

Report Mapping the ESHS Community

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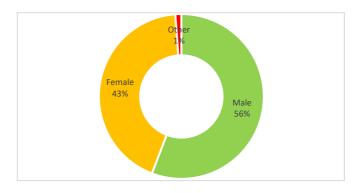
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The survey *Mapping the ESHS Community* aimed to characterize the membership profile of the European Society for the History of Science (ESHS). It was launched in February 2020 and was available at the ESHS website. An invitation to members to participate in the survey was sent twice through the ESHS membership list and reinforced during the Presidential Opening Address at the Bologna 2020 conference and reiterated at the General Assembly. The Survey addresses the training, scientific and professional profile of ESHS members, mobility and publication patterns and ability to cater for EU funding.

Before the Bologna meeting the ESHS had 570 members. The survey was answered by 86 members, that is ≈15%. Although the results are conditioned by the low number of answers, we consider that it is nevertheless interesting to present them, especially having in mind the fluctuating membership pattern between successive biennial meetings, which points to a membership core estimated at a fifth of the ESHS overall membership. When the number of answers falls below 25% of the total of ESHS members who answered the survey (as it happens with the questions concerning information on the members' institutional milieu), the information is useless in terms of statistical significance and will not be presented in this report.

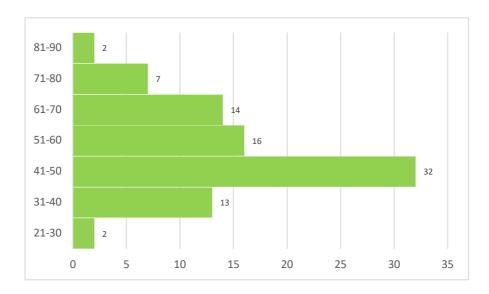
The results will be presented following the order of the survey together with a short comment whenever considered relevant. In the end, some conclusions are drawn.

Gender



Graph 1: Distribution of ESHS members by gender

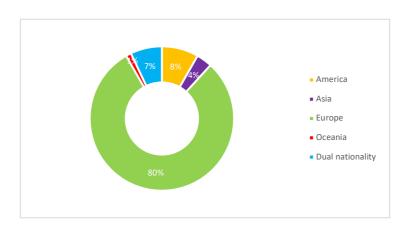
2. Age



Graph 2: Distribution of ESHS members by age

Using a population pyramid-like graphic, it is clear that the age interval with more members is the 41-50 (37,2%) followed by the one from 51-60 (18,6%), which together account for ≈60%. The pyramid is quite narrowed at the bottom (constrictive pyramid), that is respondent young members (below 40) were quite few. Additionally, we should note that if we take the majority interval as reference, 45,3% of the members fall into older age groups, while just 17,4% into younger ones. It is particularly striking that only 2 members answering the survey are in the 21-30 years range, and that the same number of members are older than 80 years.

3. Nationality



Graph 3: Distribution of ESHS members by nationality

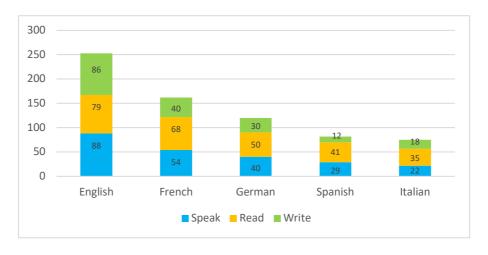
As one would expect in a European society, most of the members are from European countries (65) followed by American Countries (five from the USA, one from Canada and one from Mexico), Asian countries (two from China and one from Japan) and one Australian. There are no members from African countries. Concerning European countries, the distribution is

quite dispersed (cf. Table 1). The top 3 being Italy, Portugal and the United Kingdom, all countries that organized recently ESHS meetings.

| Europe | Quant. |
|----------------|--------|
| Austria | 1 |
| Belgian | 2 |
| United Kingdom | 7 |
| Czech | 5 |
| Danish | 2 |
| Denmark | 1 |
| Dutch | 3 |
| Estonian | 1 |
| Finland | 1 |
| French | 5 |
| German | 6 |
| Greek | 2 |
| Irish | 1 |
| Italian | 9 |
| Norwegian | 1 |
| Polish | 3 |
| Portuguese | 8 |
| Russia | 4 |
| Spain | 6 |
| Swedish | 1 |
| Total | 65 |

Table 1: ESHS European members: distribution by country

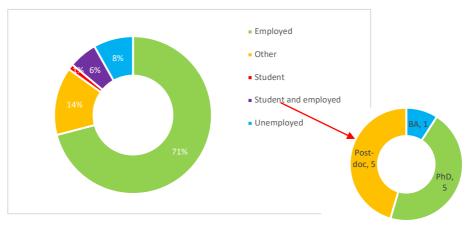
4. Languages spoken/read/written



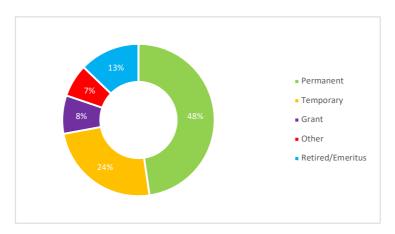
Graph 4: Top 5 languages spoken, read and written by ESHS members

This question allowed multiple answers by each respondent. The diversity of languages spoken, read and written corresponds of course to the diversity of nationalities. Together with this diversity, five languages are commonly used by ESHS members (descending order): English, French, German, Spanish and Italian. As depicted in graph 4, except for English the top 5 languages are more generally mastered when speaking or reading than when writing.

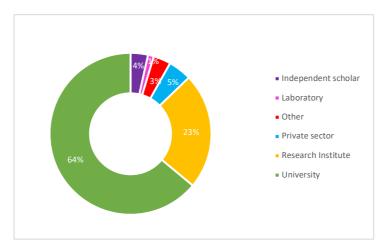
5. Professional Status, contractual situation, and workplace



Graph 5: Distribution of ESHS members by professional status



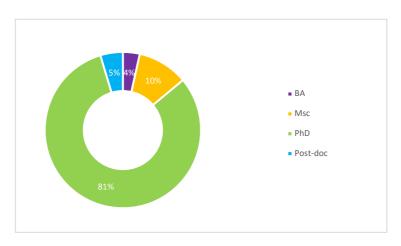
Graph 6: Distribution of ESHS members by contract situation



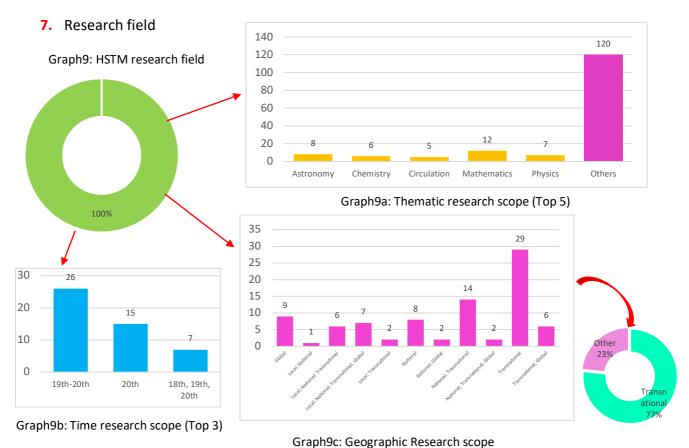
Graph 7: Distribution of ESHS members by locality of contract affiliation

Most of the ESHS members that answered the survey are employed (61 out of 86), with permanent positions (41 out of 86) and working at universities (55 out of 81). However, these numbers must be put in perspective, by crossing it with the data on age (cf. Graph 2), since unemployment and temporary contracts situations tend to occur in early career stages. Only 11 members are students, mostly distributed equally between PhD and post-doctoral research.

6. Qualifications



Graph 8: Distribution of ESHS members by qualification



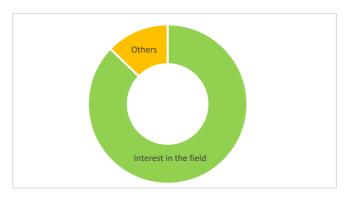
prise. Geograpine Research scope

All the 86 respondents stated that their general area of research is History of Science, Technology and Medicine. As the diversity of topics is immense (165 topics were mentioned), even the areas with more hits are not very representative: History of Mathematics accounts for 9% of the hits, History of Astronomy for 4,8%, History of Physics 4,2%, History of Chemistry for 3,6% and the topic of circulation and centres and peripheries 3%.

As far as the main periods are concerned, most of the respondents – 58, i.e. 67,4% – choose not just one but combinations of periods; from the 28 that choose just one period, 15 hits go the 20th century (53,5%), followed by the 19th century (five hits), Middle Ages and Early Modern (two hits each) and the 21st century (one hit). As for the combinations, the 19th and 20th century is dominant with 45% of the answers, followed at great distance by a combination of the 18th, 19th and 20th century. It is, thus, possible to identify a clear interest on the contemporary period by the ESHS members that responded to the survey.

Concerning the geographic scope, there is a clear transnational trend: 76,7% of the respondents consider it as their "geographical unit" and from these, 44% uses it on an exclusive basis while the remaining combined it with research on namely national topics. Although 38 of the 86 respondents did not identify a specific geographic area, from those who do 76% (39 answers) focus on European countries, seven members on America, four on Asia and three on Africa.

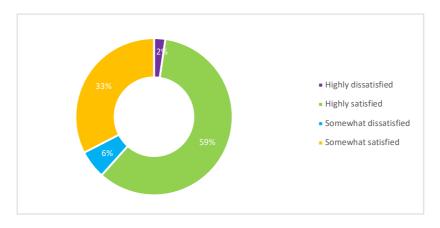
8. Reasons to enter the HSTM field



Graph 10: Reasons to enter the field

The large majority of the respondents - 75 out of 86, i.e. 87,2% - mention that they chose the HSTM area out of intellectual interest. From these group, 54 (69,2%) don't add any other explanation, while the remaining consider that they were also encouraged by other factors, namely other persons (18 answers). In the category "others," (12,8%) the job market and academic encouragement with four hits each are the most relevant.

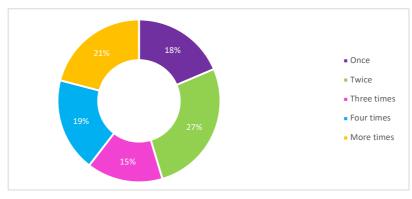
9. Satisfaction with the job/scientific research area



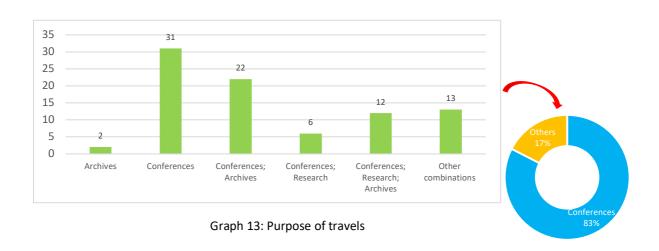
Graph 11: ESHS members' satisfaction with the job/scientific area

Although the majority of the ESHS members (51) are highly satisfied with their work and research area, a significant number of 28 respondents are not completely satisfied; however, there are only 7 who are highly dissatisfied or somewhat dissatisfied, i.e. 8,1%.

10. Professional travels



Graph 12: Number of professional travels/year



All ESHS members that answered the survey travel at least once a year (16), most of them twice a year (23) and a significant number – 47 hits - travel more frequently (13 travel three times/year, 16 travel four times/year, and 18 more than four times/year). Although many members travel for different professional reasons, 71 (83%) do it to attend conferences and, from these, 31 (44%) members travel exclusively to go to meetings.

11. University affiliation 2 2 China USA Mexico

Graph 14: ESHS University affiliation by geographical area

Although 32,5% of the respondents (28) did not give any information, the remaining 58 are overwhelmingly from universities across Europe. Based on the information gathered from answers to other questions it is quite safe to assume that this trend would not change if projected to the whole universe of the ESHS community.

25 21 20 15 12 10 5 4 0 ≤ 4 hours/week 5-10 tours/week ≥11 hours/week

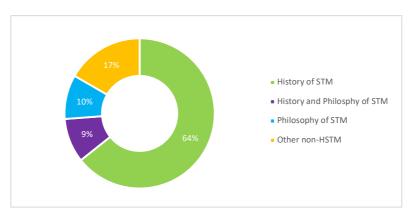
12. Hours of teaching

Graph 15: Hours of teaching

These results are only based on 43% (37 ESHS members) of the total number of respondents (43 do not respond, three are retired and three give a different type of information), but show that the majority of the respondents teach a reasonable number of hours per week, i.e. between five and ten hours per week. The four cases above ten

hours of teaching activities per week are not significant in statistical terms, but they are still worrisome, mainly because one of the respondents indicates 20 hours and the other 30 hours per week, therefore above any reasonable effort.

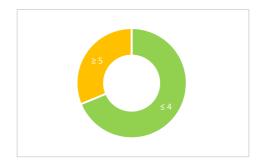
13. Contents of teaching



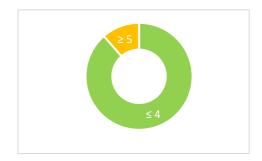
Graph 16: Contents of teaching

Once again, these results are based only on 48,8% (42 ESHS members) of the total number of respondents (41 do not respond and in three cases the question is not applicable (we assumed that these are the three retired ESHS members from the last question). The majority of respondents (27) teach topics of History of Science, Technology and Medicine, mostly in specific areas, while seven give courses in non HSTM related topics; four combine courses of History and Philosophy of Science, Technology and Medicine and other four teach only Philosophy of Science, Technology and Medicine.

14. Supervision of Master and PhD students



Graph 17a: Master students

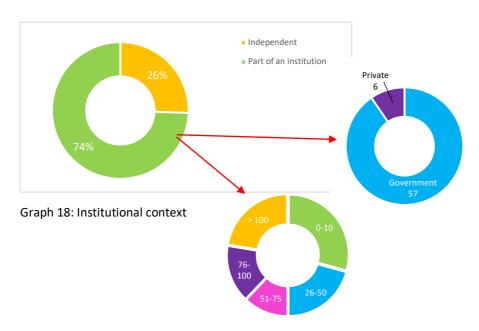


Graph 17b: PhD students

In both cases the number of answers is below half of the respondents: 32 answers for master students, i.e. 37,2%, and 47 answers, i.e. 45,3%, for PhD students. Concerning master students, most supervisors have two or three students (a total of 12, i.e. 37,5%); five do not have any students; and in the group of supervisors with more than five students, three answers mention totally unexpected values (one with 55 students under supervision, one with 70 and one with 100 students). As for PhD supervisions the large majority of answers fall

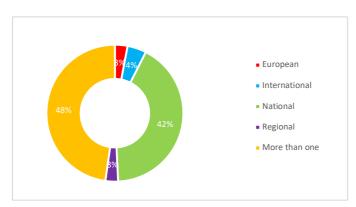
into the category of one or two students (24 answers, i.e. 70,6%); three respondents do not have any PhD students and one has 14 students under his/her supervision.

15. Institutional context

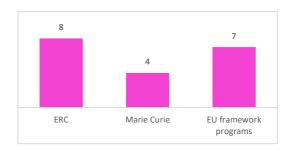


Most of the ESHS members that answered the survey are affiliated to governmental institutions and are part of research groups (centres, departments, institutes) with very different dimensions, which can vary between one to ten members and over 100 members. Although the distribution among these different categories is quite homogeneous, there is, on the one hand, a slight superiority at both ends of the spectrum (17 units below 11 members and 13 above 100 members) and, on the other hand, a 50-50 distribution between small and medium-small (under 50 members) units and medium-large and large (above 50 members) units.

16. Funding



Graph 19a: Funding sources



Graph 19b: PIs in European programs

Concerning funding, 19 respondents did not provide any data. The remaining 67 (78%) apply mostly to national funding (28 answers) and to multiple funding sources (regional, national, international and European; 32 answers). Information on leadership (PIs) of European funded projects is scarce (23 answers, i.e. 26,75%) but points out to three main frameworks: ERCs, Maria Curie grants and projects in EU frameworks (e.g. Horizon 2020). As far as the amount of funding in euros is concerned the data provided by the respondents is insufficient to draw any conclusions.





Concerning publication pattern, most of the respondents publish mainly in national journals (54 out of 86; Graph 20a), although only 5 of them do it on an exclusive basis, that is most of the ESHS members that answered the survey publish also in international *fora* (Graph 20b)

and mainly in English (Graph 20c). Only around one quarter of the total respondents (21%, i.e. 18 answers) publish mostly in collaboration with other authors and in this case, co-authors are mainly colleagues from the same disciplinary field, same nationality and same institution, although remote working is mentioned as most common than face-to-face meetings.

Complementary information on publishing was either too disperse and extensive (journals in which the respondents publish) or too scarce to be usable statistically (e.g. details on coauthors' nationalities and research areas). However, one should highlight that among around 270 journals mentioned, most of them with just one or two hits, only two are above ten hits: *Centaurus* with 17 hits, followed by *Isis* with 12 hits.

Conclusions and recommendations

Tracing the profile of the ESHS membership based on the present survey shows a stable and lively community working (both at the teaching and research level) mostly in universities and being able to keep in contact with colleagues around and outside Europe, mainly through the attendance of conferences. This pattern reinforces the importance of the ESHS biennial meetings and raises the question of the future organization of in-between biennial meetings, whatever their format. The community's research covers a large spectrum of subareas, both thematic and time-wise: they focus mostly on the 19th and 20th centuries and on Europe, addressed through the perspective of transnational and global networks. This vitality is well illustrated by both the funding and the publication profiles, in which *Centaurus* plays a prominent role, and which reveals that more than 90% of ESHS members publishes internationally, and almost a fourth do it on a collaborative basis.

This analysis is strongly biased by the age profile of the respondents, mostly above 40 years of age, who therefore find themselves on a more stable stage of their careers. The fact that the survey displays this deviation is surprising having in mind that the Early Career Scholars Network includes c.150 members. However, it is in line with the ongoing discussion on the highly fluctuating membership pattern, dependent on meeting's attendance, and unable to secure per se a committed and participant membership, going beyond a core estimated at a fifth of the ESHS overall membership. Concerning core members, a correlation seems to exist, though, between the nationality of members and the country where recent biennial meetings took place. The involvement of ESHS members in Society's life suffers from this fluctuating membership pattern, which may explain that only 86 answers to the survey were received despite the efforts to encourage members to participate. Additionally, it also raises the question of how does the Early Career Scholars Network relate to the ESHS. It would be interesting to compare the results of the present survey to a similar one with a strong number of younger respondents.

Acknowledgments:

We thank the preliminary work by intern Clément Goutorbe, the fundamental collaboration of the sociologist Paula Urze in the elaboration of the survey, and the processing of collected data by PhD student Inês Navalhas.