

# The impact of participation in the Scientist Badge Programme on Science Attitudes

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**Note:**

Brownies were found to have more positive science attitudes relative to the Guides, partially attributed to the impact of negative influences and stereotypes, whereby there is a bias that favours male students with regards to science education , Brownies displayed a greater change in attitude over the course of the study relative to the Guides, who seem more set in their perceptions of what a scientist is and how science relates to them - this supports the notion that early science experiences are paramount in creating positive science attitudes , The number of female scientists depicted in the drawings was higher and increased more significantly post-participation in the Brownie group, where this younger group had not been subjected to the intensity nor length of media impressions of stereotypes and associated mostly with female role models

**Abstract:**

Let's Talk Science is an outreach science education programme at the University of Western Ontario. One of the undergraduate science student initiatives is the Brownie and Guide Scientist Badge Programme in which university student facilitate an evening science activity session with the groups. This study evaluated the impacts of involvement in the activities on the science attitudes of the participants. A twelve indicator "scientist scale" was used to grade the pictures according to their portrayal of stereotypical science attitudes. It was found that the Brownies (aged 6-9) had more positive science attitudes and were more affected by their participation than the Guides (aged 9-12). Brownies were also found to illustrate female scientists more frequently. Research into the influential nature of extracurricular and educational experiences on the science attitudes of young girls is used to support the findings.