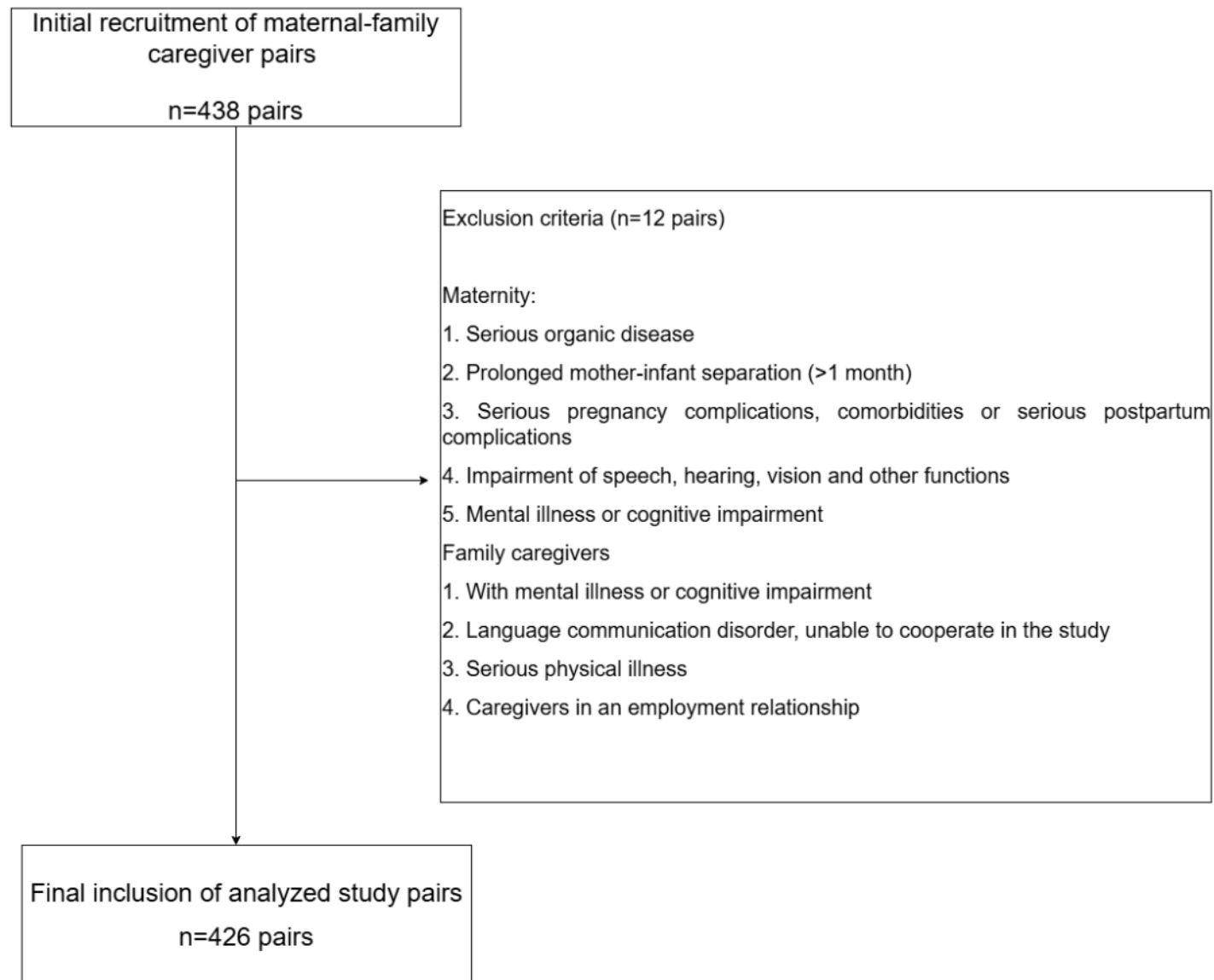
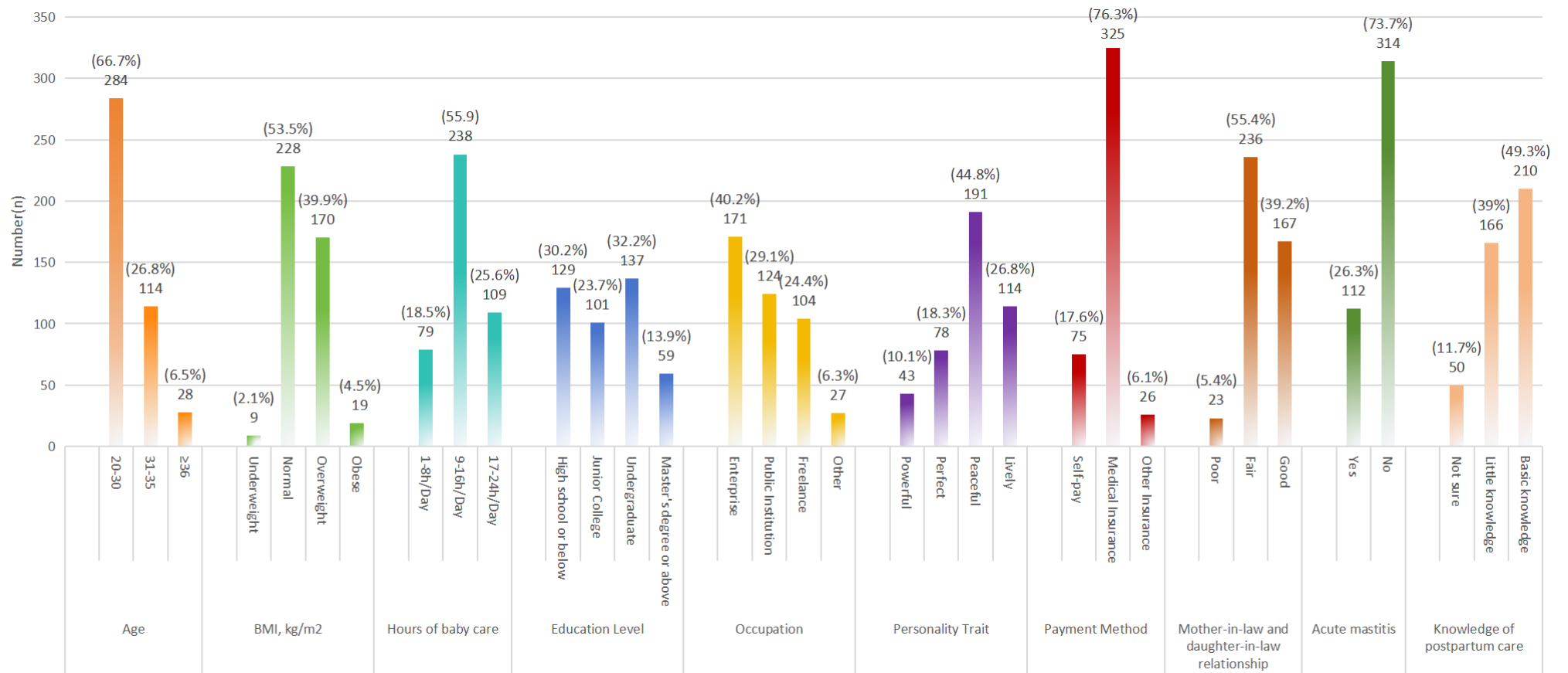
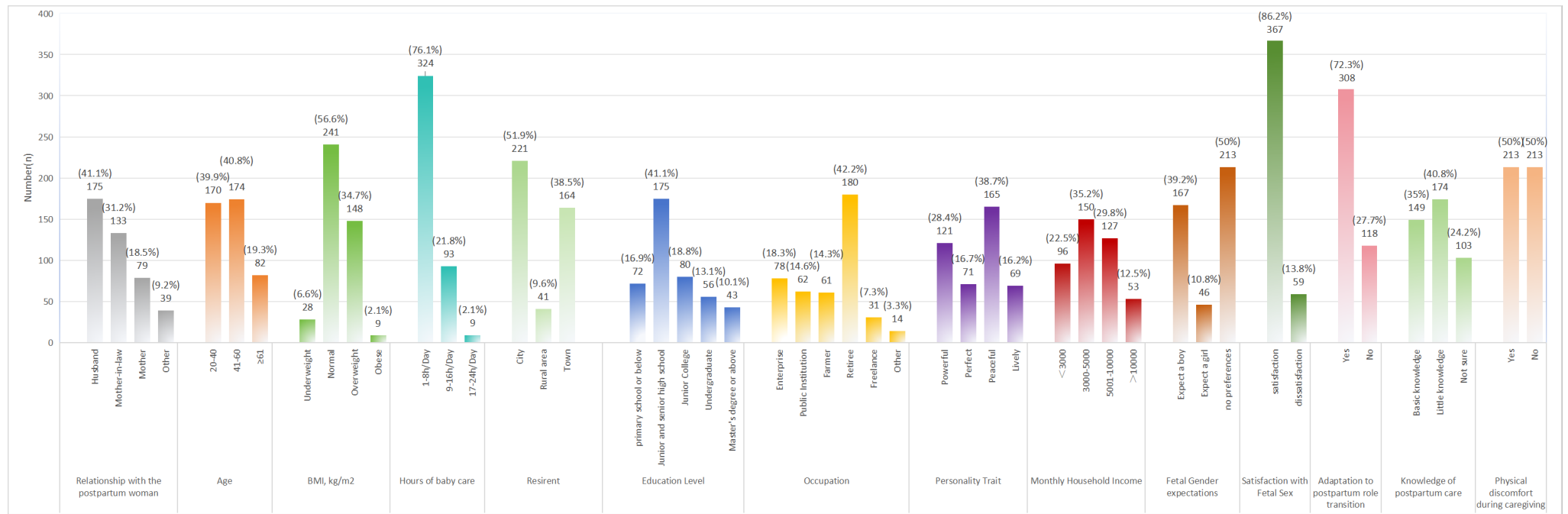




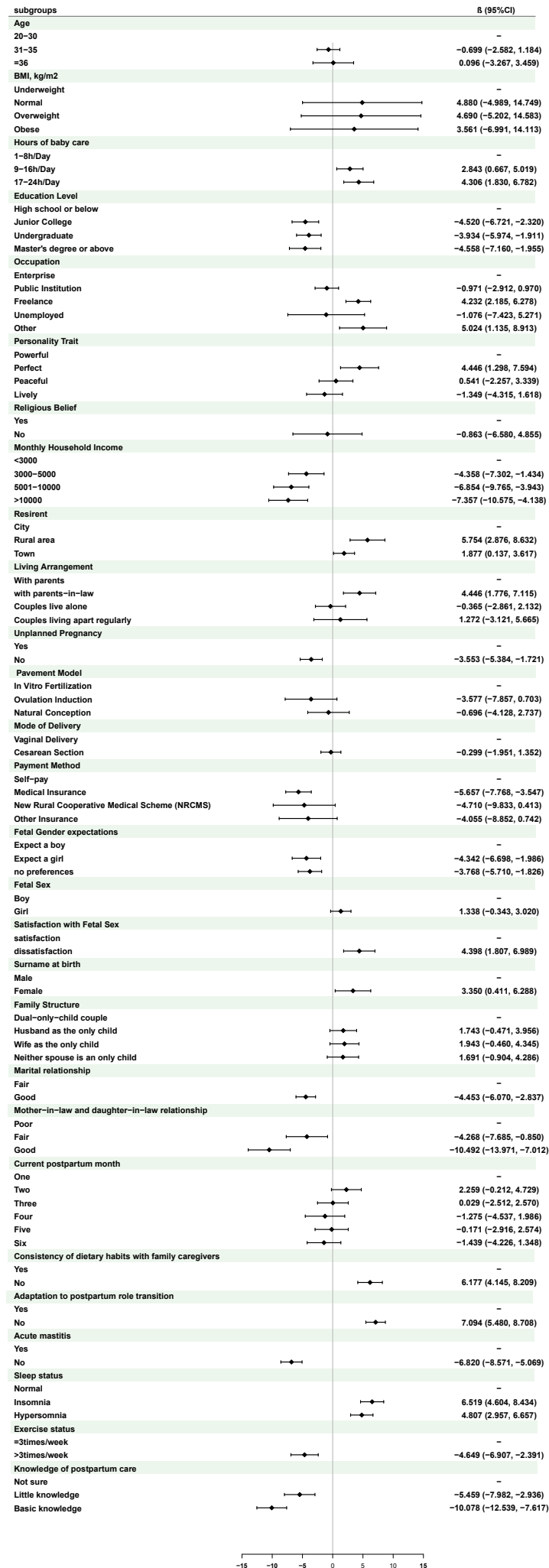
Supplementary Figure 1 Participant screening. This flowchart illustrates the screening process for a sample of maternal-family caregivers selected from outpatient postpartum rehabilitation clinics at three tertiary care hospitals in Jiangsu province.



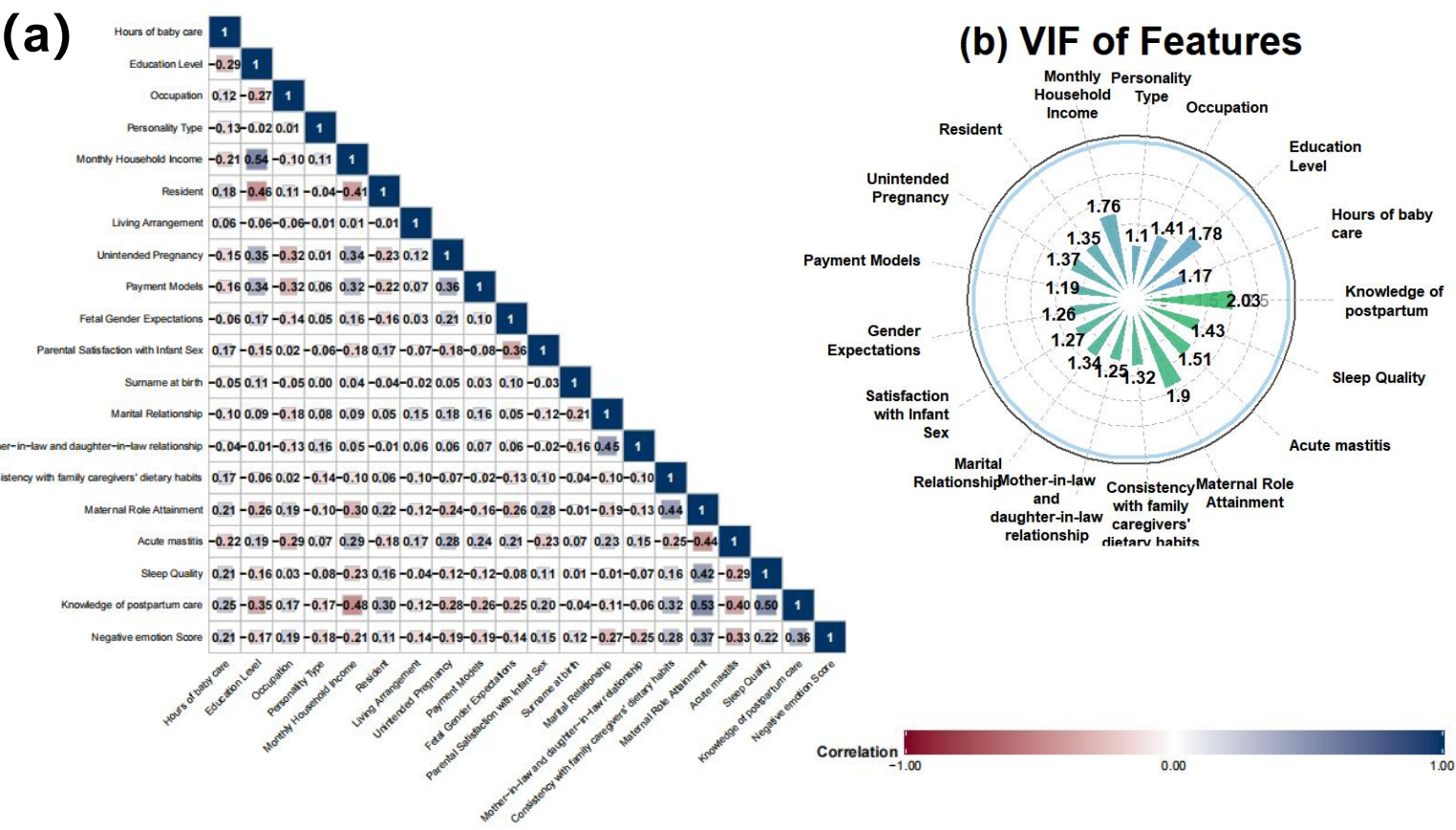
Supplementary Figure 2 Bar Chart of Demographic Baseline Characteristics of postpartum women



Supplementary Figure 3 Bar Chart of Demographic Baseline Characteristics of Family Caregivers

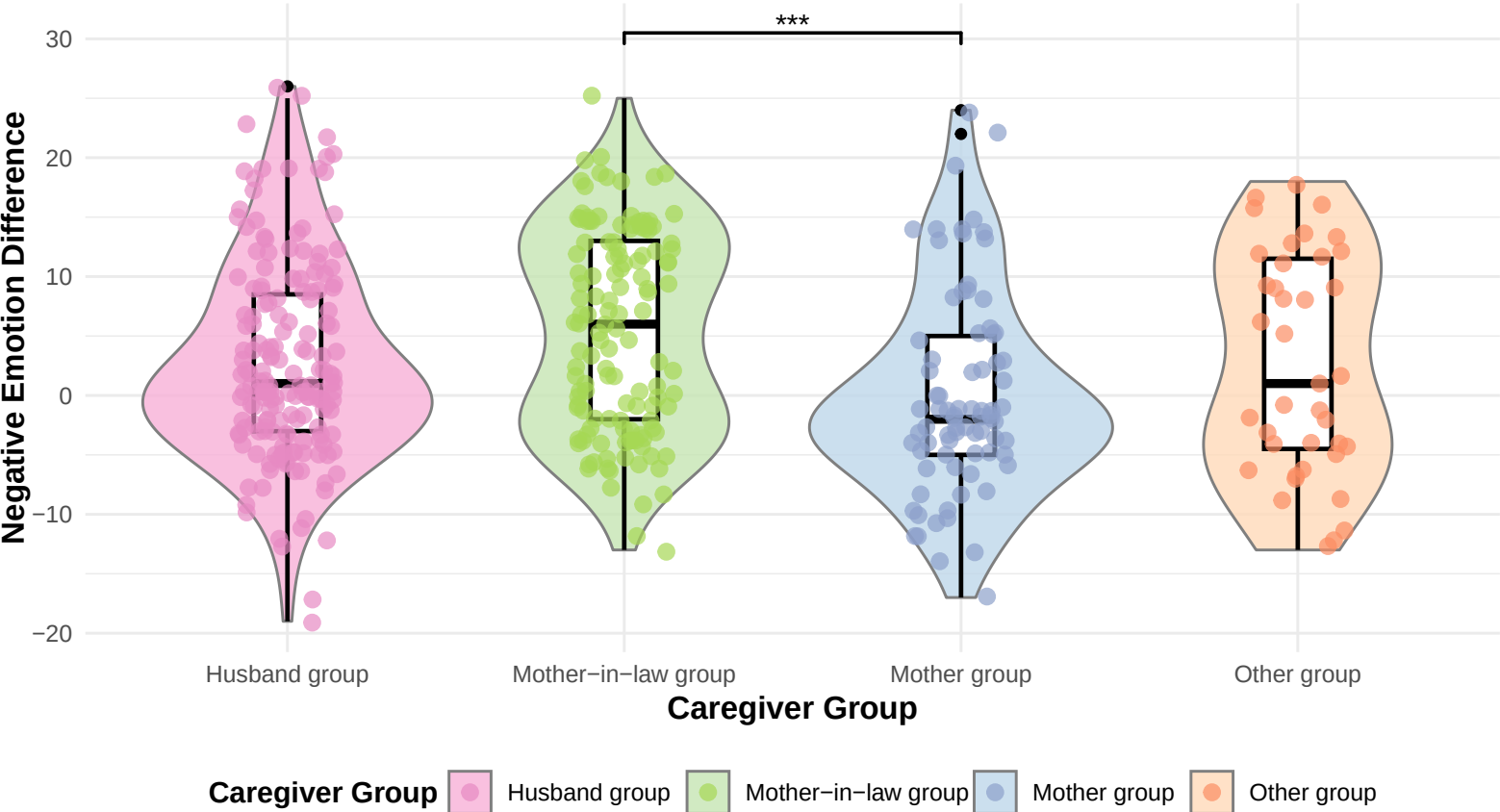


Supplementary Figure 4 Forest plot of univariate analyses of factors associated with caregiver cognitive bias in perceiving maternal negative affect.



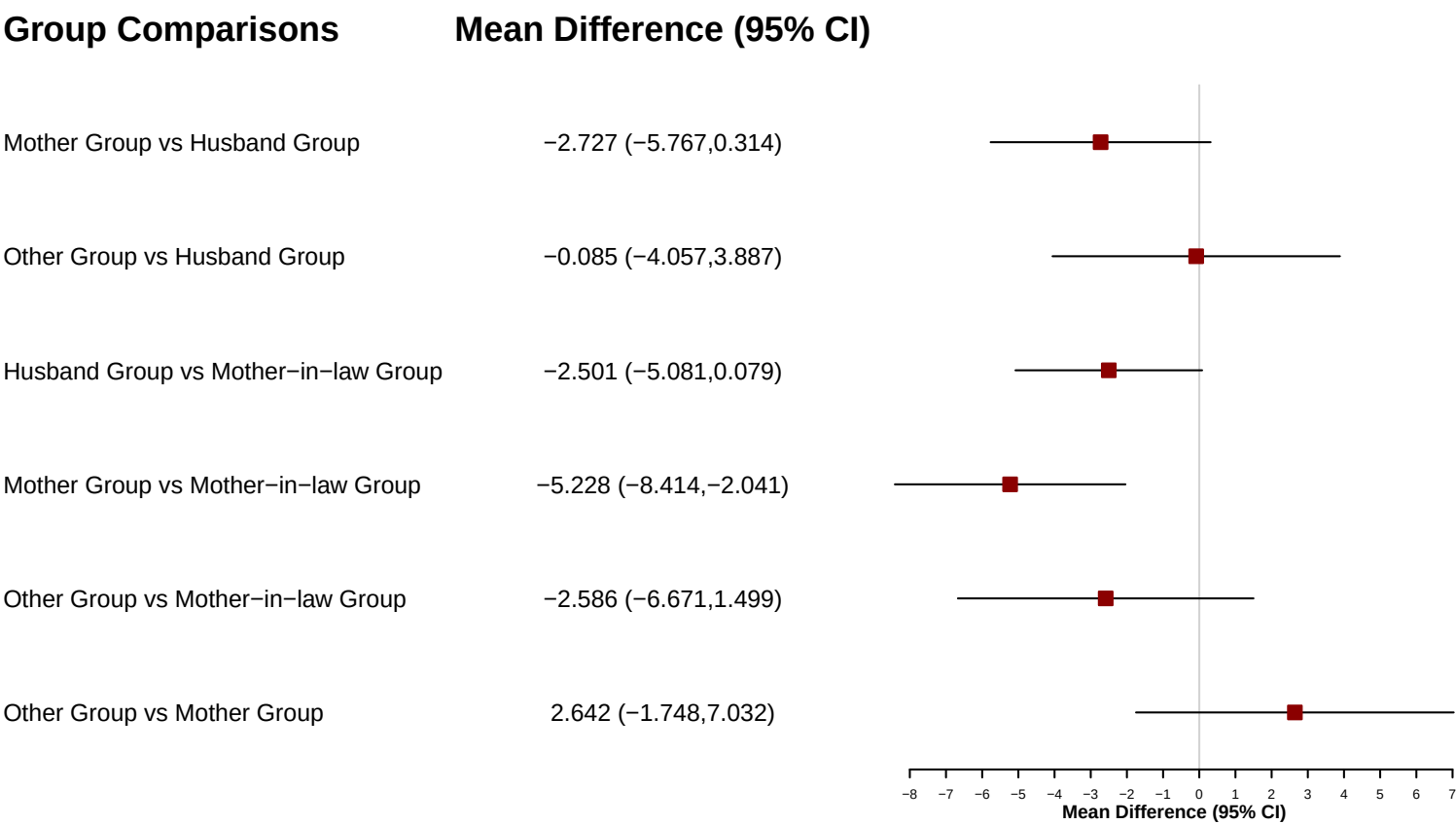
Supplementary Figure 5 (a) Spearman Rank Correlation Heatmap of Variables (b) Variance Inflation Factor (VIF) Plot of Key Features

Comparison of Negative Emotion Differences Across Caregiver Groups

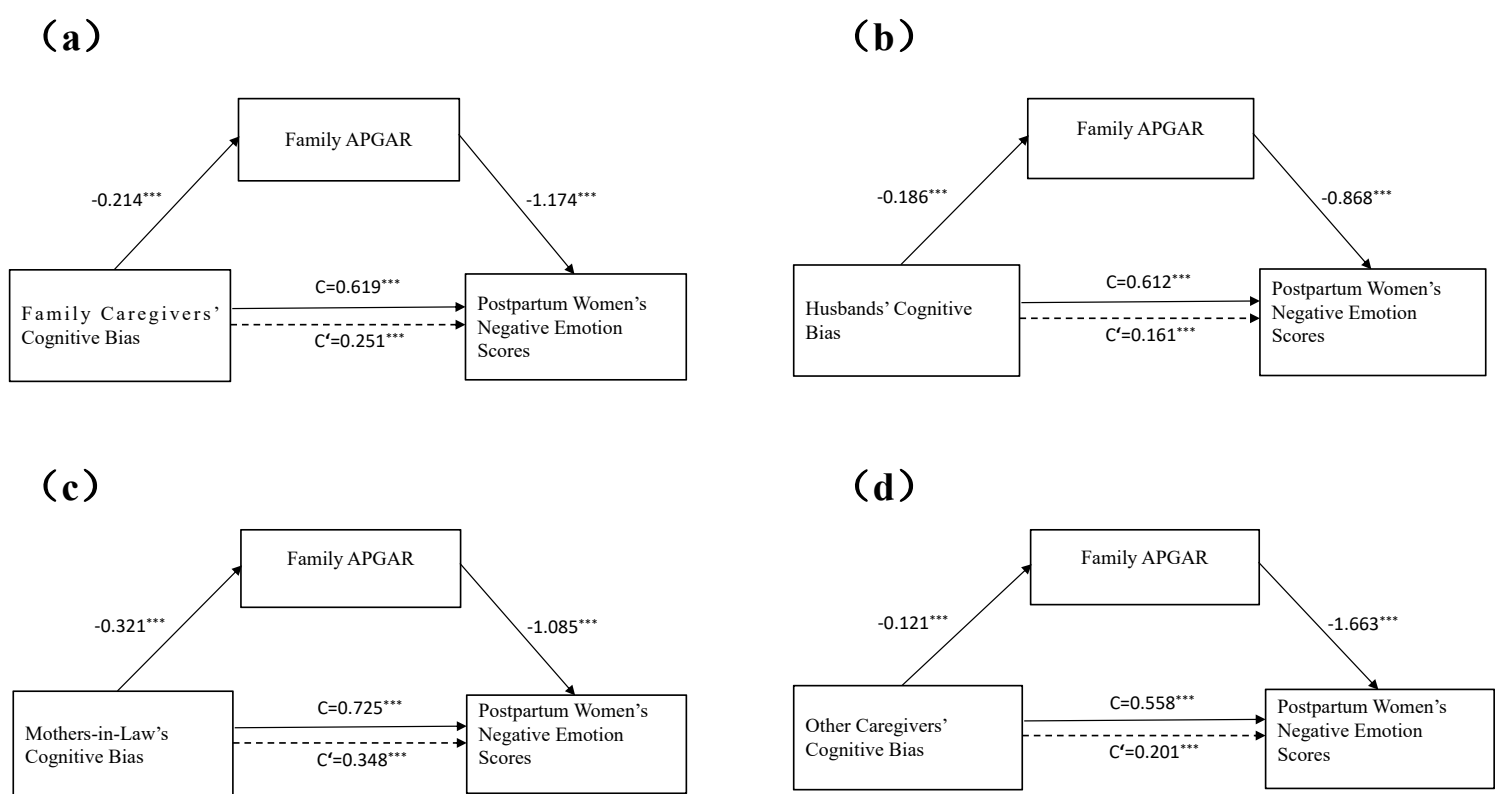


Significance: ***p<0.001, **p<0.01, *p<0.05

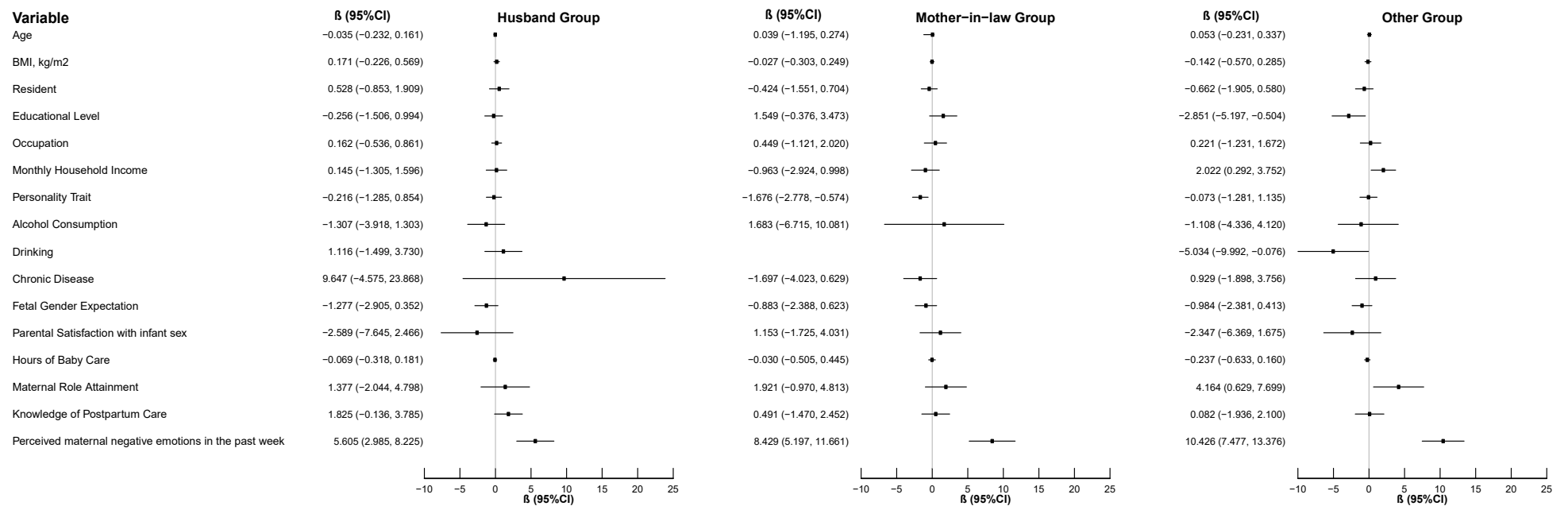
Supplementary Figure 6 Distribution of caregiver cognitive-bias scores across caregiver groups.



Supplementary Figure 7 Pairwise comparisons of mean caregiver cognitive-bias scores across caregiver groups.



Supplementary Figure 8 (a) Mediating Effect of Family Functioning on the Relationship Between Caregiver Cognitive Bias and Maternal Negative Affect. Note : C=direct effect ; C ' =indirect effect. ***P<0.001 (b) **Mediating Effect of Family Functioning on the Relationship Between Husbands ' Cognitive Bias and Maternal Negative Affect.** Note: Caregivers are husbands (N=175). C=direct effect ; C ' =indirect effect. ***P<0.001 (c) **Mediating Effect of Family Functioning on the Relationship Between Mothers-in-Law ' s Cognitive Bias and Maternal Negative Affect.** Note: Caregivers are mothers-in-law (N=133).C=direct effect ; C ' =indirect effect. ***P<0.001 (d) **Mediating Effect of Family Functioning on the Relationship Between Other Caregivers ' Cognitive Bias and Maternal Negative Affect.** Note: Other caregivers include fathers-in-law, biological mothers, and biological fathers (N=118).C=direct effect ; C ' =indirect effect. ***P<0.001



Supplementary Figure 9 Subgroup Analysis Forest Plot of the Impact of Family Caregiver Factors on cognitive bias Among Different Family Caregiver Groups

Note: The effect size for "Drinking" in the Mother-in-law Group is blank, as no participants in this group reported alcohol consumption.