

## **Resumen**

El número de chicas que eligen carreras vinculadas a ciencias, tecnologías, ingenierías, artes y matemáticas (STEAM) sigue siendo muy bajo. Una de las explicaciones se centra en la elección diferenciada de profesiones en función del género debido a la importancia que tiene la búsqueda de congruencia entre los roles que la sociedad demanda a cada sexo. El objetivo del presente estudio es examinar si los estereotipos de género relacionados con las carreras STEAM se siguen reproduciendo en alumnado y profesorado. Para ello se ha llevado a cabo un estudio cualitativo en el IES Ribalta de Castellón de la Plana con 12 alumnas/os (50% mujeres) de 14 a 16 años, y con 6 profesores/as (50% hombres). Con el alumnado, se realizó un taller grupal donde debían resolver un acertijo sobre el género de una persona presentada como eminencia médica. Con el profesorado, se realizaron entrevistas semi-estructuradas en las cuales se preguntó si existían capacidades innatas en función del sexo en las personas que se dedican a carreras STEAM. El 50% del alumnado no resolvió el enigma por: masculinización/feminización de profesiones (eminencia médica hombre, enfermera mujer), invisibilidad de las mujeres científicas en libros de texto y medios de comunicación, visibilización de logros de mujeres STEAM como algo "inusual". Los resultados del profesorado fueron en tres líneas distintas: Si que existen diferencias innatas en las personas de carreras STEAM siendo el género femenino más favorecido; no existen diferencias innatas en función del género y, si existen, benefician al género masculino. En conclusión, mediante estos resultados se confirma la variedad de creencias estereotipadas en el ámbito educativo, son consistentes con los bajos porcentajes de mujeres en carreras STEAM en la actualidad. También se pone de manifiesto por parte de las/los participantes la intención de desmantelarlas.

## **Abstract**

The number of girls choosing careers related to science, technology, engineering, arts and mathematics (STEAM) is still very low. One of the explanations focuses on the differentiated choice of professions according to gender due to the importance of the congruence search between the roles that society demands to each sex. The aim of this study is to examine if the gender stereotypes related to STEAM careers continue being reproduced by students and teachers. To this end, we carried out a qualitative study at the IES Ribalta in Castellón de la Plana with 12 female students (50% female) from 14 to 16 years old, and with 6 teachers (50% male). With the students, we hold a group workshop, showing an enigma about the sex of a person introduced as a medical eminence. With the teachers, we conducted semi-structured interviews in which they have been asked if they think if there are innate capacities in the function of gender in the people who are dedicated to STEAM careers. 50% of the students did not solve the enigma, because: masculinization /feminization of the professions (medical eminence, men; nurse, woman), the invisibility of women scientists in textbooks and the media, visualization of STEAM women achievements such as something "unusual". Teachers' responses were in three lines: Yes, there are innate differences in the function of gender and female gender is the most favored; no, there are no innate differences in the function of gender, and; Yes, there are differences and its benefits the male gender. In conclusion, these results confirm the variety of stereotyped beliefs in the educational settings, which are consistent with the low percentages of women in the STEAM careers currently. They also show the evident intention to dismantle them by the participants



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## Introduction

The number of girls choosing careers related to science, technology, engineering, arts and mathematics (STEAM) is still very low.

One of the explanations focuses on the differentiated choice of professions according to gender due to the importance of the search for congruence between the roles that society demands of each sex. The roles most related to agency-instrumentality are still associated with being male, even among the youngest, so that girls don't feel identified with the professions that relate to these traits / roles.

➤ The main objective of the following research is to detect if gender stereotypes related to STEAM careers are being reproduced in an educational center in Spain.

## Method

**Students:** 12 people (50% girls) From 14 to 16 years old.

➡ Workshops with collaboration methods.

A father and his son are in a car accident. The father dies at the scene and the son is rushed to the hospital. At the hospital the medical eminence looks at the boy and says "I can't operate on this boy, he is my son." How can this be?

**Teachers:** 6 people (50% men) From 42 to 55 years old

➡ Semi-structured interviews.

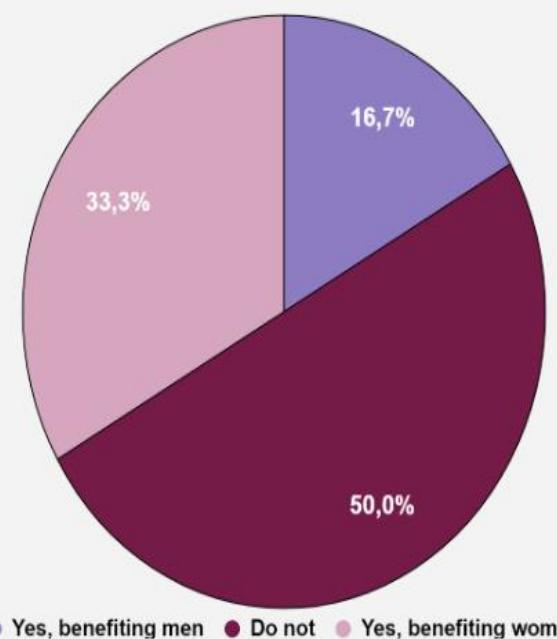
Do you think there are differences between boys and girls in their "innate talent" for Science, Technology, Engineering, Art and Mathematics?

## Results

**Students: Enigma**  
(50% unanswered)

- ☒ Invisibility of scientific women in his textbooks and media.
- ☒ Masculinization /feminization of the professions (medical eminence, men; nurse, woman).
- ☒ The attempt to visualize achievements of STEAM women come to give an image of something "unusual".

**Teachers: Interview question**



## Discussion

- In conclusion, these results confirm the variety of stereotyped beliefs in the educational settings, which are consistent with the low percentages of women in the STEAM careers currently.
- They also show the evident intention to dismantle them by the participants, although the lack of gender perspective on training.

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