(ii) calculating respective statistical variations of at least two physiological parameters derived from the bio-signal; and

(iii) determining an arousal level of the subject based on the calculated statistical variations of the at least two physiological parameters.

31. A method of claim 30, wherein the at least two physiological parameters are selected from the group consisting of respiration rate, heart rate and pulse pressure.

32. A method for determining an arousal level of a subject, the method comprising:

(i) receiving a bio-signal from the subject;

(ii) calculating statistical variation of at least one physiological parameter derived from the bio-signal, the at least one physiological parameter including pulse pressure; and

(iii) determining an arousal level of the subject based on the calculated statistical variation of the at least one physiological parameter,

wherein the arousal level is determined to be in a stress level if the calculated statistical variation of the pulse pressure is greater than a threshold value, in which the threshold value is within a range of about 3.0-12.0 mmHg mercury level.

33. A method of claim 32, wherein receiving the bio-signal includes receiving data related to at least five consecutive cardiac cycles of the bio-signal.

34. A method of claim 33, wherein the data includes time intervals of the at least five cardiac cycle relating to a systolic peak, start time and end time of each cardiac cycle.

35. A method of any of claims 32-34, wherein calculating the statistical variation of the at least one physiological parameter includes calculating the standard deviation of the pulse pressure.

36. A method of any of claims 35, wherein the arousal level is determined to be in the stress level if the calculated standard deviation of the pulse pressure is

greater than the threshold value, in which the threshold value is within a range of about 6.0-10.0 mmHg mercury level.

37. A method of any of claims 32-36, wherein the at least one physiological parameter further includes a selection from the group consisting of respiration rate and heart rate.