

Supplementary Content for:

PREDICTORS OF SERIOUS SUICIDAL BEHAVIOR IN LATE-LIFE DEPRESSION

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Supplementary Tables

Table 1a. Baseline demographic and clinical characteristics by recruitment groups

	Healthy Controls (n= 90)	Depressed Controls (n=87)	Ideators (n=71)	Attempters (n=153)	P	Post-hoc ^a
	Mean SD(Percentage)					
Age	67.98 (10.33)	67.43 (8.96)	63.13 (8.53)	64.41 (10.54)	0.014	I<DC
Education	15.41 (2.82)	14.60 (2.54)	14.39 (2.70)	13.65 (3.01)	0.027	A< DC
Income (median) ^b	30,000	20,500	20,500	20,500	0.921	--
Sex (%Male)	39 (43.3)	39 (44.8)	39 (54.9)	75 (49.0)	0.449	--
Race (%White)	81 (90.0)	73 (83.9)	60 (84.5)	131 (85.6)	0.948	--
Marital Status					0.058	--
<i>Married</i>	54 (60.0)	43 (49.4)	25 (35.2)	50 (32.7)		
<i>Divorced</i>	15 (16.7)	21 (24.1)	16 (22.5)	49 (32.0)		
<i>Never Married</i>	6 (6.7)	8 (9.2)	18 (25.4)	22 (14.4)		
<i>Widowed</i>	15 (16.7)	15 (17.2)	12 (16.9)	31 (20.3)		
Depression ^c	2.43 (2.15)	17.26 (3.80)	20.42 (4.90)	20.06 (5.92)	<0.001	DC< I, A
Ideation-current ^d	0.01 (0.11)	0.13 (0.69)	13.58 (7.94)	21.62 (7.84)	<0.001	DC<I, A; I< A
Ideation- worst ^d Lifetime	0.08 (0.55)	1.06 (2.07)	19.30 (6.88)	26.35 (5.15)	<0.001	DC<I, A; I< A
Age of Depression Onset	NA	51.13 (20.36)	40.11 (20.20)	42.65 (21.63)	0.003	DC> I, A
Substance use Disorder-lifetime	0 (0.0)	23 (26.7)	32 (45.1)	69 (45.1)	0.013	DC< I, A
Substance use Disorder-current	0 (0.0)	3 (3.5)	10 (14.1)	26 (17.0)	0.009	DC< I, A
Anxiety Disorder-lifetime	1 (1.1)	51 (59.3)	50 (70.4)	103 (67.3)	0.294	--
Physical Illness Burden ^e	6.08 (3.78)	9.52 (3.89)	8.25 (4.40)	9.03 (4.51)	0.188	--
Physical Illness Burden- High ^e	0.16 (0.36)	0.33 (0.66)	0.42 (0.67)	0.57 (0.79)	0.048	DC< A

Legend: I: Ideators; DC: Depressed Controls; A: Attempters. All values are Mean(SD) unless otherwise noted.

^aPlease note that group comparisons were performed only within the depressed groups. Healthy controls served as a benchmark.

^b\$10,000 increments

^cHamilton Rating Scale for Depression, excluding the suicide item

^dScale for Suicidal Ideation

^eCumulative Illness Rating Scale for Geriatrics

Table 1b. Baseline cognitive and personality characteristics by recruitment groups

	Healthy Controls (n= 90)	Depressed Controls (n=87)	Ideators (n=71)	Attempters (n=153)	P	Post-hoc ^a
Verbal IQ	109.19 (12.12)	107.39 (14.24)	106.42 (14.18)	102.40 (15.15)	0.065	--
Executive Function ^b	6.03 (3.25)	6.76 (4.17)	7.84 (4.37)	8.81 (4.86)	0.006	DC<A
Dementia Rating Scale	137.49 (4.04)	134.74 (5.31)	133.84 (6.97)	132.65 (7.15)	0.072	--
Self Esteem ^c	9.12 (1.59)	6.82 (2.70)	4.83 (2.58)	4.56 (2.63)	<0.001	I, A<DC
Belongingness ^c	10.36 (1.70)	8.22 (2.92)	6.35 (3.34)	6.43 (2.87)	<0.001	I, A< DC
Appraisal ^c	10.64 (1.55)	9.01 (2.67)	7.52 (3.01)	7.75 (2.81)	0.001	I,A< DC
Tangible Support ^c	10.73 (1.72)	8.63 (2.73)	7.14 (3.46)	7.09 (3.13)	0.001	I,A< DC
Perceived Burdensomeness ^d	0.35 (0.63)	0.97 (1.35)	3.80 (3.07)	3.62 (3.06)	<0.001	DC< I,A
Impulsivity- non- planning ^e	11.56(5.57)	17.14 (7.68)	18.93 (7.78)	20.76 (8.55)	0.017	DC< A
Negative Urgency ^f	18.50 (4.12)	25.10 (6.45)	29.12 (7.27)	30.06 (8.31)	<0.001	DC< I,A
Lack of Perseverance ^f	18.78 (3.94)	20.11 (4.88)	21.86 (6.22)	22.63 (7.11)	0.056	--

Legend: I: Ideators; DC: Depressed Controls; A: Attempters. All values are Mean(SD) unless otherwise noted.

^aPlease note that group comparisons were performed only within the depressed groups. Healthy controls served as a benchmark.

^bExecutive Interview

^cInterpersonal Support Evaluation List

^dPerceived burdensomeness Questionnaire

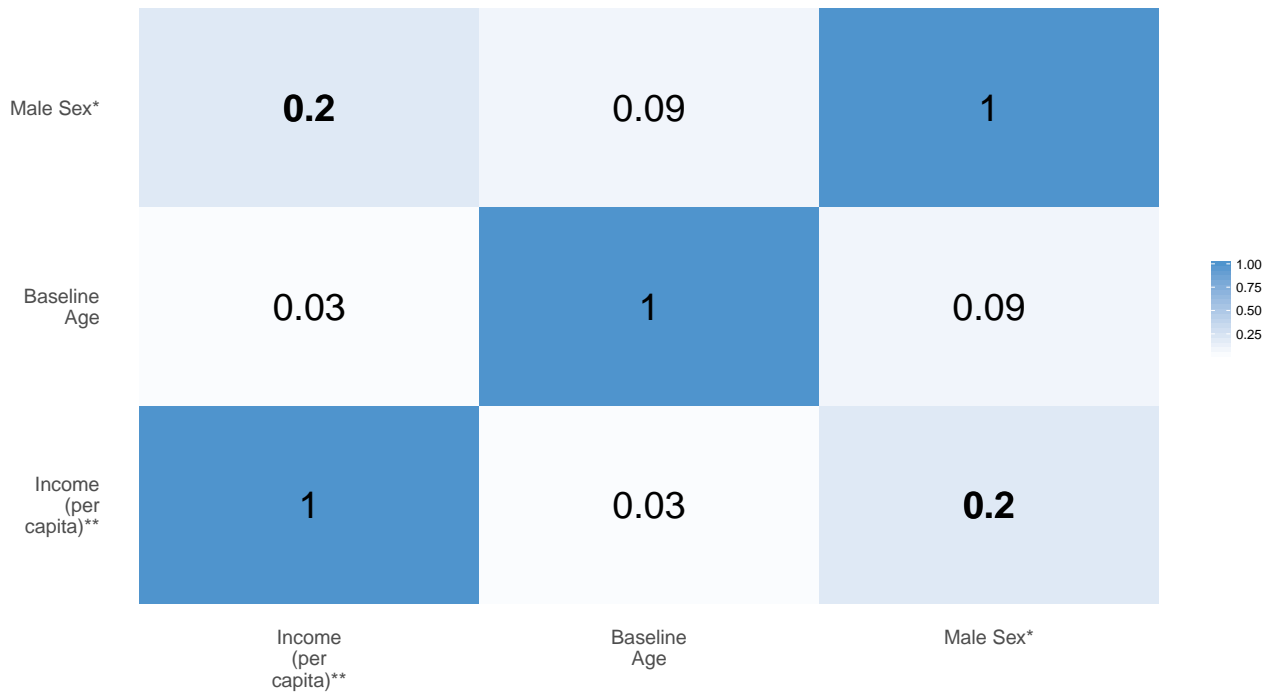
^eBarratt Impulsivity Scale

^fUrgency, Premeditation, Perseverance, Sensation Seeking Impulsive Behavior Scale

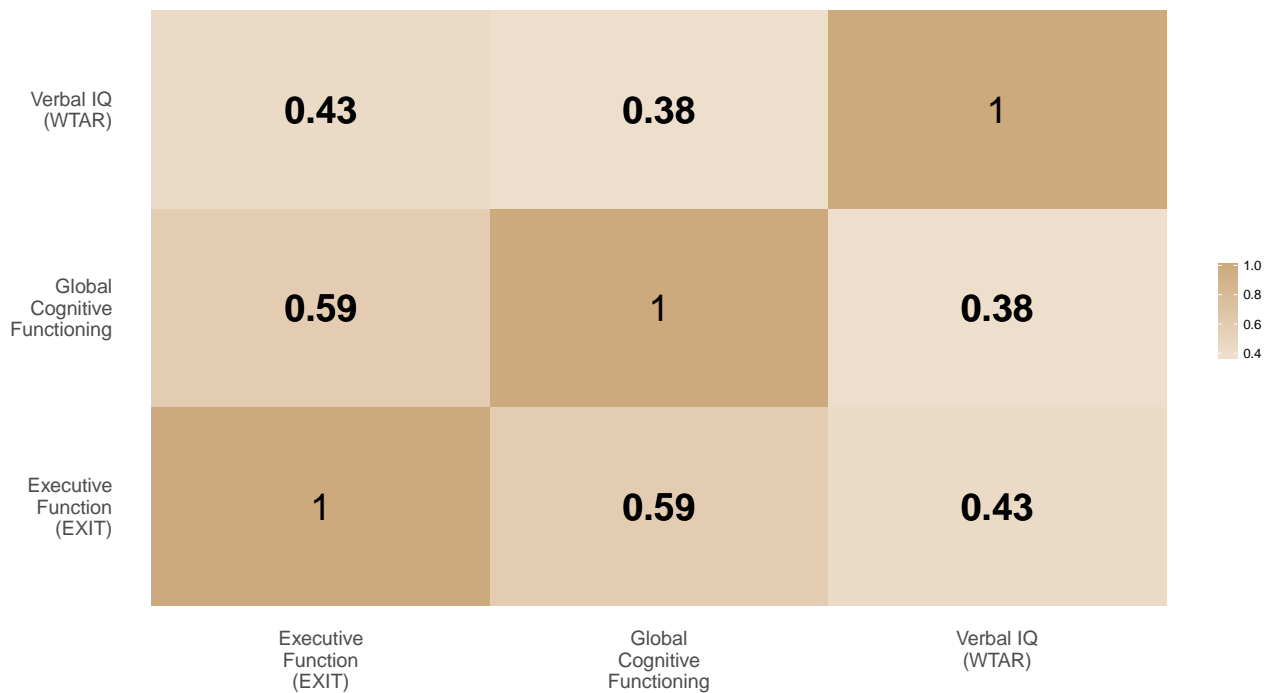
Supplementary Table 2: Within-domain correlation tables with Pearson correlation coefficients

Nominally significant correlations ($p < 0.05$) are bolded.

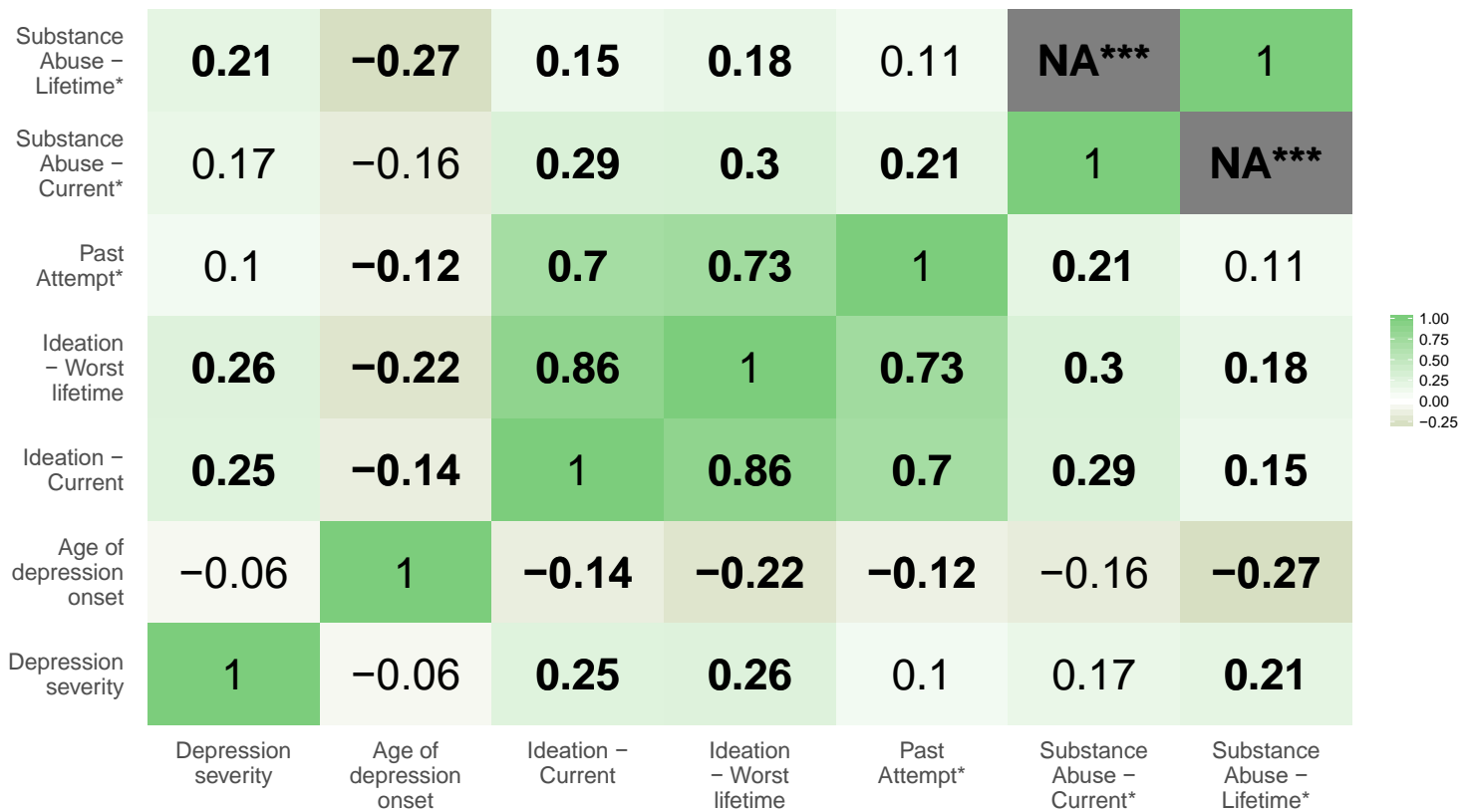
Socio-Demographic



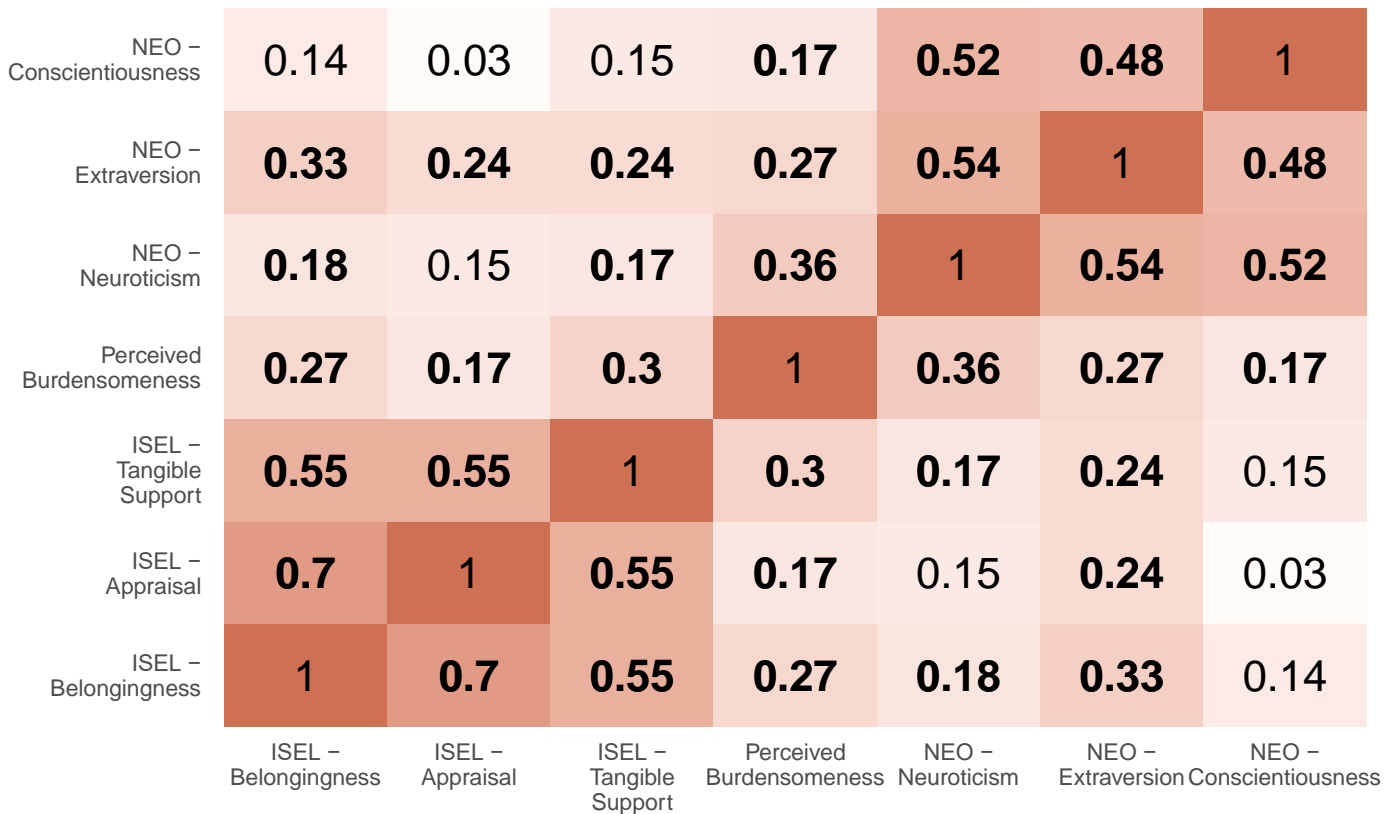
Cognition



Severity of Psychiatric Illness



Personality/Interpersonal Functioning



Impulsivity



* Association between a binary variable and most quantitative variables (see exception below) was measured using Cohen’s d statistics and tested by the two-sample t-test. Association between two binary variables was measured by the odds ratio and tested by Fisher’s exact test. All d statistics and odds ratios were then transformed into a correlation coefficient (r) using the formulas used for meta-analyses (Borenstein et al., 2009; Rosenthal, 1994).

** Due to the extremely skewed nature of income distribution, association with the other quantitative variable (age) was measured using Spearman’s correlation coefficient, while the effect size (Cohen’s d) statistic for the association of income with the binary variable (sex) was calculated based on trimmed values using 20% trim, meaning that the top and bottom 10% percent of the distribution are removed before calculating the mean difference between group and the standard deviation and tested for significance using the non-parametric Wilcoxon test.

*** Since all current substance abusers were also lifetime substance abusers, the odds ratio for their association is not defined.

Supplementary results: Differences in fatal and near fatal and less-lethal suicide events by baseline history of suicidal ideation and attempt

There were significant group differences in the cumulative incidence of fatal or near-fatal suicide attempts among depressed groups (test statistic=6.99, df=2, p=0.030), and also in the risk of less-lethal suicide events (test statistic=35.03, df=2, p<0.001). In post-hoc testing, baseline ideators had significantly higher incidence of fatal or near-fatal suicide attempts than non-suicidal depressed (adjusted p=0.020), and baseline attempters had higher incidence than non-suicidal depressed at a trend level (adjusted p=0.058), while no significant difference was found between baseline ideators and baseline attempters (unadjusted p=0.426). For less-lethal suicide events, the differences were on the strong trend level between baseline ideators and non-suicidal depressed, among whom no such event was recorded (adjusted p=0.051), while baseline attempters had significantly higher incidence than both the non-suicidal depressed (adjusted p<0.001) and baseline ideators (adjusted p=0.002). For the baseline non-suicidal depressed subjects, no incidence of either fatal or near-fatal attempt, or less-lethal suicide event was recorded before natural death or the end of the study.

Borenstein, M., Hedges, L.V., Higgins, J.P.T., Rothstein, H.R., 2009. Introduction to Meta-Analysis. Wiley, Chichester, West Sussex, UK.

Rosenthal, R., 1994. Parametric measures of effect size., in: Cooper, H., Hedges, L.V. (Eds.), The Handbook of Research Synthesis. Sage, New York, NY, p. 239.