E Detailed Fisher Score Results

To mitigate the nonlinearity and boundedness of correlation coefficients when aggregating across contexts, we also report results after applying Fisher's z-transformation to the Spearman correlations before averaging. In addition, the statistical comparisons in Appendix F are conducted on Fisher z-transformed correlations. The Fisher transform is,

$$z = \frac{1}{2}\ln\left(\frac{1+\rho}{1-\rho}\right), \tag{5}$$

where ρ denotes the Spearman correlation.

	Llama-11B	**Gemma-12B**	**Qwen-14B**
C_a (single)	$-0.03_{\pm 0.78}$	$1.27_{\pm 2.08}$	$1.42_{\pm 1.97}$
$C_a \mid (C_b = 0)$	$0.28_{\pm 1.18}$	$0.42_{\pm 1.18}$	$1.62_{\pm 2.10}$
$C_a \mid (C_b = 1)$	$-0.13_{\pm 0.78}$	$0.03_{\pm 0.72}$	$1.57_{\pm 1.93}$
$C_a \mid (C_b = 2)$	$0.03_{\pm 0.79}$	$-0.11_{\pm 1.60}$	$1.21_{\pm 1.61}$
$C_a \mid (C_b = 3)$	$0.10_{\pm 0.76}$	$0.01_{\pm 0.86}$	$1.36_{\pm 2.01}$
$C_a \mid (C_b = 4)$	$-0.13_{\pm 1.17}$	$-0.10_{\pm 1.26}$	$1.05_{\pm 1.63}$
$C_a \mid C_b$ fixed	$0.03_{\pm 0.96}$	$0.05_{\pm 1.17}$	$1.36_{\pm 1.87}$
$C_a \mid C_b$ rand	$0.02_{\pm 1.19}$	$0.34_{\pm 1.48}$	$1.22_{\pm 1.60}$
C_b (single)	$2.45_{\pm 2.92}$	$4.27_{\pm 3.23}$	$3.83_{\pm 3.18}$
$C_b \mid (C_a = 0)$	$1.12_{\pm 1.37}$	$3.24_{\pm 3.17}$	$3.27_{\pm 3.04}$
$C_b \mid (C_a = 1)$	$2.33_{\pm 2.33}$	$1.97_{\pm 2.15}$	$2.86_{\pm 2.95}$
$C_b \mid (C_a = 2)$	$1.50_{\pm 1.73}$	$2.16_{\pm 2.25}$	$2.81_{\pm 2.86}$
$C_b \mid (C_a = 3)$	$1.54_{\pm 1.72}$	$2.32_{\pm 2.73}$	$3.29_{\pm 3.04}$
$C_b \mid (C_a = 4)$	$2.60_{\pm 2.73}$	$2.89_{\pm 2.81}$	$3.13_{\pm 2.91}$
$C_b \mid C_a$ fixed	$1.82_{\pm 2.10}$	$2.51_{\pm 2.68}$	$3.07_{\pm 2.95}$
$C_b \mid C_a$ rand	$2.02_{\pm 2.31}$	$1.96_{\pm 2.29}$	$2.26_{\pm 2.47}$

Table 13: ARGUMENT generation **clarity–politeness** (Fisher-transformed Mean ± SD).

	Llama-11B	**Gemma-12B**	**Qwen-14B**
C_a (single)	$3.38_{\pm 2.97}$	$6.02_{\pm 3.12}$	$6.74_{\pm 2.79}$
$C_a \mid (C_b = 0)$	$0.51_{\pm 1.06}$	$5.29_{\pm 3.28}$	$4.53_{\pm 3.30}$
$C_a \mid (C_b = 1)$	$1.49_{\pm 1.97}$	$5.70_{\pm 3.25}$	$5.37_{\pm 3.27}$
$C_a \mid (C_b = 2)$	$1.01_{\pm 0.62}$	$4.35_{\pm 3.16}$	$5.52_{\pm 3.19}$
$C_a \mid (C_b = 3)$	$1.08_{\pm 0.60}$	$3.73_{\pm 2.95}$	$5.08_{\pm 3.23}$
$C_a \mid (C_b = 4)$	$0.86_{\pm 1.47}$	$3.92_{\pm 3.02}$	$5.59_{\pm 3.20}$
$C_a \mid C_b$ fixed	$0.99_{\pm 1.29}$	$4.60_{\pm 3.21}$	$5.22_{\pm 3.24}$
$C_a \mid C_b$ rand	$0.54_{\pm 0.67}$	$3.00_{\pm 2.75}$	$3.91_{\pm 3.13}$
C_b (single)	$1.59_{\pm 1.75}$	$6.19_{\pm 3.07}$	$6.59_{\pm 2.94}$
$C_b \mid (C_a = 0)$	$0.92_{\pm 1.71}$	$6.37_{\pm 3.09}$	$3.83_{\pm 3.18}$
$C_b \mid (C_a = 1)$	$1.12_{\pm 1.65}$	$3.11_{\pm 2.91}$	$4.98_{\pm 3.42}$
$C_b \mid (C_a = 2)$	$0.93_{\pm 1.50}$	$2.64_{\pm 2.57}$	$5.20_{\pm 3.37}$
$C_b \mid (C_a = 3)$	$0.82_{\pm 1.24}$	$2.38_{\pm 2.42}$	$3.97_{\pm 3.17}$
$C_b \mid (C_a = 4)$	$1.06_{\pm 1.89}$	$2.50_{\pm 2.64}$	$3.29_{\pm 3.03}$
$C_b \mid C_a$ fixed	$0.97_{\pm 1.61}$	$3.40_{\pm 3.11}$	$4.25_{\pm 3.30}$
$C_b \mid C_a$ rand	$0.92_{\pm 1.68}$	$2.72_{\pm 2.89}$	$3.32_{\pm 3.00}$

Table 14: ARGUMENT generation **formality–assertiveness** (Fisher-transformed Mean ± SD).