Data Article

# Analysis of dataset on editorial board composition of Dove Medical Press by continent

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## ARTICLE INFO

## ABSTRACT

This article presents the frequency of distribution of editorial members of Dove Medical press, across the world based on their official stated affiliations. Uneven distributions across the six continents were observed and this was confirmed by the Chi-square test of goodness of fit. Further research can focus on data on the gender composition, distribution of the affiliations of the first or corresponding authors of the respective journals, citation and editorial board composition based on the abstraction and indexation of the journals.

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## Specifications table

| | |
|---|---|
| Subject area | Decision Sciences |
| More specific subject area | Bibliometrics, Statistical data analysis |
| Type of data | Table, Figure and MS Excel |

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| How data was acquired | The data was obtained from freely open access Dove medical press journals which is a part of Taylor and Francis Group, the academic publishing arm of Informa PLC |
| --- | --- |
| Data format | Raw, partially analyzed |
| Experimental factors | Patterns of distribution of editorial members across the world based on their official stated affiliations. |
| Experimental features | Statistical analysis of editorial composition across the continents |
| Data source location | Dove Medical Press |
| Data accessibility | All the data are in this data article |

### Value of the data

- The dataset can be helpful in bibliometric and research evaluation analysis.
- The data analysis can be extended to obtain the editorial board composition based on the journal indexing such as Scopus, PubMed, Web of Science and so on.
- The dataset can provide insight to the theoretical and observed expectation of the editorial board composition using the Chi-square test of goodness of fit.
- The data can be helpful in efficient smart campus and journal management.
- The data analysis can be extended to include the gender composition and distribution of the affiliations of the corresponding or first authors of the journals.
- Other known statistical tools may be applied to the dataset for more exploration.

## 1. Data

The dataset contained in this article are the official stated affiliations of the members of the editorial boards of 109 journals published by the Dove medical press. The editorial board membership of each journal comprises of the editor in chief, associate editors, statistical editor (if applicable) and the other members of the editorial board. The affiliations are grouped according to the six continents. The continents are denoted as follows: North America (NAM), Europe (EURO), Asia (ASIA), South America (SAM), Australia (AUST) and Africa (AFR). The raw dataset can be assessed as Supplementary data. Similar dataset can be obtained which can focus on data on the gender composition, distribution of the affiliations of the first or corresponding authors of the respective journals, citation and editorial board composition based on the abstraction and indexation of the journals such as Emerging Sources Citation [1], Scopus [2] and PubMed [3].

### 1.1. The total editorial board composition

The description statistics was obtained for the total editorial board composition of the 109 journals. This is shown in Table 1.

**Remarks.** As of this writing, Dove Medical press has a total of 2120 editorial board members for 109 journals. The dataset is moderately positively skewed with a coefficient of skewness of 1.317 (this is because of the presence of a few extreme values). On the average, any randomly selected journals would have approximately $19 \pm 8$ people in its editorial board.

### 1.2. Distribution of editorial board membership across the six continents

Descriptive statistics of the respective six continents are done to explore the patterns of distribution that is only summarized in Table 1. This is shown in Table 2. The frequency is shown in details in Fig. 1**a, b, c, d, e** and **f**.

**Table 1**
Descriptive statistics of the total editorial board composition of 109 Dove medical press.

| | | |
|---|---|---|
| N | | 190 |
| Mean | | 19.45 |
| Median | | 17 |
| Mode | | 16 |
| Std. Deviation | | 8.18 |
| Variance | | 66.916 |
| Skewness | | 1.317 |
| Std. Error of Skewness | | 0.231 |
| Kurtosis | | 1.946 |
| Std. Error of Kurtosis | | 0.459 |
| Range | | 42 |
| Minimum | | 8 |
| Maximum | | 50 |
| Sum | | 2120 |
| Percentiles | 10 | 11 |
| | 20 | 13 |
| | 25 | 14 |
| | 30 | 15 |
| | 40 | 16 |
| | 50 | 17 |
| | 60 | 19 |
| | 70 | 22 |
| | 75 | 23.5 |
| | 80 | 25 |
| | 90 | 32 |
| | 95 | 36 |

**Table 2**
Descriptive statistics of the editorial board composition of 109 Dove medical press across the six continents.

| | | NAM | EURO | ASIA | SAM | AUST | AFR |
|---|---|---|---|---|---|---|---|
| Mean | | 10.58 | 5.16 | 2.55 | 0.32 | 0.54 | 0.30 |
| Std. Error of Mean | | 0.574 | 0.406 | 0.271 | 0.078 | 0.102 | 0.059 |
| Median | | 9.00 | 4.00 | 2.00 | 0.00 | 0.00 | 0.00 |
| Mode | | 8 | 2 | 1 | 0 | 0 | 0 |
| Std. Deviation | | 5.997 | 4.239 | 2.830 | 0.815 | 1.067 | 0.616 |
| Variance | | 35.968 | 17.966 | 8.009 | 0.664 | 1.139 | 0.380 |
| Skewness | | 1.255 | 1.397 | 2.374 | 4.149 | 2.868 | 2.126 |
| Kurtosis | | 1.905 | 2.623 | 8.598 | 22.886 | 9.523 | 4.225 |
| Range | | 32 | 23 | 18 | 6 | 6 | 3 |
| Minimum | | 0 | 0 | 0 | 0 | 0 | 0 |
| Maximum | | 32 | 23 | 18 | 6 | 6 | 3 |
| Sum | | 1153 | 562 | 278 | 35 | 59 | 33 |
| Percentiles | 10 | 4.00 | 1.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| | 20 | 6.00 | 2.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| | 25 | 6.50 | 2.00 | 1.00 | 0.00 | 0.00 | 0.00 |
| | 30 | 7.00 | 2.00 | 1.00 | 0.00 | 0.00 | 0.00 |
| | 40 | 8.00 | 3.00 | 1.00 | 0.00 | 0.00 | 0.00 |
| | 50 | 9.00 | 4.00 | 2.00 | 0.00 | 0.00 | 0.00 |
| | 60 | 11.00 | 5.00 | 2.00 | 0.00 | 0.00 | 0.00 |
| | 70 | 12.00 | 6.00 | 3.00 | 0.00 | 1.00 | 0.00 |
| | 75 | 13.00 | 7.00 | 4.00 | 0.00 | 1.00 | 0.00 |
| | 80 | 14.00 | 8.00 | 4.00 | 1.00 | 1.00 | 1.00 |
| | 90 | 20.00 | 11.00 | 6.00 | 1.00 | 2.00 | 1.00 |
| | 95 | 22.50 | 13.00 | 8.50 | 2.00 | 3.00 | 2.00 |
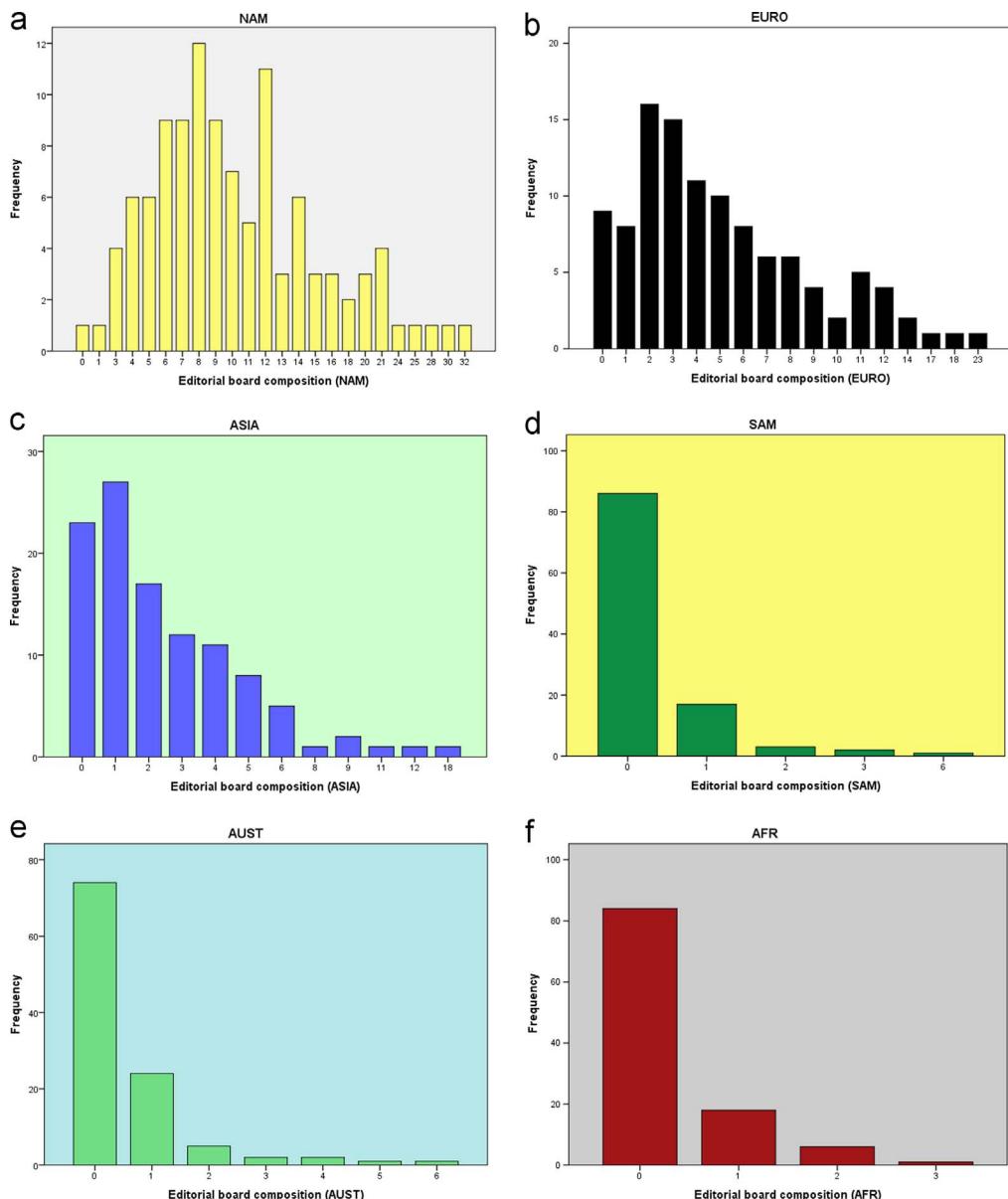
**Fig. 1. a**: The frequency of the editorial board composition (North America). **b**: The frequency of the editorial board composition (Europe). **c**: The frequency of the editorial board composition (Asia). **d**: The frequency of the editorial board composition (South America). **e**: The frequency of the editorial board composition (Australia). **f**: The frequency of the editorial board composition (Africa).

**Table 3**
Chi-square test of goodness of fit for the data across the continents.

| Test | NAM | EURO | ASIA | SAM | AUST | AFR |
|---|---|---|---|---|---|---|
| Chi-Square value | 60.321 | 54.917 | 101.165 | 244.165 | 281.908 | 163.183 |
| Degrees of freedom | 23 | 16 | 11 | 4 | 6 | 3 |
| p value | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |

**Remarks.** The percentage of the total sum across the continents is as follows: North America (54%), Europe (26.5%), Asia (13%), South America (1.65%), Australia (2.78%) and Africa (1.56%).

## 2. Experimental design, materials and methods

The data were manually extracted from the publisher's websites and analyzed using SPSS 20.0 and Microsoft Excel. The data were current as at the time of writing this article and a complete enumeration of the board members of Dove press. It was also observed that some researchers are board members in more than one journal and that necessitated that the reason why each journal was treated individually from the web page related to it. The board members are classified according to six continents. Journals that are no longer accepting papers for publications were not considered. The design adopted for data collection is because of the importance of the editorial board members in journal management, which includes; paper submission, appointment or recruitment of reviewers, decisions on submissions made by authors, quality assurance, indexation and abstraction, disciplinary roles in cases of scholarly misconduct and so on.

Similar works can be considered, see [4–25].

The data is characterized by an uneven editorial board distribution across the continents. This can be investigated by the use of Chi-square test of goodness of fit test. The assumption of no underlying probability was the reason of the use of Chi-square test of goodness of fit. This is summarized in Table 3.

**Remarks.** The distribution of the editorial board across the continents is highly uneven as evidenced by the p-values. The implications of this as regards to gender equality, acceptance and rejection rates of manuscripts and rate of publications are subject to further investigations.

## Acknowledgements

## Transparency document. Supporting information

Transparency data associated with this article can be found in the online version at http://dx.doi.org/10.1016/j.dib.2018.08.196.

## Appendix A. Supporting information

Supplementary data associated with this article can be found in the online version at http://dx.doi.org/10.1016/j.dib.2018.08.196.

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