

Source #2: Women's Underrepresentation in Science: Sociocultural and Biological Considerations summary

In their article, “Women’s Underrepresentation in Science: Sociocultural and Biological Considerations” both Ceci and Williams, psychologists at Cornell University, and Barnett, a researcher at Cornell attempt to examine various elements beyond the world’s control that lead to female underrepresentation in STEM-related careers. To do so, Ceci, Williams, and Barnett evaluate previous studies and research the various factors that impact the reasoning as to why more women are not in STEM careers.

The authors began by creating a circular framework of factors that impact career outcomes, with gender being in the middle. As a result of gender being in the middle of the circular framework, hormones and the values that society holds for males versus females play a critical role in determining where we end up. Other elements explored include brain function/development, which leads to various abilities such as self-discipline, communication, and organization. By examining the role that genes and hormones play in life, the authors discovered that a circular relationship exists where life choices, opportunities, productivity, and standardized tests results are all impacted.

The thought that biology impacts career outcomes and goals in life is important in helping determine why many females end up with college degrees, but not all pursue a career in STEM. Biological factors and loyalty to family play a crucial role in determining part of the reason why more women are not involved in STEM careers. The main takeaway from the article, however, is that certain factors that lead to underrepresentation are outside of society’s control. Genes and hormones often impact where we end up in life, and we cannot control this.

Source #2: Women's Underrepresentation in Science: Sociocultural and Biological Considerations analysis

Unlike other articles which often examine social factors that impact the underrepresentation of females in STEM, this article provides for the unique opportunity to explore biological factors that may help explain part of the reason behind the lack of women in STEM. The unique perspective provided in this article is not the idea that the culture surrounding each individual is the only thing that impacts career path, but that elements beginning before birth impact whether or not females pursue a career in STEM. This is a valuable resource because it is a source from well-respected researchers at Cornell who are passionate about comprehending the reasons behind the life decisions that each person takes. Along with that, the authors provide a visual of various factors that impact our career success, which is the circular framework image. This image is backed up by scientific evidence given throughout the article and holds a significant amount of value in helping illustrate another perspective when it comes to factors that influence career choices.

I plan to use the portion of this article that focuses on the biological factors that impact why more women do not enter into STEM-related careers. The unique scientific approach that this article provides is beneficial for readers who may want to see numbers to back up claims, rather than just logic. Often in the sources that I plan on using, only social factors are examined. Therefore, I think that this article will provide more insight into a different area. It will also help demonstrate that factors which influence each person’s career choice, whether a male or female, are all around us, even if we do not know it.

Ceci, Stephen J., et al. “Women's Underrepresentation in Science: Sociocultural and Biological Considerations.” *Psychological Bulletin*, vol. 135, no. 2, 1 Mar. 2009, pp. 218–261., doi:10.1037/a0014412.