FIGURE 1

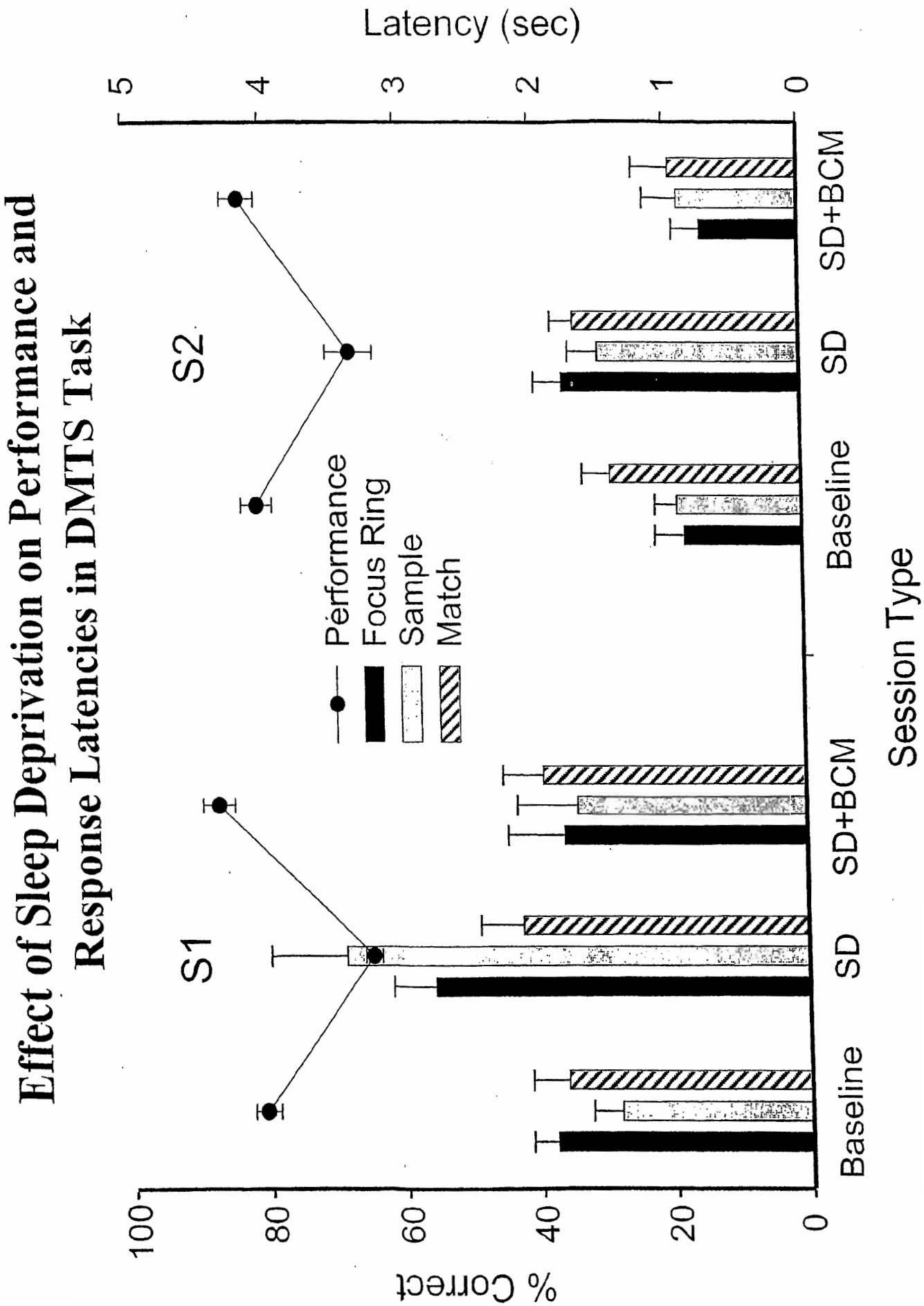

Effect of Sleep Deprivation on Performance and Response Latencies in DMTS Task
Latency (sec)
5
4
3
2
1
0
S2
S1
Performance
Focus Ring
Sample
Match
100
80
60
40
20
0
% Correct
Baseline
SD
SD+BCM
Baseline
SD
SD+BCM
Session Type

FIGURE 2

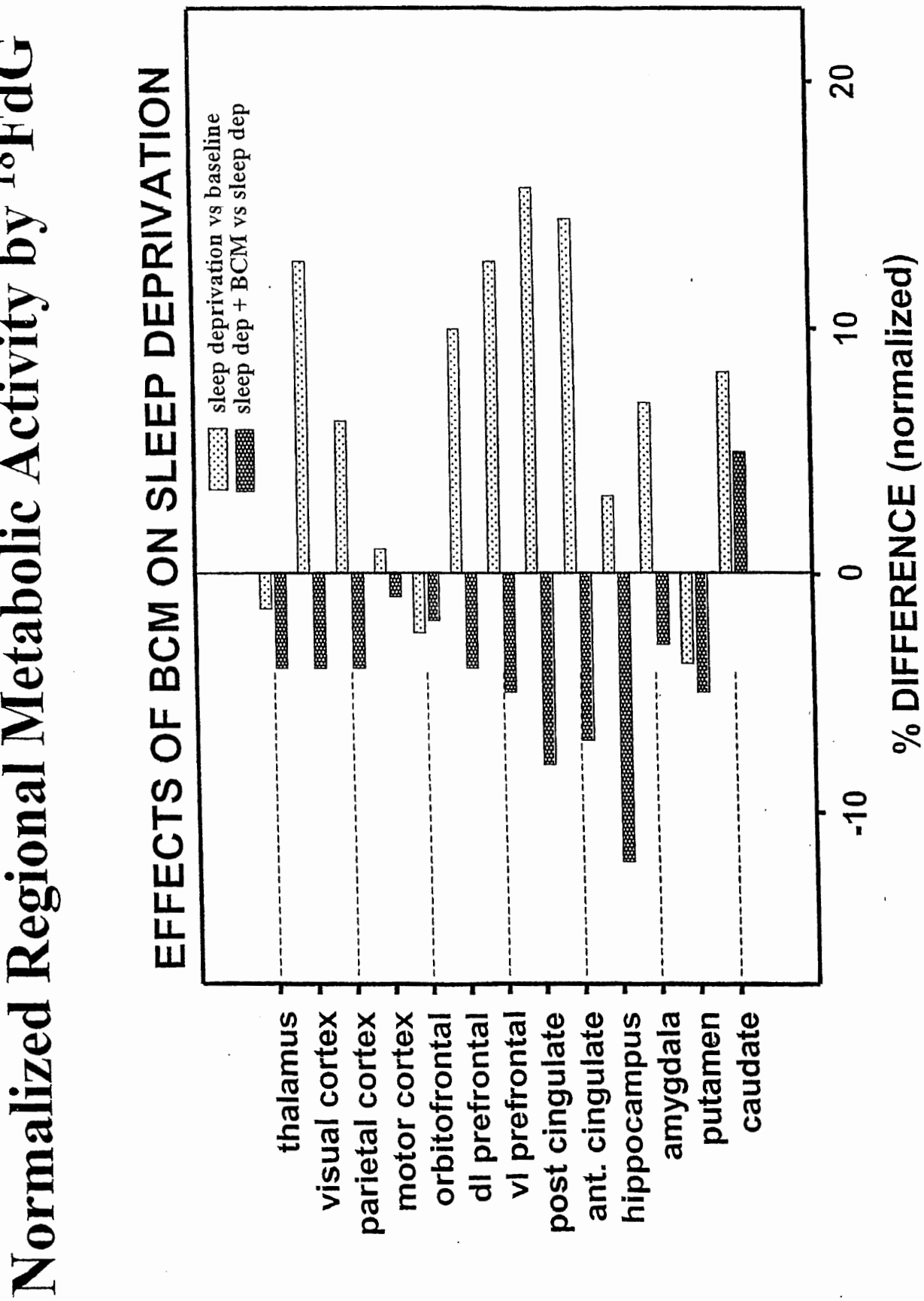
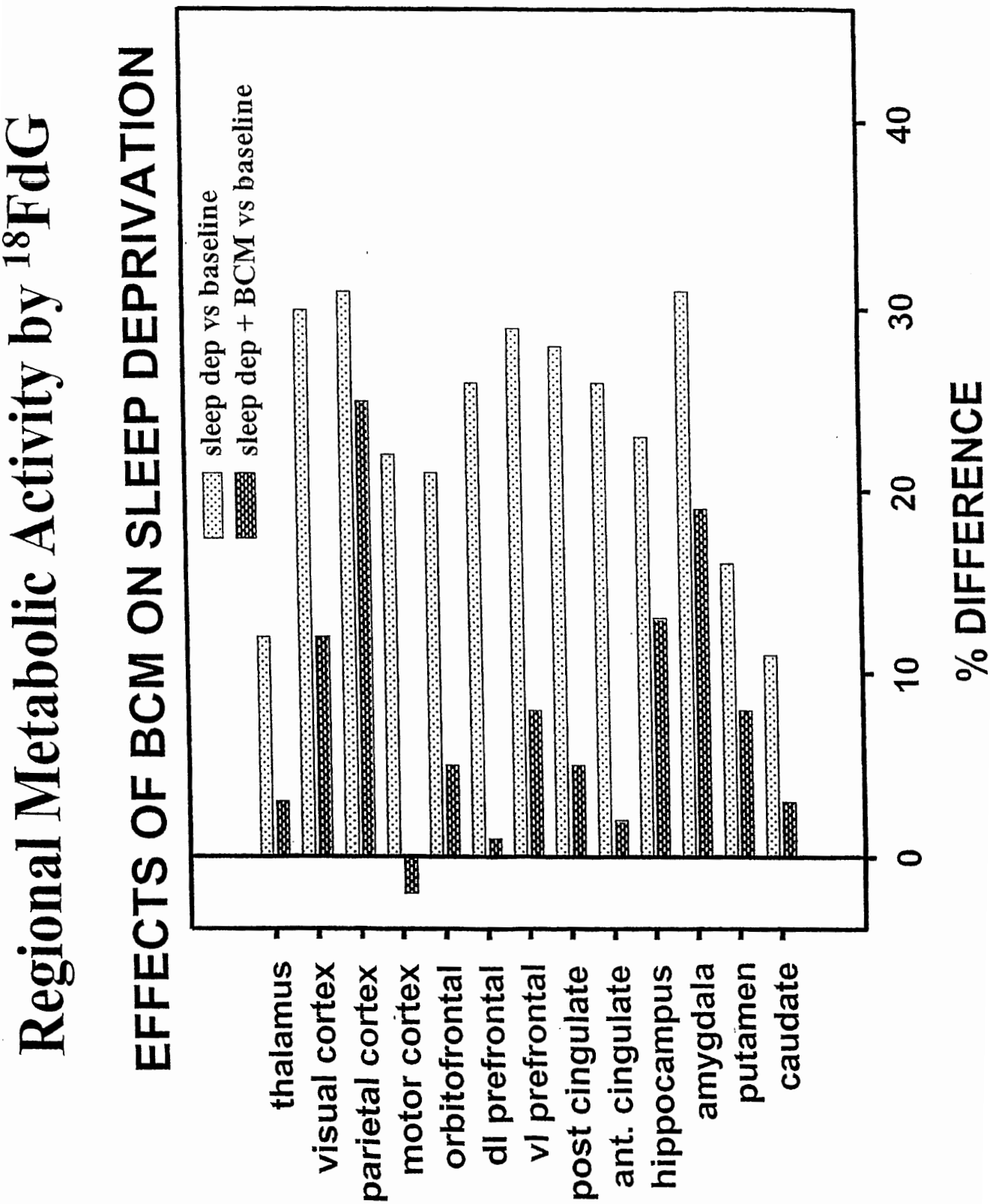

Normalized Regional Metabolic Activity by ^{18}FdG
EFFECTS OF BCM ON SLEEP DEPRIVATION
sleep deprivation vs baseline
sleep dep + BCM vs sleep dep
thalamus
visual cortex
parietal cortex
motor cortex
orbitofrontal
dl prefrontal
vl prefrontal
post cingulate
ant. cingulate
hippocampus
amygdala
putamen
caudate
-10
0
10
20
% DIFFERENCE (normalized)

FIGURE 3


Regional Metabolic Activity by ^{18}FdG
EFFECTS OF BCM ON SLEEP DEPRIVATION
sleep dep vs baseline
sleep dep + BCM vs baseline
thalamus
visual cortex
parietal cortex
motor cortex
orbitofrontal
dl prefrontal
vl prefrontal
post cingulate
ant. cingulate
hippocampus
amygdala
putamen
caudate
0
10
20
30
40
% DIFFERENCE