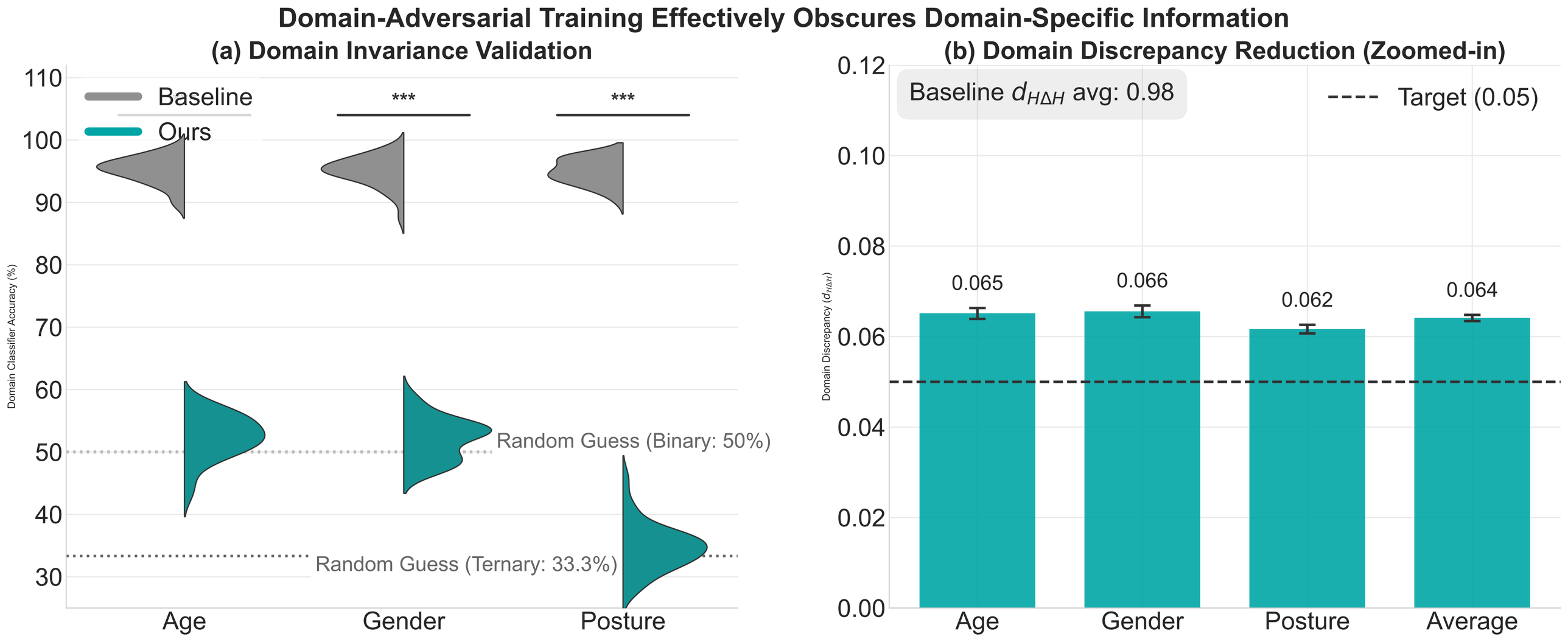
Domain-Adversarial Training Effectively Obscures Domain-Specific Information
(a) Domain Invariance Validation
Baseline
Ours
***
***
Domain Classifier Accuracy (%)
110
100
90
80
70
60
50
40
30
Random Guess (Binary: 50%)
Random Guess (Ternary: 33.3%)
Age
Gender
Posture
(b) Domain Discrepancy Reduction (Zoomed-in)
Baseline $d_{H\Delta H}$ avg: 0.98
Target (0.05)
Domain Discrepancy ($d_{H\Delta H}$)
0.12
0.10
0.08
0.06
0.04
0.02
0.00
0.065
0.066
0.062
0.064
Age
Gender
Posture
Average