Correction to: Finite element modelling and parameter identification of the seated human body exposed to vertical vibration

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Published online: 10 September 2021

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Correction to: Biomechanics and Modeling in Mechanobiology
<https://doi.org/10.1007/s10237-021-01481-1>

In the original publication of the article, Fig. 4 was published with error. Figure 4 in the original article should be replaced with:

In the original publication of the article, Table 9 was published with an error. In the frequency range of 4–7 Hz of Table 9, sixth column, ‘Fore-and-aft motion of thigh and pelvis at 6.39 Hz’ was put in the wrong position, and it should belong to the six-order modal analysis result of Kim et al. (2005). The correct table is provided below.

Fig. 4 Schematic diagrams of the sitting postures: **a** experimental posture; **b** modelled posture

The original article can be found online at <https://doi.org/10.1007/s10237-021-01481-1>.

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Table 9 Comparison of modal analysis results of optimized model with previous studies

Optimized model	Kitazaki and Griffin		Matsumoto and Griffin (2001)		Kim et al. (2005)	Zheng et al. (2011)	Singh et al. (2015)	Liu et al. (2015)
	Model (Kitazaki and Griffin 1997a)	Experiment (Kitazaki and Griffin, 1997b)	Model 1	Model 2				
1–4 Hz	Pitch motion of the upper body at 1.67 Hz	Fore-and-aft motion of the head and the pelvis at 1.49 Hz Fore-and-aft motion of the head and the pelvis at 2.81 Hz	Bend mode of the thoracic and the cervical spine at 1.10 Hz Anterior-posterior motion of the head and the pelvis in opposite phase and in phase at 2.20 Hz and 3.40 Hz	Pitch motion of the pelvis in phase with a first bending mode of the spin at 2.56 Hz	Fore-and-aft motion of spine, head and visceral at 2.71 Hz Fore-and-aft motion of thigh and pelvis at 3.41 Hz	Pitch motion of the pelvis with a bending mode of the lumbar spine, with axial and shear deformation of tissue beneath the pelvis at 1.42 Hz		Pitch motion of the entire upper-body at 1.70 Hz
4–7 Hz	Bend of upper-body, axial and shear deformation of the soft tissue beneath the thighs and the pitch motion of the legs at 5.63 Hz	Mode of the human body with axial and shear deformation of the buttocks tissue at 5.06 Hz Bend mode of the whole spine with fore-and-aft motion of the pelvis and shear deformation of the buttocks tissue at 5.77 Hz	Mode of the human body with the head, spinal column and the pelvis moved vertically at 4.90 Hz Bending mode of the lumbar and the lower thoracic spine and vertical motion of the head at 5.60 Hz	Deformation of the buttocks tissue with vertical in phase mode of the viscera at 5.66 Hz	Rotational motion of thigh and pelvis at 4.12 Hz Rotational motion of head and torso at 4.80 Hz Vertical motion of whole body and viscera at 5.35 Hz Fore-and-aft motion of thigh and pelvis at 6.39 Hz	Body motion in both the vertical and fore-aft direction with pitch motions of the pelvis and the upper body at 5.29 Hz	Vertical motion of the whole body at 5.75 Hz	Axial and shear deformation of the soft tissue beneath the thighs and the pelvis, pitch of the pelvis and legs, and bending of the upper-body at 6.20 Hz
7–10 Hz	Axial and shear deformation of buttocks and thighs tissues, pitch motions of the upper-body and legs at 7.19 Hz	Rotation mode of the pelvis at 7.51 Hz Rotational motion of the pelvis at 8.96 Hz	Pitch modes of the pelvis with different locations of the pivot at 8.10 Hz and 8.70 Hz The second visceral mode at 9.30 Hz	Deformation of the buttocks tissue out of phase with vertical visceral motion and bending of the spine at 8.34 Hz	Rotational motion of thighs at 8.04 Hz Rotational motion of spine and head at 8.34 Hz	Lower torso and upper legs, lower legs and feet move along same horizontal direction at 8.49 Hz		

Table 9 (continued)

Optimized model	Kitazaki and Griffin		Matsumoto and Griffin (2001)		Kim et al. (2005)	Zheng et al. (2011)	Singh et al. (2015)	Liu et al. (2015)
	Model (Kitazaki and Griffin 1997a)	Experiment (Kitazaki and Griffin. 1997b)	Model 1	Model 2				
> 10 Hz			Dominated by rotational motion of the pelvis and bending of the spine similar to the bending in the second mode at 12.3 Hz	Dominated by rotational motion of the pelvis and bending of the spine similar to the bending in the second mode at 11.5 Hz				Axial and shear deformation of the soft tissues, pitch motions of the legs and pelvis, and bending of the upper-body at 13.0 Hz

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