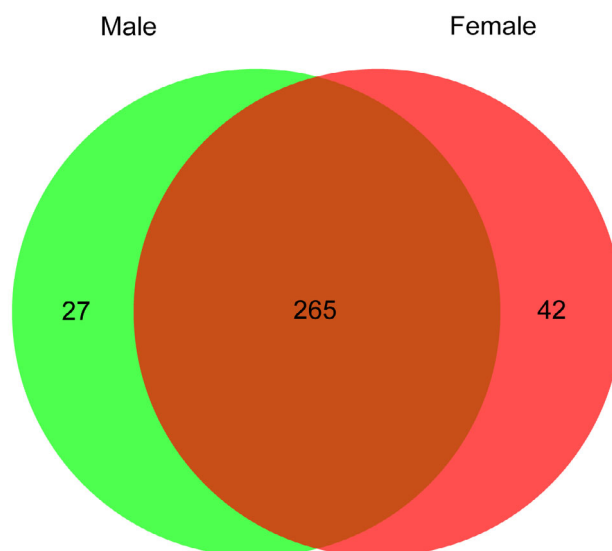
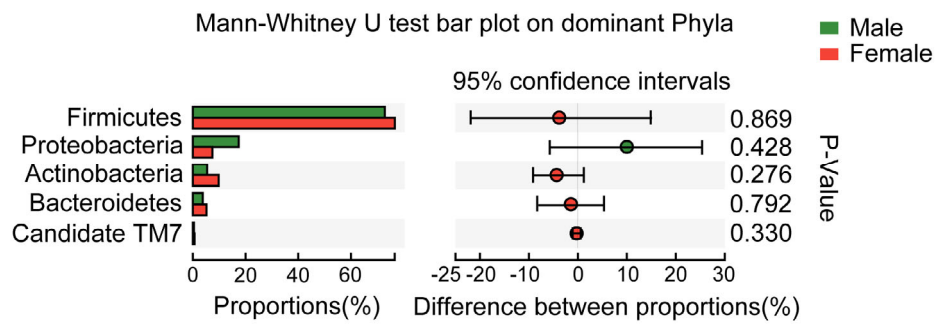


**Fig. S1** Comparison of alpha ( $\alpha$ ) diversity indices (Ace, Chao, Shannon, and Simpson) between male and female subjects. Data are shown as mean $\pm$ standard deviation (SD) ( $n=18$  for males and  $n=17$  for females), and there is no statistical difference between male and female subjects based on the non-parametric Mann-Whitney  $U$  test.



**Fig. S2** Venn diagrams show the overlapping of all operational taxonomic units (OTUs) between male and female subjects, calculated at the 97% similarity level. A high degree of similarity presented between groups. Two hundred and sixty-five OTUs are shared by male and female groups, accounting for 90.8% and 86.3% of their total OTUs, respectively.



**Fig. S3** Comparison in relative abundance of dominant phyla between male and female subjects. Green and red bars represent male and female subjects, respectively. Data are shown as mean $\pm$ standard deviation (SD). No phylum showed a statistical difference between male and female subjects.