

**Comment 10—8/13/2021—11:04 a.m.**

Hello,

Thank you for including bias topics as a requirement in the USQS. I agree that bias impacts our work as actuaries and that a minimum of 1 hour annually should be devoted to learning more about the biases that impact our work.

That said, I'd suggest a clarifying change to the language in the bias section of the USQS (2.2.6b) as follows:

*“Bias topics include content that provides knowledge and perspective that assist in identifying and addressing biases that may exist in data, assumptions, algorithms, ~~and~~ models, and the users of those data, assumptions, algorithms, and models, that impact Actuarial Services. Biases may include but are not limited to statistical, cognitive, and social biases.”* I believe this clarifying statement is necessary because the current statement does not seem to cover biases that impact actuarial services through an actuary's selections or actuarial judgment.

For example, anchoring was cited as an example of a bias topic directly relevant to actuaries on slide 36 of the webinar “U.S. Qualification Standards: Second Exposure Draft and More”, presented on August 12, 2021 (see attached). Per the American Psychological Association, anchoring bias is “the tendency, in forming perceptions or making quantitative judgments under conditions of uncertainty, *to give excessive weight to the starting value (or anchor), based on the first received information or one's initial judgment*, and not to modify this anchor sufficiently in light of later information.” (emphasis added) An example of this within our actuarial work would be to rely too heavily on the prior estimate of ultimate losses when selecting revised ultimate losses simply because the prior ultimate is the first thing the actuary looks at when selecting a revised ultimate.

Anchoring bias does not exist in the data used, the assumptions underlying the actuarial methods, the algorithms used, or the models used – it exists in the actuary making the selection (i.e. the user). While the data, assumptions, algorithms, and models can also include bias, the ways those data, assumptions, algorithms, and models are used also present a significant opportunity for bias to manifest in our actuarial services. Education on these biases should be included under this qualification standard.

I believe that this is the intent of the current language due to the inclusion of cognitive and social biases, and that the proposed modification to the language will make that more clear.

Thank you,

Sarah Manuel

**Sarah Manuel, FCAS, MAAA**