Supplementary Online Materials for:

Youth’s Personal Relationships, Psychological Symptoms and the Use of Different Substances: A Population-Based Study

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1. Supplementary Materials (SM) Tables I, II, III, and IV.
2. Appendix: Original and Modified AUDIT Items 1-3
|       | 1    | 2    | 3    | 4    | 5    | 6    | 7    | 8    | 9    | 10   | 11   | 12   | 13   | 14   |
|-------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| 1     | Age Group | --   |      |      |      |      |      |      |      |      |      |      |      |      |
| 2     | Sex     | 0.011| --   |      |      |      |      |      |      |      |      |      |      |      |
| 3     | Number of friends | -.089** | -.061** | --   |      |      |      |      |      |      |      |      |      |      |
| 4     | A friend uses illegal drugs | -.082** | -.154** | .182** | --   |      |      |      |      |      |      |      |      |      |
| 5     | Has a partner | .304** | .096** | -.047** | -.045* | --   |      |      |      |      |      |      |      |      |
|       | Lives with someone with SUP | 0.025 | 0.017 | -.007 | .119** | 0.016 | --   |      |      |      |      |      |      |      |
| 6     | Parent(s) has SUP | .090** | .039* | -.070** | .051** | .064** | .162** | --   |      |      |      |      |      |      |
| 7     | Parents together | -.080** | -.001 | .067** | -.049** | -.061** | -.061** | -.260** | --   |      |      |      |      |      |      |
| 8     | Externalizing | 0.023 | -.211** | -.038* | .180** | .047* | .083** | .225** | -.144** | --   |      |      |      |      |
|       | Internalizing | 0.020 | .184** | -.155** | .065** | -.028 | .051** | .145** | -.099** | .150** | --   |      |      |      |
| 9     | Regular Alcohol | .098** | -.096** | .187** | .189** | -.032 | .102** | -.016 | -.013 | .023 | .065** | --   |      |      |
| 10    | Weekly alcohol | .082** | -.158** | .168** | .166** | -.046* | .093** | -.001 | 0.001 | .053** | -.068** | .652** | --   |      |

Table ISM
Correlations between independent and dependent variables.
|     | 1   | 2   | 3   | 4   | 5   | 6   | 7   | 8   | 9   | 10  | 11  | 12  | 13  | 14  |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| 13  | Cigarettes | .100** | -.036* | .058** | .246** | 0.007 | .096** | .113** | -.126** | .238** | .097** | .294** | .263** | --  |
| 14  | Cannabis   | .030  | -.122** | .039*  | .306** | -.037* | .159** | .098** | -.116** | .206** | .046*  | .175** | .182** | .322** | --  |
| 15  | OID s      | .076** | -.105** | -.022  | .172** | 0.024 | .096** | .081** | -.072** | .214** | .055** | .131** | .158** | .215** | .362** |

SUP = Substance use problem. OID = Other Illicit Drugs.
** p < 0.01.
* p < 0.05.
Table IISM

*Relationship Characteristics and Psychological Symptoms of the Adolescents and Emerging Adults*

|                          | Adolescents  | Emerging Adults | Full Sample |
|--------------------------|--------------|-----------------|-------------|
|                          | *(n = 1168)* | *(n = 1878)*    | *(n = 3046)* |
| **Number of friends**    | 1168         | 1877            | 5.88        |
| **A close friend uses illegal drugs** | 545 (47.88) | 725 (40.10)    | 42.72       |
| **Has a partner**        | 256 (22.45)  | 990 (53.09)     | 42.84       |
| **Lives with someone with SUP** | 97 (8.71)    | 184 (9.97)      | 9.54        |
| **Parent(s) with SUP**   | 103 (9.13)   | 281 (15.84)     | 13.58       |
| **Parents live together**| 751 (63.49)  | 1055 (55.77)    | 58.38       |
| **Externalizing**        | 1093 (0.71)  | 1809 (0.78)     | 0.76        |
| **Internalizing**        | 1093 (0.77)  | 1809 (0.83)     | 0.81        |

*Note.* SUP = substance use problems. W = Weighted percentages or means (M). For sex, men coded = 0, and women = 1. For age group, adolescents coded = 0, and emerging adults = 1.
### Table IIISM

*Alcohol: Prevalence of Regular and Weekly Use of Alcohol. and AUDIT Scores for Weekly Drinkers*

|                        | Adolescents | Emerging Adults | Full Sample |
|------------------------|-------------|-----------------|-------------|
|                        | N           | W % or M        | N           | W % or M        | n           | W % or M        |
| **Regular Use**        |             |                 |             |                 |             |                 |
| Men                    | 208         | 35.8            | 465         | 51.4            | 673         | 46.1            |
| Women                  | 207         | 32.8            | 394         | 38.1            | 601         | 36.4            |
| All                    | 415         | 34.4            | 859         | 45.9            | 1274        | 41.3            |
| **Weekly Use**         |             |                 |             |                 |             |                 |
| Men                    | 139         | 23.7            | 332         | 36.6            | 471         | 32.0            |
| Women                  | 105         | 16.0            | 199         | 19.2            | 304         | 18.2            |
| All                    | 244         | 20.0            | 531         | 27.9            | 775         | 25.2            |
| **AUDIT-CMod**         |             |                 |             |                 |             |                 |
| Men                    | 139         | 5.8             | 332         | 4.7             | 471         | 4.9             |
| Women                  | 105         | 5.0             | 199         | 3.7             | 304         | 4.1             |
| All                    | 244         | 5.5             | 531         | 4.3             | 775         | 4.6             |
| **AUDIT-NC**           |             |                 |             |                 |             |                 |
| Men                    | 139         | 4.4             | 332         | 3.9             | 471         | 4.0             |
| Women                  | 105         | 5.3             | 199         | 3.7             | 304         | 4.2             |
| All                    | 244         | 4.7             | 531         | 3.8             | 775         | 4.1             |
| **AUDIT-TS**           |             |                 |             |                 |             |                 |
| Men                    | 139         | 10.2            | 332         | 8.5             | 471         | 8.9             |
| Women                  | 105         | 10.3            | 199         | 7.4             | 304         | 8.3             |
| All                    | 244         | 10.2            | 531         | 8.2             | 775         | 8.7             |

*Note.* AUDIT-CMod = Consumption Modified Items; AUDIT-NC = Negative Consequences; AUDIT-TS = Total Score; W % or M = Weighted percentages or means (M). For sex, men coded = 0. and women = 1. For age group, adolescents coded = 0. and emerging adults = 1.
Table IVSM
Cigarettes, Cannabis, and Other Illegal Drugs: Last-Month Prevalence

|                      | Adolescents |               | Emerging Adults |               | Full Sample |               |
|----------------------|-------------|---------------|-----------------|---------------|-------------|---------------|
|                      | n           | W %           | n               | W %           | n           | W %           |
| Any Tobacco Cigarettes |             |               |                 |               |             |               |
| Men                  | 138         | 24.9          | 351             | 40.4          | 489         | 35.3          |
| Women                | 166         | 27.7          | 330             | 33.1          | 496         | 31.3          |
| All                  | 304         | 26.3          | 681             | 36.8          | 985         | 33.3          |
| Any Cannabis         |             |               |                 |               |             |               |
| Men                  | 51          | 9.6           | 132             | 15.2          | 183         | 13.3          |
| Women                | 42          | 7.1           | 52              | 5.5           | 94          | 6.0           |
| All                  | 93          | 8.4           | 184             | 10.4          | 277         | 9.7           |
| Any Other Illegal Drugs |           |               |                 |               |             |               |
| Men                  | 12          | md            | 67              | 7.7           | 79          | md            |
| Women                | md          | md            | 19              | 1.9           | md          | md            |
| All                  | -           | -             | 86              | 4.8           | -           | -             |

Note. All percentages are weighted. Md = Microdata, which means cells with less than n < 10. Totals involving md cells are not given as they would indirectly indicate the number of participants for individual cells.
Appendix: Modified AUDIT-Consumption

In the modified AUDIT, we employed different response options in Items 1-3, as shown below. The modifications were made as a result of adjusting the AUDIT as part of the assessment battery to conduct clinical trials in our research center.

| Item | Original AUDIT Response Options | Modified Response Options |
|------|---------------------------------|---------------------------|
| 1. How often do you have a drink containing alcohol? | 0 = Never  
1 = Monthly or less  
2 = 2-4 times a month  
3 = 2-3 times per week  
4 = 4 times per week or more | 0 = Once a month or less  
1 = 2-3 times per month  
2 = 1-2 times per week  
3 = 3-4 times per week  
4 = 5 or more times per week |
| 2. How many drinks containing alcohol do you have on a typical day when you are drinking? | 0 = 1-2  
1 = 3-4  
2 = 5-6  
3 = 7-9  
4 = 10 or more | 0 = 1-4  
1 = 5-6  
2 = 7-8  
3 = 9-12  
4 = 13 or more |
| 3. How often do you have six or more drinks on one occasion? | 0 = Never  
1 = Less than monthly  
2 = Monthly  
3 = Weekly  
4 = Daily or almost daily | 0 = Never or once a month or less  
1 = 2-3 times per month  
2 = 1-2 times per week  
3 = 3-4 times per week  
4 = 5 or more times per week |

Items 4-10 (AUDIT-Negative Consequences) had the same response options as in the original instrument.