**Internet addiction and factors associated with internet addiction during COVID-19**

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| --- | --- | --- | --- | --- | --- |
|  | **Normal Internet** **Users****N= 703 (61.4%)** | **Problematic Internet Users** **N= 313 (27.3%)** | **Addictive Internet Users**  **N= 129 (11.3%)** | **x2** | **p value** |
| **Socio-demographic factors (Table 1a)** |
|  |  **n (%)** |  **n (%)** |  **n (%)** |  |  |
| **Gender** |
|  Male | 286 (40.7) | 119 (38.0) | 54 (41.9) | 0.8 | 0.66 |
|  Female | 417 (59.3) | 194 (62.0) | 75 (58.1) |
| **Age**  |
| Teenager | 140 (19.9) | 76 (24.3) | 28 (21.7) | 5.6 | 0.46 |
| Youth | 349 (49.6) | 160 (51.1) | 62 (48.1) |
| Young adult | 133 (18.9) | 50 (16.0) | 27 (20.9) |
| Middle/older adult | 81 (11.5) | 27 (8.6) | 12 (9.3) |
| **Marital status** |
| Never married | 561 (79.8) | 274 (87.5) | 109 (84.5) | 9.4 | <0.01 |
| Ever Married | 142 (20.2) | 39 (12.5) | 20 (15.5) |
| **Education**  |
| Less than higher secondary  | 57 (8.1) | 11 (3.5) | 12 (9.3) | 14.0 | 0.03 |
| Higher secondary | 234 (33.3) | 126 (40.3) | 46 (35.7) |
| Under grad degree | 265 (37.7) | 126 (40.3) | 47 (36.4) |
| Post grad degree | 147 (20.9) | 50 (16.0) | 24 (18.6) |
| **Family system**  |
| Extended  | 250 (35.6) | 120 (38.3) | 49 (38.0) |  0.8 | 0.65 |
| Nuclear family | 453 (64.4) | 193 (61.7) | 80 (62.0) |
| **Family income** |
| <50k | 237 (33.7) | 73 (23.3) | 17 (13.2) | 28.9 | 0.00 |
| 50-100k | 134 (19.1) | 63 (20.1) | 32 (24.8) |
| 100-200k | 124 (17.6) | 65 (20.8) | 30 (23.3) |
| >200k | 208 (29.6) | 112 (35.8) | 50 (38.8) |
| **Family size** |
| Small | 162 (23.0) | 72 (23.0) | 30 (23.3) | 8.1 | 0.08 |
| Medium | 419 (59.6) | 166 (53.0) | 68 (52.7) |
| Large | 122 (17.4) | 75 (24.0) | 31 (24.0) |
| **Health related factors** |
| **Depression Anxiety Stress Scale – 21 items (DASS-21)** **(Table 1b)** |
| **Depression**  |
| Normal | 367 (52.2) | 78 (24.9) | 26(20.2) | 219.4 | <0.01 |
| Mild | 119 (16.9) | 33(10.5) | 8(6.2) |
| Moderate | 119 (16.9) | 79(25.2) | 17(13.2) |
| Severe | 50 (7.1) | 44(14.1) | 17(13.2) |
| Extremely severe | 48 (6.8) | 79 (25.2) | 61(47.3) |
| **Anxiety**  |
| Normal | 350 (49.8) | 80 (25.6) | 24 (18.6) | 199.6 | <0.01 |
| Mild | 83 (11.8) | 22 (7.0) | 4 (3.1) |
| Moderate | 156 (22.2) | 67 (21.4) | 19 (14.7) |
| Severe | 34 (4.8) | 39 (12.5) | 10 (7.8) |
| Extremely severe | 80 (11.4) | 105 (33.6) | 72 (55.8) |
| **Stress**  |
| Normal | 532 (75.7) | 144 (46.0) | 39(30.2) | 234.3 | <0.01 |
| Mild | 51 (7.3) | 35 (11.2) | 4 (3.1) |
| Moderate | 63 (9.0) | 54 (17.3) | 14(10.9) |
| Severe | 41 (5.8) | 53 (16.9) | 39 (30.2) |
| Extremely severe | 16 (2.3) | 27 (8.6) | 33 (25.6) |
| **History of any mental health problems (Table 1c)** |
| No | 366 (52.1) | 119 (38.0) | 58 (45.0) | 17.9 | <0.01 |
| Yes | 260 (37.0) | 146 (46.7) | 53 (41.1) |
| I don’t know  | 77 (11.0) | 48 (15.3) | 18 (14.0) |
| **Family members suffering from mental problem during Covid (Table 1c)** |
| No | 485 (69.0) | 173 (55.3) | 74 (57.4) | 23.4 | <0.01 |
| Yes | 146 (20.8) | 82 (26.2) | 36 (27.9) |
| I don’t know | 72 (10.2) | 58 (18.5) | 19 (14.7) |
| **Behavioral and environmental factors during pandemic (Table 1d)** |
| **Work situation during pandemic** |
| No, I do not work | 321 (45.7) | 172 (55.0) | 69 (53.5) | 21.8 | <0.01 |
| No, looking for job | 62 (8.8) | 19 (6.1) | 5 (3.9) |
| No, short time work | 55 (7.8) | 29 (9.3) | 16 (12.4) |
| Yes, on work site and teleworking | 98 (13.9) | 46 (14.7) | 12 (9.3) |
| Yes, on worksite exclusively  | 167 (23.8) | 47 (15.0) | 27 (20.9) |
| **Workload during pandemic** |
| Not working | 221 (31.4) | 121 (38.7) | 48 (37.2) | 11.3 | 0.18 |
| Higher than before | 137 (19.5) | 62 (19.8) | 27 (20.9) |
| Highly variable | 66 (9.4) | 31 (9.9) | 15 (11.6) |
| Less than before | 164 (23.3) | 51 (16.3) | 23 (17.8) |
| Same as before  | 115 (16.4) | 48 (15.3) | 16 (12.4) |
| **Financial impact on budget due to pandemic** |
| No | 214 (30.4) | 82 (26.2) | 33 (25.6) | 7.0 | 0.13 |
| Yes a little | 336 (47.8) | 146 (46.7) | 57 (44.2) |
| Yes a lot | 153 (21.8) | 85 (27.2) | 39 (30.2) |
| **Describe your mood during pandemic** |
| Negative | 321 (45.7) | 178 (56.9) | 96 (74.4) | 43.6 | <0.01 |
| No change | 224 (31.9) | 70 (22.4) | 14 (10.9) |
| Positive | 158 (22.5) | 65 (20.8) | 19 (14.7) |

***Table 1 showing sociodemographic factors, health related factors and behavioral and environmental factors of participants (n=1145)***

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  | **Normal Internet Users** **Mean (SD)** | **Problematic Internet Users Mean (SD)** | **Addictive Internet Users Mean (SD)** |  **F factor** |  **P value** |
|  | **M** | **F** | **Overall** | **M** | **F** | **Overall** | **M** | **F** | **Overall** | **M** | **F** | **Overall** | **M** | **F** | **Overall** |
| **Depression Anxiety Stress Scale -21 (DASS-21) scores** |
| **Depression score** | 9.1(8.2) | 11.4(10.1) | 10.5 (9.5) | 17.3 (10.8) | 18.8 (11.8) | 18.2 (11.4) | 21.0 (13.3) | 25.2 (12.4) | 23.4(12.9) | 53.1 | 67.1 | 117.4 | <0.01 | <0.01 | <0.01 |
| **Anxiety score** | 7.8 (7.1) | 9.2 (8.5) | 8.6 (8.0) | 14.3 (9.2) | 15.6(10.5) | 15.1 (10.0) | 17.9 (12.2) | 22.0 (11.9) | 20.2(12.1) | 48.0 | 72.2 | 118.6 | <0.01 | <0.01  | <0.01 |
| **Stress Score** | 9.5 (7.9) | 11.6 (9.4) | 10.8 (8.9) | 17.0 (10.0) | 18.3(10.6) | 17.8 (10.4) | 20.6 (12.8) | 25.5 (11.8) | 23.5(12.4) | 50.2 | 75.7  | 123.2 | <0.01 | <0.01 | <0.01 |

***Table 2 showing DASS -21 scores of participants as a function of gender. (M=male; F=female; SD=standard deviation)***

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***Figure 1 showing mean DASS scores of participants as a function of gender.***

|  |  |  |
| --- | --- | --- |
| **Variable** | **Problematic internet User (PIU)** |  **Addictive Internet User (AIU)** |
| **Adjusted OR (95% CI)** | **Adjusted OR (95% CI)** |
| **Sociodemographic factors** |
| **Gender** |
| Male | 1.2 (0.8-1.6) | 1.7 (1.1-2.7) \* |
| **Marital status** |
| Never married | 1.6 (1.0-2.5) \* | 1.5 (0.8-2.8) |
| **Family income** |
| 50-100k | 1.3 (0.9-2.1) | 2.8 (1.4-5.7) \* |
| 100-200k | 1.3 (0.9-2.1) | 2.6 (1.3-5.2) \* |
| >200k | 1.3 (0.9-2.0) | 2.3 (1.2-4.4) \* |
| **Family size** |
| Small | 1.2 (0.8-1.7) | 1.1 (0.7-2.0) |
| Large | 1.8 (1.3-2.7) \* | 1.8 (1.1-3.2) \* |
| **Health related factors** |
| **Depression Anxiety Stress Scale – 21 (DASS-21)** |
| **Depression** |
| Mild | 1.1 (0.7-1.8) | 0.8 (0.3- 1.8) |
| Moderate | 2.0(1.3-3.2) \* | 1.1 (0.4- 2.3) |
| Severe | 2.1 (1.1-3.9) \* | 1.1 (0.4-3.3) |
| Extremely severe | 3.1 (1.5-6.4) \* | 1.9 (0.7-5.7) |
| **Stress** |
| Mild | 1.2 (0.7-2.0) | 0.5 (0.2-1.7) |
| Moderate | 1.1 (0.6-1.9) | 1.2 (0.5-3.0) |
| Severe | 1.2 (0.6-2.5) | 3.3 (1.2-8.9) \* |
| Extremely severe | 1.2 (0.5-3.2) | 5.4 (1.7-17.7) \* |
| **Anxiety** |
| Mild | 1.1 (0.6- 1.7) | 0.7 (0.2-2.2) |
| Moderate | 1.2 (0.8-1.9) | 1.4 (0.7-3.1) |
| Severe | 2.6 (1.4-4.9) \* | 2.1 (0.7-6.3) |
| Extremely severe | 2.0 (1.1-3.9) \* | 2.6 (1.1-7.1) |
| **Family members suffering from mental problem during Covid** |
| Yes | 1.4(1.0-2.0) | 1.1 (0.7-1.9) |
| I don’t know | 1.7 (1.1-2.6) \* | 1.3 (0.7-2.5) |
| **Behavioral and environmental factors during pandemic** |
| **Work situation during pandemic** |
| Do not work | 1.3 (0.8-2.0) | 2.2 (1.0-4.6) \* |
| Looking for job | 0.7 (0.3- 1.3) | 0.7 (0.2- 2.2) |
| Part-time job | 1.2 (0.7-2.3) | 2.6 (1.0-6.5) \* |
| Work in person | 0.7 (0.4- 1.1) | 1.5 (0.7-3.4) |
| **Describe your mood changes during pandemic** |
| Negative | 1.2 (0.8-1.7) | 2.9 (1.5-5.6) \* |
| Positive | 1.1 (0.7-1.8) | 1.5 (0.7-3.3) |

***Table 3 showing crude and adjusted odds ratio (OR) along with 95% confidence interval (CI) of factors associated with internet addiction using multinominal logistic regression. \* indicates results with P value <0.05.***