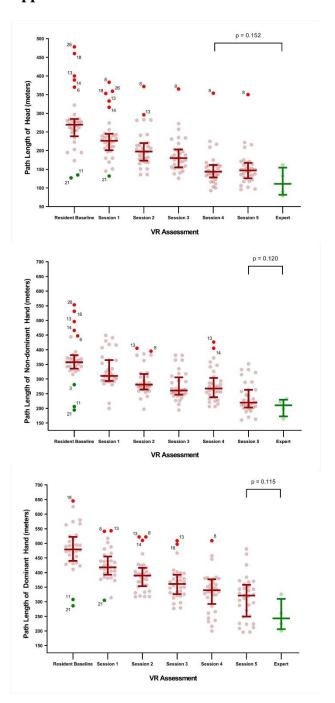
Copyright \circledcirc by The Journal of Bone and Joint Surgery, Incorporated Logishetty et al.

Fully Immersive Virtual Reality for Total Hip Arthroplasty. Objective Measurement of Skills and Transfer of Visuospatial Performance After a Competency-Based Simulation Curriculum http://dx.doi.org/10.2106/JBJS.19.00629 Page 1

The following content was supplied by the authors as supporting material and has not been copy-edited or verified by JBJS.

Appendix A



Copyright \circledcirc by The Journal of Bone and Joint Surgery, Incorporated Logishetty et al.

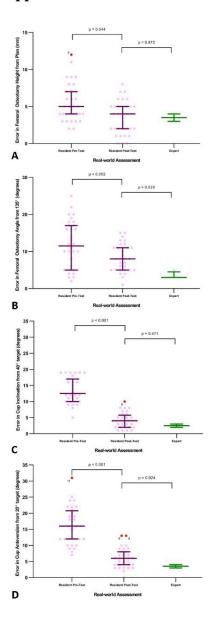
FULLY IMMERSIVE VIRTUAL REALITY FOR TOTAL HIP ARTHROPLASTY. OBJECTIVE MEASUREMENT OF SKILLS AND TRANSFER OF VISUOSPATIAL PERFORMANCE AFTER A COMPETENCY-BASED SIMULATION CURRICULUM http://dx.doi.org/10.2106/JBJS.19.00629 Page 2

Scatter plots showing the distance moved by residents' dominant hand (A), non-dominant hand (B), and head (C) when performing VR THR in a 5-session curriculum, compared to expert performance. Solid lines represent median and interquartile range. VR = Virtual Reality. Red and green dots are outliers (greater or less than 1.5 x interquartile range, respectively). Numbers next to outliers indicate participant ID.

Copyright \circledcirc by The Journal of Bone and Joint Surgery, Incorporated Logishetty et al.

FULLY IMMERSIVE VIRTUAL REALITY FOR TOTAL HIP ARTHROPLASTY. OBJECTIVE MEASUREMENT OF SKILLS AND TRANSFER OF VISUOSPATIAL PERFORMANCE AFTER A COMPETENCY-BASED SIMULATION CURRICULUM http://dx.doi.org/10.2106/JBJS.19.00629 Page 3

Appendix B



Scatter plots showing residents' error in performing the height (A) and angle of the femoral neck osteotomy, and error in orientation of the acetabular implant in inclination (C) and anteversion (D) when performing the pre- and post-test **physical world** visuospatial assessments, compared to expert performance. Solid lines represent median and interquartile range. VR = Virtual

Copyright @ by The Journal of Bone and Joint Surgery, Incorporated Logishetty et al.

Fully Immersive Virtual Reality for Total Hip Arthroplasty. Objective Measurement of Skills and Transfer of Visuospatial Performance After a Competency-Based Simulation Curriculum http://dx.doi.org/10.2106/JBJS.19.00629 Page 4

Reality. Red and green dots are outliers (greater or less than 1.5 x interquartile range,

respectively). Numbers next to outliers indicate participant ID.