Salary, Wage Transparency, and Forensic Anthropology

Nicholas V. Passalacqua[1]; Elaine Y. Chu[2]; Marin A. Pilloud[2]

[1]Anthropology and Sociology Department, Western Carolina University; [2]Anthropology Department, University of Nevada, Reno

Arguments for wage transparency

- Wage transparency narrows salary disparities, specifically for the most underpaid individuals (Gomez and Wald 2010:122).
- Reduces favoritism, discrimination, and corruption (Azfar and Nelson Jr 2007).
- Increases the bargaining power of employees; and potentially causes employers to focus on salary differentiation in terms of productivity and seniority (Estlund 2014).

Arguments against wage transparency

- Wage data are meaningless without also providing individual performance data (Gomez and Wald 2010:113).
- Attaching individual names to salaries is an invasion of privacy, instead wages should be blinded or averages (Gomez and Wald 2010:115).
- Disclosure of public-sector salaries may demonstrate that public servants are underpaid in comparison to their private-sector counterparts (Gomez and Wald 2010:115).
- The costs of lower paid employees' dissatisfaction and increased likelihood to leave, exceeds the savings of higher-paid employees' satisfaction and increased likelihood to stay (Card et al. 2012).

Materials and Methods

Salary information for current AAFS anthropology section members was searched on free public internet databases. The following information also examined for each individual: sex, terminal degree, certification by the ABFA, years active, type of position (academic vs applied), academic institution classification (using Carnegie Classifications), and rank of employee (e.g., assistant professor, director, etc.).

Salary index was created for all individuals using the following formula:

Salary Index = annual salary/cost of living/term length

For example: an individual making $90,000.00 in California (COI=138.7) employed in a nine month position, would have a salary index of 72.09 (90000/138.7/9=72.09), while and individual making $68,000.00 working in North Carolina (COI=94) in a 10 month position would have a salary index of 72.34 (68000/94/10=72.34).

Results

Salary information was available for 114 individuals (females=74, males=40) from various academic (n=77) and applied (n=37) institutions (Figure 01). For individuals employed at academic institutions, most had traditional ranks (n=14 term positions, n=25 assistant professors, n=15 associate professors, and n=20 full professors), a number also had additional administrative duties (n=13), such as program director, department head, facility director, etc. (see Figure 1).

There was a statistically significant (p<0.01) difference between mean salary index of Academic and Applied forensic anthropologists, and the two sub-groups along with a pooled sample were used for further analysis (Table 1).

Salaries had high variability, particularly applied positions

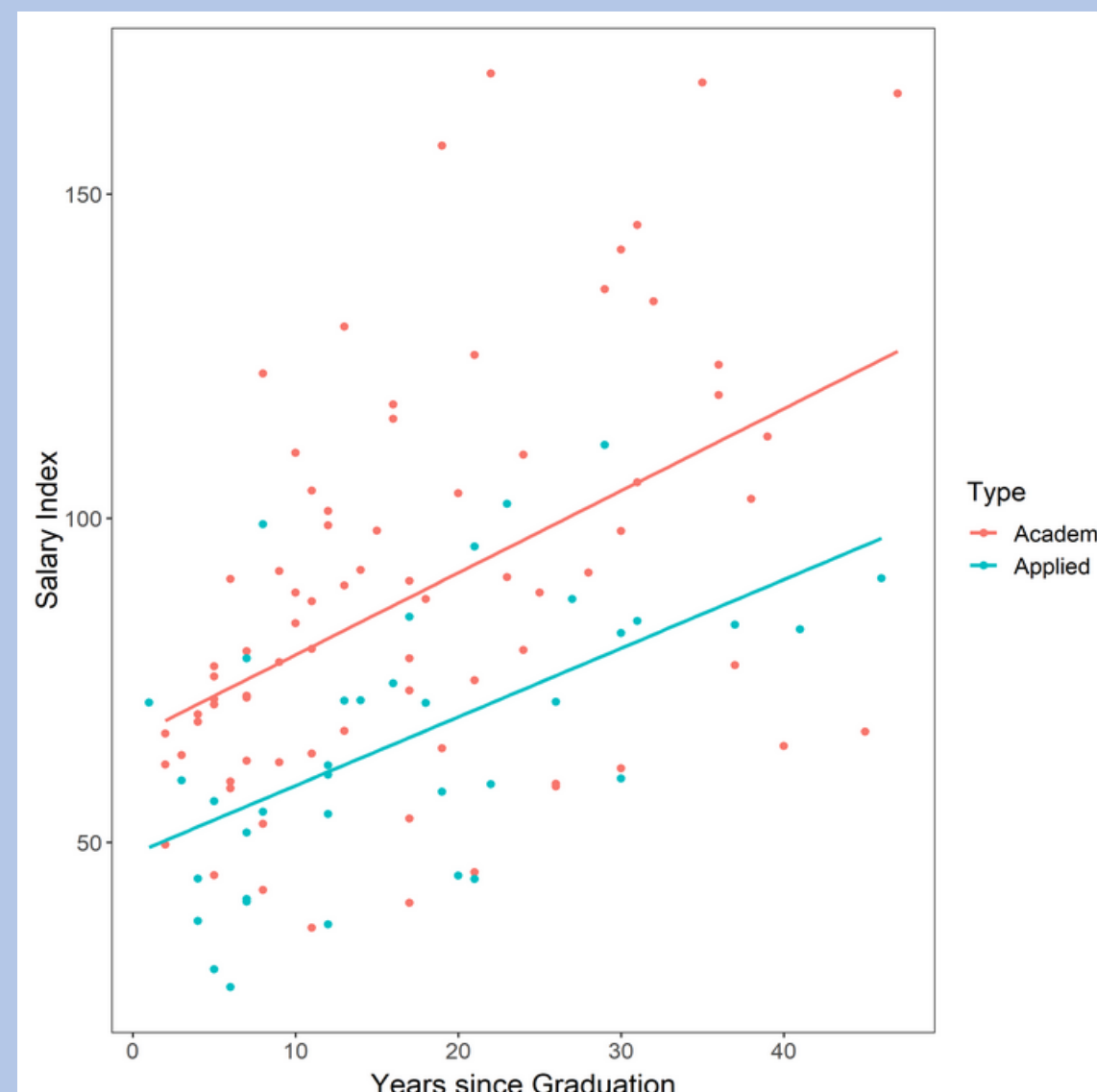**No models could estimate Salary Index with precision**

Figure 1. Distribution of Salary Index and Years Active by Type of Employment

Table 01. Mean decrease in accuracy (MDA) of variables from generated random forest models. Negative MDA models indicate situations in which models performed better without that variable.

Variables	All FAs	Academic FAs	Applied FAs
Active years	16.17	6.37	14.18
Terminal Degree	4.97	2.57	0.70
Sex	0.97	-1.33	-1.71
ABFA Certification	2.61	-3.01	7.47
Rank	33.04	31.67	-
Classification	19.66	16.72	-
Administrative Duties	8.51	7.94	-
Lab Time	3.31	-	-1.04
Type	4.15	-	-

Conclusions

This project found inconsistencies in pay for forensic anthropologists, especially for those working in the Applied sector (*pseudo R2*=0.15). Using the variables available, random forest modeling was only able to account for 48.36% of the variation seen in Salary Index for academic forensic anthropologists. Variables such as rank, basic classification of institution, and additional administrative duties were the most important variables for the academic random forest model. Finally, salary transparency paired with increased standardization into the qualifications of forensic anthropologists may assist in future salary equity in the discipline.