

The Impact of the 2011 Assault Guideline on Sentence Consistency

Jose Pina-Sánchez & Robin Linacre

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The 2011 Assault Guideline

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- The first guideline to be designed by the Sentencing Council was the new assault guideline (2011) which replaced the previous one (2007).

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- We run two regression models using the natural log of sentence length as the response variable and a set of relevant legal factors as the explanatory variables.

Longitudinal Study of Residuals

	Before	After
Constant	5.78 (.03)	5.52 (.05)
GBH	.39 (.02)	.55 (.03)
Intent	1.51 (.03)	1.74 (.03)
Prev. convictions	-.02 (.01)	.11 (.02)
First opportunity	-.09 (.02)	-.08 (.03)
Remorse	-.14 (.02)	-.13 (.03)
Carer	-.12 (.04)	-.16 (.11)
Gang	.03 (.02)	.02 (.04)
Vulnerable	.12 (.03)	.18 (.04)
Public worker	-.03 (.05)	-.10 (.06)
Sustained	.21 (.02)	.20 (.03)
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 - a) variability due to inconsistent sentencing practice: intra or inter-judge disparities;
 - b) modeling issues such as: measurement error, misspecifications, or omitted relevant variables.

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- Following this rationale, the change of R^2 from .55 to .62 can be interpreted as a reduction of the share of variability in sentence length due to inconsistent sentencing.
- To put it differently, sentences are now more predictable.

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- The comparison of R^2 s can be used to observe “before and after” changes, but it would also be interesting to look at how it changed across 2011.

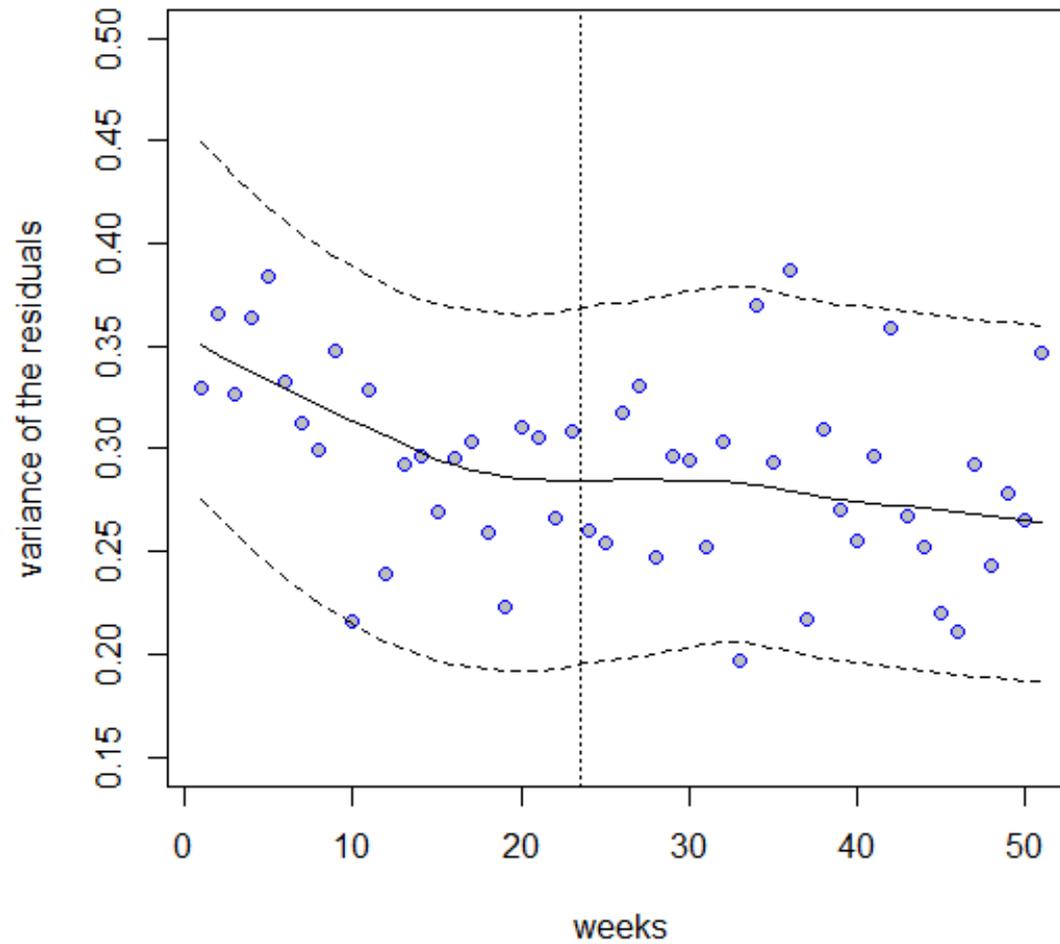
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- To obtain a more continuous assessment of the change of consistency we turn to study the residuals of our two models; i.e. the fraction of each sentence that is left unexplained.
- Specifically we group sentences by weeks, take the residuals of those sentences and calculate their variance.

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- Exact matching operationalises directly what is commonly understood by consistency in sentencing: the extent to which “like cases are treated alike”.
- Besides being fairly intuitive, exact matching, doesn’t rely on modeling assumptions.

Exact Matching

Type of Offence	Previous Convictions	Aggravating / Mitigating	Group Size: Before	Group Size: After	Variance: Before	Variance: After	Variance Difference
ABH	0	-	112	112	.37	.42	-.05
ABH	1-3	-	141	89	.36	.30	.05
GBH	1-3	-	78	74	.21	.24	-.03
GBH	0	-	60	59	.32	.24	.08
ABH	1-3	sustained	40	51	.50	.34	.16
GBH	1-3	drugs	48	37	.23	.32	-.08
ABH	1-3	drugs	62	35	.28	.20	.08
Intent	1-3	-	33	33	.30	.14	.16
ABH	1-3	first op.	34	28	.55	.32	.23
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- We find that his reduction is significant using Monte Carlo simulations.

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- We have used two methods: a) the longitudinal study of residuals (depicts continuous patterns), and b) exact matching (parsimonious, statistically principled).
- The longitudinal study of residuals indicates that the effects of the new guideline took place over time; suggesting a possible anticipatory effect.
- Using exact matching we have found an average 7.8% reduction in sentence length variability amongst similar sentences after the new guideline was implemented.