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Tables

Table 1: Participant characteristics and distribution by alcohol use categories (N=7,218)

| | | | Non-drinking | | Low risk ^a | Hazardous use | | Harmful/probable dependence | |
|--|---|-----------------------|-------------------------|-------------|-----------------------|-------------------------|-------------|-----------------------------|-------------|
| | | <i>N</i> (weighted %) | MOR (95% CI) | <i>P</i> | | MOR (95% CI) | <i>P</i> | MOR (95% CI) | <i>P</i> |
| Demographic characteristics | | | | | | | | | |
| Gender | Male ^b | 2,924 (48.83) | 1 | - | 1 | 1 | - | 1 | - |
| | Female | 4,294 (51.17) | 1.30 (1.13-1.50) | 0.01 | 1 | 0.48 (0.41-0.57) | 0.01 | 0.38 (0.27-0.54) | 0.01 |
| Age | 16-34 | 1,555 (31.38) | 1.29 (1.05-1.58) | 0.02 | 1 | 1.53 (1.27-1.85) | 0.01 | 1.42 (1.00-2.00) | 0.05 |
| | 35-54 ^c | 2,405 (33.85) | 1 | - | 1 | 1 | - | 1 | - |
| | 55-74 | 2,315 (25.48) | 0.99 (0.84-1.17) | 0.90 | 1 | 0.89 (0.75-1.06) | 0.19 | 0.56 (0.38-0.83) | 0.01 |
| | 75+ | 943 (9.28) | 1.79 (1.49-2.16) | 0.01 | 1 | 0.28 (0.19-0.40) | 0.01 | 0.08 (0.02-0.31) | 0.01 |
| Ethnicity | White | 6,515 (87.34) | 1 | - | 1 | 1 | - | 1 | - |
| | Non-white | 678 (12.66) | 5.11 (4.13-6.33) | 0.01 | 1 | 0.54 (0.36-0.81) | 0.01 | 0.86 (0.45-1.65) | 0.66 |
| Marital status | Single | 2,069 (34.22) | 1.15 (0.97-1.38) | 0.11 | 1 | 2.00 (1.68-2.37) | 0.01 | 2.70 (1.91-3.82) | 0.01 |
| | Married or civil partnership ^d | 3,264 (49.41) | 1 | - | 1 | 1 | - | 1 | - |
| | Separated/Divorced/Widowed | 1,884 (16.37) | 1.57 (1.36-1.82) | 0.02 | 1 | 1.03 (0.86-1.23) | 0.74 | 1.05 (0.66-1.65) | 0.84 |
| | Has children aged under 16 years living in household | 1,884 (16.37) | 1.57 (1.36-1.82) | 0.02 | 1 | 1.03 (0.86-1.23) | 0.74 | 1.05 (0.66-1.65) | 0.84 |
| Has children aged under 16 years living in household | No ^e | 5,658 (77.62) | 1 | - | 1 | 1 | - | 1 | - |
| | Yes | 1,560 (22.38) | 1.21 (1.04-1.41) | 0.02 | 1 | 0.87 (0.72-1.04) | 0.13 | 0.81 (0.54-1.22) | 0.31 |
| SES characteristics | | | | | | | | | |
| Education | Degree or above | 2,335 (33.51) | 0.76 (0.63-0.91) | 0.01 | 1 | 0.92 (0.77-1.11) | 0.39 | 0.77 (0.53-1.13) | 0.18 |
| | A-Level/GCSE ^f | 2,855 (43.75) | 1 | - | 1 | 1 | - | 1 | - |
| | Foreign qualifications | 252 (3.04) | 1.29 (0.91-1.83) | 0.16 | 1 | 0.55 (0.32-0.96) | 0.03 | 0.79 (0.29-2.19) | 0.65 |
| | No qualifications | 1,704 (19.69) | 1.80 (1.53-2.12) | 0.01 | 1 | 0.66 (0.53-0.83) | 0.01 | 0.71 (0.45-1.12) | 0.14 |
| Occupational grade | Managerial/professional | 1,760 (26.42) | 0.68 (0.54-0.87) | 0.01 | 1 | 1.01 (0.80-1.29) | 0.91 | 0.59 (0.39-0.90) | 0.02 |
| | Intermediate/small employers and own account workers | 1,064 (15.45) | 0.75 (0.59-0.95) | 0.02 | 1 | 0.72 (0.56-0.94) | 0.01 | 0.62 (0.38-1.01) | 0.06 |
| | Lower supervisory and technical/semi-routine/routine ^g | 1,305 (21.91) | 1 | - | 1 | 1 | - | 1 | - |

| | | | | | | | | | |
|----------------|--------------------------------------|---------------|-------------------------|-------------|---|-------------------------|-------------|-------------------------|-------------|
| | Never worked/not worked in last year | 2,752 (30.11) | 1.49 (1.23-1.81) | 0.01 | 1 | 0.44 (0.35-0.57) | 0.01 | 0.44 (0.29-0.66) | 0.01 |
| | Not classified for other reason | 295 (6.10) | 3.63 (2.55-5.17) | 0.01 | 1 | 1.08 (0.67-1.73) | 0.76 | 0.71 (0.30-1.70) | 0.44 |
| Housing tenure | Owner-occupier ^h | 4,722 (64.17) | 1 | - | 1 | 1 | - | 1 | - |
| | Social renter | 1,184 (15.63) | 2.54 (2.13-3.03) | 0.01 | 1 | 0.87 (0.67-1.12) | 0.28 | 2.13 (1.39-3.26) | 0.01 |
| | Private or other renter | 1,265 (20.20) | 1.29 (1.07-1.57) | 0.01 | 1 | 1.45 (1.19-1.76) | 0.01 | 2.31 (1.54-3.46) | 0.01 |

****Note:** MOR=multinomial odds ratio, CI=confidence interval. Bold font indicates significance

Reference categories: ^aLow risk, ^bMale gender, ^cAged 35-54, ^dMarried or in civil partnership, ^eDoes not have children living in household, ^fEducated to A-Level/GCSE level, ^gLower supervisory and technical/semi-routine/routine occupational grade, ^hOwner-occupier

Table 2: Prevalence of alcohol use among those meeting criteria for a mental health problem compared to those who did not meet criteria for the respective mental health problem (N=7,218)

| | | Non-drinking | Low risk | Hazardous use | Harmful/probable dependence | Total |
|--------------------------------------|-------------|----------------------------|----------------------------|----------------------------|-----------------------------|-------|
| Symptoms of CMD | | N (weighted%, 95% CI) | N (weighted %, 95% CI) | N (weighted %, 95% CI) | N (weighted %, 95% CI) | |
| No symptoms | | 1,356 (21.81, 20.52-23.16) | 3,694 (59.15, 57.62-60.67) | 876 (16.76, 15.61-17.97) | 117 (2.27, 1.84-2.81) | 6,043 |
| Moderate symptoms of CMD | | 132 (22.72, 18.55-27.52) | 301 (53.85, 48.42-59.19) | 89 (16.95, 13.35-21.28) | 32 (6.47, 4.13-10.01) | 554 |
| Severe symptoms of CMD | | 213 (33.21, 28.58-38.18) | 269 (43.29, 38.03-48.71) | 86 (14.96, 11.68-18.97) | 53 (8.54, 5.65-12.71) | 621 |
| Total | | 1,701 | 4,264 | 1,051 | 202 | 7,218 |
| Type of mental health problem | | | | | | |
| Depression | Not present | 1,602 (22.33, 21.11-23.60) | 4,155 (58.00, 56.59-59.41) | 1,019 (16.78, 15.75-17.88) | 177 (2.88, 2.41-3.43) | 6,953 |
| | Present | 99 (36.62, 28.46-45.63) | 109 (41.80, 32.98-51.18) | 32 (11.99, 9.50-15.03) | 25 (9.59, 4.97-17.98) | 265 |
| Anxiety | Not present | 1,545 (22.42, 21.14-23.75) | 4,033 (58.46, 57.03-59.88) | 964 (16.48, 15.44-17.57) | 154 (2.64, 2.21-3.14) | 6,696 |
| | Present | 156 (27.75, 22.69-33.45) | 231 (44.38, 38.17-50.77) | 87 (18.65, 14.07-24.30) | 48 (9.22, 6.45-13.02) | 522 |
| Phobia | Not present | 1,626 (22.42, 21.21-23.67) | 4,198 (58.00, 56.59-59.41) | 1,023 (16.63, 15.59-17.73) | 181 (2.95, 2.49-3.49) | 7,028 |
| | Present | 75 (38.41, 29.22-48.51) | 66 (35.88, 26.37-46.63) | 28 (16.54, 12.88-20.99) | 21 (9.17, 4.81-16.80) | 190 |
| Probable PTSD | Not present | 1,428 (20.70, 19.49-21.97) | 4,141 (59.50, 58.07-60.91) | 992 (16.85, 15.78-17.97) | 176 (2.95, 2.49-3.50) | 6,737 |
| | Present | 114 (34.32, 27.11-42.34) | 116 (39.47, 32.29-47.12) | 56 (18.47, 12.77-25.96) | 26 (7.74, 4.65-12.61) | 312 |
| Bipolar disorder | Not present | 1,513 (21.21, 19.99-22.48) | 4,215 (59.11, 57.70-60.50) | 1,024 (16.81, 15.75-17.91) | 182 (2.88, 2.44-3.39) | 6,934 |
| | Present | 39 (29.53, 20.92-39.90) | 46 (31.53, 21.45-43.70) | 25 (21.95, 18.15-26.29) | 20 (16.99, 8.14-32.10) | 130 |
| ASPD | Not present | 971 (20.30, 18.87-21.81) | 2,941 (57.78, 56.12-59.42) | 842 (18.74, 17.47-20.07) | 155 (3.18, 2.65-3.82) | 4,909 |
| | Present | 31 (18.18, 11.64-27.25) | 57 (31.07, 22.93-40.57) | 45 (30.29, 20.22-42.70) | 31 (20.46, 9.39-38.97) | 164 |
| BPD | Not present | 965 (19.96, 18.57-21.42) | 2,956 (57.56, 55.91-59.20) | 867 (19.07, 17.79-20.41) | 164 (3.42, 2.87-4.07) | 4,952 |
| | Present | 37 (31.47, 17.59-49.69) | 42 (29.39, 20.06-40.85) | 20 (21.41, 15.10-29.44) | 22 (17.73, 8.69-32.81) | 121 |
| Probable psychotic disorder | Not present | 1,658 (22.53, 21.30-23.80) | 4,241 (57.73, 56.32-59.13) | 1,043 (16.68, 15.65-17.77) | 196 (3.05, 2.60-3.59) | 7,138 |
| | Present | 43 (52.30, 38.21-65.94) | 23 (29.40, 16.19-47.31) | 8 (10.58, 3.09-30.52) | 6 (7.72, 1.31-34.57) | 80 |
| ADHD | Not present | 1,491 (22.56, 21.26-23.92) | 3,891 (59.03, 57.53-60.51) | 901 (15.94, 14.86-17.09) | 135 (2.47, 2.03-3.00) | 6,418 |
| | Present | 210 (24.50, 20.84-28.57) | 373 (45.93, 41.20-50.73) | 150 (21.81, 18.27-25.82) | 67 (7.76, 5.65-10.57) | 800 |

*CI=Confidence interval

Table 3: Unadjusted and adjusted associations between alcohol use and meeting criteria for a mental health problem (N=7,218)

| | | Unadjusted ^{ab} | | | | | Adjusted for demographic and SES characteristics ^{ab} | | | | | | |
|--------------------------|--|--------------------------|------|------------------|------|-----------------------------|--|------------------|---------------|------------------|-----------------------------|-------------------------|-------------|
| | | Non-drinking | | Hazardous use | | Harmful/probable dependence | Non-drinking | | Hazardous use | | Harmful/probable dependence | | |
| Symptoms of CMD | | MOR (95% CI) | P | MOR (95% CI) | P | MOR (95% CI) | P | MOR (95% CI) | P | MOR (95% CI) | P | MOR (95% CI) | P |
| Moderate symptoms of CMD | | 1.14 (0.89-1.47) | 0.29 | 1.11 (0.83-1.49) | 0.48 | 3.13 (1.92-5.10) | 0.01 | 1.03 (0.80-1.34) | 0.83 | 1.22 (0.89-1.68) | 0.21 | 3.36 (2.03-5.57) | 0.01 |

| | | | | | | | | | | | | |
|--------------------------------------|-------------------------|-------------|-------------------------|-------------|---------------------------|-------------|-------------------------|-------------|-------------------------|-------------|--------------------------|-------------|
| Severe symptoms of CMD | 2.08 (1.67-2.59) | 0.01 | 1.22 (0.90-1.65) | 0.20 | 5.13 (3.42-7.71) | 0.01 | 1.55 (1.20-1.99) | 0.01 | 1.36 (1.00-1.86) | 0.05 | 5.06 (3.34-7.66) | 0.01 |
| Type of mental health problem | | | | | | | | | | | | |
| Depression Present | 2.28 (1.64-3.15) | 0.01 | 0.99 (0.60-1.63) | 0.97 | 4.62 (2.67-8.00) | 0.01 | 1.83 (1.28-2.61) | 0.01 | 1.06 (0.65-1.72) | 0.81 | 3.92 (2.23-6.89) | 0.01 |
| Anxiety Present | 1.63 (1.27-2.09) | 0.01 | 1.49 (1.09-2.03) | 0.01 | 4.61 (3.13-6.79) | 0.01 | 1.35 (1.00-1.81) | 0.05 | 1.54 (1.12-2.12) | 0.01 | 4.32 (2.92-6.38) | 0.01 |
| Phobia Present | 2.77 (1.86-4.13) | 0.01 | 1.61 (0.92-2.82) | 0.10 | 5.03 (2.77-9.13) | 0.01 | 1.99 (1.30-3.03) | 0.01 | 1.79 (0.99-3.25) | 0.06 | 3.83 (1.99-7.36) | 0.01 |
| Probable PTSD Present | 2.50 (1.85-3.37) | 0.01 | 1.65 (1.14-2.40) | 0.01 | 3.96 (2.41-6.50) | 0.01 | 1.64 (1.16-2.33) | 0.01 | 1.59 (1.07-2.35) | 0.02 | 3.10 (1.73-5.58) | 0.01 |
| Bipolar disorder Present | 2.61 (1.66-4.12) | 0.01 | 2.45 (1.34-4.49) | 0.01 | 11.07 (6.03-20.31) | 0.01 | 2.45 (1.49-4.04) | 0.01 | 2.04 (1.11-3.73) | 0.02 | 7.52 (3.97-14.28) | 0.01 |
| ASPD Present | 1.67 (0.98-2.82) | 0.06 | 3.01 (1.93-4.68) | 0.01 | 11.95 (7.11-20.11) | 0.01 | 1.40 (0.76-2.56) | 0.28 | 2.66 (1.69-4.20) | 0.01 | 8.73 (5.07-15.04) | 0.01 |
| BPD Present | 3.09 (1.86-5.14) | 0.01 | 2.20 (1.18-4.11) | 0.01 | 10.16 (5.38-19.20) | 0.01 | 2.14 (1.13-4.05) | 0.02 | 2.40 (1.29-4.44) | 0.01 | 9.77 (4.81-19.84) | 0.01 |
| Probable psychotic disorder Present | 4.56 (2.53-8.23) | 0.01 | 1.25 (0.48-3.25) | 0.65 | 4.97 (1.73-14.27) | 0.01 | 3.42 (1.74-6.70) | 0.01 | 1.31 (0.51-3.38) | 0.58 | 2.87 (0.95-8.67) | 0.06 |
| ADHD Present | 1.40 (1.13-1.73) | 0.01 | 1.76 (1.37-2.25) | 0.01 | 4.04 (2.81-5.80) | 0.01 | 1.22 (0.96-1.54) | 0.10 | 1.56 (1.21-2.01) | 0.01 | 3.25 (2.18-4.84) | 0.01 |

*Note: MOR = multinomial odds ratio, CI = confidence interval, bold indicates significant results

^aThe reference group for all alcohol use analyses are the remainder of the sample reporting low risk alcohol use

^bThe references group for all mental health analyses are not meeting criteria for the respective mental health problem