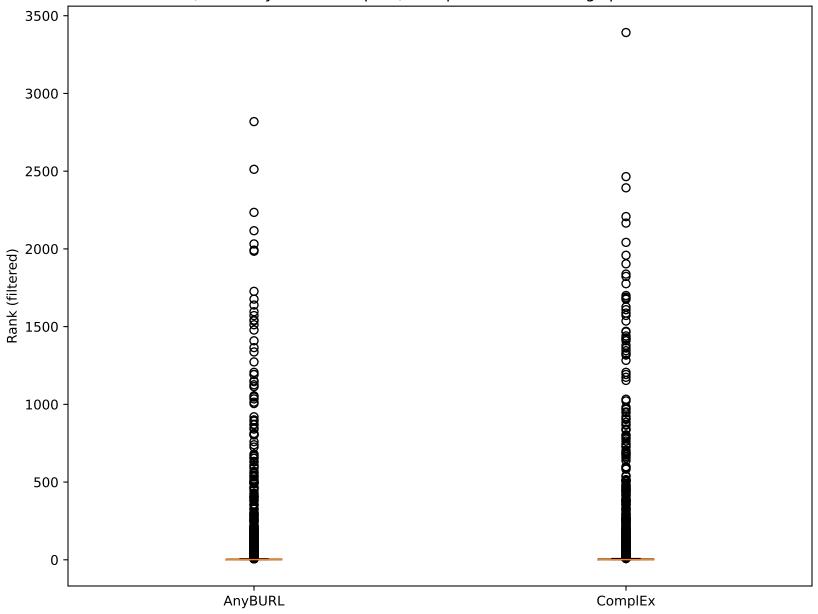
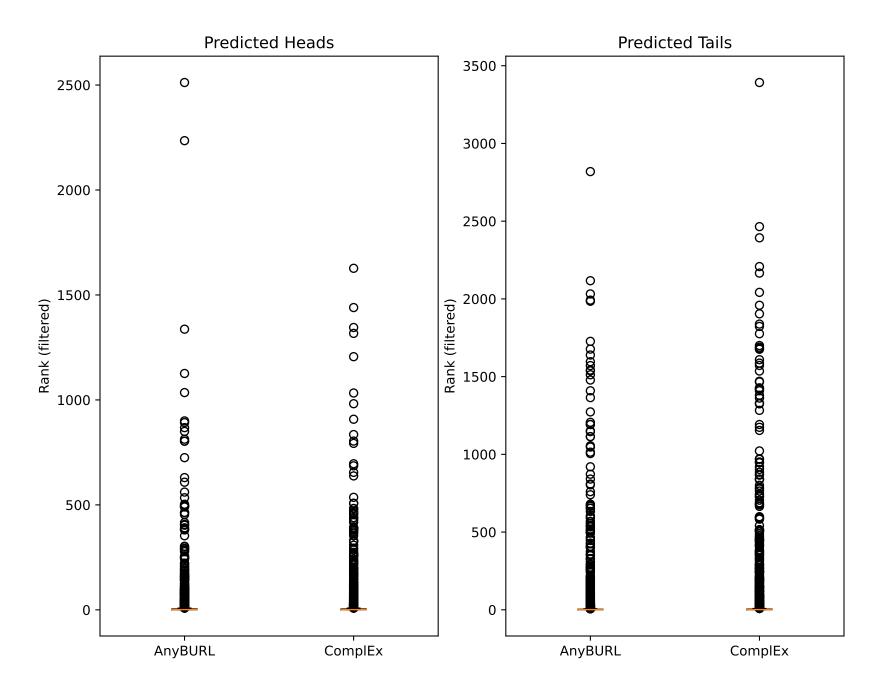
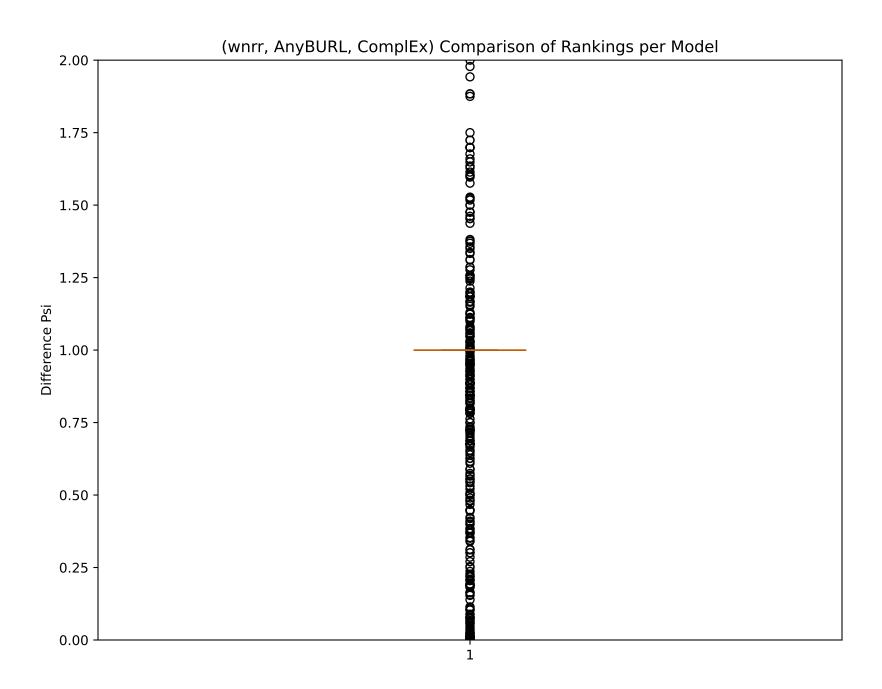
(wnrr, AnyBURL, ComplEx) Metrics

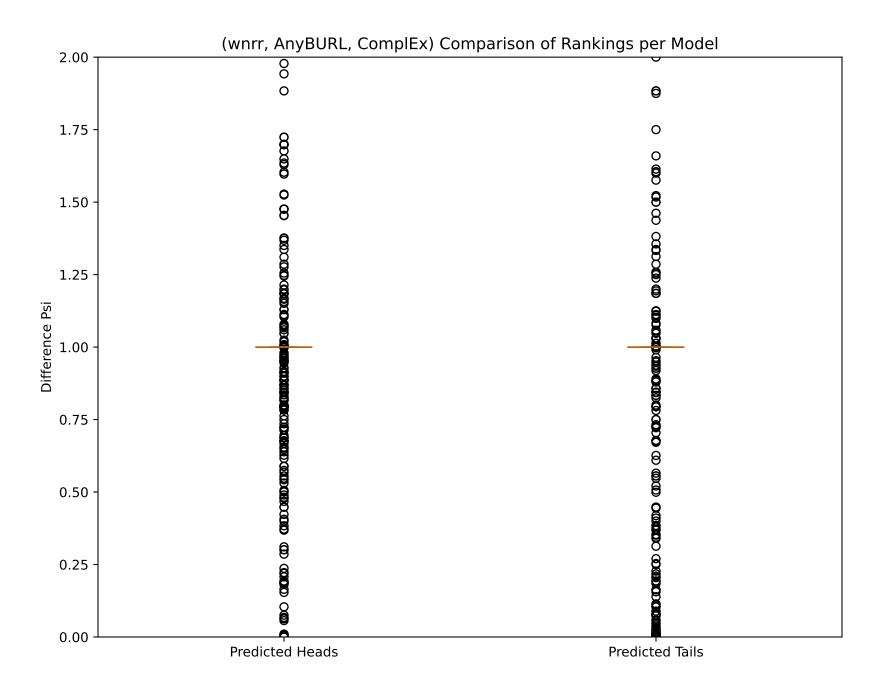
	MRR	Hits@1	Hits@10	Hits@100
AnyBURL	0.732	0.686	0.829	0.942
ComplEx Combined	0.713	0.662	0.811	0.925
ComplEx 1	0.735	0.685	0.835	0.944
ComplEx 2	0.739	0.688	0.837	0.943
ComplEx 3	0.736	0.687	0.833	0.940
ComplEx 4	0.732	0.682	0.833	0.936
ComplEx 5	0.734	0.682	0.836	0.941

(wnrr, AnyBURL, ComplEx) Comparison of Rankings per Model

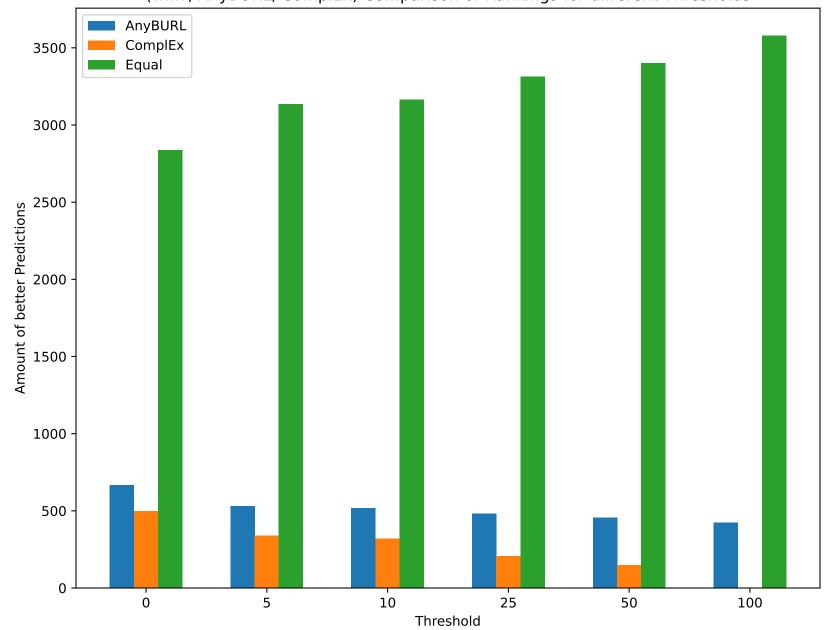




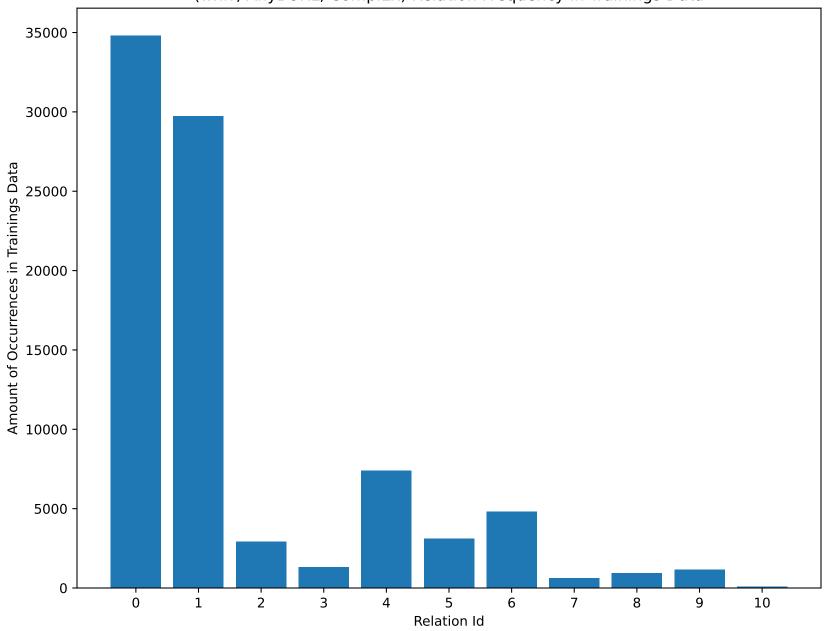




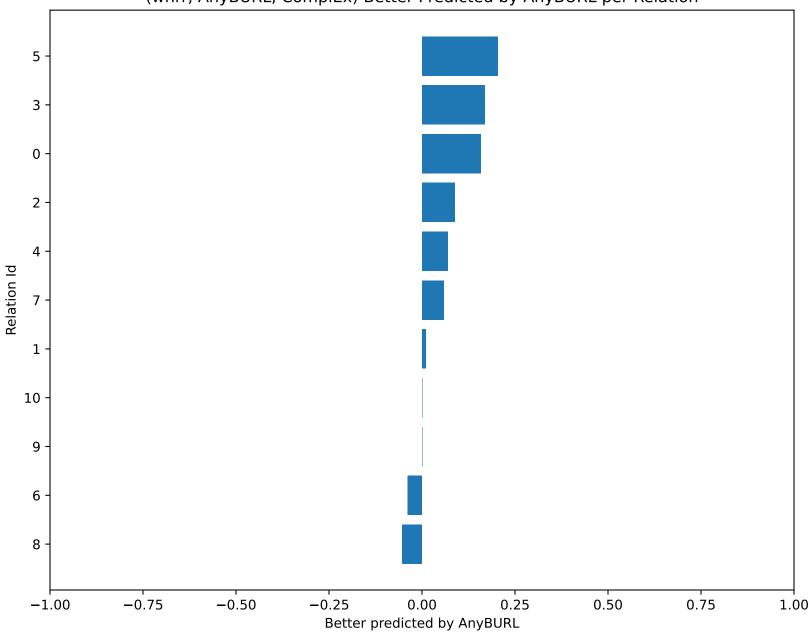
(wnrr, AnyBURL, ComplEx) Comparison of Rankings for different Thresholds



(wnrr, AnyBURL, ComplEx) Relation Frequency in Trainings Data

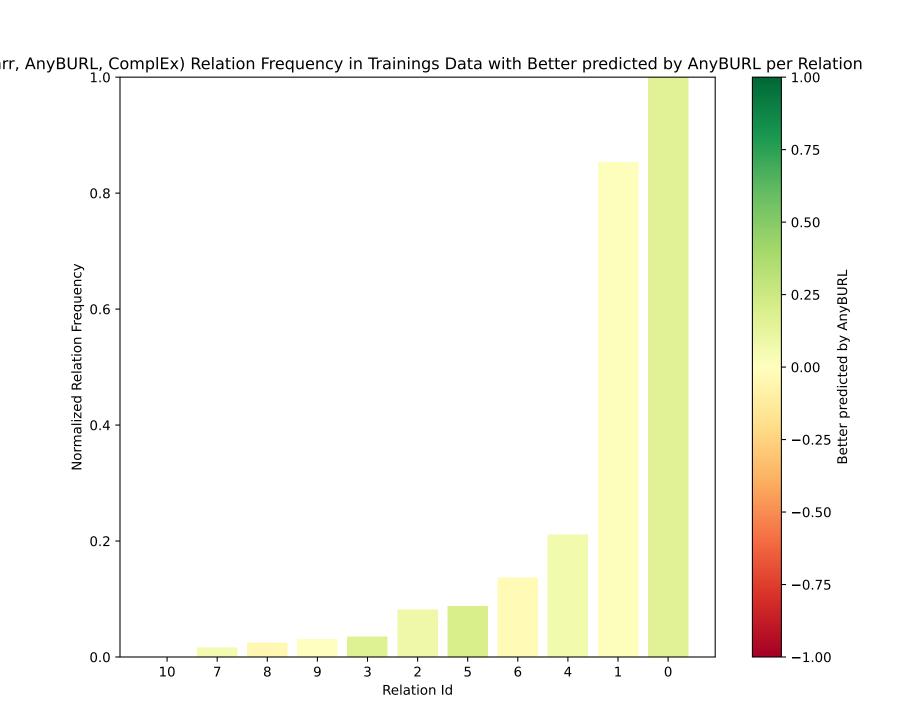


(wnrr, AnyBURL, ComplEx) Better Predicted by AnyBURL per Relation



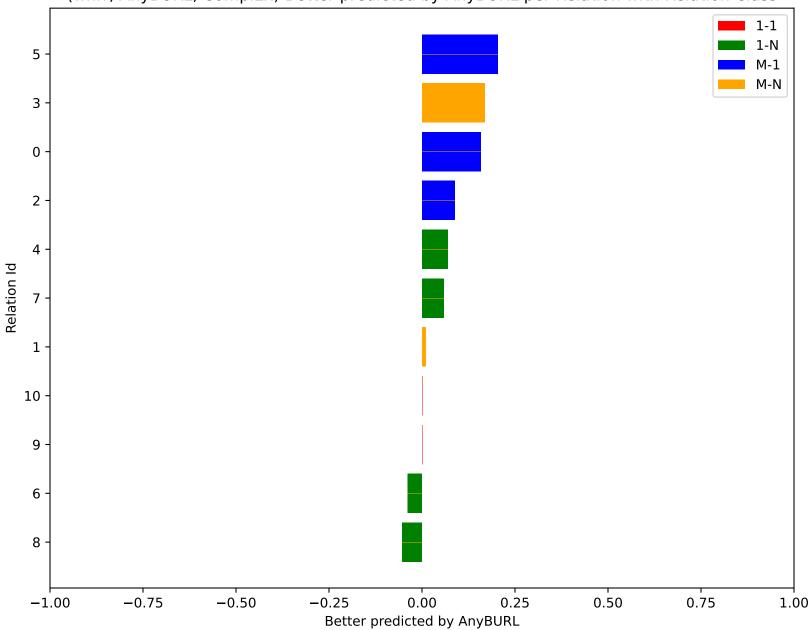
rr, AnyBURL, ComplEx) Better predicted by AnyBURL per Relation with Relation Frequency in Trainings Data - 0.8 0.75 - 0.7 0.50 0.6 Better predicted by AnyBURL 0.25 0.00 -0.25-0.50- 0.2 -0.750.1 -1.00L _{0.0} 2 10 7 8 3 5 6 9 1 4 Ó

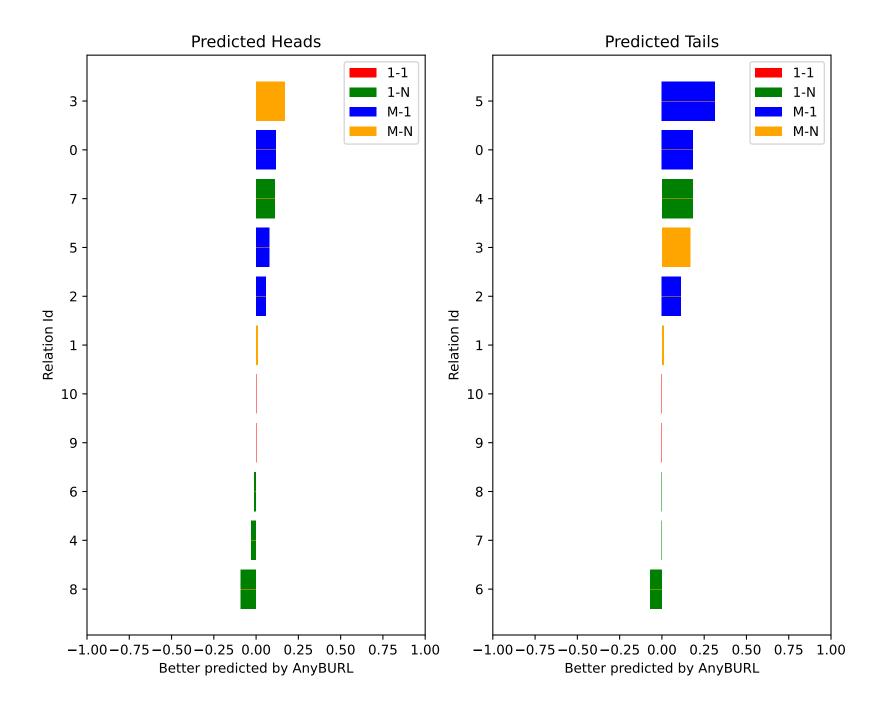
Relation Id



(wnrr, AnyBURL, ComplEx) Better Predicted by AnyBURL per Normalized Relation Frequency Bin (0.9, 1.0] (0.8, 0.9] -(0.7, 0.8] -Normalized Relation Frequency Bin (0.6, 0.7] -(0.5, 0.6](0.4, 0.5](0.3, 0.4] -(0.2, 0.3] -(0.1, 0.2] (-0.001, 0.1] -0.75-0.50-0.250.00 0.25 0.50 0.75 -1.001.00 Better predicted by AnyBURL

(wnrr, AnyBURL, ComplEx) Better predicted by AnyBURL per Relation with Relation Class



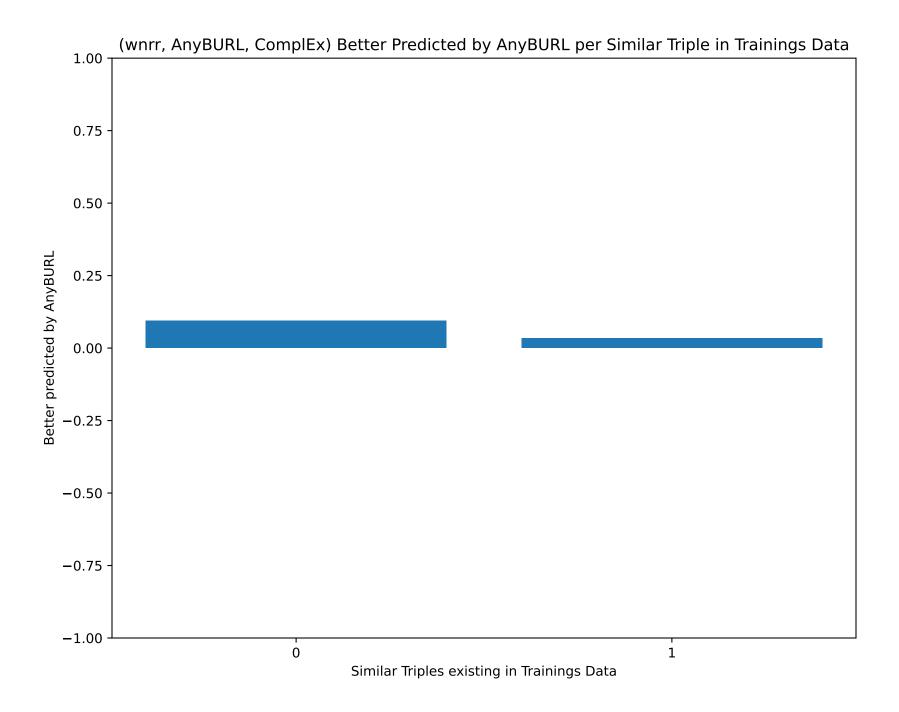


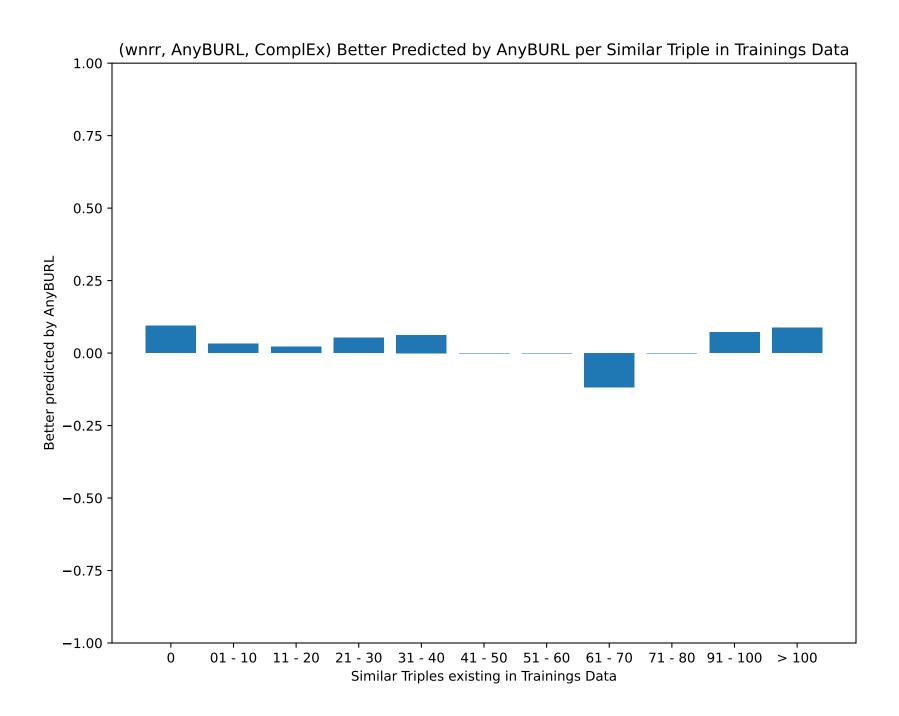
(wnrr, AnyBURL, ComplEx) Better predicted per Relation Class in %

	AnyBURL	ComplEx	Equal
1-1	0.000%	0.000%	100.000%
1-N	19.818%	16.909%	63.273%
M-1	28.199%	12.963%	58.838%
M-N	2.017%	0.367%	97.616%

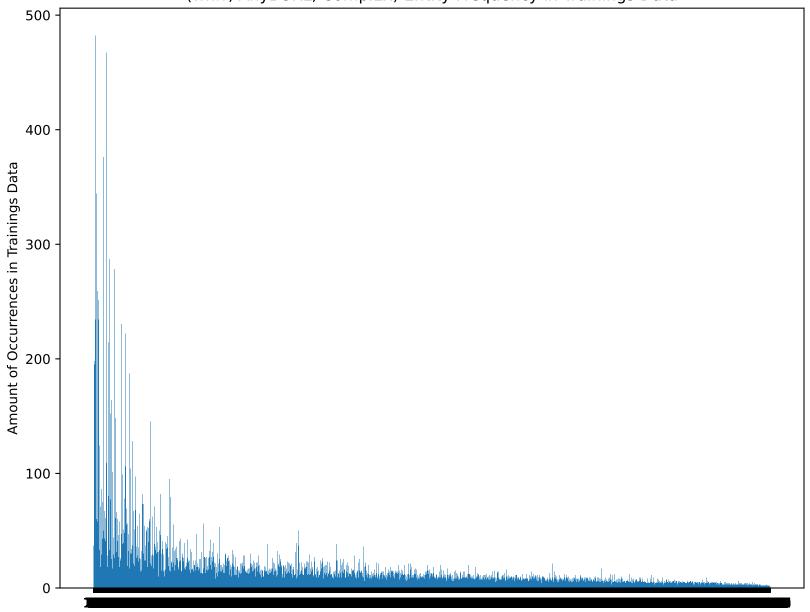
(wnrr, AnyBURL, ComplEx) Better predicted per Relation Class in % (cleaned)

	AnyBURL	ComplEx	Equal
1-1	0.000%	0.000%	100.000%
1-N	21.131%	11.440%	67.429%
M-1	28.844%	16.281%	54.874%
M-N	2.017%	0.367%	97.616%

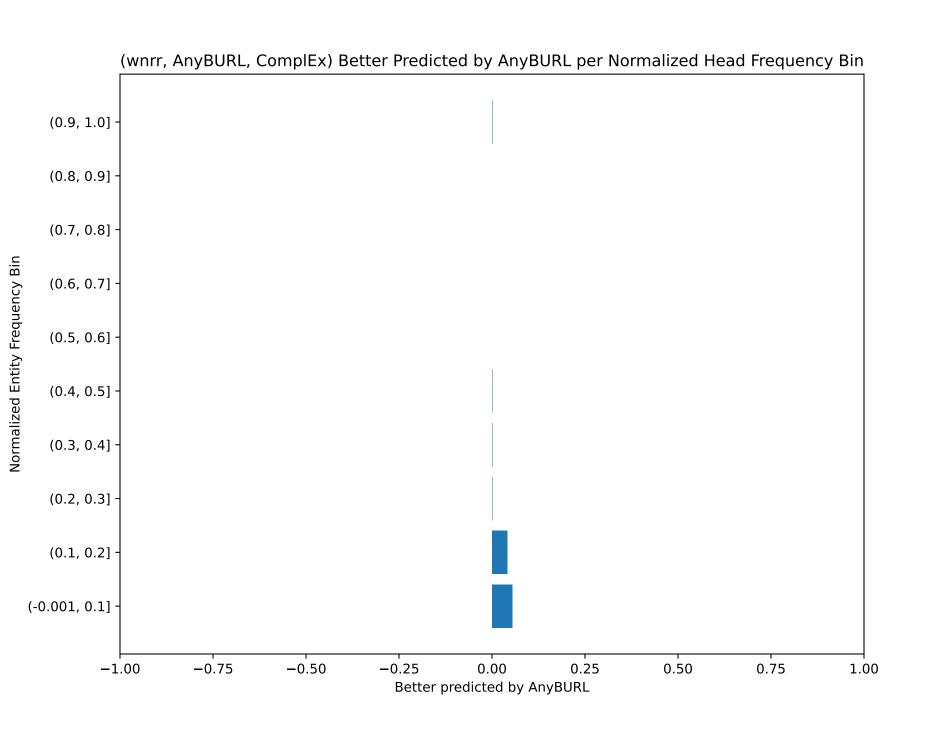




(wnrr, AnyBURL, ComplEx) Entity Frequency in Trainings Data



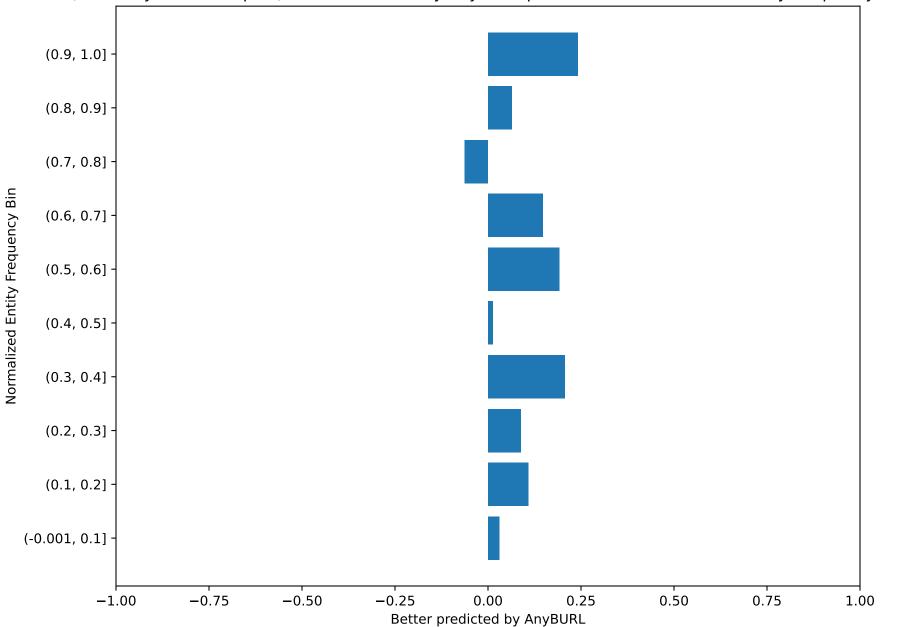
Entity Id

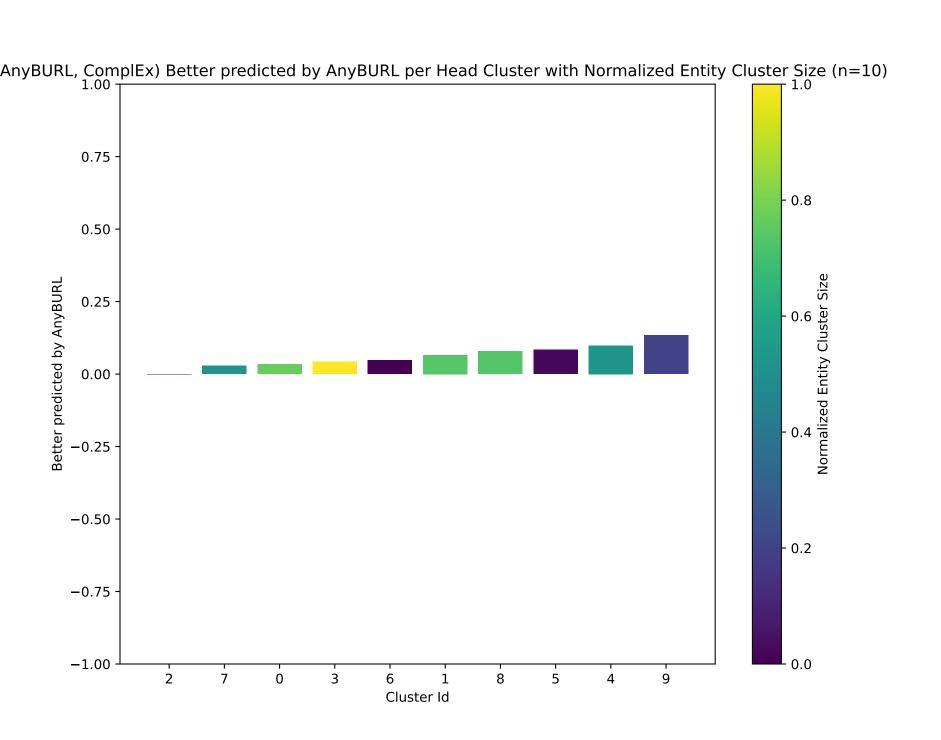


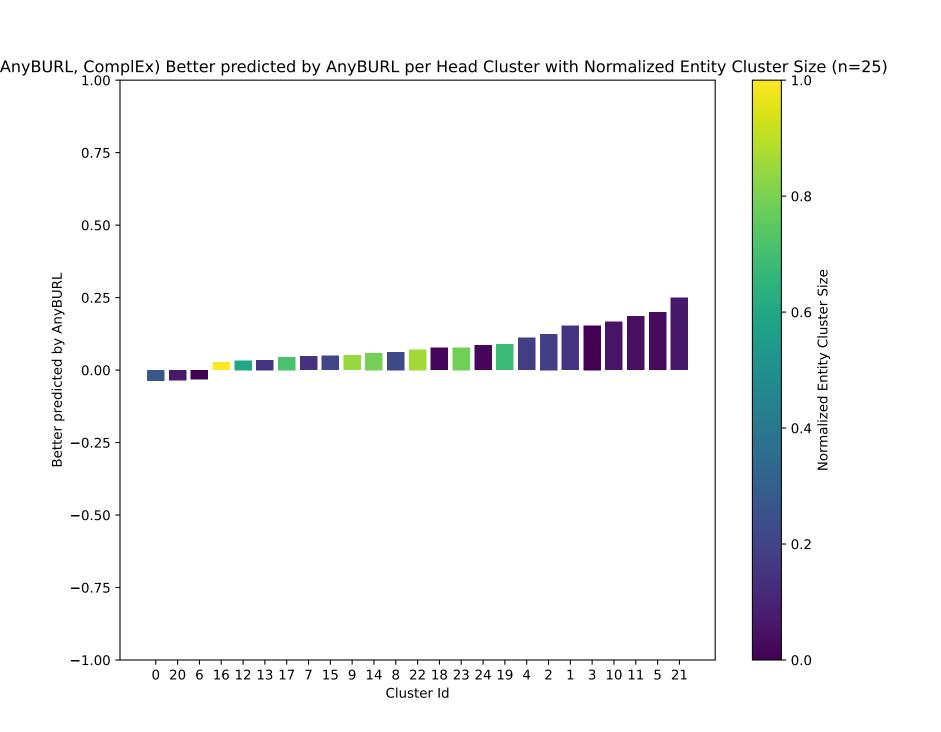
(wnrr, AnyBURL, ComplEx) Better Predicted by AnyBURL per Normalized Tail Frequency Bin (0.9, 1.0] (0.8, 0.9] -(0.7, 0.8] -Normalized Entity Frequency Bin (0.6, 0.7] -(0.5, 0.6](0.4, 0.5](0.3, 0.4] -(0.2, 0.3] -(0.1, 0.2](-0.001, 0.1] -0.75-0.50-0.250.00 0.25 0.50 0.75 -1.001.00

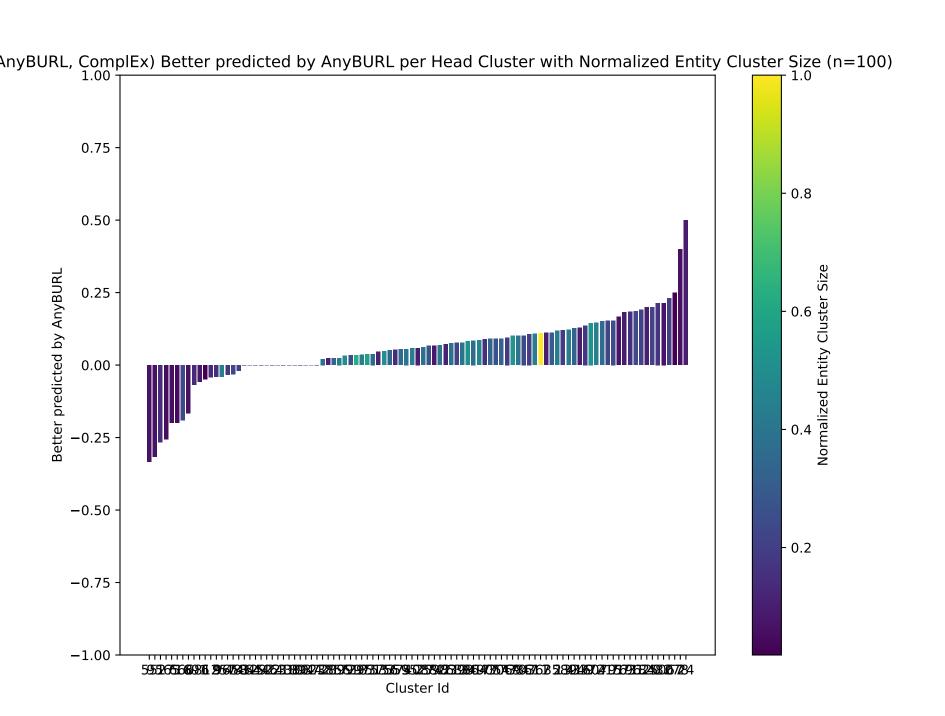
Better predicted by AnyBURL

(wnrr, AnyBURL, ComplEx) Better Predicted by AnyBURL per Combined Normalized Entity Frequency Bin









AnyBURL, ComplEx) Better predicted by AnyBURL per Head Cluster with Normalized Entity Cluster Size (n=10) 0.12 8.0 0.10 o 0 0 0 0 0 Normalized Entity Cluster Size Better predicted by AnyBURL 0.04 0.2 - 0.02 0.0 0.00

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7 4 Cluster Id

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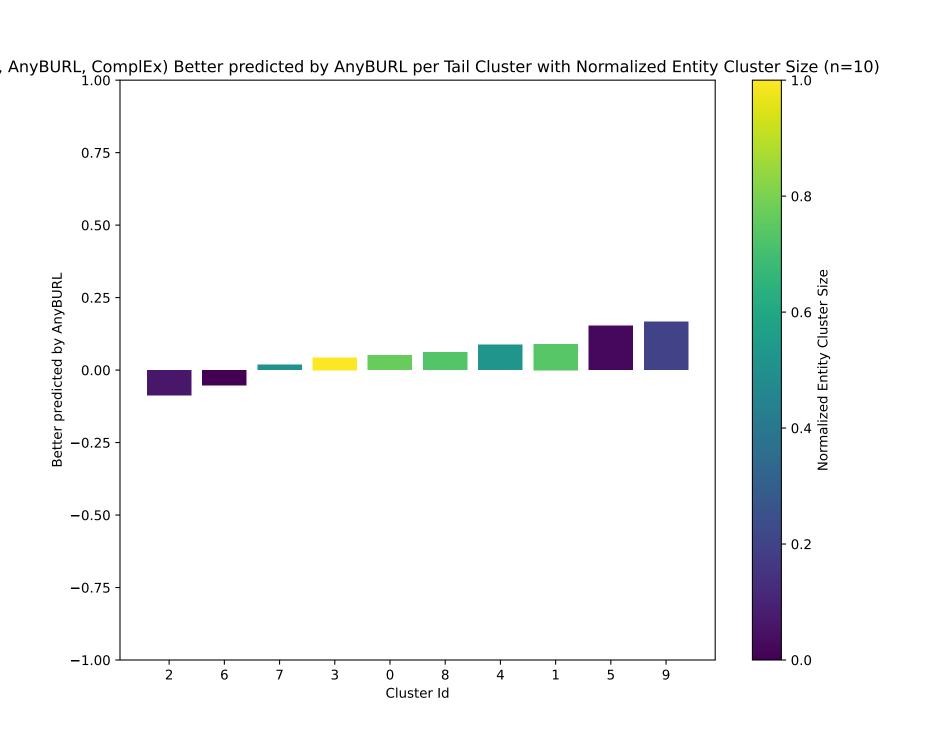
8

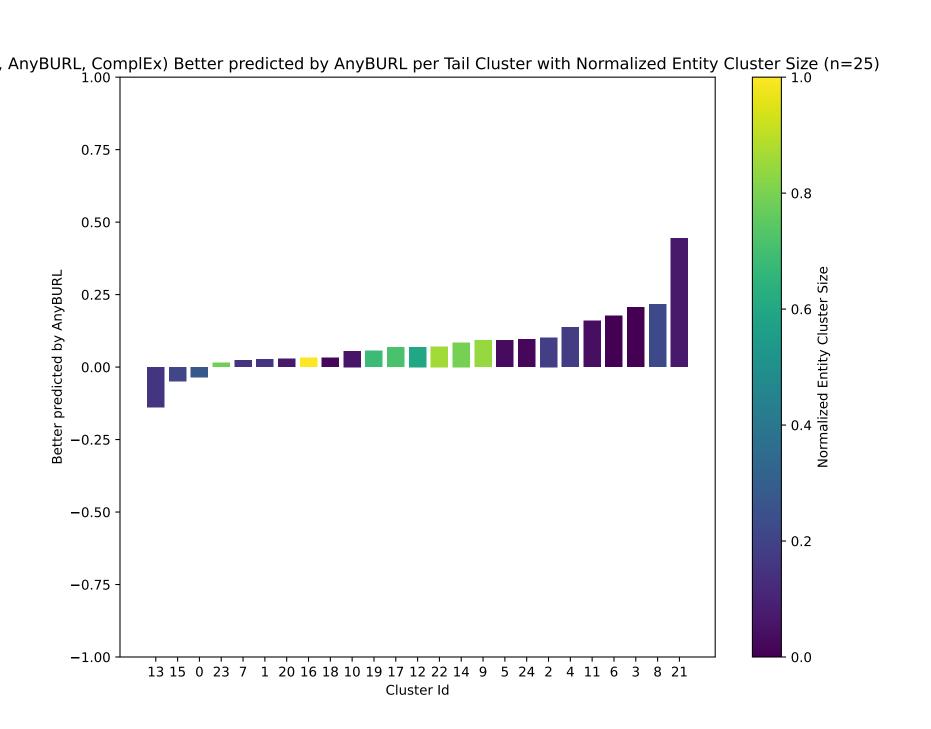
ż

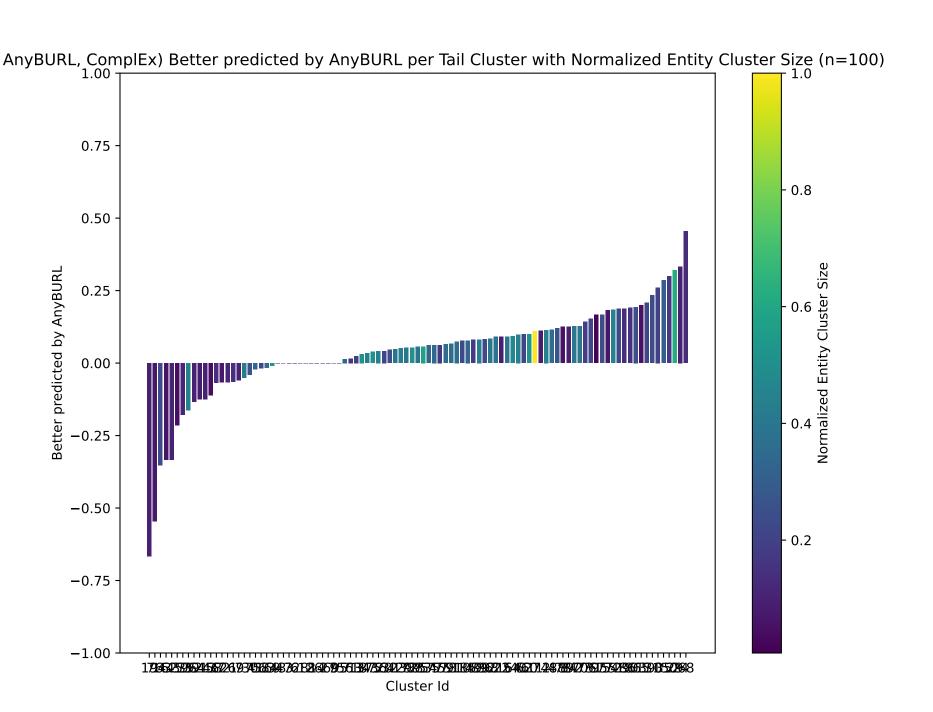
2

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6







, AnyBURL, ComplEx) Better predicted by AnyBURL per Tail Cluster with Normalized Entity Cluster Size (n=10) - 0.15 8.0 - 0.10 Normalized Entity Cluster Size Better predicted by AnyBURL 0.05 - 0.00 0.2 - -0.05 0.0 9 2 i 5 7 4 Cluster Id ż 8 6 Ó 3