

## **What tools did I use?**

#1 Cited in searching

#2 Backlink searching

#3 Subject searching

## **What did I find? (2 new sources)**

#1: Enduring Influence of Stereotypical Computer Science Role Models on Women's Academic Aspirations

In the first tool that I used, cited in searching, I used one of my previous articles to see who else had used it in their work. I was able to do this by first accessing the SU library database and locating the 'cited by' button. For this first source, I found a paper on the role that stereotypes, and role models had played in women's career decisions.

The text referenced the fact that although there may be female 'role models' on television shows, such as the Big Bang Theory that attempt to promote being nerdy, this doesn't always increase the odds that women desire to enter into areas like computer science. The article states that this is because younger girls cannot easily relate to these characters, so it is hard to look up to them and want to follow in their footsteps. On the other hand, the article also suggests that non-stereotypical roles, the opposite of female characters on the Big Bang Theory may have a positive impact on women's desires to enter into the STEM field.

After suggesting this, the articles conducted a study to see whether or not there was a correlation between the impact that stereotypical vs. non-stereotypical individuals had on women who were indecisive on which field to enter. The study showed a correlation existed between women's interactions with non-stereotypical individuals having a positive impact on their decision to enter into computer science.

This article did a tremendous job at pointing out the fact that role models, whether they be on television shows or in real life have an impact on whether or not women want to enter into computer science (in general, STEM). This text also helps illustrate the idea that there is a limitless number of factors that play into if women enter STEM related fields.

The limits of this point of view are that it ignores that stereotypes will always be present for STEM related careers, especially computer science. It ignores the idea that in general, a two-minute conversation with someone who is not considered stereotypical in a STEM related job is not going to have a tremendous impact on whether or not they decide to pursue a STEM related degree. People make up their decisions on a variety of factors, which the article even speaks about. Time, amount of money, background, class schedules, social backgrounds all play a role in where a person ends up academically and later on in their career. It is unfair to state that one factor has such a significant amount of pull on deciding whether or not a woman enters into a specific industry.

To conduct a study using stereotypes such as nerdy appearance, anti-social individuals to illustrate the point that if a woman sees this, they are less inclined to enter into computer science is just wrong. It is shallow and overlooks other factors that may play a role in their decision. This includes the fact that they may have never been interested in computer science.

## #2: Women's Work' in Science

For the second tool, I used the backlink search tool. I used the seejane.org website you provided to look up some other links that people visited. I ended up stumbling upon a article of women in science in the late 1800's- early 1900's.

The text, in summary, was about women entering employment in certain scientific fields due to the rising number of women seeking employment. This came on partially as a result of the increasing number of college graduates, along with the idea that women had "unique talents" for specific fields. In fields like astronomy, females known for their perseverance and loyalty to their jobs which led to them not being able to be promoted. They were seen as threats to many men in certain positions and as a result were kept in positions which required tedious, difficult work that no man wanted to do. The woman in the field at this period believed that they were inferior to men and as a result were happy with whatever careers they were able to obtain. The main reasons for hiring females at this time was due to the economic incentives and the stereotypes that surrounded women. Simply put, in this period, there was an idea that through gender stereotypes, certain fields would have access to woman who could work for practically nothing. The article then goes on to reference this shift in ideology by the 1910's where the women's rights movement began to takeoff and woman began to see their own value. They no longer believed that they were so inferior to men and thought that they deserved better jobs. These jobs that were created as a result of stereotypes surrounding women were not seen as a positive thing anymore, rather they were degrading.

This article speaks a lot about woman and careers that they were able to obtain during the late 1800's-early 1900's. It gives examples of famous woman in astrology, education and home economics. The thing that this article fails to do however is highlight the gravity that both stereotypes and female opinions have on career paths. Stereotypes that existed at the time, including the idea that woman were inferior to men led to women believing that they held no value, and as a result did not deserve the same career that a man had. With movements like the women's rights movements in the 1910's, woman began to see that these stereotypes were wrong and as a result the field began to change. There were more opportunities for females to explore new lines of work and actually have a chance of being promoted, instead of having to stay in the same position for 30+ years. 100 years later, we can see just how much societies views on women have changed. Although back then women were thought to have unique qualities which were seen as beneficial, they were never fully taken advantage of. Today, women in banking are seen as a huge advantage as they provide stability. Women are now able to have positions which are considered some of the most influential and powerful in the world.

This article took a more historical POV, speaking only about what had occurred in the past. It did not reference the future or any ideas surrounding it. However, it used certain terms which could be seen as contradictory, in my opinion. It uses the word downgraded for 'feminized' (such as their roles were not important) but then states that science benefitted from women being in these positions for a long period of time. They overlooked the idea that although jobs that women held at the time were considered inferior to those that men held, they were equally if not more important than the roles that men held. The article even references how women's loyalty was beneficial to science because they were able to analyze and do their jobs better than anyone else. Woman realized how important it was to pay attention and complete work in a precise, accurate manner. Therefore, I believe that their work was critical in the success of certain major projects in science.

## **Thoughts about each tool**

I liked the cited in tool. I thought it was useful because it was easy to find through a previous article that I had used in the research. It also allowed for a fresh perspective, where instead of stating that gender is the dominant factor that decides where we will end up career wise, it states that our role models have a more significant impact on where we end up. This article helped me uncover the idea that role models may play a role in helping us make decisions, but for different reasons than I previously thought. It helped me realize that not only do role-models/characters on TV shows allow for positive experiences within a given field, such as STEM/comp-sci, but it can also provide for a negative view on the industry overall. Some girls may not like being exposed to stereotypical views of comp-sci, such as being unskilled at relationships, obsessed and awkward.

At first, I was not able to use the backlink search tool very well. I think this is because I used more mainstream websites where there was a lot of traffic. The results often did not have to do with what I was looking for, which therefore made it irrelevant to my research. I think this would be great though with a small blogging website where there is less traffic. Using the backlink search tool on websites like Forbes is more difficult because there are so many different people that use it for different purposes. Some use it for research, some use it to keep up with recent trends, or some just read it for fun.

After thinking about some websites that I could use which could give me new sources to use, I decided to use the seejane.org link and backlink that to see if there were any sources that I could use. After using the seejane.org link, I found a fantastic read on early women in science. Although it relates to females in science careers 100+ years ago, I think it is relevant because it helps illustrate the point that industries and society is evolving and slowly becoming more inclusive. Overall, it was a really great tool to be exposed to, and I am glad I was able to find out how to use it in the most efficient manner.

The subject search tool was something that I was already used to doing, inputting general words which may pop up in an article that relates to my overall questions/thoughts. I have also used the subject search tool by clicking through words that the article highlights in its summary to find similar articles on the subject. A lot of the words that I had used came up with the same articles that I already read. The other articles focused more on the consumer side of finance/banking and microfinancing with women. I will continue to explore new subject's words related to woman in STEM/finance. I am hoping to find a cartoon/visual illustration soon as well. Some of the words that I tried using for subjects include women, gender, banking, finance, equity, equality, gender inclusion, and jobs. I used these subject words as a result of looking through previous source keywords included on the SU library database. I also just clicked through the words in general to see if I could find an article that would help illustrate how women are driven into certain careers, which may not be in STEM. Hopefully I can find some new perspectives with this approach, however I believe that this tool can be better used for finding articles with similar perspectives to the subject as they all used similar keywords.

## **Did this work help clarify or complicate inquiry?**

I think this approach to finding new sources allowed for new perspectives on my subject. Although it provided for new perspectives and ideas that did not completely support my argument, it allowed for me to realize that the idea that there are a variety of different elements that impact whether or not someone enters into a STEM related career. Seeing how views of gender were 100+ years ago made me realize that even 20 years plays a big difference in whether or not a woman is able to pursue a career. 1880s-1900s and the women's movement.

Just because a different perspective is given in a new source does not mean that you cannot use it to your advantage. I think this exercise helped me realize that you can counter any piece of evidence and frame it in the way that you want a thought or idea to be stated. Therefore, I don't really think it complicated my inquiry, rather it clarified it more than anything. I am looking forward to continuing my research on the subject and using these new tools to my advantage. They provide for a new, unique approach. I was particularly fond of the backlink search, I think that was the coolest tool.

#### **Links for sources:**

Link to #1: [https://journals-sagepub-com.libezproxy2.syr.edu/doi/full/10.1177/0361684312459328?utm\\_source=summon&utm\\_medium=discovery-provider](https://journals-sagepub-com.libezproxy2.syr.edu/doi/full/10.1177/0361684312459328?utm_source=summon&utm_medium=discovery-provider)

Link to #2: [https://www-jstor-org.libezproxy2.syr.edu/stable/230118?seq=1#metadata\\_info\\_tab\\_contents](https://www-jstor-org.libezproxy2.syr.edu/stable/230118?seq=1#metadata_info_tab_contents)

#### **Sources cited (order based numerical reference #1,#2)**

Cheryan S, Drury BJ, Vichayapai M. Enduring Influence of Stereotypical Computer Science Role Models on Women's Academic Aspirations. *Psychology of Women Quarterly*. 2013;37(1):72-79. doi:10.1177/0361684312459328

Rossiter, Margaret W. "'Women's Work' in Science, 1880-1910." *Isis*, vol. 71, no. 3, 1980, pp. 381–398. *JSTOR*, [www.jstor.org/stable/230118](http://www.jstor.org/stable/230118). Accessed 28 July 2021.