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A new method of computing dynamic heart rate involving the use of short video clips has been proposed in this paper. Video clips are far easier to obtain and cheaper than the existing invasive or in-contact methods of obtaining the heart rates. In this study, it is observed that close to accurate readings can be obtained if the three ICA sources are independent of each other. The independence of the ICA sources needs to be established to ensure the reliability of the findings. For this, mutual information developed earlier was used. Two experiments were done to corroborate the validity of the proposed method and the accuracy of its findings. These experiments show that the findings of this method agree with the findings of the established, and therefore accepted, method. The Bland-Altman plot shows that most of the findings of this study fall within the boundaries set for 95% limit of agreement interval. The RMSE in both experiments is less than 3 BPM.

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