LP-DIXIT Additional Experiments

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In this additional report, we discuss the results of the comparative experiments that are not included in the main paper where we analyzed the outcomes for the comparison of LP-X methods using LP-DIXIT with Llama3.1-70B on FB15k-237, WN18RR, and YAGO3-10 (KGs without schema), and using LP-DIXIT and LP-DIXIT$_{\mathcal{O}}$ with the same LLM on DB50K, DB100K, YAGO4-20 (KGs with schema). Hence, the remaining experiments are the ones using LP-DIXIT$_{\mathcal{O}}$, LP-DIXIT$_{\mathcal{D}}$, and LP-DIXIT$_{\mathcal{O}\mathcal{D}}$ with Llama3.1-7-B on the KGs without schema (in Tabs. 1, 2, and 3), and LP-DIXIT$_{\mathcal{D}}$, and LP-DIXIT$_{\mathcal{O}\mathcal{D}}$ with Llama3.1-70B on the KGs without schema (in Tabs. 4, and 5). Next, we analyze the outcomes on all the KGs when using all the declinations of LP-DIXIT with Llama-3.1-8B (in Tabs. 6, 7, 8, 9 for KGs without schema and in Tabs. 10, 11, 12, 13 for KGs with schema), and Mixtral-8x7B (in Tabs. 14, 15, 16, 17 for KGs without schema and in Tabs. 18, 19, 20, 21 for KGs with schema). In the majority of the cases, Criage and Data Poisoning performed best as discussed in the main paper.

Table 1: LP-DIXIT$_{\mathcal{O}}$ Llama3 70B no schema

KGE	LP-X	Mode	FB15k-237	WN18RR	YAGO3-10
TransE	DP	nec	-0.050	**0.480**	**0.760**
	DP	suff	-0.020	**0.480**	**0.760**
	Kelpie	nec	-0.020	0.050	0.180
	Kelpie	suff	**0.020**	–	0.450
	GEnI	–	0.010	0.040	-0.060
ComplEx	Criage	nec	**0.530**	**0.430**	0.770
	Criage	suff	0.410	0.280	**0.780**
	DP	nec	-0.010	0.350	0.710
	DP	suff	-0.010	0.350	0.710
	Kelpie	nec	0.020	0.050	0.630
	Kelpie	suff	0.000	0.360	0.710
	GEnI	–	-0.010	0.070	0.020
ConvE	Criage	nec	0.030	0.288	0.690
	Criage	suff	**0.200**	**0.346**	**0.710**
	DP	nec	-0.080	-0.096	0.010
	DP	suff	-0.080	-0.058	0.080
	Kelpie	nec	-0.090	-0.115	-0.080
	Kelpie	suff	-0.060	-0.096	0.010

Table 2: LP-DIXIT$_{\mathcal{D}}$ Llama3 70B no schema

KGE	LP-X	Mode	FB15k-237	WN18RR	YAGO3-10
TransE	DP	nec	-0.040	**0.310**	0.750
	DP	suff	**0.020**	0.290	**0.800**
	Kelpie	nec	0.030	-0.030	0.260
	Kelpie	suff	-0.010	–	0.490
	GEnI	–	-0.030	0.010	-0.020
ComplEx	Criage	nec	**0.320**	0.370	0.780
	Criage	suff	0.280	0.180	**0.830**
	DP	nec	-0.080	0.440	0.640
	DP	suff	-0.010	**0.450**	0.680
	Kelpie	nec	0.030	0.190	0.570
	Kelpie	suff	-0.050	0.500	0.650
	GEnI	–	-0.070	0.010	0.020
ConvE	Criage	nec	0.040	-0.269	0.820
	Criage	suff	**0.190**	**-0.250**	**0.850**
	DP	nec	-0.070	-0.462	0.090
	DP	suff	-0.140	-0.462	0.110
	Kelpie	nec	-0.080	-0.519	-0.030
	Kelpie	suff	-0.030	-0.481	0.020

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Table 3: LP-DIXIT$_{\mathcal{OD}}$ Llama3 70B no schema

KGE	LP-X	Mode	FB15k-237	WN18RR	YAGO3-10
TransE	DP	nec	0.010	**0.280**	**0.720**
	DP	suff	-0.030	0.190	0.670
	Kelpie	nec	0.020	-0.050	0.190
	Kelpie	suff	**0.030**	–	0.430
	GEnI	–	-0.050	0.000	0.010
ComplEx	Criage	nec	**0.330**	**0.310**	**0.770**
	Criage	suff	0.290	0.140	0.740
	DP	nec	-0.070	0.210	0.660
	DP	suff	0.000	0.270	0.670
	Kelpie	nec	0.030	0.090	0.570
	Kelpie	suff	0.060	0.200	0.630
	GEnI	–	-0.100	0.050	-0.020
ConvE	Criage	nec	0.120	-0.154	0.750
	Criage	suff	**0.150**	**-0.135**	**0.760**
	DP	nec	-0.020	-0.308	0.070
	DP	suff	-0.020	-0.231	0.080
	Kelpie	nec	0.000	-0.269	0.020
	Kelpie	suff	-0.010	-0.192	0.080

Table 4: LP-DIXIT$_{\mathcal{D}}$ Llama-3.1-70B schema

KGE	LP-X	Mode	Summ.	DB100K	DB50K	YAGO4-20
TransE	DP	nec	–	0.120	0.220	0.110
	DP	suff	–	0.120	**0.320**	0.070
	Kelpie	nec	–	**0.170**	0.200	0.020
	Kelpie	suff	–	0.100	0.210	**0.130**
	GEnI	–	–	-0.080	-0.040	-0.060
	Kelpie++	nec	b	0.080	0.170	0.070
	Kelpie++	nec	s	0.040	0.270	0.020
	Kelpie++	suff	b	0.090	0.150	0.080
	Kelpie++	suff	s	0.080	0.210	0.030
ComplEx	Criage	nec	–	0.530	**0.550**	0.280
	Criage	suff	–	**0.540**	0.430	**0.320**
	DP	nec	–	0.340	0.270	0.030
	DP	suff	–	0.380	0.250	0.010
	Kelpie	nec	–	0.270	0.230	-0.040
	Kelpie	suff	–	0.240	0.220	-0.010
	GEnI	–	–	-0.050	-0.020	-0.020
	Kelpie++	nec	b	0.200	0.200	0.070
	Kelpie++	nec	s	0.170	0.230	-0.010
	Kelpie++	suff	b	0.140	0.210	0.000
	Kelpie++	suff	s	0.130	0.180	0.030
ConvE	Criage	nec	–	0.440	**0.070**	0.350
	Criage	suff	–	**0.460**	0.020	**0.440**
	DP	nec	–	0.260	-0.080	0.100
	DP	suff	–	0.200	0.010	0.180
	Kelpie	nec	–	0.030	-0.020	0.100
	Kelpie	suff	–	0.040	-0.080	0.170
	Kelpie++	nec	b	0.050	-0.160	0.060
	Kelpie++	nec	s	0.090	-0.180	0.170
	Kelpie++	suff	b	0.160	-0.140	0.090
	Kelpie++	suff	s	0.090	-0.110	0.170

Table 5: LP-DIXIT$_{\mathcal{OD}}$ Llama-3.1-70B schema

KGE	LP-X	Mode	Summ.	DB100K	DB50K	YAGO4-20
TransE	DP	nec	–	**0.110**	0.220	-0.010
	DP	suff	–	0.040	0.230	**0.050**
	Kelpie	nec	–	-0.060	0.200	-0.040
	Kelpie	suff	–	0.000	0.140	0.030
	GEnI	–	–	0.010	-0.040	-0.010
	Kelpie++	nec	b	0.010	**0.310**	0.010
	Kelpie++	nec	s	0.050	0.270	0.010
	Kelpie++	suff	b	-0.040	0.200	-0.020
	Kelpie++	suff	s	0.040	0.230	-0.040
ComplEx	Criage	nec	–	**0.510**	**0.360**	0.330
	Criage	suff	–	0.400	0.350	**0.360**
	DP	nec	–	0.270	0.120	0.070
	DP	suff	–	0.250	0.140	-0.060
	Kelpie	nec	–	0.160	0.120	0.050
	Kelpie	suff	–	0.180	0.180	0.010
	GEnI	–	–	0.040	-0.010	0.050
	Kelpie++	nec	b	0.140	0.170	0.050
	Kelpie++	nec	s	0.160	0.160	0.040
	Kelpie++	suff	b	0.140	0.180	0.070
	Kelpie++	suff	s	0.050	0.180	0.030
ConvE	Criage	nec	–	0.220	0.040	0.160
	Criage	suff	–	**0.350**	**0.060**	**0.280**
	DP	nec	–	0.170	-0.060	0.050
	DP	suff	–	0.160	-0.040	0.110
	Kelpie	nec	–	-0.020	-0.060	0.040
	Kelpie	suff	–	0.040	-0.050	0.090
	Kelpie++	nec	b	0.010	-0.090	0.070
	Kelpie++	nec	s	0.060	-0.110	0.010
	Kelpie++	suff	b	0.060	-0.090	0.100
	Kelpie++	suff	s	0.050	-0.110	0.100

Table 6: LP-DIXIT Llama3 8B no schema

KGE	LP-X	Mode	FB15k-237	WN18RR	YAGO3-10
TransE	DP	nec	-0.030	**0.320**	**0.710**
	DP	suff	-0.020	**0.320**	**0.710**
	Kelpie	nec	-0.010	-0.030	0.210
	Kelpie	suff	-0.030	–	0.480
	GEnI	–	**0.000**	0.030	0.010
ComplEx	Criage	nec	**0.270**	0.290	0.490
	Criage	suff	0.250	0.060	0.460
	DP	nec	0.000	0.320	0.580
	DP	suff	0.000	0.320	0.580
	Kelpie	nec	0.000	0.180	0.480
	Kelpie	suff	0.020	**0.350**	**0.600**
	GEnI	–	-0.020	0.010	-0.030
ConvE	Criage	nec	0.000	0.019	0.530
	Criage	suff	**0.120**	**0.058**	**0.560**
	DP	nec	0.010	0.000	0.040
	DP	suff	0.030	0.000	0.070
	Kelpie	nec	-0.020	0.000	-0.030
	Kelpie	suff	0.000	0.000	0.020

Table 7: LP-DIXIT$_{\mathcal{O}}$ Llama3 8B no schema

KGE	LP-X	Mode	FB15k-237	WN18RR	YAGO3-10
TransE	DP	nec	-0.210	**0.170**	**0.650**
	DP	suff	-0.180	0.130	**0.650**
	Kelpie	nec	-0.170	0.030	0.160
	Kelpie	suff	-0.190	–	0.470
	GEnI	–	**-0.040**	0.010	0.000
ComplEx	Criage	nec	**0.000**	0.180	0.330
	Criage	suff	-0.070	0.090	0.250
	DP	nec	-0.180	0.180	0.660
	DP	suff	-0.180	0.180	0.660
	Kelpie	nec	-0.140	0.010	0.530
	Kelpie	suff	-0.130	**0.190**	**0.690**
	GEnI	–	-0.010	0.010	0.070
ConvE	Criage	nec	-0.170	-0.077	0.330
	Criage	suff	**-0.120**	**0.038**	**0.340**
	DP	nec	-0.160	-0.135	0.070
	DP	suff	-0.150	-0.135	0.080
	Kelpie	nec	-0.200	-0.135	-0.030
	Kelpie	suff	-0.160	-0.135	0.030

Table 8: LP-DIXIT$_{\mathcal{D}}$ Llama3 8B no schema

KGE	LP-X	Mode	FB15k-237	WN18RR	YAGO3-10
TransE	DP	nec	-0.230	0.230	**0.780**
	DP	suff	-0.180	**0.240**	0.760
	Kelpie	nec	-0.140	-0.040	0.240
	Kelpie	suff	**-0.090**	–	0.580
	GEnI	–	-0.150	0.020	0.000
ComplEx	Criage	nec	**0.210**	0.100	0.580
	Criage	suff	0.130	0.060	0.550
	DP	nec	-0.060	**0.260**	0.620
	DP	suff	-0.060	0.200	0.620
	Kelpie	nec	-0.060	0.180	0.510
	Kelpie	suff	-0.080	0.170	**0.690**
	GEnI	–	-0.050	-0.030	-0.020
ConvE	Criage	nec	-0.040	**0.038**	**0.520**
	Criage	suff	-0.060	-0.038	0.490
	DP	nec	-0.140	-0.346	0.030
	DP	suff	-0.130	-0.327	0.130
	Kelpie	nec	**-0.030**	-0.327	0.010
	Kelpie	suff	-0.080	-0.365	0.080

Table 9: LP-DIXIT$_{\mathcal{OD}}$ Llama3 8B no schema

KGE	LP-X	Mode	FB15k-237	WN18RR	YAGO3-10
TransE	DP	nec	-0.040	0.280	**0.790**
	DP	suff	-0.040	0.310	0.760
	Kelpie	nec	-0.060	0.100	0.280
	Kelpie	suff	-0.030	–	**0.520**
	GEnI	–	**0.090**	0.000	-0.040
ComplEx	Criage	nec	0.190	0.050	0.450
	Criage	suff	**0.200**	0.060	0.500
	DP	nec	0.010	0.190	0.650
	DP	suff	-0.030	0.210	0.660
	Kelpie	nec	0.060	0.150	0.560
	Kelpie	suff	0.090	**0.220**	**0.670**
	GEnI	–	-0.010	0.040	0.000
ConvE	Criage	nec	-0.050	-0.135	**0.510**
	Criage	suff	**-0.040**	**0.096**	0.500
	DP	nec	-0.060	-0.404	0.010
	DP	suff	**-0.040**	-0.327	0.100
	Kelpie	nec	**-0.040**	-0.500	0.010
	Kelpie	suff	-0.070	-0.462	0.100

Table 10: LP-DIXIT Llama-3.1-8B schema

KGE	LP-X	Mode	Summ.	DB100K	DB50K	YAGO4-20
TransE	DP	nec	–	-0.020	**0.270**	0.170
	DP	suff	–	-0.010	0.260	**0.180**
	Kelpie	nec	–	-0.080	0.250	0.130
	Kelpie	suff	–	-0.070	0.230	0.150
	GEnI	–	–	**0.000**	-0.010	-0.020
	Kelpie++	nec	b	-0.040	0.240	0.120
	Kelpie++	nec	s	-0.060	0.220	0.050
	Kelpie++	suff	b	-0.060	0.220	0.110
	Kelpie++	suff	s	-0.060	0.200	0.140
ComplEx	Criage	nec	–	**0.480**	**0.450**	0.270
	Criage	suff	–	0.370	0.440	**0.320**
	DP	nec	–	0.360	0.300	0.030
	DP	suff	–	0.360	0.300	0.030
	Kelpie	nec	–	0.190	0.250	0.000
	Kelpie	suff	–	0.260	0.320	0.010
	GEnI	–	–	0.020	0.010	-0.010
	Kelpie++	nec	b	0.130	0.280	0.010
	Kelpie++	nec	s	0.070	0.240	0.040
	Kelpie++	suff	b	0.120	0.280	0.000
	Kelpie++	suff	s	0.080	0.260	0.010
ConvE	Criage	nec	–	0.270	**0.420**	0.280
	Criage	suff	–	**0.380**	0.230	**0.420**
	DP	nec	–	0.280	0.010	0.090
	DP	suff	–	0.230	0.030	0.080
	Kelpie	nec	–	0.020	0.000	-0.010
	Kelpie	suff	–	0.120	-0.020	0.000
	Kelpie++	nec	b	0.030	-0.010	0.050
	Kelpie++	nec	s	0.000	0.010	0.060
	Kelpie++	suff	b	0.080	0.000	0.060
	Kelpie++	suff	s	0.030	-0.020	0.120

Table 11: LP-DIXIT$_{\mathcal{O}}$ Llama-3.1-8B schema

KGE	LP-X	Mode	Summ.	DB100K	DB50K	YAGO4-20
TransE	DP	nec	–	-0.090	**0.140**	-0.040
	DP	suff	–	-0.090	0.130	-0.030
	Kelpie	nec	–	-0.090	0.120	**0.020**
	Kelpie	suff	–	-0.140	0.100	-0.060
	GEnI	–	–	**0.030**	0.040	0.010
	Kelpie++	nec	b	-0.080	0.070	**0.020**
	Kelpie++	nec	s	-0.090	0.120	-0.050
	Kelpie++	suff	b	-0.070	0.080	-0.030
	Kelpie++	suff	s	-0.130	0.100	-0.080
ComplEx	Criage	nec	–	0.220	0.150	**0.080**
	Criage	suff	–	0.180	0.140	0.070
	DP	nec	–	**0.290**	**0.160**	-0.110
	DP	suff	–	**0.290**	0.150	-0.110
	Kelpie	nec	–	0.110	0.100	-0.020
	Kelpie	suff	–	0.160	0.150	-0.040
	GEnI	–	–	0.020	-0.020	0.010
	Kelpie++	nec	b	0.070	0.110	0.000
	Kelpie++	nec	s	0.050	0.040	0.000
	Kelpie++	suff	b	0.030	0.130	-0.050
	Kelpie++	suff	s	-0.010	0.060	-0.080
ConvE	Criage	nec	–	0.180	-0.030	0.090
	Criage	suff	–	0.170	**0.010**	**0.170**
	DP	nec	–	**0.200**	-0.200	-0.100
	DP	suff	–	0.100	-0.080	-0.060
	Kelpie	nec	–	-0.090	-0.140	-0.150
	Kelpie	suff	–	-0.020	-0.100	-0.160
	Kelpie++	nec	b	-0.070	-0.180	-0.160
	Kelpie++	nec	s	-0.080	-0.210	-0.110
	Kelpie++	suff	b	-0.030	-0.180	-0.050
	Kelpie++	suff	s	-0.040	-0.220	-0.080

Table 12: LP-DIXIT$_{\mathcal{D}}$ Llama-3.1-8B schema

KGE	LP-X	Mode	Summ.	DB100K	DB50K	YAGO4-20
TransE	DP	nec	–	-0.030	0.070	-0.050
	DP	suff	–	**0.090**	**0.160**	**0.080**
	Kelpie	nec	–	**0.090**	0.120	0.070
	Kelpie	suff	–	0.030	0.050	-0.010
	GEnI	–	–	0.000	-0.060	-0.090
	Kelpie++	nec	b	0.000	0.120	0.020
	Kelpie++	nec	s	-0.030	0.140	-0.010
	Kelpie++	suff	b	0.000	0.090	0.020
	Kelpie++	suff	s	0.000	0.160	-0.010
ComplEx	Criage	nec	–	**0.500**	**0.370**	0.190
	Criage	suff	–	0.370	0.310	**0.370**
	DP	nec	–	0.370	0.160	0.000
	DP	suff	–	0.360	0.160	-0.040
	Kelpie	nec	–	0.230	0.120	-0.050
	Kelpie	suff	–	0.230	0.180	-0.010
	GEnI	–	–	-0.020	-0.050	-0.030
	Kelpie++	nec	b	0.060	0.030	0.010
	Kelpie++	nec	s	0.110	0.110	-0.010
	Kelpie++	suff	b	-0.020	0.110	-0.010
	Kelpie++	suff	s	0.000	0.160	-0.040
ConvE	Criage	nec	–	0.200	**0.140**	**0.280**
	Criage	suff	–	**0.300**	0.040	**0.280**
	DP	nec	–	**0.300**	-0.380	0.010
	DP	suff	–	0.200	-0.240	0.060
	Kelpie	nec	–	0.030	-0.250	0.100
	Kelpie	suff	–	0.070	-0.210	0.040
	Kelpie++	nec	b	0.000	-0.290	-0.030
	Kelpie++	nec	s	0.000	-0.250	-0.070
	Kelpie++	suff	b	0.080	-0.230	-0.030
	Kelpie++	suff	s	0.050	-0.230	-0.040

Table 13: LP-DIXIT$_{\mathcal{OD}}$ Llama-3.1-8B schema

KGE	LP-X	Mode	Summ.	DB100K	DB50K	YAGO4-20
TransE	DP	nec	–	**0.050**	0.150	**0.020**
	DP	suff	–	0.040	0.120	-0.040
	Kelpie	nec	–	-0.050	**0.160**	-0.060
	Kelpie	suff	–	0.050	0.150	-0.080
	GEnI	–	–	0.010	-0.030	-0.050
	Kelpie++	nec	b	-0.070	0.090	-0.090
	Kelpie++	nec	s	-0.100	0.080	-0.190
	Kelpie++	suff	b	-0.110	0.040	-0.160
	Kelpie++	suff	s	-0.090	0.030	-0.100
ComplEx	Criage	nec	–	0.280	**0.370**	0.210
	Criage	suff	–	0.210	0.340	**0.290**
	DP	nec	–	0.310	-0.010	-0.050
	DP	suff	–	**0.320**	0.090	-0.030
	Kelpie	nec	–	0.120	0.070	-0.020
	Kelpie	suff	–	0.230	0.110	0.060
	GEnI	–	–	-0.020	-0.010	-0.050
	Kelpie++	nec	b	0.070	0.010	-0.100
	Kelpie++	nec	s	0.070	-0.110	-0.030
	Kelpie++	suff	b	0.000	0.090	0.000
	Kelpie++	suff	s	0.030	-0.060	-0.080
ConvE	Criage	nec	–	0.210	**0.140**	0.190
	Criage	suff	–	**0.320**	0.100	**0.200**
	DP	nec	–	0.240	-0.340	0.020
	DP	suff	–	0.190	-0.210	0.040
	Kelpie	nec	–	-0.020	-0.280	0.020
	Kelpie	suff	–	0.070	-0.060	-0.010
	Kelpie++	nec	b	0.020	-0.340	-0.100
	Kelpie++	nec	s	-0.070	-0.300	-0.060
	Kelpie++	suff	b	0.000	-0.250	-0.080
	Kelpie++	suff	s	-0.060	-0.290	-0.050

Table 14: LP-DIXIT Mixtral 7B no schema

KGE	LP-X	Mode	FB15k-237	WN18RR	YAGO3-10
TransE	DP	nec	-0.040	0.070	0.600
	DP	suff	-0.050	0.060	0.590
	Kelpie	nec	-0.040	0.020	0.180
	Kelpie	suff	-0.050	–	0.400
	GEnI	–	**0.340**	**0.320**	**0.860**
ComplEx	Criage	nec	**0.200**	0.090	**0.660**
	Criage	suff	0.170	0.010	0.590
	DP	nec	0.010	0.110	0.540
	DP	suff	0.010	0.110	0.540
	Kelpie	nec	-0.010	0.120	0.470
	Kelpie	suff	0.000	0.130	0.560
	GEnI	–	-0.010	0.010	0.000
ConvE	Criage	nec	0.000	0.000	0.580
	Criage	suff	**0.070**	0.000	**0.630**
	DP	nec	-0.020	**0.019**	0.070
	DP	suff	-0.020	**0.019**	0.120
	Kelpie	nec	-0.030	0.000	0.000
	Kelpie	suff	-0.020	0.000	0.040

Table 15: LP-DIXIT$_{\mathcal{O}}$ Mixtral 7B no schema

KGE	LP-X	Mode	FB15k-237	WN18RR	YAGO3-10
TransE	DP	nec	-0.050	0.010	0.500
	DP	suff	-0.080	0.020	0.500
	Kelpie	nec	-0.070	-0.030	0.180
	Kelpie	suff	-0.110	–	0.360
	GEnI	–	**0.210**	**0.220**	**0.670**
ComplEx	Criage	nec	**0.150**	-0.060	0.350
	Criage	suff	0.030	-0.120	0.300
	DP	nec	-0.050	-0.040	**0.430**
	DP	suff	-0.050	-0.040	**0.430**
	Kelpie	nec	0.020	-0.030	0.360
	Kelpie	suff	0.000	-0.040	0.340
	GEnI	–	-0.010	**0.000**	0.000
ConvE	Criage	nec	-0.070	0.115	0.340
	Criage	suff	-0.040	-0.192	**0.420**
	DP	nec	-0.050	-0.058	-0.010
	DP	suff	**-0.010**	**-0.212**	0.100
	Kelpie	nec	-0.070	-0.077	-0.020
	Kelpie	suff	-0.090	-0.231	-0.010

Table 16: LP-DIXIT$_{\mathcal{D}}$ Mixtral 7B no schema

KGE	LP-X	Mode	FB15k-237	WN18RR	YAGO3-10
TransE	DP	nec	-0.170	0.080	0.650
	DP	suff	-0.180	0.050	0.560
	Kelpie	nec	-0.190	-0.060	0.180
	Kelpie	suff	-0.260	–	0.290
	GEnI	–	**-0.010**	**0.570**	**0.840**
ComplEx	Criage	nec	**0.060**	0.080	0.450
	Criage	suff	0.050	0.030	0.360
	DP	nec	-0.050	0.070	0.400
	DP	suff	-0.140	0.120	0.470
	Kelpie	nec	-0.070	0.070	0.430
	Kelpie	suff	-0.170	**0.130**	**0.490**
	GEnI	–	-0.030	-0.010	-0.010
ConvE	Criage	nec	**-0.090**	-0.404	**0.480**
	Criage	suff	-0.100	**-0.346**	0.470
	DP	nec	-0.130	-0.385	0.040
	DP	suff	-0.160	-0.385	0.070
	Kelpie	nec	-0.190	-0.404	-0.050
	Kelpie	suff	-0.160	-0.365	-0.010

Table 17: LP-DIXIT$_{\mathcal{OD}}$ Mixtral 7B no schema

KGE	LP-X	Mode	FB15k-237	WN18RR	YAGO3-10
TransE	DP	nec	-0.020	0.040	0.690
	DP	suff	-0.070	0.060	0.660
	Kelpie	nec	0.020	-0.010	0.260
	Kelpie	suff	-0.040	–	0.460
	GEnI	–	**0.210**	**0.460**	**0.750**
ComplEx	Criage	nec	**0.180**	0.020	0.470
	Criage	suff	0.130	-0.010	0.420
	DP	nec	-0.110	**0.060**	0.500
	DP	suff	-0.070	**0.060**	0.480
	Kelpie	nec	-0.110	0.030	**0.510**
	Kelpie	suff	-0.050	0.050	0.470
	GEnI	–	-0.010	0.020	0.020
ConvE	Criage	nec	-0.030	**-0.135**	**0.450**
	Criage	suff	**0.040**	-0.308	**0.450**
	DP	nec	-0.110	-0.250	0.030
	DP	suff	-0.120	-0.308	0.070
	Kelpie	nec	-0.100	-0.327	0.020
	Kelpie	suff	-0.090	-0.308	0.020

Table 18: LP-DIXIT Mixtral-7B schema

KGE	LP-X	Mode	Summ.	DB100K	DB50K	YAGO4-20
TransE	DP	nec	–	0.060	0.150	0.030
	DP	suff	–	0.080	0.140	0.040
	Kelpie	nec	–	0.080	0.120	0.060
	Kelpie	suff	–	0.010	0.160	0.040
	GEnI	–	–	**0.410**	**0.300**	**0.300**
	Kelpie++	nec	b	0.020	0.180	0.040
	Kelpie++	nec	s	0.000	0.190	0.030
	Kelpie++	suff	b	0.040	0.120	0.060
	Kelpie++	suff	s	0.030	0.170	0.000
ComplEx	Criage	nec	–	**0.260**	**0.500**	0.320
	Criage	suff	–	0.190	0.350	**0.340**
	DP	nec	–	0.200	0.220	0.050
	DP	suff	–	0.200	0.220	0.050
	Kelpie	nec	–	0.100	0.220	0.080
	Kelpie	suff	–	0.110	0.230	0.070
	GEnI	–	–	**0.260**	0.020	0.100
	Kelpie++	nec	b	0.060	0.100	0.040
	Kelpie++	nec	s	0.050	0.130	0.050
	Kelpie++	suff	b	0.020	0.120	0.030
	Kelpie++	suff	s	0.050	0.140	-0.030
ConvE	Criage	nec	–	0.130	**0.330**	0.190
	Criage	suff	–	**0.230**	0.270	**0.460**
	DP	nec	–	0.090	0.030	-0.040
	DP	suff	–	0.140	0.050	-0.020
	Kelpie	nec	–	-0.030	-0.010	-0.040
	Kelpie	suff	–	-0.010	0.020	-0.010
	Kelpie++	nec	b	-0.040	0.070	-0.050
	Kelpie++	nec	s	-0.030	0.070	-0.020
	Kelpie++	suff	b	0.000	0.080	0.030
	Kelpie++	suff	s	0.030	0.070	-0.010

Table 19: LP-DIXIT$_{\mathcal{O}}$ Mixtral-7B schema

KGE	LP-X	Mode	Summ.	DB100K	DB50K	YAGO4-20
TransE	DP	nec	–	-0.100	0.040	-0.070
	DP	suff	–	-0.120	0.020	-0.080
	Kelpie	nec	–	-0.100	0.000	-0.090
	Kelpie	suff	–	-0.130	0.020	-0.120
	GEnI	–	–	**0.270**	**0.210**	**0.130**
	Kelpie++	nec	b	-0.080	0.040	-0.080
	Kelpie++	nec	s	-0.110	0.060	-0.110
	Kelpie++	suff	b	-0.070	0.040	-0.080
	Kelpie++	suff	s	-0.090	0.080	-0.130
ComplEx	Criage	nec	–	0.080	**0.170**	0.090
	Criage	suff	–	0.060	0.100	**0.100**
	DP	nec	–	0.070	-0.010	-0.040
	DP	suff	–	0.070	-0.010	-0.040
	Kelpie	nec	–	0.050	-0.080	-0.020
	Kelpie	suff	–	0.110	-0.050	-0.050
	GEnI	–	–	**0.240**	0.060	0.020
	Kelpie++	nec	b	0.140	0.090	-0.040
	Kelpie++	nec	s	0.070	0.040	-0.060
	Kelpie++	suff	b	0.070	0.080	-0.100
	Kelpie++	suff	s	0.080	0.080	-0.110
ConvE	Criage	nec	–	0.010	**0.120**	0.040
	Criage	suff	–	0.010	0.000	**0.090**
	DP	nec	–	**0.040**	-0.130	-0.110
	DP	suff	–	0.020	-0.200	-0.100
	Kelpie	nec	–	-0.030	-0.150	-0.120
	Kelpie	suff	–	0.020	-0.210	-0.120
	Kelpie++	nec	b	-0.030	-0.130	-0.140
	Kelpie++	nec	s	0.010	-0.150	-0.150
	Kelpie++	suff	b	0.030	-0.100	-0.110
	Kelpie++	suff	s	-0.040	-0.130	-0.150

Table 20: LP-DIXIT$_{\mathcal{D}}$ Mixtral-7B schema

KGE	LP-X	Mode	Summ.	DB100K	DB50K	YAGO4-20
TransE	DP	nec	–	0.040	0.150	-0.040
	DP	suff	–	0.080	0.050	0.010
	Kelpie	nec	–	-0.010	-0.050	-0.040
	Kelpie	suff	–	-0.070	0.020	0.020
	GEnI	–	–	**0.370**	**0.250**	**0.200**
	Kelpie++	nec	b	-0.070	0.000	-0.170
	Kelpie++	nec	s	-0.070	0.030	-0.160
	Kelpie++	suff	b	-0.020	-0.080	-0.240
	Kelpie++	suff	s	-0.080	-0.030	-0.200
ComplEx	Criage	nec	–	0.130	**0.320**	-0.010
	Criage	suff	–	0.020	0.180	**0.120**
	DP	nec	–	0.190	0.090	0.020
	DP	suff	–	0.190	0.090	0.030
	Kelpie	nec	–	0.130	-0.040	-0.050
	Kelpie	suff	–	0.000	0.130	-0.010
	GEnI	–	–	**0.370**	0.030	0.080
	Kelpie++	nec	b	0.000	-0.020	-0.130
	Kelpie++	nec	s	0.010	-0.030	-0.110
	Kelpie++	suff	b	-0.050	0.050	-0.180
	Kelpie++	suff	s	0.040	0.040	-0.160
ConvE	Criage	nec	–	0.140	**0.040**	-0.100
	Criage	suff	–	**0.180**	-0.180	**0.050**
	DP	nec	–	0.140	-0.420	-0.090
	DP	suff	–	0.030	-0.380	0.010
	Kelpie	nec	–	-0.010	-0.340	-0.050
	Kelpie	suff	–	-0.050	-0.440	-0.010
	Kelpie++	nec	b	-0.030	-0.460	-0.170
	Kelpie++	nec	s	-0.080	-0.410	-0.200
	Kelpie++	suff	b	-0.050	-0.390	-0.170
	Kelpie++	suff	s	0.000	-0.410	-0.180

Table 21: LP-DIXIT$_{\mathcal{OD}}$ Mixtral-7B schema

KGE	LP-X	Mode	Summ.	DB100K	DB50K	YAGO4-20
TransE	DP	nec	–	-0.050	0.000	0.030
	DP	suff	–	0.050	-0.010	0.080
	Kelpie	nec	–	-0.100	-0.020	0.010
	Kelpie	suff	–	-0.080	-0.040	0.080
	GEnI	–	–	**0.300**	**0.160**	**0.120**
	Kelpie++	nec	b	-0.160	-0.040	-0.170
	Kelpie++	nec	s	-0.120	0.020	-0.140
	Kelpie++	suff	b	-0.080	-0.050	-0.200
	Kelpie++	suff	s	-0.120	-0.070	-0.260
ComplEx	Criage	nec	–	0.090	**0.250**	**0.170**
	Criage	suff	–	0.100	0.180	0.120
	DP	nec	–	0.140	0.050	0.050
	DP	suff	–	0.130	-0.020	0.020
	Kelpie	nec	–	0.050	-0.060	0.080
	Kelpie	suff	–	0.010	0.100	0.020
	GEnI	–	–	**0.280**	-0.010	0.050
	Kelpie++	nec	b	0.030	-0.030	-0.100
	Kelpie++	nec	s	-0.130	-0.090	-0.150
	Kelpie++	suff	b	-0.020	-0.020	-0.100
	Kelpie++	suff	s	0.030	-0.070	-0.170
ConvE	Criage	nec	–	0.100	**0.060**	0.110
	Criage	suff	–	0.160	-0.240	**0.150**
	DP	nec	–	**0.170**	-0.320	-0.020
	DP	suff	–	-0.030	-0.420	0.000
	Kelpie	nec	–	-0.050	-0.390	0.030
	Kelpie	suff	–	-0.020	-0.400	-0.010
	Kelpie++	nec	b	-0.080	-0.350	-0.200
	Kelpie++	nec	s	-0.090	-0.350	-0.180
	Kelpie++	suff	b	-0.090	-0.390	-0.160
	Kelpie++	suff	s	-0.070	-0.400	-0.180