Domain identification and stereotypes: representations of scientists among Romanian elementary school students

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Kew words

Scientists, representations, DAST, elementary students, beliefs, misconceptions

Abstract

The goal of the current study is to investigate elementary school students' domain identification and their representations of scientists compared to other professions (e.g., teacher, veterinarian). Research shows that students' stereotypes about scientists may affect their science self-efficacy and interest in science (Losh et al., 2008). Studies investigating children's representations of scientists using the Draw a Scientist methods (DAST) indicates that most students hold stereotypes about the role of the scientist and about the identity of a scientist. Findings from such research show that there is a bias regarding the demographics and gender variations in children's representations of scientists (Finson, 2002). A large number of scientists are depicted as white males; Hispanics and Asian scientists are underrepresented and women are depicted mostly as "superwomen". The sources of these misconceptions are various, including media, children's literature, and lack of students' experiences with the work of a scientist.

This proposal is a work in progress; data collection will be completed in October 2015 and data analysis will follow up shortly after all data will be cleaned and organized. Participants (approximate N=200) will be elementary students from Romania enrolled in public and private schools, in both rural and urban areas ranging in age and grade level (i.e., grades 1 to 5). Study findings will be discussed in relationship with research related to gender and cultural stereotypes, as well as research about conceptual change. Additionally, implications for teacher practices, teacher education, and student career preparation will be discussed.

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