**The effects of lisdexamfetamine dimesylate on eating behavior and homeostatic, reward, and cognitive processes in women with binge-eating symptoms: an experimental medicine study.**

1. Aim

This experimental medicine study aimed to investigate the homeostatic, reward, and cognitive mechanisms that underlie the effects of lisdexamfetamine dimesylate (LDX) on appetite in women with binge-eating symptoms. It was hypothesised that LDX would reduce appetite and improve cognition in women with binge-eating symptoms.

1. Participants

Participants were women with binge-eating symptoms. Participants who scored 18 or above on the Binge Eating Scale (BES) (Gormally et al., 1982) were identified as having binge-eating symptoms. Participants were recruited from the University of Birmingham and the surrounding community through posters and social media.

1. Design

A randomised, crossover, double-blind, placebo-controlled design was used. All participants received 50mg LDX or placebo in a counterbalanced order at least one week apart.

1. Materials
   1. Demographic information: age (years), BMI (kg/m2)
   2. Binge Eating Scale (BES): The Binge Eating Scale (BES) is a 16-item questionnaire that indicates severity of binge-eating symptoms (Gormally et al., 1982). The BES was used to determine the presence of binge-eating symptoms. Participants were eligible to take part if they had a Moderate score (18- 26) or Severe score (27-46).
   3. Beck Depression Inventory – II (BDI-II): The BDI is a 21-item scale measuring depression severity (Beck et al., 1996).
   4. The Dutch Eating Behaviour Questionnaire (DEBQ): The DEBQ is a 33-item self-report questionnaire comprised of three subscales: ‘Emotional Eating’, ‘External Eating’, and ‘Dietary Restraint’ (van Strien et al., 1986).
   5. Visual Analogue Scales (VAS): VAS assess current appetite, mood, and physical state. The participants rated how they felt at that moment in relation to 14 sensations (alertness, drowsiness, happiness, hunger, fullness, desire to eat, thirst, disgust, anxiety, sadness, and withdrawn, lightheaded, nausea, faint) by placing a vertical mark through a 10cm horizontal line with left and right anchors indicating the extremes of each sensation (‘completely absent’ to ‘most I could imagine’). Completed questionnaires were then measured from the left end of each horizontal line to the place where the vertical mark was drawn for each question. VAS were analysed using the factor structure: ‘Arousal’ (alertness, drowsiness, and happiness), ‘Appetite’ (hunger, fullness, and desire to eat), ‘Negative Effects’ (disgust, anxiety, sadness, and withdrawn), ‘Physical Effects’ (lightheaded, nausea, and faint). Thirst was treated as a separate factor. Post-dose VAS results were converted to area under the curve (AUC) values using the trapezoid method.
   6. Barratt’s Impulsiveness Scale (BIS-11): The BIS is a 30-item questionnaire that assesses trait impulsiveness and comprises three factors: attention impulsiveness, motor impulsiveness, and non-planning impulsiveness (Patton et al., 1995).
   7. Emotional Test Battery (see www.p1vital.com) is a computerised battery consisting of validated emotional cognitive tasks (Thomas et al., 2016) that have been used in previous single-dosing drug experiments (Harmer et al., 2003; Harmer et al., 2009). The following three tasks from the ETB were included:
      1. Facial expression recognition task (FERT): Faces with one of six emotional expressions (happiness, fear, anger, disgust, sadness, and surprise) or a neutral expression appeared on a black background screen. The faces were morphed from neutral to full expressions in 10% increments to foster ambiguity about the expression being displayed. Each intensity was represented 4 times, along with 10 presentations of neutral expressions totalling 250 stimuli. Each stimulus was presented for 500ms, followed by a blank screen. The participant was instructed to classify each expression as quickly and as accurately as possible by clicking on the appropriate emotion adjective in the dialogue box. Percentage accuracy is reported for correctly classifying the facial expression, and RT for correct responses were recorded by valence. Commission errors (incorrectly classifying a facial expression) are reported as percentage incorrectly recognised by valence.
      2. Emotional Categorisation Task (ECAT): Sixty positive and negative adjectives (e.g., cheerful, hostile) were presented for 500ms. Participants responded with a button box to indicate whether they would like or dislike to be described as such. Words were matched for meaningfulness, length, and frequency of occurrence. Accuracy (percentage) and reaction times (RT) (ms) by valence were measured.
      3. Emotional Recall Task (EREC): Participants were given four minutes to recall as many words from the ECAT task as could be remembered within a 4-minute period. Task instructions and the timer were presented on the computer, and the participant wrote recalled words on paper. Accuracy for correctly recalling words presented in the ECAT were measured as items remembered by valence. Recalling words that were not presented in the ECAT were labelled as commission errors and were recorded as items incorrectly recalled by valence.
      4. Emotional recognition memory task (EMEM): Participants were presented with 60 personality descriptor words derived from the ECAT, along with 60 matching novel distractor words. Participants were instructed to indicate whether the word had been presented during the ECAT using a dedicated button box. Percentage accuracy for correctly recognising words that appeared in the ECAT, and RT for correct responses were recorded by valence. Commission errors (items) for incorrectly classifying a distractor word as having appeared in the ECAT was recorded as percentage incorrectly recognised by valence.
   8. The SST is a measure of response inhibition (Verbruggen et al., 2008). This task was adapted from the STOP-IT software programmed by Verbruggen et al. (2008). During the no-signal trials, a white arrow is presented on a black background pointing either left or right until the participant responds or until the maximum presentation of 1,250 milliseconds. The participant is instructed to indicate the direction of the arrow using the left and right keys on the keyboard. When the arrow turned blue in colour (stop-signal trial), the participant was instructed not to respond. The blue arrow in stop-signal trials is initially presented for 250 milliseconds and this delay is then adjusted continuously using the staircase tracking procedure whereby the personalised adjusted score is the stop signal delay (SSD). The experiment consists of 3 blocks of 64 trials in which 75% of the trials are no-signal trials. An estimation of the RT on stop-signal trials (SSRT) is calculated by subtracting mean SSD from mean RT. Omission and commission errors, and RT for no-signal and stop-signal trials (SSRT), and SSD were calculated.
   9. N-Back: To measure working memory capacity, a visuospatial n-back task (Kirchner, 1958) was presented via E-Prime 2.0 (Psychology Software Tools, Pittsburgh, PA) software. Blue circles were presented on a white 3x3 grid for 500ms. Participants were instructed to indicate if the circle was in the same position (‘1’ on the keyboard) or a different position (‘2’ on the keyboard) as it was two (2-back) and three trials back (3-back). Accuracy (proportion) and RT (ms) by stimuli (2 and 3-back) were recorded.
   10. This task, which is modelled after the Conner’s Continuous Performance Task, involves a series of white letters being presented on a grey background in random order (Advokat et al., 2007; Mesquita et al., 2016). Participants were instructed to press the space bar for every letter (target) except ‘X’ (non-target). Letters were presented for 900ms. The ‘X’/non-target trials appeared in 42 (5%) of the 830 trials. The task duration was 14 minutes. An average of the RT standard deviations was calculated to measure response time variability (RTV). Errors (omission and commission) and RT for target and non-target trials and RTV were calculated.
   11. Pasta intake measured in grams. Pasta liking ratings (0-100 mm) collected at the beginning and end of the snack. Pasta eating rate measured as grams per minute.
   12. Cookie intake measured in grams. Cookie liking ratings (0-100 mm) collected at the beginning and end of the snack. Cookie eating rate measured as grams per minute.
   13. Three 3 mL blood samples (see timings in procedure) were collected via venipuncture for assessment of d-amphetamine concentration (mg/L).
2. Procedure

Prior to the study, all participants attended a screening session to ensure eligibility. The screening session included collection of height and weight (to calculate BMI) and completion of the SCID-CV. Participants were assessed by a physician to determine medical fitness.

Participants arrived at the testing site at 8:30 or 9:00. A urine-sample was collected for the pregnancy test and a breathalyser test was taken to ensure alcohol abstinence. A baseline blood sample was taken. Participants completed the first VAS and then the LDX or placebo capsule was self-administered. After administration, participants waited in a designated area for two hours for drug absorption before beginning cognitive tasks. During the break, participants completed the following questionnaires: DEBQ, BIS, and second VAS. After the two-hour wait, participants completed the following tasks in order: third VAS, ETB, fourth VAS, SST, n-back, and a fifth VAS. Participants then underwent an fMRI scan for 1.5 hours. During the scan, participants completed a delay discounting task and a picture rating task. After the fMRI scan, a second blood draw was taken and a sixth VAS was completed. Participants then consumed lunch and completed a seventh VAS. Then participants completed the inattention task and an eighth VAS before consuming the cookie snack. A final blood sample and VAS (VAS 9) was taken before the participant was debriefed

1. Explanation of the SPSS data file:

Note: Data cells filled with 99999 indicate missing data. Data cells filled with 111111 indicate excluded data removed on the basis of statistical outliers and chance responding.

List and explanation of all the variables in order of SPSS columns. All reaction time data are recorded in milliseconds.

1. ID
2. Age (years)
3. BMI
4. Ethnicity
5. LDX\_MgL\_Draw2 = second blood sample of d-amphetamine
6. LDX\_MgL\_Draw3 = third blood sample of d-amphetamine
7. BES\_Score = Binge Eating Scale outcome score
8. BES\_category = Score on the Binge Eating Scale classified as Moderate (0) or Severe (1)
9. DEBQ\_RestraintEating = Score on the Restraint factor of the Dutch Eating Behaviour Questionnaire (DEBQ)
10. DEBQ\_ExternalEating = Score on the External factor of the Dutch Eating Behaviour Questionnaire (DEBQ)
11. DEBQ\_EmotionEating = Score on the Emotional factor of the Dutch Eating Behaviour Questionnaire (DEBQ)
12. BIS\_Attentional = Score on the Attentional factor of the Barratt Impulsiveness Scale
13. BIS\_Nonplanning = Score on the Nonplanning factor of the Barratt Impulsiveness Scale
14. BIS\_Motor = Score on the Motor factor of the Barratt Impulsiveness Scale
15. BIS\_Total = Score on the combined Total factor of the Barratt Impulsiveness Scale
16. BDI\_total = Score on the Beck Depression Inventory
17. Pasta\_intake\_grams.LDX = pasta intake (grams) in the LDX condition
18. Cookies\_intake\_grams.LDX = cookie intake (grams) in the LDX condition
19. Pasta\_intake\_grams.placebo = pasta intake (grams) in the placebo condition
20. Cookies\_intake\_grams.placebo = cookie intake (grams) in the placebo condition
21. Pasta\_Liking1.LDX = rated pasta palatability (0-100 mm) at the beginning of the meal in the LDX condition
22. Pasta\_Liking2.LDX = rated pasta palatability (0-100 mm) at the end of the meal in the LDX condition
23. cookie\_Liking1.LDX = rated cookie palatability (0-100 mm) at the beginning of the snack in the LDX condition
24. cookie\_Liking2.LDX = rated cookie palatability (0-100 mm) at the end of the snack in the LDX condition
25. Pasta\_EatingRate\_Min.LDX = pasta eating rate (grams per minute) in the LDX condition
26. cookie\_EatingRate\_Min.LDX = cookie eating rate (grams per minute) in the LDX condition
27. Pasta\_Liking1.placebo = rated pasta palatability (0-100 mm) at the beginning of the meal in the placebo condition
28. Pasta\_Liking2.placebo = rated pasta palatability (0-100 mm) at the end of the meal in the placebo condition
29. cookie\_Liking1.placebo = rated cookie palatability (0-100 mm) at the beginning of the snack in the placebo condition
30. cookie\_Liking2.placebo = rated cookie palatability (0-100 mm) at the end of the snack in the placebo condition
31. Pasta\_EatingRate\_Min.placebo = pasta eating rate (grams per minute) in the placebo condition
32. cookie\_EatingRate\_Min.placebo = cookie eating rate (grams per minute) in the placebo condition
33. Nback\_3Back\_Acc.LDX = 3-back percentage accuracy in the LDX condition
34. Nback\_3BackRT.LDX = 3-back reaction time in the LDX condition
35. Nback\_2Back\_Acc.LDX = 2-back percentage accuracy in the LDX condition
36. Nback\_2BackRT.LDX = 2-back reaction time in the LDX condition
37. Nback\_3Back\_Acc.placebo = 3-back percentage accuracy in the placebo condition
38. Nback\_3BackRT.placebo = 3-back reaction time in the placebo condition
39. Nback\_2Back\_Acc.placebo = 2-back percentage accuracy in the placebo condition
40. Nback\_2BackRT.placebo = 2-back reaction time in the placebo condition
41. SST\_comission\_error.LDX = ratio of commission errors on the Stop Signal Task (SST) in the LDX condition
42. SST\_ssd.LDX = stop signal delay on the SST in the LDX condition
43. SST\_ssrt.LDX = stop signal reaction time on the SST in the LDX condition
44. SST\_omission\_error.LDX = ratio of omission errors on the SST in the LDX condition
45. SST\_rtns.LDX = no signal reaction time on the SST in the LDX condition
46. SST\_commission\_error.placebo = ratio of commission errors on the Stop Signal Task (SST) in the placebo condition
47. SST\_ssd.placebo = stop signal delay on the SST in the placebo condition
48. SST\_ssrt.placebo = stop signal reaction time on the SST in the placebo condition
49. SST\_omission\_error.placebo = ratio of omission errors on the SST in the placebo condition
50. SST\_rtns.placebo = no signal reaction time on the SST in the placebo condition
51. ECAT\_ACC\_Neg.LDX = percentage accuracy for rejecting negative self-referent words in the Emotional Categorisation Task (ECAT) in the LDX condition
52. ECAT\_ACC\_Pos.LDX = percentage accuracy for selecting positive self-referent words in the Emotional Categorisation Task (ECAT) in the LDX condition
53. ECAT\_RT\_Neg.LDX = reaction time for rejecting negative self-referent words in the Emotional Categorisation Task (ECAT) in the LDX condition
54. ECAT\_RT\_Pos.LDX = reaction time for selecting positive self-referent words in the Emotional Categorisation Task (ECAT) in the LDX condition
55. ECAT\_ACC\_Neg.placebo = percentage accuracy for rejecting negative self-referent words in the Emotional Categorisation Task (ECAT) in the placebo condition
56. ECAT\_ACC\_Pos.placebo = percentage accuracy for selecting positive self-referent words in the Emotional Categorisation Task (ECAT) in the placebo condition
57. ECAT\_RT\_Neg.placebo = reaction time for rejecting negative self-referent words in the Emotional Categorisation Task (ECAT) in the placebo condition
58. ECAT\_RT\_Pos.placebo = reaction time for selecting positive self-referent words in the Emotional Categorisation Task (ECAT) in the placebo condition
59. EREC\_NegRem.LDX = number of negative words accurately recalled in the Emotional Recall (EREC) task in the LDX condition
60. EREC\_PosRem.LDX = number of positive words accurately recalled in the Emotional Recall (EREC) task in the LDX condition
61. EREC\_NegInc.LDX = number of negative words incorrectly recalled in the Emotional Recall (EREC) task in the LDX condition
62. EREC\_PosInc.LDX = number of negative words incorrectly recalled in the Emotional Recall (EREC) task in the LDX condition
63. EREC\_NegRem.placebo = number of negative words accurately recalled in the Emotional Recall (EREC) task in the placebo condition
64. EREC\_PosRem.placebo = number of positive words accurately recalled in the Emotional Recall (EREC) task in the placebo condition
65. EREC\_NegInc.placebo = number of negative words incorrectly recalled in the Emotional Recall (EREC) task in the placebo condition
66. EREC\_PosInc.placebo = number of negative words incorrectly recalled in the Emotional Recall (EREC) task in the placebo condition
67. EMEM\_ACC\_Neg.LDX = percentage of negative words accurately recognised in the Emotional Recognition Memory (EMEM) task in the LDX condition
68. EMEM\_ACC\_Pos.LDX = percentage of positive words accurately recognised in the EMEM task in the LDX condition
69. EMEM\_Inc\_Neg.LDX = percentage of negative words incorrectly recognised in the EMEM task in the LDX condition
70. EMEM\_Inc\_Pos.LDX = percentage of positive words incorrectly recognised in EMEM task in the LDX condition
71. EMEM\_RT\_Neg.LDX = reaction time for recognising negative words in the EMEM task in the LDX condition
72. EMEM\_RT\_Pos.LDX = reaction time for recognising positive words in the EMEM task in the LDX condition
73. EMEM\_ACC\_Neg.placebo = percentage of negative words accurately recognised in the EMEM task in the placebo condition
74. EMEM\_ACC\_Pos.placebo = percentage of positive words accurately recognised in the EMEM task in the placebo condition
75. EMEM\_Inc\_Neg.placebo = percentage of negative words incorrectly recognised in the EMEM task in the placebo condition
76. EMEM\_Inc\_Pos.placebo = percentage of positive words incorrectly recognised in EMEM task in the placebo condition
77. EMEM\_RT\_Neg.placebo = reaction time for recognising negative words in the EMEM task in the placebo condition
78. EMEM\_RT\_Pos.placebo = reaction time for recognising positive words in the EMEM task in the placebo condition
79. FERT\_ACC\_NEU.LDX = percentage accuracy for correctly identifying neutral facial expressions in the Facial Expression Recognition (FERT) task in the LDX condition
80. FERT\_MIS\_NEU.LDX = percentage of neutral facial expressions incorrectly identified in the FERT task in the LDX condition
81. FERT\_RT\_NEU.LDX = reaction time for neutral facial expressions correctly identified in the FERT task in the LDX condition
82. FERT\_ACC\_SU.LDX = percentage accuracy for correctly identifying surprise facial expressions in the FERT task in the LDX condition
83. FERT\_MIS\_SU.LDX = percentage of surprise facial expressions incorrectly identified in the FERT task in the LDX condition
84. FERT\_RT\_SU.LDX = reaction time for surprise facial expressions correctly identified in the FERT task in the LDX condition
85. FERT\_ACC\_AN.LDX = percentage accuracy for correctly identifying angry facial expressions in the FERT task in the LDX condition
86. FERT\_MIS\_AN.LDX = percentage of angry facial expressions incorrectly identified in the FERT task in the LDX condition
87. FERT\_RT\_AN.LDX = reaction time for angry facial expressions correctly identified in the FERT task in the LDX condition
88. FERT\_ACC\_DI.LDX = percentage accuracy for correctly identifying disgust facial expressions in the FERT task in the LDX condition
89. FERT\_MIS\_DI.LDX = percentage of disgust facial expressions incorrectly identified in the FERT task in the LDX condition
90. FERT\_RT\_DI.LDX = reaction time for disgust facial expressions correctly identified in the FERT task in the LDX condition
91. FERT\_ACC\_FE.LDX = percentage accuracy for correctly identifying fearful facial expressions in the FERT task in the LDX condition
92. FERT\_MIS\_FE.LDX = percentage of fearful facial expressions incorrectly identified in the FERT task in the LDX condition
93. FERT\_RT\_FE.LDX = reaction time for fearful facial expressions correctly identified in the FERT task in the LDX condition
94. FERT\_ACC\_SA.LDX = percentage accuracy for correctly identifying sad facial expressions in the FERT task in the LDX condition
95. FERT\_MIS\_SA.LDX = percentage of sad facial expressions incorrectly identified in the FERT task in the LDX condition
96. FERT\_RT\_SA.LDX = reaction time for fearful sad expressions correctly identified in the FERT task in the LDX condition
97. FERT\_ACC\_HA.LDX = percentage accuracy for correctly identifying happy facial expressions in the FERT task in the LDX condition
98. FERT\_MIS\_HA.LDX = percentage of happy facial expressions incorrectly identified in the FERT task in the LDX condition
99. FERT\_RT\_HA.LDX = reaction time for happy facial expressions correctly identified in the FERT task in the LDX condition
100. FERT\_ACC\_NEU.placebo = percentage accuracy for correctly identifying neutral facial expressions in the Facial Expression Recognition (FERT) task in the LDX condition
101. FERT\_MIS\_NEU.placebo = percentage of neutral facial expressions incorrectly identified in the FERT task in the LDX condition
102. FERT\_RT\_NEU.placebo = reaction time for neutral facial expressions correctly identified in the FERT task in the LDX condition
103. FERT\_ACC\_SU.placebo = percentage accuracy for correctly identifying surprise facial expressions in the FERT task in the LDX condition
104. FERT\_MIS\_SU.placebo = percentage of surprise facial expressions incorrectly identified in the FERT task in the LDX condition
105. FERT\_RT\_SU.placebo = reaction time for surprise facial expressions correctly identified in the FERT task in the LDX condition
106. FERT\_ACC\_AN.placebo = percentage accuracy for correctly identifying angry facial expressions in the FERT task in the LDX condition
107. FERT\_MIS\_AN.placebo = percentage of angry facial expressions incorrectly identified in the FERT task in the LDX condition
108. FERT\_RT\_AN.placebo = reaction time for angry facial expressions correctly identified in the FERT task in the LDX condition
109. FERT\_ACC\_DI.placebo = percentage accuracy for correctly identifying disgust facial expressions in the FERT task in the LDX condition
110. FERT\_MIS\_DI.placebo = percentage of disgust facial expressions incorrectly identified in the FERT task in the LDX condition
111. FERT\_RT\_DI.placebo = reaction time for disgust facial expressions correctly identified in the FERT task in the LDX condition
112. FERT\_ACC\_FE.placebo = percentage accuracy for correctly identifying fearful facial expressions in the FERT task in the LDX condition
113. FERT\_MIS\_FE.placebo = percentage of fearful facial expressions incorrectly identified in the FERT task in the LDX condition
114. FERT\_RT\_FE.placebo = reaction time for fearful facial expressions correctly identified in the FERT task in the LDX condition
115. FERT\_ACC\_SA.placebo = percentage accuracy for correctly identifying sad facial expressions in the FERT task in the LDX condition
116. FERT\_MIS\_SA.placebo = percentage of sad facial expressions incorrectly identified in the FERT task in the LDX condition
117. FERT\_RT\_SA.placebo = reaction time for fearful sad expressions correctly identified in the FERT task in the LDX condition
118. FERT\_ACC\_HA.placebo = percentage accuracy for correctly identifying happy facial expressions in the FERT task in the LDX condition
119. FERT\_MIS\_HA.placebo = percentage of happy facial expressions incorrectly identified in the FERT task in the LDX condition
120. FERT\_RT\_HA.placebo = reaction time for happy facial expressions correctly identified in the FERT task in the LDX condition
121. Inattention\_target\_RT.LDX = reaction time for correct target responses in the LDX condition on the inattention/Continuous Performance Task
122. Inattention\_Omission\_Percentage.LDX = percentage omission errors in the LDX condition on the inattention/Continuous Performance Task
123. Inattention\_Commission\_Percentage.LDX = percentage commission errors in the LDX condition on the inattention/Continuous Performance Task
124. Inattention\_RTV.LDX = response time variability/sustained attention in the LDX condition on the inattention/Continuous Performance Task
125. Inattention\_target\_RT.placebo = reaction time for correct target responses in the placebo condition on the inattention/Continuous Performance Task
126. Inattention\_Omission\_Percentage.placebo = percentage omission errors in the placebo condition on the inattention/Continuous Performance Task
127. Inattention\_Commission\_Percentage.placebo = percentage commission errors in the placebo condition on the inattention/Continuous Performance Task
128. Inattention\_RTV.placebo = response time variability/sustained attention in the placebo condition on the inattention/Continuous Performance Task
129. Arousal\_PreDose\_LDX = pre-dose arousal ratings (cm) on the visual analogue scales (VAS) in the LDX condition
130. Arousal\_PreDose\_Placebo = pre-dose arousal ratings (cm) on the VAS in the placebo condition
131. Appetite\_PreDose\_LDX = pre-dose appetite ratings (cm) on the VAS in the LDX condition
132. Appetite\_PreDose\_Placebo = pre-dose appetite ratings (cm) on the VAS in the placebo condition
133. NegEffects\_PreDose\_LDX = pre-dose negative effects ratings (cm) on the VAS in the LDX condition
134. NegEffects\_PreDose\_Placebo = pre-dose negative effects ratings (cm) on the VAS in the placebo condition
135. PhysEffects\_PreDose\_LDX = pre-dose physical effects ratings (cm) on the VAS in the LDX condition
136. PhysEffects\_PreDose\_Placebo = pre-dose physical ratings (cm) on the VAS in the placebo condition
137. Thirst\_PreDose\_LDX = pre-dose thirst ratings (cm) on the VAS in the LDX condition
138. Thirst\_PreDose\_Placebo = pre-dose thirst ratings (cm) on the VAS in the placebo condition
139. Arousal\_ AUC\_PostDose\_LDX = post-dose arousal ratings (area under the curve (AUC)) on the VAS in the LDX condition
140. Arousal\_ AUC\_PostDose\_Placebo = post dose arousal ratings (AUC) on the VAS in the placebo condition
141. Appetite\_ AUC\_PostDose\_LDX = post dose appetite ratings (AUC) on the VAS in the LDX condition
142. Appetite \_AUC\_PostDose\_Placebo = post dose appetite (AUC) on the VAS in the placebo condition
143. NegEffects\_ AUC\_PostDose\_LDX = post dose negative effects ratings (AUC) on the VAS in the LDX condition
144. NegEffects\_ AUC\_PostDose\_Placebo = post dose negative effects ratings (AUC) on the VAS in the placebo condition
145. PhysEffects\_ AUC\_PostDose\_LDX = post dose physical effects ratings (AUC) on the VAS in the LDX condition
146. PhysEffects\_ AUC\_PostDose\_Placebo = post dose physical effects ratings (AUC) on the VAS in the placebo condition
147. Thirst\_AUC\_PostDose\_LDX= post dose thirst ratings (AUC) on the VAS in the LDX condition
148. Thirst\_AUC\_PostDose\_Placebo = post dose thirst ratings (AUC) on the VAS in the placebo condition