**Table 1. Descriptive Characteristics of the Overall Study Population and by Relative Amplitude Categories**

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| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Characteristics | OverallSample  (n=4587) | Poor  (n=2293) | Fair  (n=2293) | Good  (n=2293) | VGood  (n=2293) | Excellent  (n=2293) | P.Value  (n=2293) | RACutoff |
| Inter-daily Stability (IS60) | 0.64 (0.16) | 0.59 (0.16) | 0.63 (0.16) | 0.64 (0.16) | 0.64 (0.16) | 0.65 (0.15) | 0.035 |  |
| Intra-daily Variability (IV60) | 0.69 (0.25) | 0.79 (0.3) | 0.68 (0.25) | 0.67 (0.25) | 0.69 (0.24) | 0.72 (0.26) | <0.001 |  |
| M10 Midpoint | 14.16 (2.72) | 14.22 (2.53) | 14.23 (2.69) | 14.15 (2.84) | 14.17 (2.64) | 14.25 (2.62) | 0.957 |  |
| M10 Counts | 497.12 (169.78) | 404.38 (155.55) | 476.27 (178.39) | 504.32 (172.73) | 495.72 (161.57) | 533.81 (149.6) | <0.001 |  |
| L5 Midpoint | 3.89 (3.67) | 4.43 (4.5) | 4.02 (3.47) | 4.02 (3.69) | 3.77 (3.73) | 3.36 (2.77) | 0.125 |  |
| L5 Counts | 36.84 (37.44) | 43.89 (37.28) | 41.69 (38.93) | 38.73 (40.8) | 31.69 (30.85) | 33.99 (40.14) | 0.005 |  |
| Relative Amplitude | 0.86 (0.12) | 0.8 (0.14) | 0.84 (0.13) | 0.86 (0.12) | 0.88 (0.11) | 0.89 (0.1) | <0.001 |  |

**1. BMI: body mass index; L5: Least Active 5 hour period; M10: most active 10-hour period; RA: relative amplitude.  
2. RA median value was 0.89.  
3. Education Dichotomous: With or without a college degree.  
4. Smoking Status: Smoke or not smoke at all.  
5. Sleep Disorder: Ever diagnosed with sleep disorder or not.  
6. Chi-square tests were used to compare mean values across categories for categorical values and t-tests were used for continuous variables.**

**Table 2. Logistic regression models for 24-h Rest-Activity Pattern Variables in Relation to Self Rated Health**

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|  | Self Rated 1 (Sample Size = 4587) | |
| 24-h Rest-Activity Pattern Variables | Model 1  Tertile1 OR (95% C.I.)  Tertile2 OR (95% C.I.)  Tertile3 OR (95% C.I.)  *p-trend* | Model 2  Tertile1 OR (95% C.I.)  Tertile2 OR (95% C.I.)  Tertile3 OR (95% C.I.)  *p-trend* |
| Inter-daily Stability (IS60) < 0.58 0.58 - 0.72 > 0.72 | 0.99 (0.88-1.12) 1.28 (1.01-1.62)  *p-trend=0.044* | 1.07 (0.92-1.25) 1.49 (1.13-1.97)  *p-trend=0.005* |
| Intra-daily Variability (IV60) < 0.56 0.56 - 0.77 > 0.77 | 0.98 (0.79-1.21) 0.94 (0.75-1.17)  *p-trend=0.565* | 0.89 (0.69-1.15) 0.84 (0.64-1.11)  *p-trend=0.219* |
| M10 Midpoint < 12.82 12.82 - 15.15 > 15.15 | 0.9 (0.77-1.06) 0.97 (0.8-1.17)  *p-trend=0.752* | 0.85 (0.73-1.0) 0.79 (0.64-0.98)  *p-trend=0.033* |
| M10 Counts (x100) < 4.14 4.14 - 5.58 > 5.58 | 1.49 (1.2-1.84) 1.84 (1.44-2.34)  *p-trend<0.001* | 1.45 (1.16-1.82) 2.24 (1.72-2.91)  *p-trend<0.001* |
| L5 Midpoint < 2.6 2.6 - 3.97 > 3.97 | 0.88 (0.7-1.11) 0.65 (0.55-0.78)  *p-trend<0.001* | 0.86 (0.68-1.09) 0.63 (0.55-0.72)  *p-trend<0.001* |
| L5 Counts < 21.54 21.54 - 39.38 > 39.38 | 0.82 (0.66-1.0) 0.52 (0.43-0.62)  *p-trend<0.001* | 0.89 (0.72-1.1) 0.58 (0.48-0.7)  *p-trend<0.001* |
| Relative Amplitude < 0.84 0.84 - 0.92 > 0.92 | 1.85 (1.49-2.29) 2.42 (1.96-2.98)  *p-trend<0.001* | 1.74 (1.4-2.18) 2.23 (1.81-2.75)  *p-trend<0.001* |
|  | Self Rated 2 (Sample Size = 4587) | |
| 24-h Rest-Activity Pattern Variables | Model 1  Tertile1 OR (95% C.I.)  Tertile2 OR (95% C.I.)  Tertile3 OR (95% C.I.)  *p-trend* | Model 2  Tertile1 OR (95% C.I.)  Tertile2 OR (95% C.I.)  Tertile3 OR (95% C.I.)  *p-trend* |
| Inter-daily Stability (IS60) < 0.58 0.58 - 0.72 > 0.72 | 1.07 (0.91-1.26) 1.31 (1.09-1.58)  *p-trend=0.005* | 1.12 (0.94-1.33) 1.45 (1.2-1.74)  *p-trend<0.001* |
| Intra-daily Variability (IV60) < 0.56 0.56 - 0.77 > 0.77 | 1.15 (0.96-1.38) 1.11 (0.91-1.37)  *p-trend=0.304* | 1.04 (0.84-1.28) 0.96 (0.75-1.23)  *p-trend=0.756* |
| M10 Midpoint < 12.82 12.82 - 15.15 > 15.15 | 1.08 (0.82-1.42) 1.08 (0.92-1.26)  *p-trend=0.368* | 1.03 (0.79-1.35) 0.97 (0.81-1.17)  *p-trend=0.767* |
| M10 Counts (x100) < 4.14 4.14 - 5.58 > 5.58 | 1.41 (1.2-1.65) 1.43 (1.21-1.68)  *p-trend<0.001* | 1.38 (1.17-1.63) 1.66 (1.37-2.01)  *p-trend<0.001* |
| L5 Midpoint < 2.6 2.6 - 3.97 > 3.97 | 0.9 (0.75-1.07) 0.61 (0.48-0.77)  *p-trend<0.001* | 0.88 (0.72-1.06) 0.62 (0.51-0.75)  *p-trend<0.001* |
| L5 Counts < 21.54 21.54 - 39.38 > 39.38 | 0.69 (0.59-0.82) 0.57 (0.47-0.69)  *p-trend<0.001* | 0.74 (0.62-0.88) 0.65 (0.52-0.8)  *p-trend<0.001* |
| Relative Amplitude < 0.84 0.84 - 0.92 > 0.92 | 1.45 (1.21-1.72) 2.04 (1.71-2.45)  *p-trend<0.001* | 1.34 (1.13-1.58) 1.88 (1.57-2.24)  *p-trend<0.001* |

**1. CI: confidence interval; L5: Least Active 5 hour period; M10: most active 10-hour period; OR: Odds Ratio.  
2. Model 1: Represents univariate associations.  
3. Model 2: Adjusted for age, sex, marital status, education, race/ethnicity, smoking, and alcohol use.  
4. Model 3: Adjusted for model 2 covariates and additionally for BMI.  
5. Model 4: Adjusted for model 2 covariates and additionally for self-reported sleep disorders.**