

# Supplementary Material

Behind the Scenes

What is Parliamentary Performance and How Can We Measure It?

Richard Schobess

Ghent University

09/03/2021

## 1 MP Peer Assessment Survey

MPs of the three Belgian parliaments have been invited by email to participate in the online survey with a short note describing the content of the survey and the purely scientific purpose as well as informing about the voluntary nature to participate in the survey, their right to opt-out as well as the strict confidentiality of the data and anonymisation of all results. The invitation also contained the personalised link to the individual survey version for every MP. For each question MPs were presented a list of 12 MPs being active in the same standing committees or from the same parliamentary party group. I therefore developed an algorithm to randomly select 9 MPs being active in the same standing committees<sup>1</sup> and 3 from the same parliamentary party group and repeated the procedure in case of duplicates. When there were not enough MPs from the same committees I opted to fill the list with MPs from the same party group and vice versa. In case there were neither enough MPs from both committees and party group the list was filled with random draws from the entire parliament. This had to be done for three MPs who finally did not participate in the online survey.

The here employed peer assessment method differs in several respects from previous approaches. The design of the survey has been mainly inspired by Humphreys and Weinstein (2012) representing the most recent attempt and being most transparent about the used methodology. However, in contrast to that approach each MP was asked to evaluate only 12 (instead of 15) peers on all six questions in order to avoid drop outs from respondents getting bored from the potentially monotonous survey experience. The effect of this measure could not be examined since the authors did not report the response rate to their MP survey. Furthermore, none of the previous approaches controlled for potential rater effects beyond differences due to government/opposition party status (Humphreys and Weinstein, 2012) however only at the parliamentary level (not taking different levels of rater bias between MPs into account).

---

<sup>1</sup>I categorised ‘being active’ in a standing committee based on the website of Flemish Parliament (min. 2 two years permanent member) and the Parliament of Wallonia (effective member). Since no such information was available for members of the Federal Parliament resulting in unreasonably high numbers of formal committee membership, only those formally assigned committees were counted where MPs effectively asked at least 1/5 of the total oral questions in committees or more than the halve of the median number of all oral committee questions to avoid selecting committees purely based on formal membership where MPs almost never sit.

## 2 Participation MP Peer Assessment Survey

	Model 1	Model 2
Intercept	-1.37 (0.35)***	-1.23 (0.39)**
Female	0.03 (0.25)	0.01 (0.25)
Dutch	0.16 (0.27)	0.17 (0.27)
RegionParliament	0.47 (0.26)	0.46 (0.26)
Frontbench	0.26 (0.25)	0.25 (0.25)
PPGSize	-0.00 (0.01)	-0.00 (0.01)
Ideology	-0.04 (0.06)	-0.03 (0.06)
IdeologySq		-0.03 (0.03)
AIC	424.17	425.56
BIC	451.15	456.40
Log Likelihood	-205.08	-204.78
Deviance	410.17	409.56
Num. obs.	349	349

\*\*\* $p < 0.001$ , \*\* $p < 0.01$ , \* $p < 0.05$

Table 1: Peer Assessment Survey Participation

While the analysis only distinguished between national and regional MPs, no substantial difference in the participation rates of MPs from both regional parliaments has been found (33.06 percent and 32 percent for MPs of the Flemish Parliament and the Parliament of Wallonia respectively).

### 3 Peer Assessment Rater Models

#### 3.1 Potential Scale Reduction Factor Summary Statistics Bayesian Ordered Probit Varying Intercepts Varying Slopes Model

```
> quantile(na.omit(psrfr),probs = seq(0,1,.1))
      0%      10%      20%      30%      40%      50%      60%      70%      80%
0.9998769 0.9999495 0.9999929 1.0000359 1.0000804 1.0001352 1.0001962 1.0002755 1.0003960
      90%      100%
1.0006209 1.0320029
```

#### 3.2 Rater Model Characteristics

The employed multilevel ordered probit model to control for potential rater effects employs the stochastic component of ordered probit models. These models assume a normally distributed latent variable underlying the categorical dependent variable (in our case ranging from 1 to 5) (see e.g. Long, 1997). In order to allow for varying intercepts and varying slopes I make use of a systematic model component allowing for varying coefficients at the group-level (individual raters). The model therefore estimates coefficients of all independent variables for all raters who participated in the peer assessment survey. Since each rater evaluated 'only' 12 other MPs for six questions (76 evaluations per rater), a multilevel model has been preferred over separate models for each of the 99 raters or a complete pooling model assuming identical coefficients for all raters. Instead, a partial pooling model allows to benefit from additional information beyond the 76 evaluations per rater (in order to decrease uncertainty) assuming that rater effects are not entirely independent between raters (see e.g. Gelman and Hill, 2007).

### 3.3 Results Bayesian Multilevel Ordered Probit Models

	<i>Dependent variable: Rating</i>					
	Model 1			Model 2		
	5%	50%	95%	5%	50%	95%
Constant	1.8	1.95	2.1	1.81	2.15	2.48
SameParty	0.27	0.34	0.42	0.28	0.5	0.72
SameCoalition	0	0.06	0.13	-0.05	0.13	0.32
IdeolDist	-0.1	-0.08	-0.05	-0.13	-0.05	0.03
Hierarchy	0.18	0.24	0.3	0.11	0.23	0.36
SameGender	-0.05	0	0.04	-0.08	0.02	0.12
SameLang	-0.1	-0.02	0.07	-0.1	0.12	0.33
EffectLegis	-0.28	-0.2	-0.13	-0.37	-0.25	-0.13
EffectContr	-0.41	-0.34	-0.26	-0.52	-0.41	-0.31
QualRepr	0.28	0.35	0.43	0.29	0.46	0.63
QualLegis	-0.23	-0.16	-0.08	-0.33	-0.19	-0.06
QualContr	0	0.08	0.16	0	0.1	0.2
SigmaConstant	0.51	0.58	0.67	1.1	1.4	1.78
SigmaSameParty				0.9	1.09	1.3
SigmaSameCoalition				0.62	0.79	0.99
SigmaIdeolDist				0.31	0.38	0.46
SigmaHierarchy				0.35	0.46	0.6
SigmaSameGender				0.4	0.48	0.57
SigmaSameLang				0.43	0.65	0.91
SigmaEffectLegis				0.45	0.57	0.69
SigmaEffectContr				0.3	0.41	0.53
SigmaQualRepr				0.69	0.83	0.99
SigmaQualLegis				0.48	0.6	0.73
SigmaQualContr				0.01	0.32	0.48
Tau1	0	0	0	0	0	0
Tau2	0.82	0.87	0.91	1	1.05	1.11
Tau3	2.05	2.1	2.15	2.45	2.52	2.59
Tau4	3.45	3.51	3.58	4.17	4.25	4.34
N		6576			6576	
Groups (Raters)		99			99	

Table 2: Bayesian Ordered Probit Models Identifying Potential Rater Effects for Peer Assessment Ratings Among Belgian MPs. Model1: Varying Intercepts, Model 2: Varying Intercepts Varying Slopes. The first half of the reported coefficients in Model 2 represent average rater effects, whereas the sigma coefficients indicate the standard deviation of coefficients between raters. Tau estimate thresholds to capture the categorical dependent variable by an underlying normally distributed latent variable.

### 3.4 Summary Statistics Standardised Peer Assessment Scores

Table 3:

Statistic	N	Mean	St. Dev.	Min	Pctl(25)	Pctl(75)	Max
Repr.Effectiven.	325	0.013	0.999	-3.775	-0.594	0.519	4.658
Legisl.Effectiven.	325	-0.009	1.005	-2.953	-0.643	0.608	4.055
Contr.Effectiven.	325	0.001	1.003	-3.927	-0.637	0.523	4.002
Repr.Quality	325	-0.001	1.004	-3.595	-0.475	0.522	3.836
Legisl.Quality	325	0.010	0.995	-3.351	-0.534	0.508	4.550
Contr.Quality	325	0.005	0.998	-2.762	-0.590	0.456	4.326

## 4 Robustness Rater Models

This section reports several further robustness checks for the rater bias models additionally to the varying intercepts (no varying slopes) ordered probit model (Section 3). First of all, the proportional odds assumption is examined graphically as suggested by Harrell (2001) with separate probit models for dichotomous dependent variables for each category (Section 4.1). Secondly, the robustness of the results has been tested by employing a multilevel probit model with a dichotomous dependent variable being coded as one if the evaluation is higher than the mean of all evaluations issued by a specific rater and zero otherwise allowing to avoid assuming proportional odds (section 4.2). Finally, more simple linear varying intercepts and varying intercepts varying slopes models (assuming normally distributions) have been used in Section 4.3. The results provide empirical support to theoretical arguments of rater model choices and show that the general findings are robust over various model specifications.

### 4.1 Bayesian Ordered Probit Varying Intercepts Varying Slopes Model Proportional Odds Assumption.

#### 4.1.1 Potential Scale Reduction Factor Summary Statistics Bayesian Probit Varying Intercepts Varying Slopes Models with Binary Dependent Variables for Each Category.

```
# Binary Dependent Variable = 1 if Evaluation > 1, otherwise 0

> quantile(na.omit(psrfr),probs = seq(0,1,.1))
      0%      10%      20%      30%      40%      50%      60%      70%
0.9995441 0.9998989 1.0001706 1.0004305 1.0007143 1.0009793 1.0013657 1.0020023
      80%      90%      100%
1.0030105 1.0055914 1.0623465
>

# Binary Dependent Variable = 1 if Evaluation > 2, otherwise 0

> quantile(na.omit(psrfr),probs = seq(0,1,.1))
      0%      10%      20%      30%      40%      50%      60%      70%
0.9995210 0.9999947 1.0002489 1.0005004 1.0008321 1.0012025 1.0017808 1.0025704
      80%      90%      100%
1.0041402 1.0076910 1.0905309
>

# Binary Dependent Variable = 1 if Evaluation > 3, otherwise 0
```

```

> quantile(na.omit(psrfr),probs = seq(0,1,.1))
      0%      10%      20%      30%      40%      50%      60%      70%
0.9995051 0.9998242 0.9999586 1.0001122 1.0002775 1.0004459 1.0006483 1.0008860
      80%      90%     100%
1.0012135 1.0017660 1.0116355
>

# Binary Dependent Variable = 1 if Evaluation > 4, otherwise 0

> quantile(na.omit(psrfr),probs = seq(0,1,.1))
      0%      10%      20%      30%      40%      50%      60%      70%
0.9995051 0.9998242 0.9999586 1.0001122 1.0002775 1.0004459 1.0006483 1.0008860
      80%      90%     100%
1.0012135 1.0017660 1.0116355
>

```

#### 4.1.2 Graphical Inspection of Proportional Odds Assumption

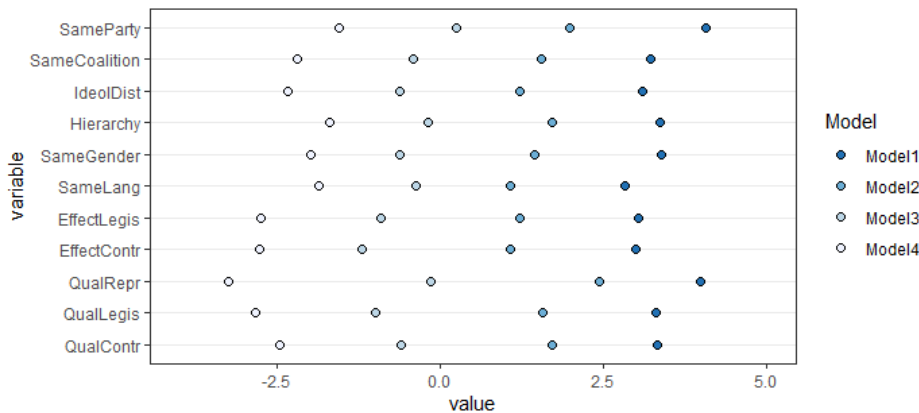


Figure 1: Graphical Inspection of Proportional Odds Assumption Comparing Distances Between Coefficients for Four Models where the Ordered Categorical Dependent Variable is Transformed to a Binary Dependent Variable. Coefficients Based on Four Bayesian Probit Varying Intercepts Varying Slopes Models with Evaluation = 0 or 1, if Evaluation > 1 (Model 1); Evaluation > 2 (Model 2); Evaluation > 3 (Model 3); Evaluation > 4 (Model 4).

The graphical inspection of the proportional odds assumption as suggested by Harrell (2001) allows to compare the distances between coefficients for separate models for each category. The results presented above show that the distances between the coefficients for models for each category (Model 1-4) remain very similar to each other providing empirical support for the plausibility of the proportional odds assumption. However, some doubts are possible with regard to the dummy variable controlling for raters' thresholds for Quality of Representation where distances between coefficients are slightly larger than for other variables. Therefore,



the robustness of the findings has been tested with an additional rater model specification that avoids relying on the proportional odds assumption (see Appendix Section 4.2). The additional test confirms that the results do not change when relaxing the proportional odds assumption.

## 4.2 Bayesian Probit Varying Intercepts Varying Slopes Model With Binary Dependent Variable (No Proportional Odds Assumption).

### 4.2.1 Potential Scale Reduction Factor Summary Statistics Bayesian Probit Varying Intercepts Varying Slopes Model.

```
> quantile(na.omit(psrfr),probs = seq(0,1,.1))
      0%      10%      20%      30%      40%      50%      60%      70%
0.9995108 0.9997767 0.9999250 1.0000820 1.0002293 1.0004048 1.0006009 1.0008542
      80%      90%      100%
1.0012099 1.0017982 1.0123885
>
```

### 4.2.2 Results Bayesian Probit Varying Intercepts Varying Slopes Model

	5%	50%	95%
Constant	-0.830	-0.400	-0.010
SameParty	0.410	0.680	0.960
SameCoalition	-0.120	0.160	0.440
IdeolDist	-0.160	-0.060	0.040
Hierarchy	0.190	0.380	0.580
SameGender	-0.150	-0.020	0.100
SameLang	-0.150	0.200	0.540
EffectLegis	-0.340	-0.150	0.050
EffectContr	-0.810	-0.600	-0.410
QualRepr	0.510	0.780	1.080
QualLegis	-0.420	-0.180	0.070
QualContr	0.010	0.150	0.310
SigmaConstant	0.960	1.460	2.030
SigmaSameParty	0.920	1.170	1.490
SigmaSameCoalition	0.990	1.250	1.570
SigmaIdeolDist	0.360	0.460	0.590
SigmaHierarchy	0.510	0.690	0.910
SigmaSameGender	0.480	0.590	0.720
SigmaSameLang	0.880	1.210	1.610
SigmaEffectLegis	0.720	0.890	1.090
SigmaEffectContr	0.720	0.910	1.130
SigmaQualRepr	1.130	1.390	1.680
SigmaQualLegis	1.010	1.230	1.490
SigmaQualContr	0.330	0.550	0.760

Table 4: Bayesian Probit Varying Intercepts Varying Slopes Model With Binary Dependent Variable: Evaluation = 0 or 1, Threshold = Mean of Each Raters' Evaluations.

### 4.3 Linear Multilevel Rater Models

Table 5: Linear Multilevel Models Identifying Potential Rater Biases

	<i>Dependent variable:</i>	
	evaluation	
	(1)	(2)
	LinRanInter	LinRanSlop
sameparty	0.256*** (0.037)	0.316*** (0.088)
samecoalition	0.050 (0.032)	0.081 (0.075)
ideoldist	-0.062*** (0.010)	-0.035 (0.031)
hierarchy	0.178*** (0.030)	0.157*** (0.047)
samegender	-0.003 (0.022)	0.007 (0.038)
samelanguage	-0.021 (0.038)	0.060 (0.081)
questionQ4	-0.152*** (0.035)	-0.153*** (0.050)
questionQ5	-0.259*** (0.035)	-0.260*** (0.041)
questionQ6	0.276*** (0.036)	0.277*** (0.056)
questionQ7	-0.111*** (0.037)	-0.109** (0.053)
questionQ8	0.068* (0.037)	0.069 (0.043)
Constant	3.323*** (0.068)	3.199*** (0.120)
Observations	6,576	6,576
Log Likelihood	-8,386.536	-7,768.724
Akaike Inf. Crit.	16,801.070	15,719.450
Bayesian Inf. Crit.	16,896.150	16,337.450

*Note:* \*p<0.1; \*\*p<0.05; \*\*\*p<0.01

## 5 The Dimensionality of Parliamentary Performance in Belgium: Exploratory Factor Analysis

### 5.1 Descriptive Statistics

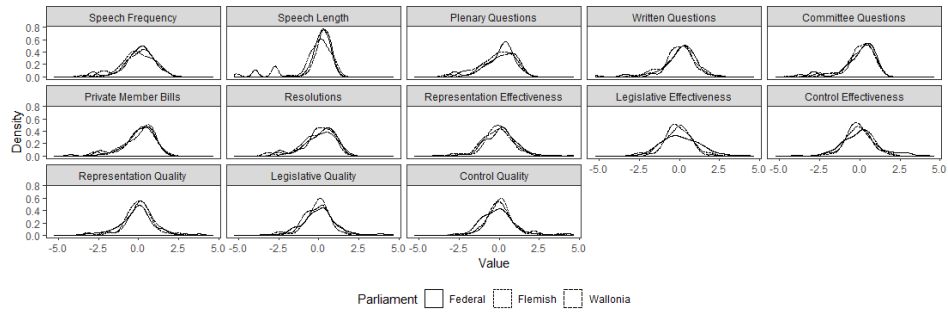


Figure 2: Distributions of 13 indicators of parliamentary performance in three Belgian parliaments.

### 5.2 Parliamentary Performance Full Data: Determine Amount of Factors

Table 6: Model Fit Statistics for Five Factor Models

Factors	Chi Sq.	p-value	TLI	RMSEA	RMSEA (CI)	SRMSR
1	744.302	0	0.575	0.181	(0.168-0.191)	0.186
2	334.751	0	0.784	0.13	(0.115-0.141)	0.094
3	155.768	0	0.889	0.093	(0.076-0.107)	0.062
4	85.253	0.207	0.932	0.073	(0.053-0.09)	0.043
5	41.43	0.804	0.967	0.051	(0.024-0.074)	0.034

### 5.3 Parliamentary Performance: Formal Parliamentary Activity Indicators Only

Table 7: Model Fit Statistics for Three Factor Models of Formal Parliamentary Activity

Factors	Chi Sq.	p-value	TLI	RMSEA	RMSEA (CI)	SRMSR
1	236.876	0	0.761	0.223	(0.197-0.247)	0.158
2	55.562	0.001	0.911	0.137	(0.103-0.17)	0.071
3	9.357	0.397	0.968	0.082	(0.025-0.142)	0.039

Table 8: EFA Formal Parliamentary Activity

Three Factors of Formal Parliamentary Activity						
Variable	ML1	ML2	ML3	h2	u2	com
Speechfreq.	<b>0.94</b>	-0.11	0.14	0.96	0.04	1.07
Speechlength	<b>0.96</b>	0.06	-0.08	0.90	0.10	1.02
Plen.Quest.	<b>0.65</b>	0.30	0.03	0.72	0.28	1.42
Writ.Quest.	-0.10	<b>0.70</b>	0.14	0.55	0.45	1.13
Commit.Quest.	0.22	<b>0.65</b>	0.04	0.64	0.36	1.23
Bills	0.11	0.05	<b>0.53</b>	0.38	0.62	1.10
Resolutions	0.02	0.07	<b>0.71</b>	0.58	0.42	1.02
SS loadings	2.49	1.23	1.01			
ML1	1.00	0.46	0.57			
ML2	0.46	1.00	0.53			
ML3	0.57	0.53	1.00			

## 6 Robustness Exploratory Factor Analyses

### 6.1 Parliamentary Performance: Qualitative Indicators Only

Table 9: Model Fit Statistics for Two Factor Models of Qualitative Aspects of Parliamentary Performance

Factors	Chi Sq.	p-value	TLI	RMSEA	RMSEA (CI)
1	70.842	0	0.783	0.145	(0.115-0.178)
2	6.145	0.398	0.983	0.04	(0-0.1)

Table 10: EFA Quality of Parliamentary Work

Two Factors of Quality of Parliamentary Work					
Variable	ML1	ML2	$h^2$	$u^2$	com
Repr.Effectiven.	<b>0.55</b>	0.15	0.38	0.62	1.15
Legisl.Effectiven.	-0.03	<b>0.85</b>	0.70	0.30	1.00
Contr.Effectiven.	<b>0.35</b>	<b>0.45</b>	0.45	0.55	1.87
Repr.Quality	<b>0.75</b>	-0.10	0.51	0.49	1.04
Legisl.Quality	<b>0.46</b>	0.24	0.35	0.65	1.53
Contr.Quality	<b>0.78</b>	-0.01	0.60	0.40	1.00
SS loadings	1.88	1.11			
ML1	1.00	0.38			
ML2	0.38	1.00			

## 6.2 Exploratory Factor Analyses without Standardised Parliamentary Activity by Parliament

Table 11: EFA Parliamentary Performance without Activity Standardisation by Parliament

Five Factors of Parliamentary Performance								
Variable	ML3	ML4	ML2	ML1	ML5	h2	u2	com
Speechfreq	<b>0.99</b>	0.02	-0.03	0.07	-0.09	0.96	0.04	1.03
Speehtokens	<b>0.93</b>	-0.05	0.03	-0.02	0.06	0.89	0.11	1.02
PQ	<b>0.70</b>	0.07	0.00	-0.03	0.25	0.71	0.29	1.27
WQ	-0.07	-0.02	0.02	0.06	<b>0.73</b>	0.53	0.47	1.04
CQ	0.20	0.03	0.01	0.06	<b>0.62</b>	0.60	0.40	1.23
PMB	0.25	-0.02	0.09	<b>0.38</b>	-0.03	0.28	0.72	1.87
Resolut	0.00	0.01	0.01	<b>0.98</b>	0.02	1.00	0.00	1.00
EffecRepr	0.25	<b>0.55</b>	0.07	-0.05	0.05	0.45	0.55	1.47
EffectLegis	-0.02	-0.01	<b>1.00</b>	0.01	0.01	1.00	0.00	1.00
EffectContr	0.11	<b>0.41</b>	<b>0.34</b>	-0.03	-0.03	0.41	0.59	2.13
QualRepr	-0.06	<b>0.72</b>	-0.09	0.06	0.00	0.49	0.51	1.06
QualLegisl	0.07	<b>0.50</b>	0.20	-0.04	-0.05	0.35	0.65	1.38
QualContr	-0.07	<b>0.80</b>	-0.02	0.02	0.00	0.62	0.38	1.02
SS loadings	2.7	1.97	1.26	1.21	1.13			
ML3	1.00	0.17	0.16	0.38	0.48			
ML4	0.17	1.00	0.32	0.19	0.10			
ML2	0.16	0.32	1.00	0.08	0.15			
ML1	0.38	0.19	0.08	1.00	0.43			
ML5	0.48	0.10	0.15	0.43	1.00			

### 6.3 Exploratory Factor Analyses without Data Transformation

Table 12: EFA Parliamentary Performance Without Data Transformation

Five Factors of Parliamentary Performance								
Variable	ML2	ML4	ML3	ML1	ML5	h2	u2	com
Speechfreq.	<b>0.95</b>	0.00	-0.02	-0.04	-0.02	0.86	0.14	1.00
Speechlength	<b>0.94</b>	-0.05	-0.01	0.11	-0.01	0.98	0.02	1.03
Plen.Quest.	<b>0.46</b>	0.20	-0.06	-0.08	<b>0.32</b>	0.45	0.55	2.34
Writ.Quest.	-0.13	-0.06	-0.02	0.07	<b>0.69</b>	0.45	0.55	1.11
Commit.Quest.	0.20	0.01	0.06	0.15	<b>0.52</b>	0.51	0.49	1.50
Bills	0.27	-0.08	0.11	<b>0.30</b>	0.15	0.34	0.66	2.95
Resolutions	0.03	0.03	0.01	<b>0.97</b>	0.02	1.00	0.00	1.01
Repr.Effectiven.	0.17	<b>0.52</b>	0.14	-0.13	0.23	0.49	0.51	1.93
Legisl.Effectiven.	-0.05	-0.03	<b>0.91</b>	0.02	0.00	0.81	0.19	1.01
Contr.Effectiven.	0.12	<b>0.33</b>	<b>0.44</b>	-0.07	0.03	0.44	0.56	2.12
Repr.Quality	-0.08	<b>0.77</b>	-0.09	0.06	-0.01	0.54	0.46	1.06
Legisl.Quality	0.11	<b>0.43</b>	0.27	0.00	-0.04	0.35	0.65	1.86
Contr.Quality	-0.04	<b>0.76</b>	0.03	0.05	-0.07	0.58	0.42	1.04
SS loadings	2.36	1.9	1.23	1.22	1.08			
ML2	1.00	0.17	0.03	0.47	0.37			
ML4	0.17	1.00	0.34	0.03	0.16			
ML3	0.03	0.34	1.00	0.06	0.13			
ML1	0.47	0.03	0.06	1.00	0.35			
ML5	0.37	0.16	0.13	0.35	1.00			



## 6.4 Exploratory Factor Analyses with Varimax Rotation

Table 13: EFA Parliamentary Performance With Varimax Rotation

Five Factors of Parliamentary Performance								
Variable	ML2	ML3	ML4	ML1	ML5	h2	u2	com
Speechfreq.	<b>0.93</b>	0.12	0.11	0.02	0.28	0.97	0.03	1.24
Speechlength	<b>0.91</b>	0.06	0.20	0.08	0.14	0.90	0.10	1.17
Plen.Quest.	<b>0.71</b>	0.14	<b>0.42</b>	0.03	0.17	0.73	0.27	1.87
Writ.Quest.	0.14	0.00	<b>0.70</b>	0.06	0.21	0.56	0.44	1.29
Commit.Quest.	<b>0.39</b>	0.07	<b>0.66</b>	0.05	0.18	0.62	0.38	1.85
Bills	0.30	0.10	0.24	0.06	<b>0.44</b>	0.36	0.64	2.57
Resolutions	0.26	0.15	0.29	0.02	<b>0.68</b>	0.65	0.35	1.81
Repr.Effectiven.	0.26	<b>0.59</b>	0.12	0.12	0.06	0.44	0.56	1.60
Legisl.Effectiven.	0.04	0.24	0.09	<b>0.96</b>	0.05	1.00	0.00	1.15
Contr.Effectiven.	0.13	<b>0.51</b>	0.05	<b>0.36</b>	0.03	0.41	0.59	2.00
Repr.Quality	0.00	<b>0.69</b>	0.00	-0.04	0.09	0.49	0.51	1.04
Legisl.Quality	0.05	<b>0.54</b>	0.01	0.22	0.06	0.35	0.65	1.36
Contr.Quality	-0.01	<b>0.77</b>	0.01	0.03	0.06	0.60	0.40	1.02
SS loadings	2.61	2.11	1.31	1.14	0.89			

## 6.5 Exploratory Factor Analyses with Data Based on a Varying Intercepts (without Varying Slopes) Rater Model

Table 14: EFA Parliamentary Performance Varying Intercepts Rater Model

Five Factors of Parliamentary Performance								
Variable	ML2	ML3	ML1	ML4	ML5	h2	u2	com
Speechfreq.	<b>0.97</b>	0.03	-0.01	-0.09	0.12	0.97	0.03	1.05
Speechlength	<b>0.95</b>	-0.05	0.04	0.04	-0.06	0.90	0.10	1.02
Plen.Quest.	<b>0.63</b>	0.10	-0.01	<b>0.31</b>	-0.02	0.73	0.27	1.53
Writ.Quest.	-0.08	-0.05	0.05	<b>0.74</b>	0.13	0.57	0.43	1.11
Commit.Quest.	0.20	0.11	0.04	<b>0.62</b>	0.02	0.62	0.38	1.28
Bills	0.16	0.05	0.08	0.14	<b>0.42</b>	0.39	0.61	1.66
Resolutions	0.13	0.04	-0.01	0.22	<b>0.56</b>	0.56	0.44	1.42
Repr.Effectiven.	0.21	<b>0.62</b>	0.06	0.04	-0.01	0.59	0.41	1.25
Legisl.Effectiven.	0.00	0.00	<b>1.00</b>	0.02	0.00	1.00	0.00	1.00
Contr.Effectiven.	0.11	<b>0.49</b>	<b>0.31</b>	-0.03	0.00	0.55	0.45	1.81
Repr.Quality	0.01	<b>0.75</b>	-0.06	0.11	-0.11	0.53	0.47	1.10
Legisl.Quality	-0.03	<b>0.58</b>	0.17	-0.13	0.16	0.50	0.50	1.45
Contr.Quality	-0.07	<b>0.89</b>	-0.02	-0.03	0.06	0.77	0.23	1.02
SS loadings	2.67	2.58	1.3	1.36	0.75			
ML2	1.00	0.34	0.26	0.46	0.39			
ML3	0.34	1.00	0.51	0.19	0.27			
ML1	0.26	0.51	1.00	0.18	0.23			
ML4	0.46	0.19	0.18	1.00	0.32			
ML5	0.39	0.27	0.23	0.32	1.00			

## 6.6 Exploratory Factor Analyses with Data Based on Probit Varying Intercepts Varying Slopes Model with Binary Dependent Variable (Threshold Individual Rater Means).

Table 15: EFA Parliamentary Performance Probit Varying Intercepts Varying Slopes Model

Five Factors of Parliamentary Performance								
Variable	ML1	ML2	ML3	ML4	ML5	$h^2$	$u^2$	com
Speechfreq.	<b>0.96</b>	0.00	-0.11	0.12	0.02	0.97	0.03	1.06
Speechlength	<b>0.96</b>	-0.01	0.06	-0.07	-0.01	0.90	0.10	1.02
Plen.Quest.	<b>0.64</b>	0.05	0.29	0.01	0.06	0.72	0.28	1.43
Writ.Quest.	-0.08	-0.07	<b>0.70</b>	0.16	0.09	0.57	0.43	1.19
Commit.Quest.	0.23	0.14	<b>0.63</b>	0.03	-0.06	0.64	0.36	1.39
Bills	0.10	-0.03	0.07	<b>0.45</b>	0.29	0.44	0.56	1.89
Resolutions	0.06	0.08	0.10	<b>0.70</b>	-0.07	0.63	0.37	1.10
Repr.Effectiven.	0.14	<b>0.46</b>	0.02	0.04	0.19	0.42	0.58	1.55
Legisl.Effectiven.	0.03	0.02	0.08	-0.05	<b>0.57</b>	0.35	0.65	1.06
Contr.Effectiven.	0.02	<b>0.37</b>	-0.05	-0.03	<b>0.39</b>	0.40	0.60	2.05
Repr.Quality	-0.01	<b>0.62</b>	0.11	-0.05	0.03	0.41	0.59	1.08
Legisl.Quality	0.06	0.20	-0.08	0.09	<b>0.37</b>	0.28	0.72	1.85
Contr.Quality	-0.03	<b>0.82</b>	-0.04	0.06	-0.02	0.66	0.34	1.02
SS loadings	2.59	1.67	1.24	0.96	0.94			
ML1	1.00	0.32	0.43	0.50	0.28			
ML2	0.32	1.00	0.18	0.31	0.45			
ML3	0.43	0.18	1.00	0.44	0.17			
ML4	0.50	0.31	0.44	1.00	0.21			
ML5	0.28	0.45	0.17	0.21	1.00			

## 6.7 Separate Factor Models For Three Parliaments

Table 16: Federal Parliament

Four Dimensions of Parliamentary Performance							
Variable	ML3	ML4	ML1	ML2	h2	u2	com
Speechfreq	<b>0.99</b>	0.01	-0.09	-0.04	0.91	0.09	1.02
Speechnum	<b>0.96</b>	-0.10	0.02	0.06	0.94	0.06	1.03
PQ	<b>0.83</b>	0.08	0.09	-0.02	0.78	0.22	1.04
WQ	-0.03	-0.02	<b>1.01</b>	0.01	1.00	0.00	1.00
CQ	<b>0.36</b>	0.08	<b>0.38</b>	0.06	0.41	0.59	2.15
PMB	<b>0.43</b>	0.14	0.26	-0.06	0.37	0.63	1.96
Resolut	0.30	0.17	<b>0.32</b>	-0.01	0.31	0.69	2.51
EffectRepr	<b>0.35</b>	<b>0.46</b>	0.08	0.04	0.42	0.58	1.96
EffectLegis	0.00	-0.01	0.01	<b>1.00</b>	1.00	0.00	1.00
EffectContr	0.05	<b>0.44</b>	-0.05	<b>0.36</b>	0.41	0.59	1.97
QualRepr	0.09	<b>0.66</b>	0.01	-0.05	0.44	0.56	1.05
QualLegisl	-0.07	<b>0.67</b>	-0.07	0.13	0.50	0.50	1.12
QualContr	-0.07	<b>0.88</b>	0.00	-0.04	0.75	0.25	1.02
SS loadings	3.3	2.22	1.5	1.21			
ML3	1.00	0.12	0.39	0.06			
ML4	0.12	1.00	0.10	0.27			
ML1	0.39	0.10	1.00	0.15			
ML2	0.06	0.27	0.15	1.00			

Table 17: Federal Parliament - Dutch-speaking MPs

Five Dimensions of Parliamentary Performance								
Variable	ML2	ML4	ML5	ML1	ML3	h2	u2	com
plenspeechfreq	<b>1.01</b>	0.03	-0.11	0.06	-0.07	0.93	0.07	1.04
plenspeechtokens	<b>0.86</b>	-0.16	0.10	0.07	0.11	0.93	0.07	1.15
PQ	<b>0.64</b>	0.04	<b>0.33</b>	-0.03	0.01	0.73	0.27	1.50
WQ	-0.05	-0.07	<b>0.73</b>	0.28	0.04	0.75	0.25	1.32
CQ	0.09	0.06	0.09	<b>0.92</b>	0.04	1.00	0.00	1.05
PMB	0.18	0.06	<b>0.56</b>	-0.06	-0.02	0.42	0.58	1.25
Resolut	0.11	0.11	<b>0.45</b>	0.13	-0.06	0.34	0.66	1.47
EffectRepr	<b>0.40</b>	<b>0.39</b>	0.28	-0.29	0.12	0.57	0.43	3.83
EffectLegis	-0.01	0.01	-0.01	0.03	<b>0.93</b>	0.88	0.12	1.00
EffectContr	-0.04	<b>0.64</b>	-0.05	0.02	0.17	0.52	0.48	1.17
QualRepr	0.03	<b>0.56</b>	0.04	-0.06	-0.06	0.31	0.69	1.06
QualLegisl	-0.06	<b>0.58</b>	-0.07	0.01	0.28	0.53	0.47	1.51
QualContr	-0.06	<b>0.85</b>	0.00	0.09	-0.07	0.69	0.31	1.05
SS loadings	2.63	2.08	1.6	1.16	1.11			
ML2	1.00	-0.01	0.54	0.23	0.10			
ML4	-0.01	1.00	0.12	-0.07	0.36			
ML5	0.54	0.12	1.00	0.43	0.18			
ML1	0.23	-0.07	0.43	1.00	0.19			
ML3	0.10	0.36	0.18	0.19	1.00			

Table 18: Federal Parliament - French-speaking MPs

Five Dimensions of Parliamentary Performance								
Variable	ML4	ML5	ML2	ML1	ML3	h2	u2	com
plenspeechfreq	<b>0.95</b>	0.01	-0.02	0.04	0.00	0.93	0.07	1.00
plenspeehtokens	<b>0.98</b>	-0.08	0.02	-0.01	-0.01	0.94	0.06	1.01
PQ	<b>0.84</b>	0.06	0.01	-0.05	0.19	0.89	0.11	1.12
WQ	-0.08	-0.08	-0.02	<b>0.39</b>	<b>0.31</b>	0.24	0.76	2.10
CQ	0.08	0.03	0.02	0.06	<b>0.93</b>	1.00	0.00	1.03
PMB	<b>0.47</b>	0.05	0.03	<b>0.40</b>	-0.16	0.51	0.49	2.26
Resolut	0.02	0.01	0.02	<b>0.96</b>	0.07	1.00	0.00	1.01
EffectRepr	<b>0.31</b>	<b>0.48</b>	0.18	0.05	-0.08	0.45	0.55	2.12
EffectLegis	-0.11	-0.07	<b>0.69</b>	-0.14	0.08	0.41	0.59	1.18
EffectContr	0.03	0.02	<b>0.97</b>	0.04	-0.02	1.00	0.00	1.01
QualRepr	0.05	<b>0.63</b>	0.11	0.26	0.00	0.62	0.38	1.42
QualLegisl	-0.01	<b>0.83</b>	-0.09	-0.17	0.07	0.67	0.33	1.12
QualContr	-0.07	<b>0.89</b>	0.03	0.06	0.00	0.81	0.19	1.02
SS loadings	3.1	2.19	1.52	1.52	1.13			
ML4	1.00	0.14	0.23	0.48	0.49			
ML5	0.14	1.00	0.26	0.20	0.25			
ML2	0.23	0.26	1.00	0.36	0.08			
ML1	0.48	0.20	0.36	1.00	0.26			
ML3	0.49	0.25	0.08	0.26	1.00			

Table 19: Flemish Parliament

Five Dimensions of Parliamentary Performance								
Variable	ML3	ML2	ML5	ML4	ML1	h2	u2	com
Speechfreq	<b>0.91</b>	0.03	0.06	-0.03	0.11	0.95	0.05	1.04
Speechnum	<b>0.95</b>	0.00	0.01	0.02	-0.03	0.89	0.11	1.00
PQ	<b>0.49</b>	0.07	0.02	<b>0.47</b>	0.04	0.71	0.29	2.05
WQ	-0.21	0.05	0.10	<b>0.72</b>	0.09	0.51	0.49	1.26
CQ	0.17	-0.01	-0.04	<b>0.78</b>	0.07	0.80	0.20	1.12
PMB	0.02	0.01	0.15	0.16	<b>0.31</b>	0.21	0.79	2.02
Resolut	0.03	-0.01	-0.03	0.04	<b>0.97</b>	1.00	0.00	1.01
EffectRepr	0.01	<b>1.01</b>	-0.03	0.05	-0.04	1.00	0.00	1.01
EffectLegis	-0.08	-0.09	<b>0.68</b>	0.00	0.07	0.41	0.59	1.08
EffectContr	0.09	0.04	<b>0.83</b>	0.03	-0.10	0.75	0.25	1.06
QualRepr	-0.04	<b>0.46</b>	0.10	-0.25	0.23	0.35	0.65	2.21
QualLegisl	0.04	0.06	<b>0.49</b>	-0.01	0.10	0.30	0.70	1.13
QualContr	0.05	<b>0.52</b>	0.20	-0.14	0.12	0.45	0.55	1.62
SS loadings	2.24	1.61	1.58	1.6	1.29			
ML3	1.00	0.25	0.30	0.40	0.41			
ML2	0.25	1.00	0.41	0.10	0.21			
ML5	0.30	0.41	1.00	0.07	0.11			
ML4	0.40	0.10	0.07	1.00	0.37			
ML1	0.41	0.21	0.11	0.37	1.00			

Table 20: Parliament of Wallonia

Five Dimensions of Parliamentary Performance								
Variable	ML3	ML5	ML2	ML4	ML1	h2	u2	com
Speechfreq	<b>0.89</b>	0.01	-0.07	0.14	-0.02	0.95	0.05	1.07
Speechnum	<b>1.02</b>	0.00	-0.01	-0.09	0.00	0.94	0.06	1.01
PQ	<b>0.72</b>	0.03	0.11	0.04	0.13	0.71	0.29	1.13
WQ	0.21	-0.22	0.06	0.09	<b>0.50</b>	0.42	0.58	1.89
CQ	0.03	0.08	-0.02	0.06	<b>0.93</b>	1.00	0.00	1.03
PMB	0.02	0.05	-0.04	<b>0.81</b>	0.04	0.73	0.27	1.02
Resolut	0.02	-0.05	0.03	<b>0.86</b>	0.06	0.78	0.22	1.02
EffectRepr	0.07	<b>0.74</b>	0.11	-0.11	0.09	0.65	0.35	1.14
EffectLegis	-0.03	<b>0.83</b>	-0.06	0.04	0.03	0.68	0.32	1.02
EffectContr	0.04	<b>0.42</b>	0.14	0.03	0.28	0.42	0.58	2.02
QualRepr	-0.02	-0.02	<b>1.00</b>	-0.03	0.01	1.00	0.00	1.00
QualLegisl	0.16	<b>0.48</b>	0.10	0.28	-0.25	0.48	0.52	2.61
QualContr	0.00	0.08	<b>0.71</b>	0.10	-0.05	0.56	0.44	1.08
SS loadings	2.66	1.85	1.64	1.71	1.45			
ML3	1.00	0.34	-0.03	0.59	0.57			
ML5	0.34	1.00	0.37	0.28	0.23			
ML2	-0.03	0.37	1.00	0.02	0.05			
ML4	0.59	0.28	0.02	1.00	0.40			
ML1	0.57	0.23	0.05	0.40	1.00			



## 7 The Dimensionality of Parliamentary Performance in Belgium: Confirmatory Factor Analysis

### 7.1 CFA Lavaan Model Specification

```

mod <- '
Activity =~ ReprAct + LegisAct + ContAct
Quality =~ Content + Effectiv

ReprAct =~ SpF + SpL + PlQ
ContAct =~ WrQ + CmQ + PlQ
LegisAct =~ PMB + Rsl
Content =~ RpQ + CnQ
Effectiv =~ LgE + CnE

Activity~~Activity; Activity~~Quality; Quality~~Quality
SpF~~SpF; SpL~~SpL; PlQ~~PlQ
WrQ~~WrQ; CmQ~~CmQ; PMB~~PMB; Rsl~~Rsl
RpQ~~RpQ; CnQ~~CnQ
LgE~~LgE; CnE~~CnE
'
```

### 7.2 CFA Results

Table 21: CFA Model Fit Statistics.

ntotal	npar	chisq	df	pvalue	cfi	tli	rmsea	srmr
325	29	88.667	37	0.000	0.970	0.955	0.066	0.035

	lhs	op	rhs	est	se	z	pvalue	ci.lower	ci.upper
1	Activity	=~	ReprAct	1.00	0.00			1.00	1.00
2	Activity	=~	LegisAct	0.79	0.10	7.76	0.00	0.59	0.99
3	Activity	=~	ContAct	0.67	0.09	7.48	0.00	0.50	0.85
4	Quality	=~	Content	1.00	0.00			1.00	1.00
5	Quality	=~	Effectiv	1.13	0.47	2.39	0.02	0.20	2.06
6	ReprAct	=~	SpF	1.00	0.00			1.00	1.00
7	ReprAct	=~	SpL	0.99	0.03	33.89	0.00	0.93	1.05
8	ReprAct	=~	PIQ	0.63	0.05	13.07	0.00	0.53	0.72
9	ContAct	=~	WrQ	1.00	0.00			1.00	1.00
10	ContAct	=~	CmQ	1.33	0.13	10.07	0.00	1.07	1.59
11	ContAct	=~	PIQ	0.54	0.08	6.46	0.00	0.37	0.70
12	LegisAct	=~	PMB	1.00	0.00			1.00	1.00
13	LegisAct	=~	Rsl	1.14	0.13	8.71	0.00	0.89	1.40
14	Content	=~	RpQ	1.00	0.00			1.00	1.00
15	Content	=~	CnQ	1.28	0.20	6.47	0.00	0.89	1.67
16	Effectiv	=~	LgE	1.00	0.00			1.00	1.00
17	Effectiv	=~	CnE	1.77	0.35	5.11	0.00	1.09	2.45
18	Activity	~~	Activity	0.53	0.08	6.30	0.00	0.36	0.69
19	Activity	~~	Quality	0.09	0.04	2.47	0.01	0.02	0.16
20	Quality	~~	Quality	0.15	0.07	2.15	0.03	0.01	0.30
21	SpF	~~	SpF	0.06	0.02	3.53	0.00	0.03	0.09
22	SpL	~~	SpL	0.11	0.02	6.03	0.00	0.07	0.15
23	PIQ	~~	PIQ	0.28	0.03	10.75	0.00	0.23	0.34
24	WrQ	~~	WrQ	0.56	0.05	10.31	0.00	0.46	0.67
25	CmQ	~~	CmQ	0.25	0.06	4.28	0.00	0.14	0.37
26	PMB	~~	PMB	0.60	0.06	9.64	0.00	0.48	0.72
27	Rsl	~~	Rsl	0.47	0.06	7.24	0.00	0.34	0.59
28	RpQ	~~	RpQ	0.58	0.08	7.72	0.00	0.43	0.73
29	CnQ	~~	CnQ	0.30	0.10	2.92	0.00	0.10	0.49
30	LgE	~~	LgE	0.74	0.07	9.81	0.00	0.59	0.88
31	CnE	~~	CnE	0.15	0.15	1.01	0.31	-0.14	0.45
32	ReprAct	~~	ReprAct	0.40	0.06	6.67	0.00	0.28	0.52
33	ContAct	~~	ContAct	0.17	0.04	4.39	0.00	0.10	0.25
34	LegisAct	~~	LegisAct	0.08	0.04	1.89	0.06	-0.00	0.17
35	Content	~~	Content	0.27	0.08	3.55	0.00	0.12	0.42
36	Effectiv	~~	Effectiv	0.07	0.07	1.01	0.31	-0.07	0.22

Table 22: CFA Parameter Estimates.

Activity = Overall Parliamentary Activity; Quality = Overall Quality of Parliamentary Performance; ReprAct = Representation Activity; ContAct = Control Activity; LegisAct = Legislative Activity; Content = Content of Parliamentary Performance; Effectiv = Policy-making Effectiveness; SpF = Plenary Speech Frequency; SpL = Plenary Speech Length; PIQ = Plenary Questions; WrQ = Written Questions; CmQ = Committee Questions; PMB = Private Members' Bills; Rsl = Resolutions; RpQ = Representation Quality; CnQ = Control Quality; LgE = Legislative Effectiveness; CnE = Control Effectiveness.

## 8 Robustness CFA

### 8.1 CFA Results Without Second-order Concepts

Table 23: CFA Model Fit Statistics.

ntotal	npar	chisq	df	pvalue	cfi	tli	rmsea	srmr
325	33	83.586	33	0.00000	0.970	0.950	0.069	0.032

	lhs	op	rhs	est	se	z	pvalue	ci.lower	ci.upper
1	ReprAct	=~	SpF	1.00	0.00			1.00	1.00
2	ReprAct	=~	SpL	0.99	0.03	33.91	0.00	0.93	1.05
3	ReprAct	=~	PlQ	0.63	0.05	13.03	0.00	0.53	0.72
4	ContAct	=~	WrQ	1.00	0.00			1.00	1.00
5	ContAct	=~	CmQ	1.33	0.13	10.11	0.00	1.07	1.59
6	ContAct	=~	PlQ	0.53	0.08	6.44	0.00	0.37	0.70
7	LegisAct	=~	PMB	1.00	0.00			1.00	1.00
8	LegisAct	=~	Rsl	1.18	0.14	8.73	0.00	0.92	1.45
9	Content	=~	RpQ	1.00	0.00			1.00	1.00
10	Content	=~	CnQ	1.25	0.18	6.79	0.00	0.89	1.61
11	Effectiv	=~	LgE	1.00	0.00			1.00	1.00
12	Effectiv	=~	CnE	1.82	0.36	5.03	0.00	1.11	2.53
13	ReprAct	~~	ReprAct	0.93	0.08	11.72	0.00	0.77	1.08
14	ReprAct	~~	ContAct	0.36	0.05	6.78	0.00	0.25	0.46
15	ReprAct	~~	LegisAct	0.40	0.06	7.08	0.00	0.29	0.51
16	ReprAct	~~	Content	0.07	0.04	1.72	0.09	-0.01	0.16
17	ReprAct	~~	Effectiv	0.11	0.04	2.96	0.00	0.04	0.18
18	ContAct	~~	ContAct	0.41	0.07	5.87	0.00	0.27	0.55
19	ContAct	~~	LegisAct	0.27	0.05	6.03	0.00	0.19	0.36
20	ContAct	~~	Content	0.05	0.03	1.46	0.14	-0.02	0.11
21	ContAct	~~	Effectiv	0.06	0.03	2.47	0.01	0.01	0.11
22	LegisAct	~~	LegisAct	0.39	0.07	5.35	0.00	0.25	0.54
23	LegisAct	~~	Content	0.11	0.04	2.95	0.00	0.04	0.18
24	LegisAct	~~	Effectiv	0.07	0.03	2.58	0.01	0.02	0.13
25	Content	~~	Content	0.43	0.09	4.97	0.00	0.26	0.60
26	Content	~~	Effectiv	0.17	0.05	3.82	0.00	0.08	0.26
27	Effectiv	~~	Effectiv	0.27	0.07	3.72	0.00	0.13	0.40
28	SpF	~~	SpF	0.06	0.02	3.58	0.00	0.03	0.10
29	SpL	~~	SpL	0.11	0.02	6.01	0.00	0.07	0.15
30	PlQ	~~	PlQ	0.28	0.03	10.75	0.00	0.23	0.34
31	WrQ	~~	WrQ	0.56	0.05	10.29	0.00	0.45	0.67
32	CmQ	~~	CmQ	0.25	0.06	4.34	0.00	0.14	0.37
33	PMB	~~	PMB	0.61	0.06	9.91	0.00	0.49	0.73
34	Rsl	~~	Rsl	0.45	0.06	6.91	0.00	0.32	0.57
35	RpQ	~~	RpQ	0.57	0.07	7.77	0.00	0.43	0.72
36	CnQ	~~	CnQ	0.31	0.09	3.32	0.00	0.13	0.50
37	LgE	~~	LgE	0.74	0.07	9.91	0.00	0.60	0.89
38	CnE	~~	CnE	0.13	0.16	0.81	0.42	-0.18	0.43

Table 24: CFA Parameter Estimates. ReprAct = Representation Activity; ContAct = Control Activity; LegisAct = Legislative Activity; Content = Content of Parliamentary Work; Effectiv = Policy-making Effectiveness; SpF = Plenary Speech Frequency; SpL = Plenary Speech Length; PlQ = Plenary Questions; WrQ = Written Questions; CmQ = Committee Questions; PMB = Private Members' Bills; Rsl = Resolutions; RpQ = Representation Quality; CnQ = Control Quality; LgE = Legislative Effectiveness; CnE = Control Effectiveness.

## 8.2 Model Fit Statistics CFA Based on Alternative Rater Model Specifications

Table 25: Model Fit Statistics for CFA Based on Varying Intercepts (without Varying Slopes) Rater Model.

ntotal	npar	chisq	df	pvalue	cfi	tli	rmsea	srmr
325	29	99.90	37	0.00	0.97	0.95	0.07	0.04

Table 26: Model Fit Statistics for CFA Based on Probit Varying Intercepts Rater Model with Binary Dependent Variable (Threshold = Individual Rater Means).

ntotal	npar	chisq	df	pvalue	cfi	tli	rmsea	srmr
325	29	97.32	37	0.00	0.96	0.95	0.07	0.04

## 8.3 CFA Parameter Estimates Based on Alternative Rater Model Specifications

	lhs	op	rhs	est	se	z	pvalue	ci.lower	ci.upper
1	Activity	=~	ReprAct	1.00	0.00			1.00	1.00
2	Activity	=~	LegisAct	0.78	0.10	8.18	0.00	0.59	0.97
3	Activity	=~	ContAct	0.65	0.09	7.61	0.00	0.48	0.82
4	Quality	=~	Content	1.00	0.00			1.00	1.00
5	Quality	=~	Effectiv	1.13	0.20	5.78	0.00	0.75	1.51
6	ReprAct	=~	SpF	1.00	0.00			1.00	1.00
7	ReprAct	=~	SpL	0.99	0.03	33.97	0.00	0.93	1.04
8	ReprAct	=~	PIQ	0.62	0.05	12.99	0.00	0.53	0.72
9	ContAct	=~	WrQ	1.00	0.00			1.00	1.00
10	ContAct	=~	CmQ	1.36	0.14	10.03	0.00	1.09	1.63
11	ContAct	=~	PIQ	0.54	0.08	6.44	0.00	0.38	0.71
12	LegisAct	=~	PMB	1.00	0.00			1.00	1.00
13	LegisAct	=~	Rsl	1.11	0.13	8.82	0.00	0.86	1.35
14	Content	=~	RpQ	1.00	0.00			1.00	1.00
15	Content	=~	CnQ	1.40	0.13	10.72	0.00	1.15	1.66
16	Effectiv	=~	LgE	1.00	0.00			1.00	1.00
17	Effectiv	=~	CnE	1.48	0.14	10.30	0.00	1.20	1.76
18	Activity	~~	Activity	0.54	0.08	6.58	0.00	0.38	0.70
19	Activity	~~	Quality	0.13	0.03	5.13	0.00	0.08	0.18
20	Quality	~~	Quality	0.11	0.03	4.36	0.00	0.06	0.16
21	SpF	~~	SpF	0.06	0.02	3.35	0.00	0.02	0.09
22	SpL	~~	SpL	0.11	0.02	6.25	0.00	0.08	0.15
23	PIQ	~~	PIQ	0.29	0.03	10.81	0.00	0.23	0.34
24	WrQ	~~	WrQ	0.57	0.05	10.45	0.00	0.46	0.68
25	CmQ	~~	CmQ	0.24	0.06	4.02	0.00	0.12	0.35
26	PMB	~~	PMB	0.58	0.06	9.46	0.00	0.46	0.70
27	Rsl	~~	Rsl	0.48	0.06	7.62	0.00	0.36	0.61
28	RpQ	~~	RpQ	0.17	0.02	9.24	0.00	0.13	0.20
29	CnQ	~~	CnQ	0.12	0.03	4.40	0.00	0.06	0.17
30	LgE	~~	LgE	0.20	0.02	10.09	0.00	0.16	0.24
31	CnE	~~	CnE	0.10	0.03	3.66	0.00	0.05	0.16
32	ReprAct	~~	ReprAct	0.39	0.06	6.78	0.00	0.28	0.50
33	ContAct	~~	ContAct	0.17	0.04	4.53	0.00	0.10	0.25
34	LegisAct	~~	LegisAct	0.09	0.04	2.10	0.04	0.01	0.18
35	Content	~~	Content	0.06	0.02	3.29	0.00	0.02	0.09
36	Effectiv	~~	Effectiv	0.02	0.02	1.02	0.31	-0.02	0.06

Table 27: CFA Parameter Estimates Based on Varying Intercepts (without Varying Slopes) Rater Model.

Activity = Overall Parliamentary Activity; Quality = Overall Quality of Parliamentary Performance; ReprAct = Representation Activity; ContAct = Control Activity; LegisAct = Legislative Activity; Content = Content of Parliamentary Performance; Effectiv = Policy-making Effectiveness; SpF = Plenary Speech Frequency; SpL = Plenary Speech Length; PIQ = Plenary Questions; WrQ = Written Questions; CmQ = Committee Questions; PMB = Private Members' Bills; Rsl = Resolutions; RpQ = Representation Quality; CnQ = Control Quality; LgE = Legislative Effectiveness; CnE = Control Effectiveness.

	lhs	op	rhs	est	se	z	pvalue	ci.lower	ci.upper
1	Activity	=~	ReprAct	1.00	0.00			1.00	1.00
2	Activity	=~	LegisAct	0.81	0.10	8.06	0.00	0.61	1.00
3	Activity	=~	ContAct	0.67	0.09	7.55	0.00	0.49	0.84
4	Quality	=~	Content	1.00	0.00			1.00	1.00
5	Quality	=~	Effectiv	0.59	0.16	3.65	0.00	0.27	0.91
6	ReprAct	=~	SpF	1.00	0.00			1.00	1.00
7	ReprAct	=~	SpL	0.99	0.03	33.90	0.00	0.93	1.05
8	ReprAct	=~	PIQ	0.63	0.05	13.23	0.00	0.53	0.72
9	ContAct	=~	WrQ	1.00	0.00			1.00	1.00
10	ContAct	=~	CmQ	1.35	0.13	10.05	0.00	1.08	1.61
11	ContAct	=~	PIQ	0.54	0.08	6.51	0.00	0.38	0.70
12	LegisAct	=~	PMB	1.00	0.00			1.00	1.00
13	LegisAct	=~	Rsl	1.12	0.13	8.88	0.00	0.87	1.37
14	Content	=~	RpQ	1.00	0.00			1.00	1.00
15	Content	=~	CnQ	1.21	0.16	7.63	0.00	0.90	1.53
16	Effectiv	=~	LgE	1.00	0.00			1.00	1.00
17	Effectiv	=~	CnE	1.69	0.34	5.03	0.00	1.03	2.35
18	Activity	~~	Activity	0.52	0.08	6.40	0.00	0.36	0.68
19	Activity	~~	Quality	0.21	0.04	4.88	0.00	0.13	0.30
20	Quality	~~	Quality	0.34	0.10	3.46	0.00	0.15	0.53
21	SpF	~~	SpF	0.06	0.02	3.44	0.00	0.03	0.09
22	SpL	~~	SpL	0.11	0.02	6.12	0.00	0.08	0.15
23	PIQ	~~	PIQ	0.28	0.03	10.79	0.00	0.23	0.34
24	WrQ	~~	WrQ	0.57	0.05	10.36	0.00	0.46	0.67
25	CmQ	~~	CmQ	0.25	0.06	4.15	0.00	0.13	0.36
26	PMB	~~	PMB	0.59	0.06	9.59	0.00	0.47	0.71
27	Rsl	~~	Rsl	0.48	0.06	7.55	0.00	0.35	0.60
28	RpQ	~~	RpQ	0.59	0.07	8.85	0.00	0.46	0.73
29	CnQ	~~	CnQ	0.39	0.08	5.00	0.00	0.24	0.54
30	LgE	~~	LgE	0.78	0.07	10.92	0.00	0.64	0.93
31	CnE	~~	CnE	0.41	0.11	3.71	0.00	0.19	0.63
32	ReprAct	~~	ReprAct	0.41	0.06	6.98	0.00	0.29	0.52
33	ContAct	~~	ContAct	0.17	0.04	4.51	0.00	0.10	0.25
34	LegisAct	~~	LegisAct	0.08	0.04	1.78	0.08	-0.01	0.16
35	Content	~~	Content	0.08	0.07	1.08	0.28	-0.06	0.21
36	Effectiv	~~	Effectiv	0.08	0.04	2.32	0.02	0.01	0.15

Table 28: CFA Parameter Estimates Based on Probit Varying Intercepts Rater Model with Binary Dependent Variable (Threshold = Individual Rater Means).

Activity = Overall Parliamentary Activity; Quality = Overall Quality of Parliamentary Performance; ReprAct = Representation Activity; ContAct = Control Activity; LegisAct = Legislative Activity; Content = Content of Parliamentary Performance; Effectiv = Policy-making Effectiveness; SpF = Plenary Speech Frequency; SpL = Plenary Speech Length; PIQ = Plenary Questions; WrQ = Written Questions; CmQ = Committee Questions; PMB = Private Members' Bills; Rsl = Resolutions; RpQ = Representation Quality; CnQ = Control Quality; LgE = Legislative Effectiveness; CnE = Control Effectiveness.