ADHD SMART Study Data Description/Codebook

The ADHD SMART study was designed to develop an adaptive intervention involving behavioral modification treatment and medication treatment for children with attention deficit hyperactivity disorder (PI: William Pelham, Florida State University). This handout describes the variables in a simulated SAS data set (adhd_simulated_data.sas7bdat) that was generated to mimic data arising from the ADHD SMART study. The simulated data set, which has a total sample size of N=150 with 51 early responders and 99 early non-responders, can be used with the supplied SAS code to learn how to analyze data arising from a SMART study.
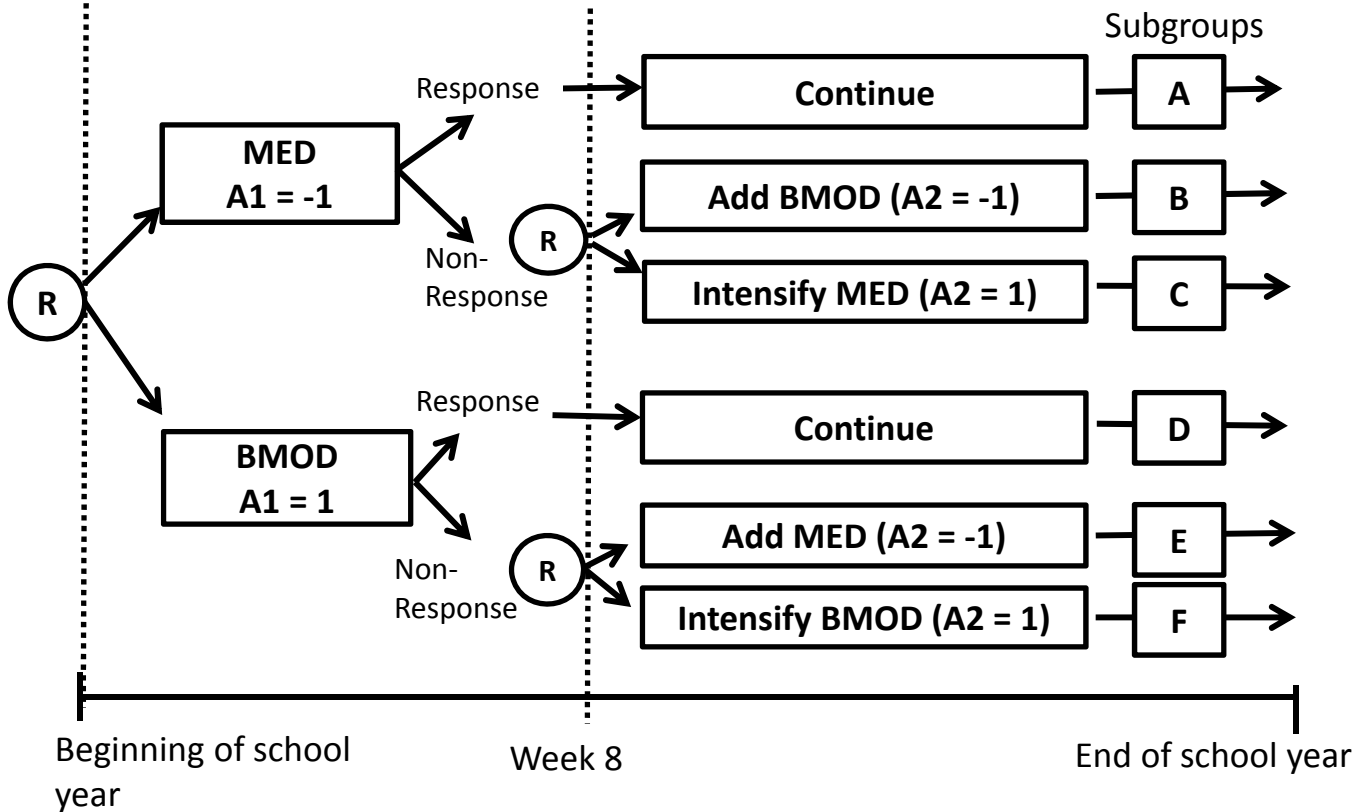
Variable Name	Variable Type	Description of the Variable
O11	Baseline covariate (binary; coded as 0/1)	ODD Diagnosis, reflecting whether the child was (coded as 1) or was not (coded as 0) diagnosed with ODD (oppositional defiant disorder) before the first-stage intervention.
O12	Baseline covariate (continuous)	ADHD score, reflecting ADHD symptoms at the end of the previous school year (ranging from 0 to 3, larger values reflect fewer symptoms).
O13	Baseline covariate (binary; coded as 0/1)	Medication prior to first-stage intervention, reflecting whether the child did (coded as 1) or did not (coded as 0) receive medication during the previous school year.
O14	Baseline covariate (binary; coded as 0/1)	Race variable: white (coded 1) versus non-white (coded 0)
A1	First stage intervention (binary; coded as -1/1)	$A1 = -1$ if the first stage intervention was Medication; $A2 = 1$ if the first stage intervention was Behavioral Intervention.
R	Response indicator (binary; coded as 0/1)	$R = 0$ if participant did not respond to the first stage intervention; $R = 1$ if he or she responded.
O21	Intermediate outcome (post-baseline covariate) (continuous)	Number of months until non-response (maximum: 8 months).
O22	Intermediate outcome (post-baseline covariate) (binary; coded as 0/1)	Adherence to the stage 1 intervention: whether the child did (coded as 1) or did not (coded as 0) show high adherence to initial treatment
A2	Second stage intervention (binary; coded as -1/1; missing for R=1)	Non-responders (R=0) to the first stage intervention entered the second stage of intervention and were re-randomized to either ADDING the other type of intervention (coded as -1) or INTENSIFYING the first stage intervention (coded as 1).
Y	Outcome (continuous)	Participant's school performance at the end of the school year (ranging from 1 to 5, higher values reflect better performance).

	First-stage intervention	Intermediate outcome	Second-stage intervention	Subgroups

Beginning of school year   Week 8   End of school year

$O1$ —— $A1$ —— $O2$ / R Status —— $A2$ —— Y