

Witches on Trial in Scotland

In this activity, students prepare a blog post about the early modern witch trials for the National Museum of Scotland, based on quantitative data and statistical testing.

Length 📖 1-2 hours (Medium Problem)

Prerequisites Proportions, Crosstabulations, Excel, Chi-Square

Concepts Proportions, Excel, Chi-Square

Themes Gender, Injustice

Discipline History



Scenario

When you saw the job posting for a Community Engagement Officer position at the National Museum of Scotland in Edinburgh, you jumped at the chance to apply, and you were thrilled to find out you got the job.

A few months later and you are settling into the new job (and new city!) nicely.

One morning your supervisor approaches you with a request:

Supervisor: I have a project I'm wondering if you can tackle. As you know, the museum is trying to build up its online presence in order to reach more members of the community, and our management team thinks we should do a write-up on the Scottish witch trials. After all, we have a number of artifacts related to the witch trials in our collection,¹ and we have just learned that a team of historians from the University of Edinburgh have built a database about the witch trials in Scotland.² We also think our community might find the topic interesting.

You: Yes, this sounds fascinating! So, where do I come in?

Supervisor: Well, I know you have a background in History and Quantitative Methods, so I'm wondering if you can work with the historical database to try to build an overall picture of the witch trials – and perhaps in particular you can compare the experience of men and women during the witch trials. You can try to figure out for whom the trials were more severe. And then I'm hoping you can write a blog post for the website, presenting an overview of the witch trials, including your results from working with the database. We can even get our web design team to add some images of artifacts in our collection to the post. What do you think?

You: I'd be happy to work on this. What is the timeline? And how long should the blog post be?

What you need to produce

- Proportions/percentages highlighting important features of the witch trials in early modern Scotland
- A test of significance, comparing women accused of witchcraft to men accused of witchcraft
- A brief overview of the witch trials in early modern Scotland (~150 words)



Evaluation grid

Understanding & Interpretation	
<ul style="list-style-type: none"> Proportions/percentages are well-chosen in terms of highlighting significant trends in the witch trials (2 points) Test of significance is well-set up to compare women’s and men’s experiences during the witch trials (2 points) Overview text clearly explains patterns during the witch trials, as well as thoughtful interpretations of the data (~150 words; 6 points) 	/10
Writing & Style	
<ul style="list-style-type: none"> Writing is formal in tone, and explains key concepts and data points in clear language 	/2
Requirements	
<ul style="list-style-type: none"> Proportions/percentages are accurately computed (2 points) Test of significance is accurately computed (4 points) Overview text meets required length (~150 words; 2 points) 	/8
Total	/20

Breakdown of the problem

Guiding question – Part 1

How can proportions/percentages help to build a basic picture of a phenomenon?

After clarifying the expectations for your task, you begin reviewing the witch trials database your supervisor shared with you (in the corresponding Excel file). Using the data you have, compute several proportions/percentages in order to get a picture of some of the patterns during the witch trials in Scotland. Use the space provided below to keep track of your results.



Proportions/percentages

Guiding question – Part 2

How can you determine if there is a significant difference between two groups, in terms of a particular characteristic?

Now that you have a sense of some of the patterns in the data from the witch trials, you are ready to tackle your supervisor’s more specific request: to discover whether women fared significantly worse than men during the witch trials. You may have a hunch from the proportions you computed already, but you decide to conduct a test of significance to be more confident about making a statement in your upcoming blog post about this. Using the space below, conduct a test of significance to determine for whom the witch trials were more severe – men or women.

Test of significance



Guiding question – Part 3

What is important to understand about the witch trials in early modern Scotland?

Now you are ready to write your blog post about the witch trials for the museum website. Consider what you think readers should understand about the witch trials in Scotland, and how you might include some of your proportion/percentage calculations, as well as the results from your test of significance, to build a precise picture of the phenomenon. Remember that as a Community Outreach Officer, you are looking to engage and pique the interest of your readers, so your writing should be polished, but not overly formal or technical to ensure people stay interested. Use the space below to draft your blog post about the early modern witch trials in Scotland (~150 words).

Overview of witch trials in early modern Scotland

References

1. *Witch's collar* [Iron collar]. (17th century). Instruments of torture. (Online ID: 000-100-001-362-C). National Museum of Scotland, Edinburgh. Retrieved from <https://nms.scran.ac.uk/database/record.php?usi=000-100-001-362-C>
2. Goodare, J., Martin, L., Miller, J., & Yeoman, L. (2003, January). Survey of Scottish Witchcraft Database. Retrieved from <http://witches.shca.ed.ac.uk/>

