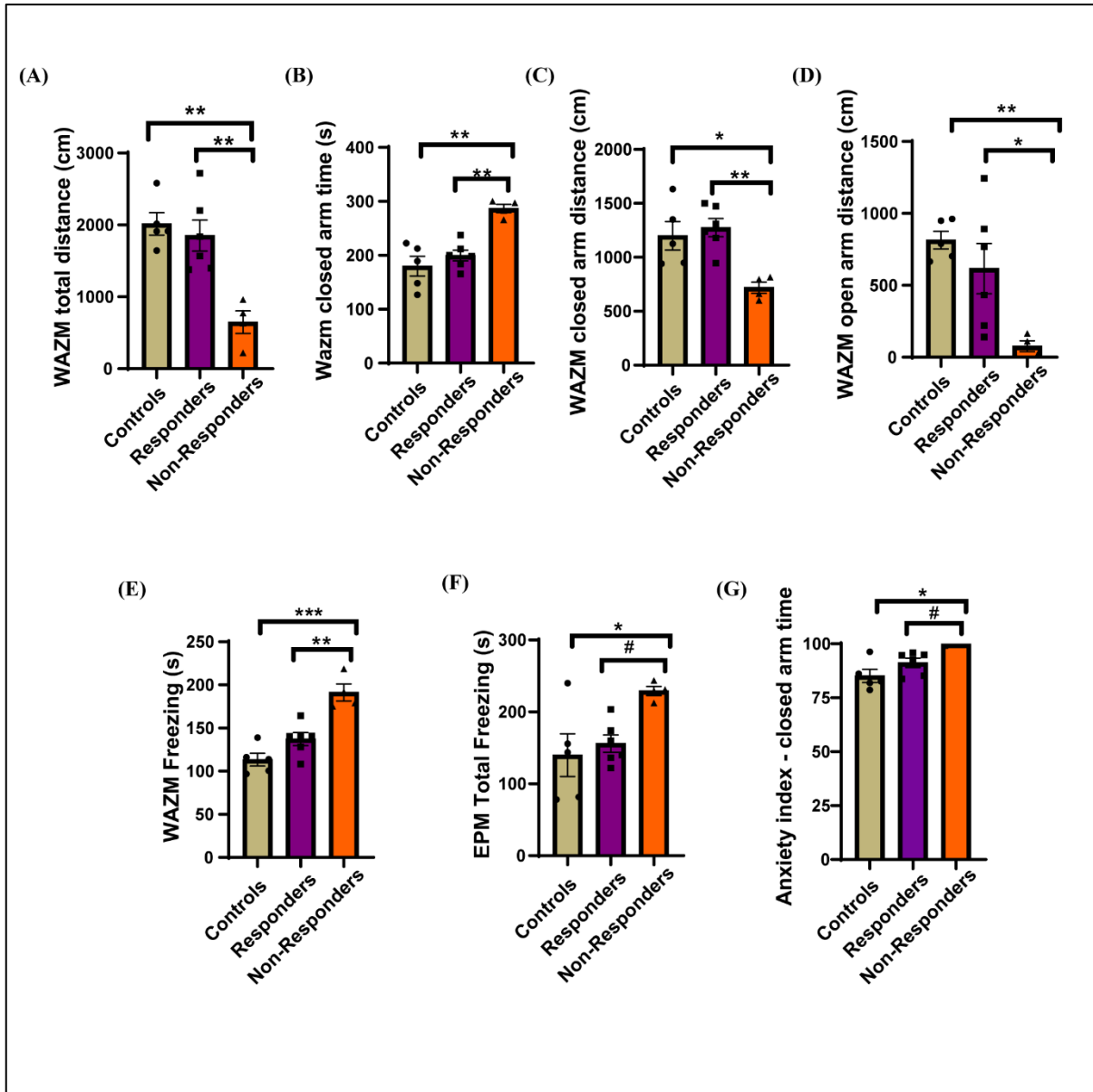


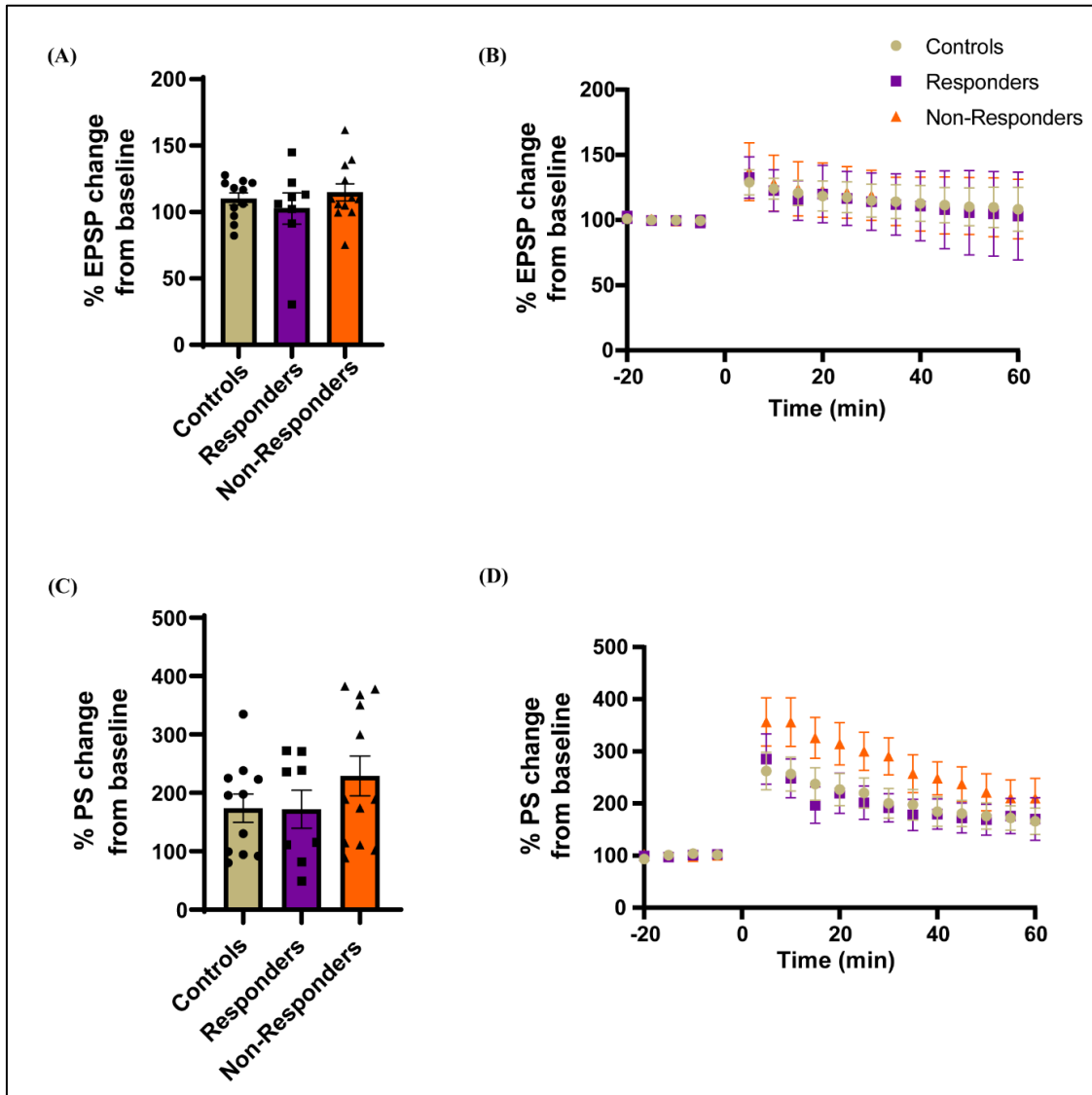
Supplementary Material

1 Supplementary Figures



Supplementary Figure 1. Average group effect of *controls*, treatment *responders* and *non-responders* used in western blot experiments on behavioural parameters of WAZM and EPM. (A) Total distance travelled in WAZM by the *non-responders* was the least while *responders* and *control* travelled similar distance [Ordinary one-way ANOVA ($F_{(2,12)} = 13.51$, $p = 0.0008$); Bonferroni's post hoc test $p^{**} < 0.001$]. (B) Time spent in the WAZM closed arms was the highest by the *non-responders* but

responders and *controls* spent similar time [Ordinary one-way ANOVA ($F_{(2,12)} = 16.05$, $p = 0.0004$); Bonferroni's post hoc test $p^{**} < 0.01$, $p^{***} < 0.0001$]. (C) Distance travelled in the closed arms was the least by *non-responders* but *responders* and *controls* traversed similar distance [Ordinary one-way ANOVA ($F_{(2,12)} = 8.317$, $p = 0.0054$); Bonferroni's post hoc test $p^* < 0.05$, $p^{**} < 0.01$]. (D) Distance travelled in the open arm of the WAZM was least by the *non-responders* while *responders* and *controls* covered similar distances [Ordinary one-way ANOVA ($F_{(2,12)} = 7.581$, $p = 0.0074$); Bonferroni's post hoc test $p^* < 0.05$, $p^{**} < 0.01$]. (E) Total time spent freezing in the WAZM was highest amongst the *non-responders* but *responders* and *controls* spent similar time freezing [Ordinary one-way ANOVA ($F_{(2,12)} = 21.15$, $p = 0.0001$); Bonferroni's post hoc test $p^{**} < 0.01$, $p^{***} < 0.0001$]. (H) Time spent freezing in the EPM was higher in the *non-responders* than the *controls* [Ordinary one-way ANOVA ($F_{(2,12)} = 5.293$, $p = 0.0225$); Bonferroni's post hoc test $p^{**} < 0.05$, $p^\# = 0.0663$]. A similarly strong trend was also observed between *responders* and *non-responders* (I) Anxiety index in the EPM was higher in the *non-responders* than the *controls*. A similarly strong trend was also observed between *responders* and *non-responders*. [Kruskal-Wallis test ($H(3) = 9.165$, $p = 0.002$); Dunn's post hoc test $p^{**} < 0.01$, $p^\# = 0.0843$] All data represented as mean \pm SEM. *Controls* ($n = 5$), treatment *responders* ($n = 6$), treatment *non-responders* ($n = 4$).



Supplementary Figure 2. (A) Sixty minutes following the application of TBS, *controls*, *responders* and *non-responders* showed increase in EPSP slope than baseline levels. (B) However no difference was observed between the groups across time in EPSP slope [2-way repeated measures, interaction effect ($F_{(22,319)} = 0.8256$, $p = ns$)] (C) The application of TBS also resulted in an increase in PS amplitude in *controls*, *responders* and *non-responders*. No difference was observed between the groups across time in PS amplitude [2-way repeated measures, interaction effect ($F_{(22,319)} = 1.443$, $p = ns$)]. Controls ($n = 11$), responders ($n = 8$), non-responders ($n = 13$)