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## Model Analysis Android App

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Study models which are collected before starting orthodontic treatment are essential diagnostic aids. These models offer a 3-D view i.e. transverse, vertical and sagittal plane of both the arches. Model analysis includes the study of the both the arches in non-appearance of patient. Model analysis is an important tool in the diagnosis and treatment planning before, during and after treatment. It is essential to measure the total amount of crowding, spacing, expansion etc. within the arches, for proper treatment planning. It also helps us for accurate bracket positioning.

For this we have developed an android mobile app to abridge the tiresome mathematical calculations required for study model analysis and proper bracket placement. This app is called Model Analysis App, which runs on Android-based smartphones (an iPhone app is planned). This Model Analysis App is available on Google Play Store (play.google.com / store). New version has been added by including formulas for missing teeth and MBT chart for bracket positioning.

The app provides quick and accurate mathematical calculations for

- 1. Bolton's ratio.1
- 2. Bolton's ratio for Vidarbha population (SM ratio).<sup>2</sup>
- Modified Bolton's ratio (ViVan ratio).<sup>3</sup>
- 4. Carev's Analysis.
- 5. Ashley Howe's Analysis.
- 6. Pont's Analysis.
- 7. Tanaka Johnston.
- 8. Peck and Peck index.
- 9. Formula for missing Maxillary Central and Lateral Incisor (ViVan Formula).
- 10. Formula for missing Maxillary and Mandibular Canine (VM Formula).
- 11. Formula for missing Mandibular molars (MeeVik Formula).
- 12. Formula for missing Mandibular Central Incisors (SV Formula).
- 13. MBT bonding guide.

This app is an excellent reference to these analyses and bracket placement.<sup>4,5</sup>

## Using the App

Indicators on the Model Analysis app's home screen are used for steering (Fig. 1). Snapping on the first row which is "Tooth Dimensions", will allow us to enter the mesiodistal widths of the permanent teeth in quadrant wise manner. (Fig. 2). These values can be changed by clicking the reverse arrow button. The "Reset" key will erase all values. References are available via the "help" button on each analysis screen.

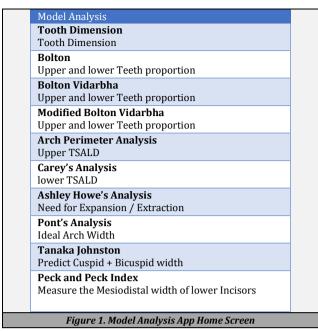
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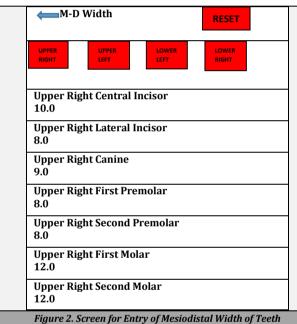
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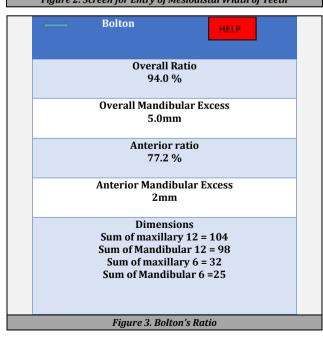
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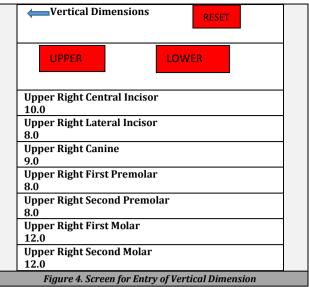
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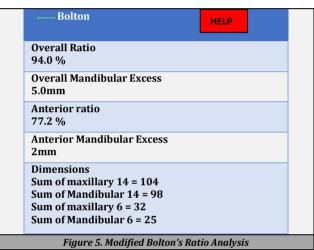
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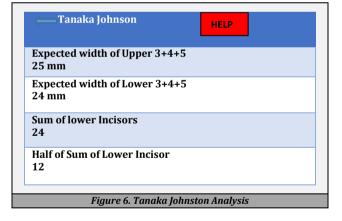












## Conclusions

All other analyses are available at android app at play store by name "Model Analysis App".

This app is used for diagnosis and treatment planning. It will be streamlined and organized for orthodontists in the near future.

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Disclosure forms provided by the authors are available with the full text of this article at jemds.com.

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