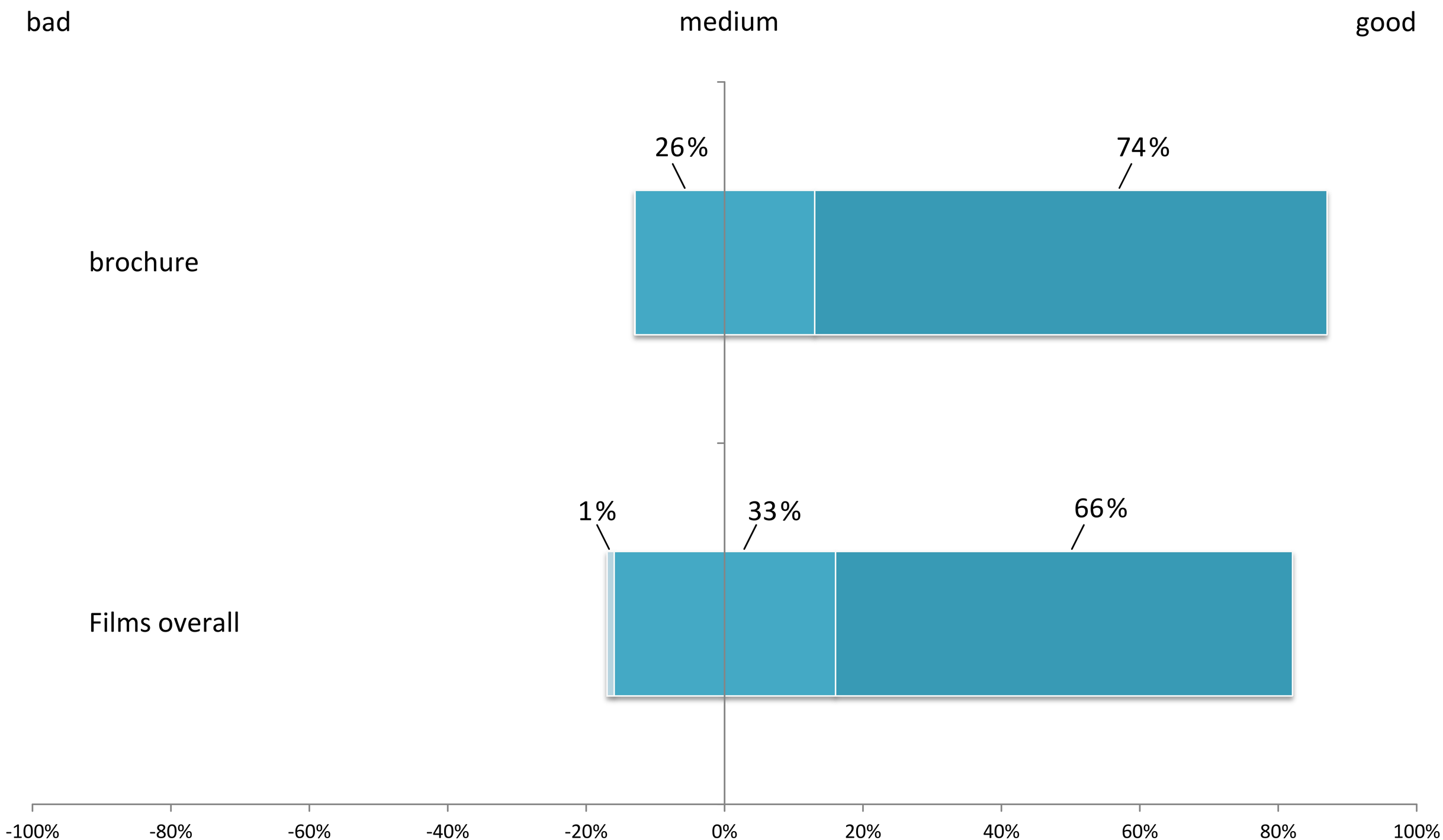Evaluation of AHOI materials