In contrast, the *FA* article selectors follow a strong trauma focus, with “fractography,” “kerf,” “saws,” and “kerfs” among the top ten. Forensic *AJPA* article selectors are heavily methodologically focused, featuring words such as “ages,” “pronasale,” “race,” “fusion,” and “indicator.”

Results indicate forensic articles in the *AJPA* align with the overall forensic anthropological focus on methodology and validation, but are more applicable across biological anthropology. Forensic anthropology has a minimal but impactful presence within the *AJPA*, as the majority of articles accepted focus on methodology applicable across biological anthropology rather than just to the discipline of forensic anthropology.

AJPA, Text Analysis, Publications