Author’s response to reviews

Title: Validation of a novel Kinect-based device for 3D scanning of the foot plantar surface in weight-bearing

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Author’s response to reviews:

The authors would like to thank again both reviewers for helping to improve the quality and the content of the manuscript.

All changes with respect to the former version have been highlighted in yellow in the current revision.

The main issue is to do with abbreviations of journal names in the reference list.

We have now abbreviated the Journals names in the reference list.

Page 2, Line 29: 'needs' can be singular here: '...fulfilling the technological need for custom devices...'

Page 4, Line 49: insert 'a': 'application as a static body scanner'

Page 4, Line 51: insert 'a': 'and as a motion analysis tool'

Page 4, Line 54: insert 'a': 'study as a 3d foot scanner'

Page 6, 24: There is still an issue here with commonly used terminology. Most articles in the podiatry/orthotics field will refer to 'semi weight-bearing' as the position where the client is
seated with feet resting on the floor. A client in bi-pedal standing is referred to as 'weight-bearing' or 'full weight-bearing'. To stay consistent with this accepted terminology, this should be changed to '..taken in bipedal standing - or full weight-bearing;'

Page 7, Line 20: 'Custom software...' rather than 'A custom software....'
Page 10, Line 35: insert 'the': 'Most of the current...
Page 10, Line 40: remove 'condition': '...scanning in weight-bearing.'
Page 10, Line 40: insert 'foot's'. A possessive apostrophe is appropriate here (i think!): '...estimate the foot's main....'
Page 11, Line 25: as above: '...which is the foot's most...
Page 11, Line 48: remove 'also inter-operator': '...can reasonably be expected.'
Page 12, Line 10: remove 'little': '...explained by compression of the....'

The latest set of comments have all been addressed in this revised version according to the reviewer's suggestions.

As far as the Page 11 Line 48 comment, the sentence has now been modified as follows
"However, since the acquisition process is almost fully automatic, inter-operator errors are expected to have similar magnitude."

Reviewer #2:
Page 4 Line 10 response
I agree you make no mention of scanning feet for the production of orthoses
I wrongly assumed this! but I suspect many of you target audience may do the same!
May I suggest you make this more clear with a sentence early on in your paper

We understand the reviewer's misunderstanding, as one of the applications of such device can be, as highlighted in the Introduction, also for the design of custom orthoses. However the authors believe that Title and main aims (end of the Introduction) of the current manuscript are already
well focussed on the validation of a new 3D foot scanning device, with no particular mention to any specific application. The validation of the device for the design of custom orthoses would indeed require another study which could be sought in future investigations.

Page 10  Line 33

May I suggest ....still the preferred method to design semi weight bearing custom insoles. Many custom orthoses are still suspension casted.

Ok, this has now been modified according to what suggested by the reviewer.