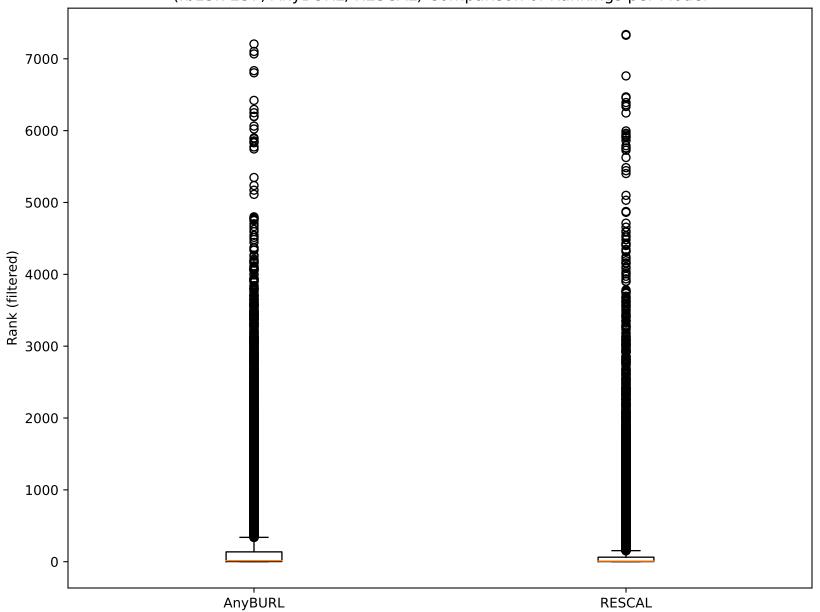
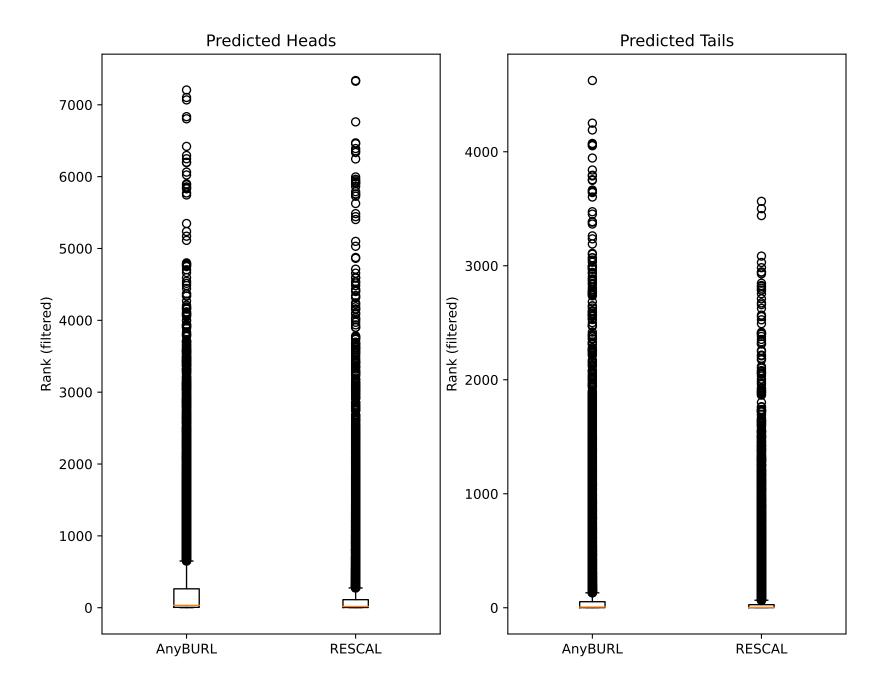
## (fb15k-237, AnyBURL, RESCAL) Metrics

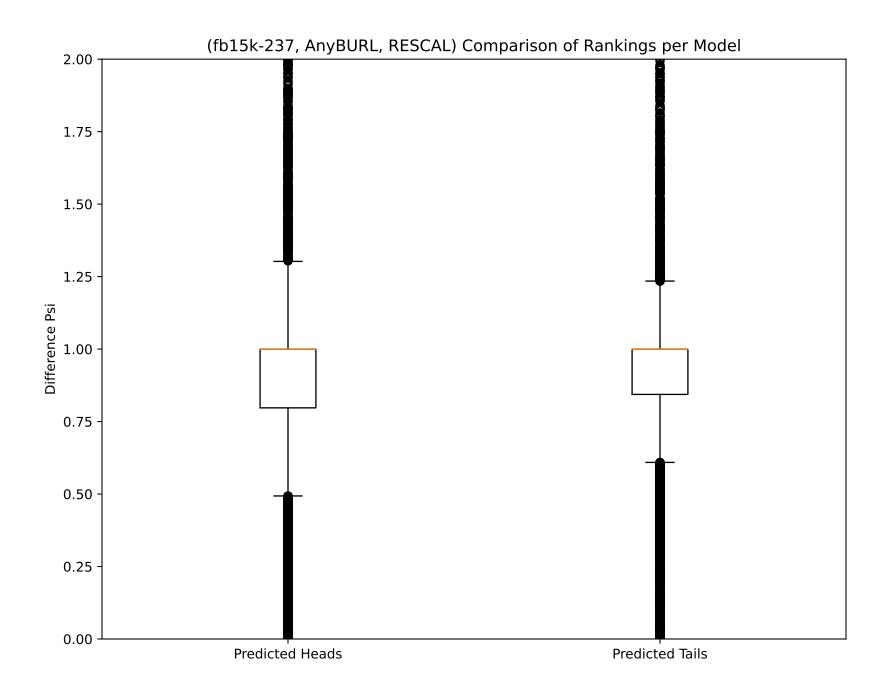
	MRR	Hits@1	Hits@10	Hits@100
AnyBURL	0.298	0.217	0.461	0.721
RESCAL Combined	0.348	0.249	0.542	0.798
RESCAL 1	0.371	0.277	0.560	0.807
RESCAL 2	0.367	0.274	0.553	0.806
RESCAL 3	0.371	0.276	0.560	0.810
RESCAL 4	0.373	0.278	0.561	0.809
RESCAL 5	0.373	0.278	0.561	0.809

(fb15k-237, AnyBURL, RESCAL) Comparison of Rankings per Model

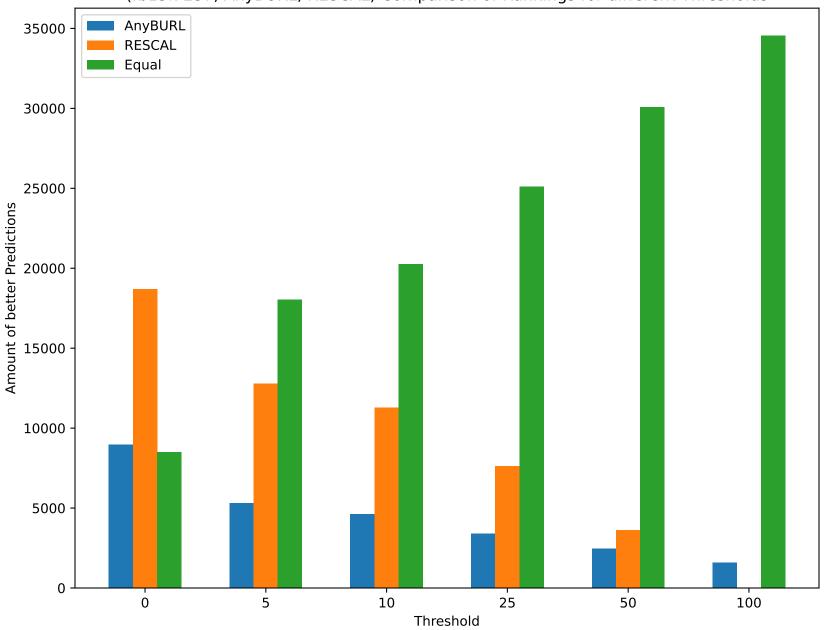




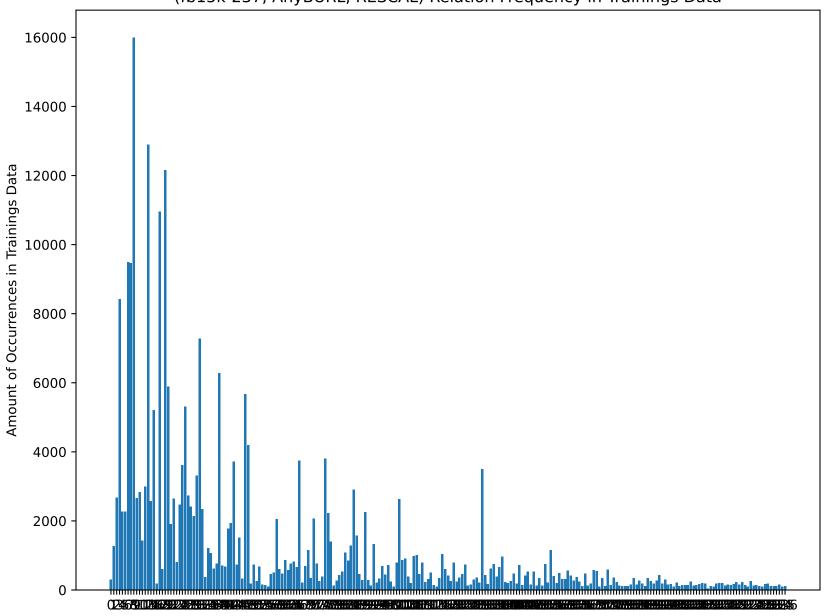
(fb15k-237, AnyBURL, RESCAL) Comparison of Rankings per Model 2.00 1.75 1.50 1.25 -Difference Psi 0.75 0.50 0.25 0.00 1



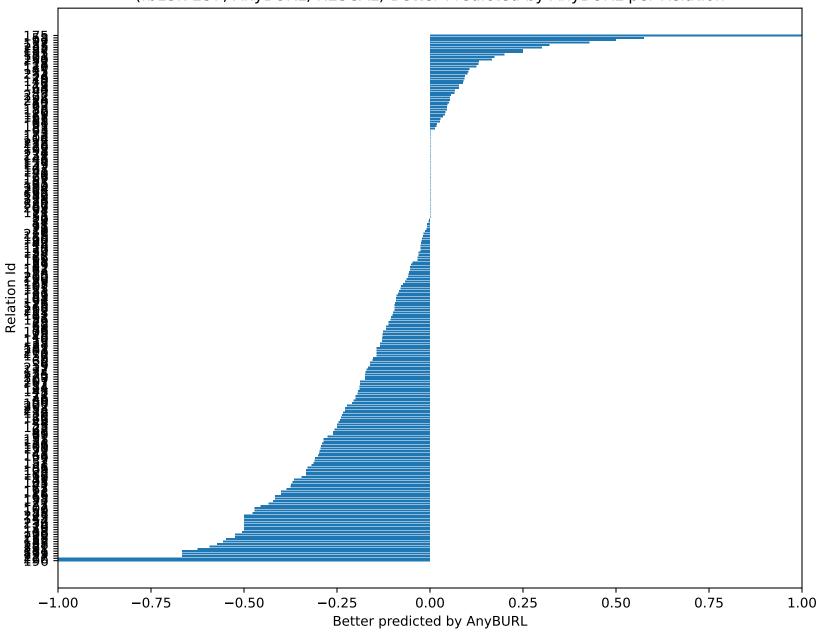
(fb15k-237, AnyBURL, RESCAL) Comparison of Rankings for different Thresholds



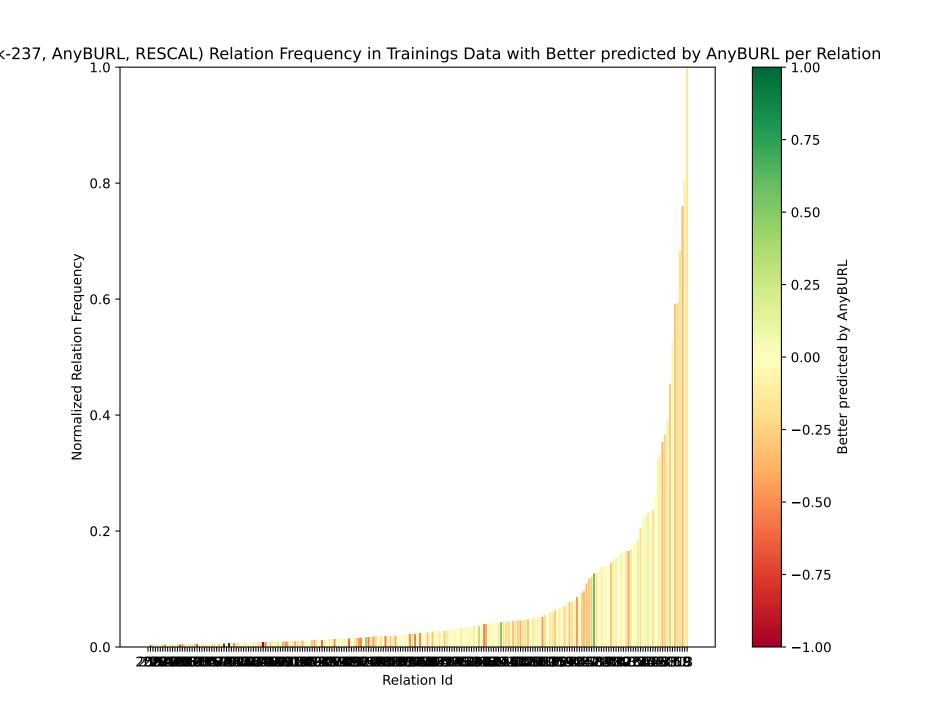
(fb15k-237, AnyBURL, RESCAL) Relation Frequency in Trainings Data



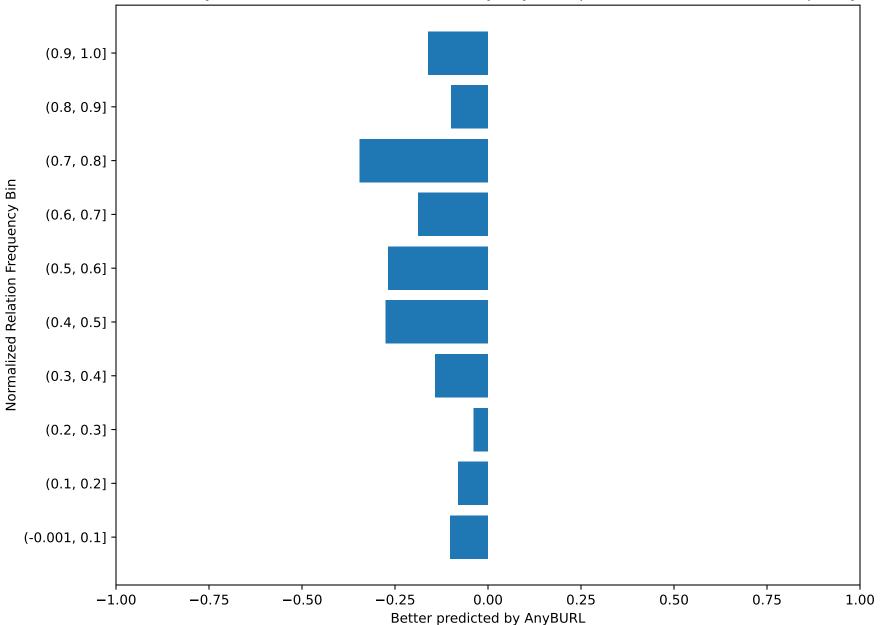
(fb15k-237, AnyBURL, RESCAL) Better Predicted by AnyBURL per Relation



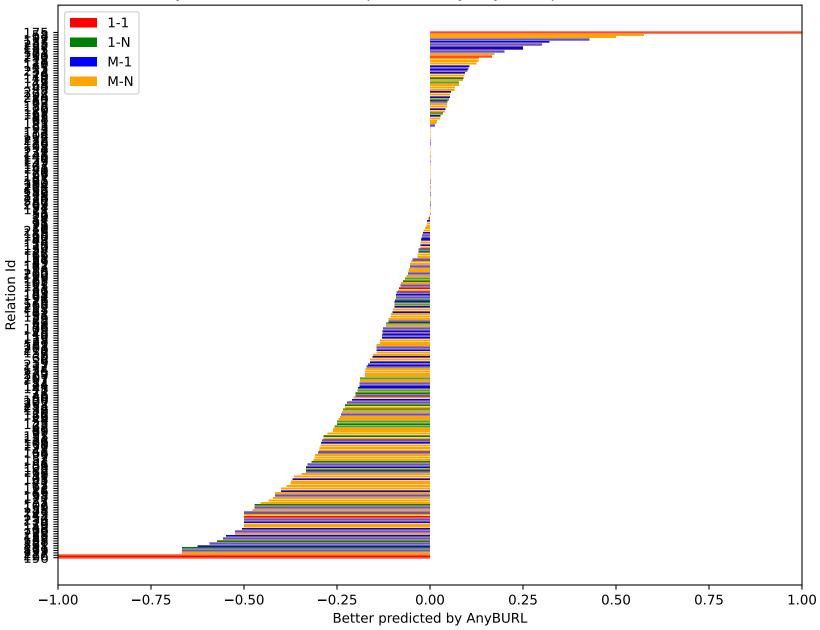
c-237, AnyBURL, RESCAL) Better predicted by AnyBURL per Relation with Relation Frequency in Trainings Data 8.0 0.75 - 0.7 0.50 0.6 Normalized Relation Frequency Better predicted by AnyBURL 0.25 - 0.5 0.00 -0.25-0.500.2 -0.750.1 -1.000.0 Relation Id

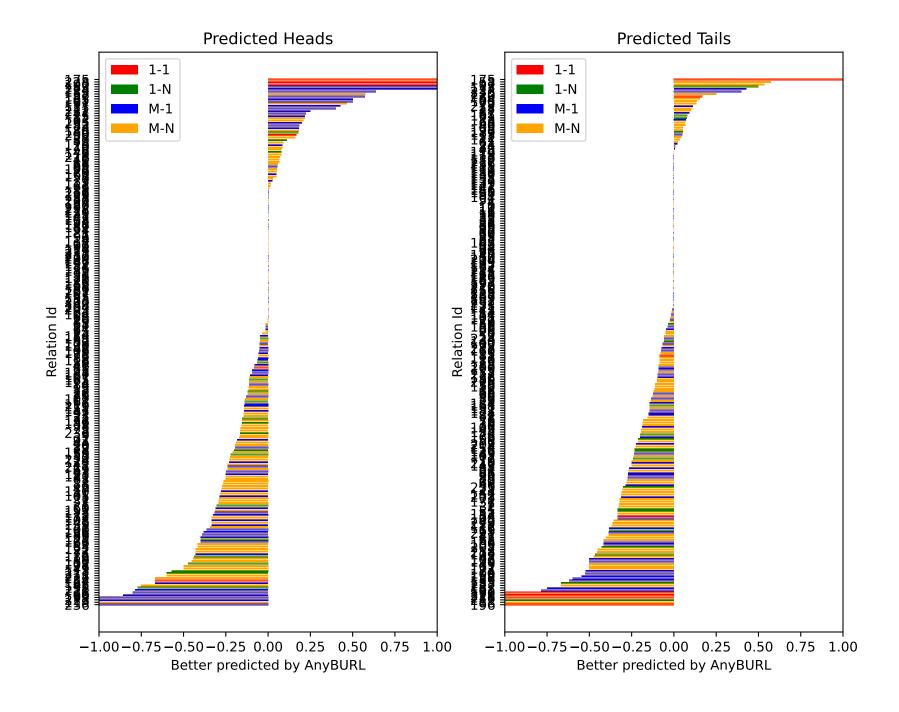


(fb15k-237, AnyBURL, RESCAL) Better Predicted by AnyBURL per Normalized Relation Frequency Bin



(fb15k-237, AnyBURL, RESCAL) Better predicted by AnyBURL per Relation with Relation Class



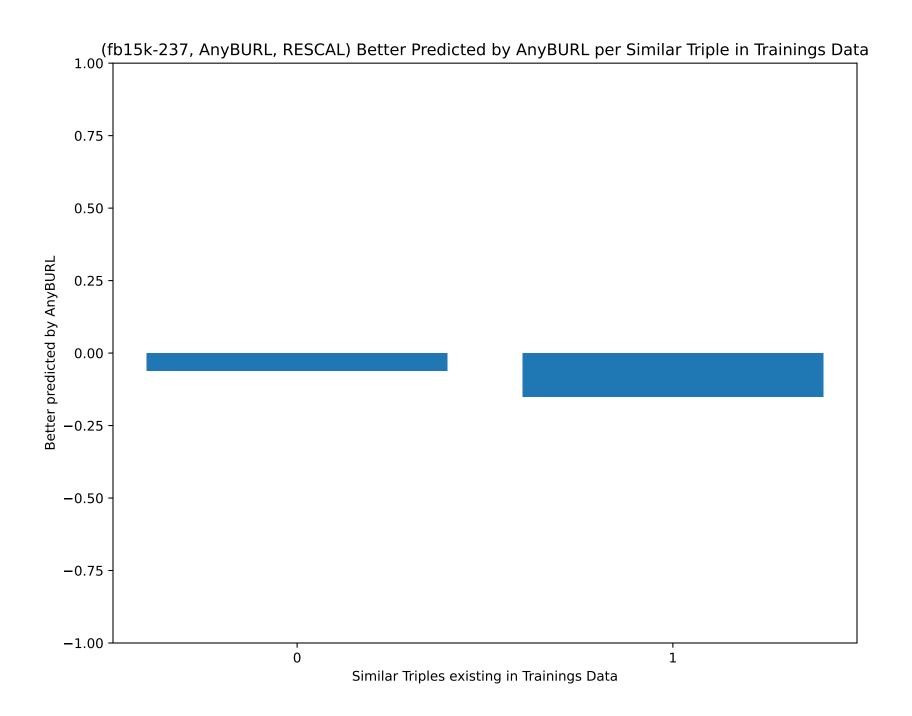


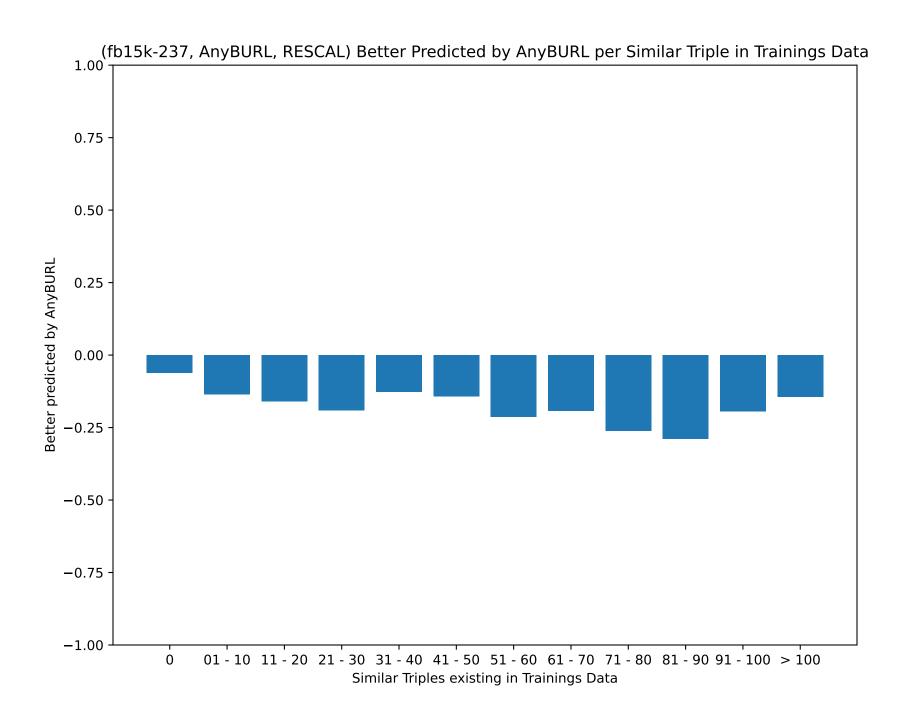
## (fb15k-237, AnyBURL, RESCAL) Better predicted per Relation Class in %

	AnyBURL	RESCAL	Equal
1-1	8.543%	7.538%	83.920%
1-N	14.963%	27.556%	57.481%
M-1	9.451%	16.822%	73.726%
M-N	10.167%	25.705%	64.128%

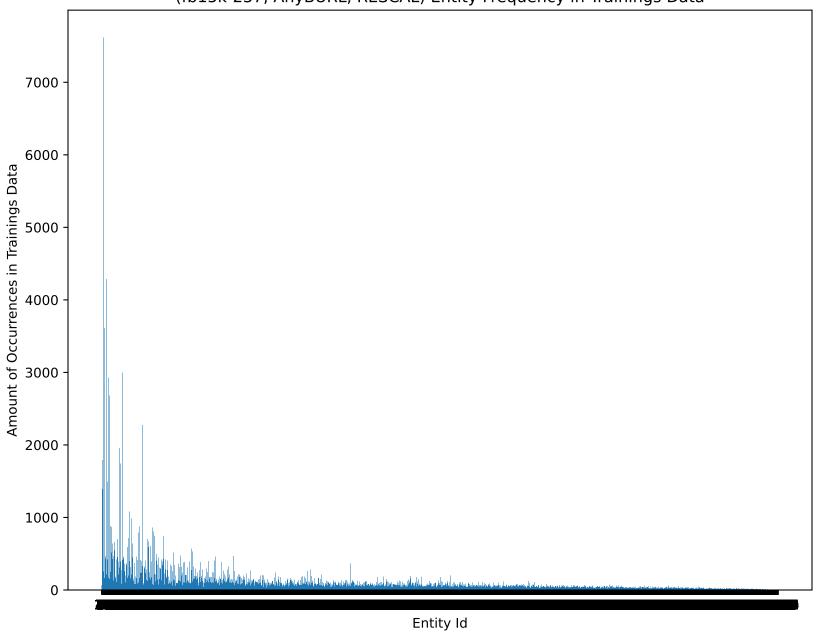
## (fb15k-237, AnyBURL, RESCAL) Better predicted per Relation Class in % (cleaned)

	AnyBURL	RESCAL	Equal
1-1	8.543%	7.538%	83.920%
1-N	14.745%	22.574%	62.681%
M-1	7.005%	16.034%	76.960%
M-N	10.167%	25.705%	64.128%

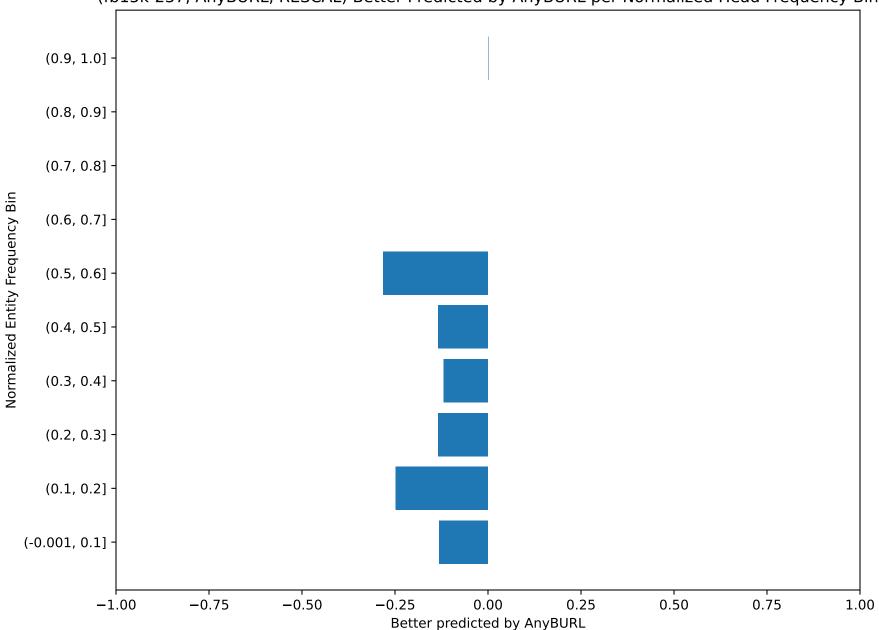




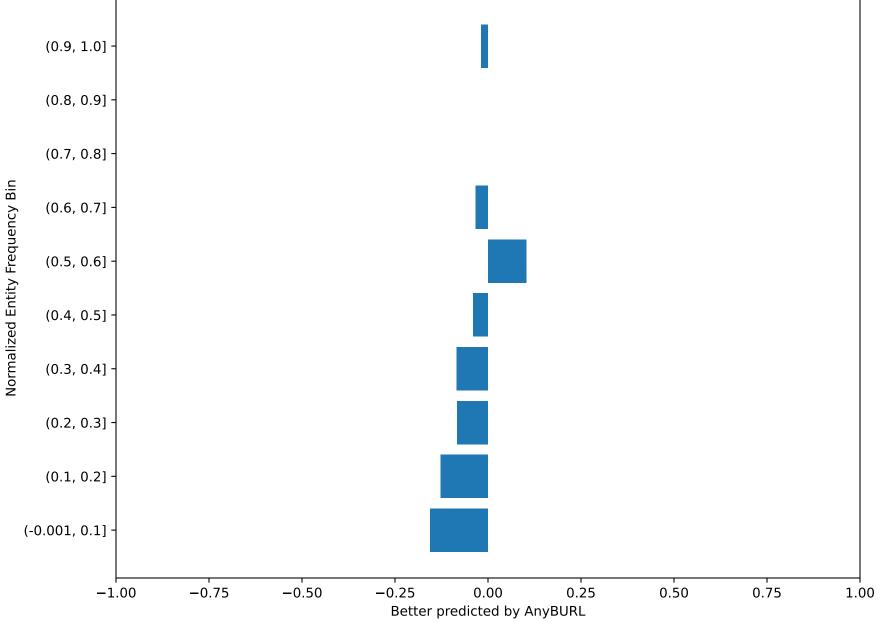
(fb15k-237, AnyBURL, RESCAL) Entity Frequency in Trainings Data



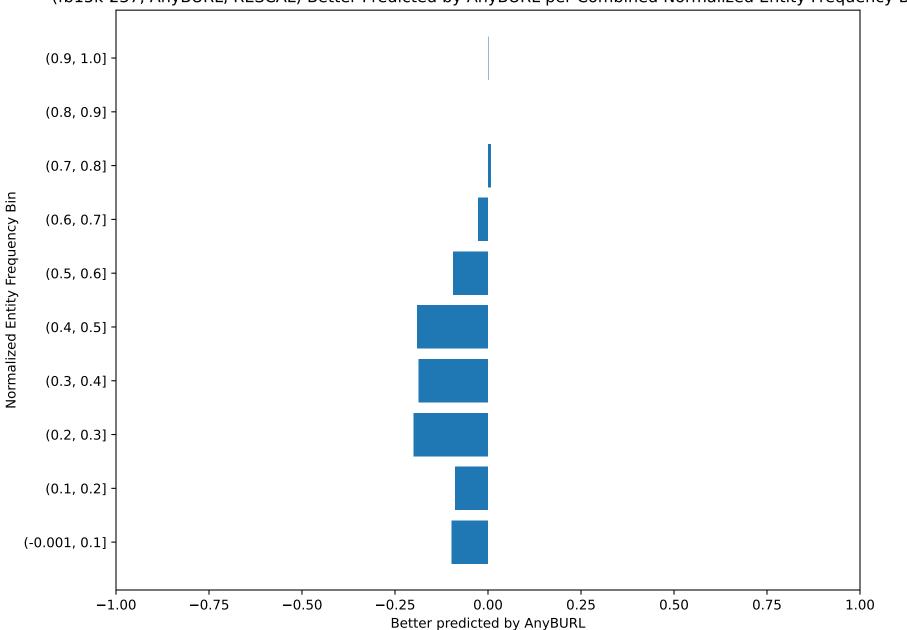
(fb15k-237, AnyBURL, RESCAL) Better Predicted by AnyBURL per Normalized Head Frequency Bin



(fb15k-237, AnyBURL, RESCAL) Better Predicted by AnyBURL per Normalized Tail Frequency Bin



(fb15k-237, AnyBURL, RESCAL) Better Predicted by AnyBURL per Combined Normalized Entity Frequency Bin



37, AnyBURL, RESCAL) Better predicted by AnyBURL per Head Cluster with Normalized Entity Cluster Size (n=10) 0.75 - 0.8 0.50 Normalized Entity Cluster Size Better predicted by AnyBURL 0.25 0.00 -0.25-0.500.2 -0.75-1.00- 0.0

6 3 Cluster Id

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1

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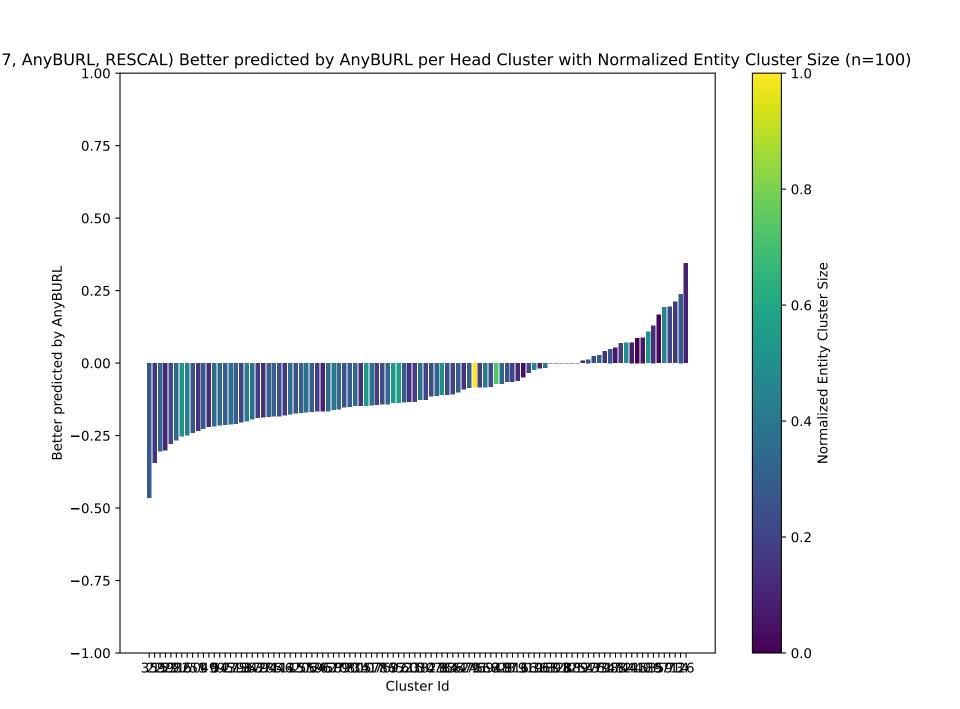
ż

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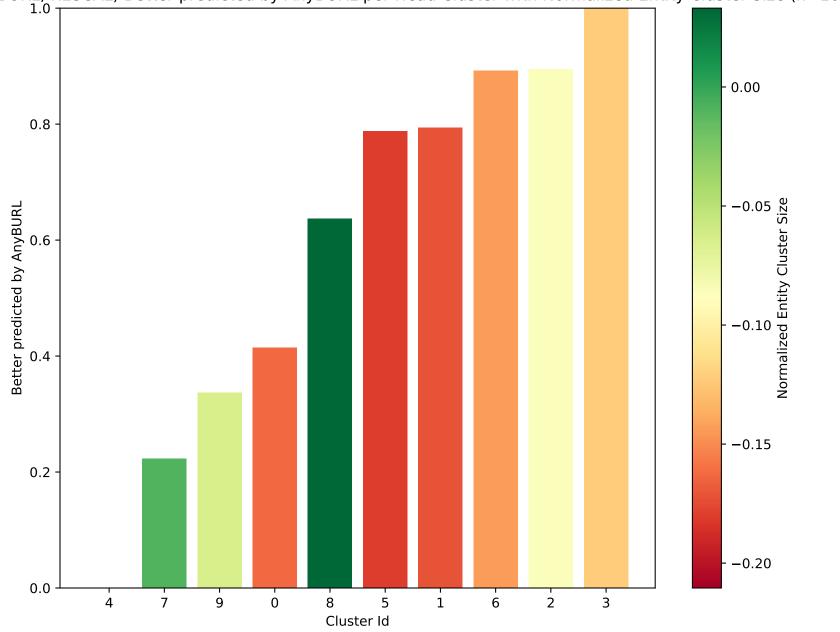
2

37, AnyBURL, RESCAL) Better predicted by AnyBURL per Head Cluster with Normalized Entity Cluster Size (n=25) 0.75 - 0.8 0.50 o b Normalized Entity Cluster Size Better predicted by AnyBURL 0.25 0.00 -0.25-0.500.2 -0.75-1.000.0 22 7 21 15 2 1 0 8 10 17 16 23 18 5 6 20 3 11 12 19 24 4 13 14 9

Cluster Id



37, AnyBURL, RESCAL) Better predicted by AnyBURL per Head Cluster with Normalized Entity Cluster Size (n=10)  $\frac{1.0}{1.0}$ 



237, AnyBURL, RESCAL) Better predicted by AnyBURL per Tail Cluster with Normalized Entity Cluster Size (n=10) 0.75 - 0.8 0.50 Normalized Entity Cluster Size Better predicted by AnyBURL 0.25 0.00 -0.25-0.500.2 -0.750.0 -1.005 3 ż Ö i 2 9 8 6 4 Cluster Id

237, AnyBURL, RESCAL) Better predicted by AnyBURL per Tail Cluster with Normalized Entity Cluster Size (n=25) 0.75 - 0.8 0.50 o b Normalized Entity Cluster Size Better predicted by AnyBURL 0.25 0.00 -0.25-0.500.2 -0.75-1.000.0 21 3 22 16 2 20 7 17 0 6 5 18 15 10 8 24 23 12 1 19 13 11 4 14 9 Cluster Id

37, AnyBURL, RESCAL) Better predicted by AnyBURL per Tail Cluster with Normalized Entity Cluster Size (n=100) 0.75 - 0.8 0.50 Normalized Entity Cluster Size Better predicted by AnyBURL 0.25 - 0.6 0.00 -0.25 -0.500.2 -0.75-1.000.0

Cluster Id

237, AnyBURL, RESCAL) Better predicted by AnyBURL per Tail Cluster with Normalized Entity Cluster Size (n=10)

