Program: HLM 7 Hierarchical Linear and Nonlinear Modeling
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Module: HLM2.EXE (7.01.21202.1001)
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Specifications for this Overdispersed Poisson HLM2 run

Problem Title: no title

The data source for this run = replicate_jls
The command file for this run = E:\Istanbul\jls_mod3_rep.hlm
Output file name = E:\Istanbul\hlm2.html
The maximum number of level-1 units = 123
The maximum number of level-2 units = 67
The maximum number of micro iterations = 14

Method of estimation: restricted PQL
Maximum number of macro iterations = 100

Distribution at Level-1: Poisson

The outcome variable is MIGR_REL

Summary of the model specified

Level-1 Model

$$E(MIGR\_REL_{ti}|\pi_i) = \lambda_{ti}$$
$$\log[\lambda_{ti}] = \eta_{ti}$$
$$\eta_{ti} = \pi_{0i} + \pi_{1i}*(EXECUTIV_{ti}) + \pi_{2i}*(WP\_HLM_{ti}) + \pi_{3i}*(MONATE_{ti}) + \pi_{4i}*(ANFRAGEN_{ti}) + \pi_{5i}*(POSITION_{ti})$$

Level-2 Model

$$\pi_{0i} = \beta_{00} + \beta_{01}*(GEN\_HLM_{i}) + \beta_{02}*(GENDER_i) + \beta_{03}*(POL\_LEVE_i) + \beta_{04}*(VISMIN\_M_i) + \beta_{05}*(ZEIT\_MEA_i) + \beta_{06}*(LEFT\_RIG_i) + \beta_{07}*(STADT\_LA_i) + \beta_{08}*(VOLKSPAR_i)$$

$$+ \beta_{09}*(IA\_VISMI_i) + r_{0i}$$

$$\pi_{1i} = \beta_{10}$$

$$\pi_{2i} = \beta_{20} + \beta_{21}*(VISMIN\_M_i)$$

$$\pi_{3i} = \beta_{30}$$

$$\pi_{4i} = \beta_{40}$$

$$\pi_{5i} = \beta_{50}$$

MONATE ANFRAGEN have been centered around the grand mean.

ZEIT_MEA has been centered around the grand mean.

Level-1 variance = σ^2/λ_{ti}

Mixed Model

$$\eta_{ti} = \beta_{00} + \beta_{01}*GEN\_HLM\_{i} + \beta_{02}*GENDER_i + \beta_{03}*POL\_LEVE_i$$
$$+ \beta_{04}*VISMIN\_M_i + \beta_{05}*ZEIT\_MEA_i + \beta_{06}*LEFT\_RIG_i + \beta_{07}*STADT\_LA_i$$
$$+ \beta_{08}*VOLKSPAR_i + \beta_{09}*IA\_VISMI_i$$
$$+ \beta_{10}*EXECUTIV_{ti}$$
$$+ \beta_{20}*WP\_HLM_{ti} + \beta_{21}*VISMIN\_M_i*WP\_HLM_{ti}$$
$$+ \beta_{30}*MONATE_{ti}$$
$$+ \beta_{40}*ANFRAGEN_{ti}$$
$$+ \beta_{50}*POSITION_{ti}$$
$$+ r_{0i}$$

The value of the log-likelihood function at iteration 6 = -5.192779E+002

Results for Non-linear Model with the Log Link Function

Unit-Specific Model, PQL Estimation - (macro iteration 16)

σ^2 = 2.31946

τ

INTRCPT1,π_0	0.84171

Random level-1 coefficient	Reliability estimate
INTRCPT1,π_0	0.559

The value of the log-likelihood function at iteration 2 = -2.750362E+002

Final estimation of fixed effects: (Unit-specific model)

Fixed Effect	Coefficient	Standard error	*t*-ratio	Approx. *d.f.*	*p*-value
For INTRCPT1, π_0					

INTRCPT2, β_{00}	1.121752	0.510370	2.198	57	0.032
GEN_HLM_, β_{01}	-0.377238	0.351654	-1.073	57	0.288
GENDER, β_{02}	-0.184023	0.314474	-0.585	57	0.561
POL_LEVE, β_{03}	0.351421	0.440949	0.797	57	0.429
VISMIN_M, β_{04}	0.942326	0.427423	2.205	57	0.032
ZEIT_MEA, β_{05}	0.045258	0.032274	1.402	57	0.166
LEFT_RIG, β_{06}	0.607154	0.781793	0.777	57	0.441
STADT_LA, β_{07}	1.048099	0.425668	2.462	57	0.017
VOLKSPAR, β_{08}	-1.021366	0.368792	-2.769	57	0.008
IA_VISMI, β_{09}	-1.744084	1.076060	-1.621	57	0.111
For EXECUTIV slope, π_1					
INTRCPT2, β_{10}	-1.023107	0.254666	-4.017	50	<0.001
For WP_HLM slope, π_2					
INTRCPT2, β_{20}	0.124881	0.240954	0.518	50	0.607
VISMIN_M, β_{21}	-0.007964	0.251389	-0.032	50	0.975
For MONATE slope, π_3					
INTRCPT2, β_{30}	0.012049	0.005909	2.039	50	0.047
For ANFRAGEN slope, π_4					
INTRCPT2, β_{40}	0.012006	0.002465	4.871	50	<0.001
For POSITION slope, π_5					
INTRCPT2, β_{50}	-0.415547	0.218204	-1.904	50	0.063

Fixed Effect	Coefficient	Event Rate Ratio	Confidence Interval
For INTRCPT1, π_0			
INTRCPT2, β_{00}	1.121752	3.070228	(1.105,8.534)
GEN_HLM_, β_{01}	-0.377238	0.685753	(0.339,1.387)
GENDER, β_{02}	-0.184023	0.831917	(0.443,1.562)
POL_LEVE, β_{03}	0.351421	1.421085	(0.588,3.437)
VISMIN_M, β_{04}	0.942326	2.565944	(1.090,6.040)
ZEIT_MEA, β_{05}	0.045258	1.046298	(0.981,1.116)
LEFT_RIG, β_{06}	0.607154	1.835202	(0.383,8.785)
STADT_LA, β_{07}	1.048099	2.852225	(1.216,6.691)
VOLKSPAR, β_{08}	-1.021366	0.360103	(0.172,0.754)
IA_VISMI, β_{09}	-1.744084	0.174805	(0.020,1.509)
For EXECUTIV slope, π_1			
INTRCPT2, β_{10}	-1.023107	0.359476	(0.216,0.600)
For WP_HLM slope, π_2			
INTRCPT2, β_{20}	0.124881	1.133014	(0.698,1.839)
VISMIN_M, β_{21}	-0.007964	0.992067	(0.599,1.644)

For MONATE slope, π_3			
INTRCPT2, β_{30}	0.012049	1.012122	(1.000,1.024)
For ANFRAGEN slope, π_4			
INTRCPT2, β_{40}	0.012006	1.012078	(1.007,1.017)
For POSITION slope, π_5			
INTRCPT2, β_{50}	-0.415547	0.659979	(0.426,1.023)

Final estimation of fixed effects
(Unit-specific model with robust standard errors)

Fixed Effect	Coefficient	Standard error	*t*-ratio	Approx. *d.f.*	*p*-value
For INTRCPT1, π_0					
INTRCPT2, β_{00}	1.121752	0.432264	2.595	57	0.012
GEN_HLM_, β_{01}	-0.377238	0.291253	-1.295	57	0.200
GENDER, β_{02}	-0.184023	0.285875	-0.644	57	0.522
POL_LEVE, β_{03}	0.351421	0.403726	0.870	57	0.388
VISMIN_M, β_{04}	0.942326	0.322879	2.919	57	0.005
ZEIT_MEA, β_{05}	0.045258	0.028742	1.575	57	0.121
LEFT_RIG, β_{06}	0.607154	0.653127	0.930	57	0.356
STADT_LA, β_{07}	1.048099	0.438641	2.389	57	0.020
VOLKSPAR, β_{08}	-1.021366	0.287648	-3.551	57	<0.001
IA_VISMI, β_{09}	-1.744084	0.955084	-1.826	57	0.073
For EXECUTIV slope, π_1					
INTRCPT2, β_{10}	-1.023107	0.400685	-2.553	50	0.014
For WP_HLM slope, π_2					
INTRCPT2, β_{20}	0.124881	0.217162	0.575	50	0.568
VISMIN_M, β_{21}	-0.007964	0.250113	-0.032	50	0.975
For MONATE slope, π_3					
INTRCPT2, β_{30}	0.012049	0.006103	1.974	50	0.054
For ANFRAGEN slope, π_4					
INTRCPT2, β_{40}	0.012006	0.004254	2.823	50	0.007
For POSITION slope, π_5					
INTRCPT2, β_{50}	-0.415547	0.218628	-1.901	50	0.063

Fixed Effect	Coefficient	Event Rate Ratio	Confidence Interval
For INTRCPT1, π_0			
INTRCPT2, β_{00}	1.121752	3.070228	(1.292,7.298)
GEN_HLM_, β_{01}	-0.377238	0.685753	(0.383,1.229)

GENDER, β_{02}	-0.184023	0.831917	(0.469,1.475)
POL_LEVE, β_{03}	0.351421	1.421085	(0.633,3.190)
VISMIN_M, β_{04}	0.942326	2.565944	(1.344,4.899)
ZEIT_MEA, β_{05}	0.045258	1.046298	(0.988,1.108)
LEFT_RIG, β_{06}	0.607154	1.835202	(0.496,6.789)
STADT_LA, β_{07}	1.048099	2.852225	(1.185,6.867)
VOLKSPAR, β_{08}	-1.021366	0.360103	(0.202,0.641)
IA_VISMI, β_{09}	-1.744084	0.174805	(0.026,1.184)
For EXECUTIV slope, π_1			
INTRCPT2, β_{10}	-1.023107	0.359476	(0.161,0.804)
For WP_HLM slope, π_2			
INTRCPT2, β_{20}	0.124881	1.133014	(0.732,1.753)
VISMIN_M, β_{21}	-0.007964	0.992067	(0.600,1.640)
For MONATE slope, π_3			
INTRCPT2, β_{30}	0.012049	1.012122	(1.000,1.025)
For ANFRAGEN slope, π_4			
INTRCPT2, β_{40}	0.012006	1.012078	(1.003,1.021)
For POSITION slope, π_5			
INTRCPT2, β_{50}	-0.415547	0.659979	(0.425,1.024)

Final estimation of variance components

Random Effect	Standard Deviation	Variance Component	*d.f.*	χ^2	*p*-value
INTRCPT1, r_0	0.91744	0.84171	57	527.96191	<0.001
level-1, *e*	1.52298	2.31946			

Results for Population-Average Model

The value of the log-likelihood function at iteration 2 = -2.745831E+002

Final estimation of fixed effects: (Population-average model)

Fixed Effect	Coefficient	Standard error	*t*-ratio	Approx. *d.f.*	*p*-value
For INTRCPT1, π_0					
INTRCPT2, β_{00}	1.350862	0.465948	2.899	57	0.005
GEN_HLM_, β_{01}	-0.383848	0.316682	-1.212	57	0.230
GENDER, β_{02}	-0.254481	0.287579	-0.885	57	0.380
POL_LEVE, β_{03}	0.317028	0.401429	0.790	57	0.433
VISMIN_M, β_{04}	1.021494	0.391508	2.609	57	0.012

ZEIT_MEA, β_{05}	0.036865	0.029419	1.253	57	0.215
LEFT_RIG, β_{06}	0.634944	0.692361	0.917	57	0.363
STADT_LA, β_{07}	1.106331	0.390242	2.835	57	0.006
VOLKSPAR, β_{08}	-1.062111	0.338383	-3.139	57	0.003
IA_VISMI, β_{09}	-1.698577	0.947232	-1.793	57	0.078
For EXECUTIV slope, π_1					
INTRCPT2, β_{10}	-1.050627	0.202501	-5.188	50	<0.001
For WP_HLM slope, π_2					
INTRCPT2, β_{20}	0.131776	0.224373	0.587	50	0.560
VISMIN_M, β_{21}	0.001140	0.228875	0.005	50	0.996
For MONATE slope, π_3					
INTRCPT2, β_{30}	0.012666	0.005897	2.148	50	0.037
For ANFRAGEN slope, π_4					
INTRCPT2, β_{40}	0.011684	0.002016	5.795	50	<0.001
For POSITION slope, π_5					
INTRCPT2, β_{50}	-0.421407	0.161658	-2.607	50	0.012

Fixed Effect	Coefficient	Event Rate Ratio	Confidence Interval
For INTRCPT1, π_0			
INTRCPT2, β_{00}	1.350862	3.860753	(1.518,9.817)
GEN_HLM_, β_{01}	-0.383848	0.681235	(0.361,1.285)
GENDER, β_{02}	-0.254481	0.775319	(0.436,1.379)
POL_LEVE, β_{03}	0.317028	1.373041	(0.614,3.068)
VISMIN_M, β_{04}	1.021494	2.777341	(1.268,6.084)
ZEIT_MEA, β_{05}	0.036865	1.037553	(0.978,1.101)
LEFT_RIG, β_{06}	0.634944	1.886916	(0.471,7.551)
STADT_LA, β_{07}	1.106331	3.023245	(1.384,6.606)
VOLKSPAR, β_{08}	-1.062111	0.345725	(0.176,0.681)
IA_VISMI, β_{09}	-1.698577	0.182944	(0.027,1.220)
For EXECUTIV slope, π_1			
INTRCPT2, β_{10}	-1.050627	0.349719	(0.233,0.525)
For WP_HLM slope, π_2			
INTRCPT2, β_{20}	0.131776	1.140853	(0.727,1.791)
VISMIN_M, β_{21}	0.001140	1.001140	(0.632,1.586)
For MONATE slope, π_3			
INTRCPT2, β_{30}	0.012666	1.012746	(1.001,1.025)
For ANFRAGEN slope, π_4			
INTRCPT2, β_{40}	0.011684	1.011753	(1.008,1.016)
For POSITION slope, π_5			

INTRCPT2, β_{50}	-0.421407	0.656123	(0.474,0.908)

Final estimation of fixed effects
(Population-average model with robust standard errors)

Fixed Effect	Coefficient	Standard error	*t*-ratio	Approx. *d.f.*	*p*-value
For INTRCPT1, π_0					
INTRCPT2, β_{00}	1.350862	0.315463	4.282	57	<0.001
GEN_HLM_, β_{01}	-0.383848	0.223803	-1.715	57	0.092
GENDER, β_{02}	-0.254481	0.216102	-1.178	57	0.244
POL_LEVE, β_{03}	0.317028	0.304738	1.040	57	0.303
VISMIN_M, β_{04}	1.021494	0.241942	4.222	57	<0.001
ZEIT_MEA, β_{05}	0.036865	0.020326	1.814	57	0.075
LEFT_RIG, β_{06}	0.634944	0.425334	1.493	57	0.141
STADT_LA, β_{07}	1.106331	0.339230	3.261	57	0.002
VOLKSPAR, β_{08}	-1.062111	0.231757	-4.583	57	<0.001
IA_VISMI, β_{09}	-1.698577	0.731939	-2.321	57	0.024
For EXECUTIV slope, π_1					
INTRCPT2, β_{10}	-1.050627	0.249366	-4.213	50	<0.001
For WP_HLM slope, π_2					
INTRCPT2, β_{20}	0.131776	0.207818	0.634	50	0.529
VISMIN_M, β_{21}	0.001140	0.222731	0.005	50	0.996
For MONATE slope, π_3					
INTRCPT2, β_{30}	0.012666	0.005935	2.134	50	0.038
For ANFRAGEN slope, π_4					
INTRCPT2, β_{40}	0.011684	0.002479	4.713	50	<0.001
For POSITION slope, π_5					
INTRCPT2, β_{50}	-0.421407	0.136426	-3.089	50	0.003

Fixed Effect	Coefficient	Event Rate Ratio	Confidence Interval
For INTRCPT1, π_0			
INTRCPT2, β_{00}	1.350862	3.860753	(2.052,7.263)
GEN_HLM_, β_{01}	-0.383848	0.681235	(0.435,1.067)
GENDER, β_{02}	-0.254481	0.775319	(0.503,1.195)
POL_LEVE, β_{03}	0.317028	1.373041	(0.746,2.528)
VISMIN_M, β_{04}	1.021494	2.777341	(1.711,4.509)
ZEIT_MEA, β_{05}	0.036865	1.037553	(0.996,1.081)
LEFT_RIG, β_{06}	0.634944	1.886916	(0.805,4.423)

STADT_LA, β_{07}	1.106331	3.023245	(1.532,5.964)
VOLKSPAR, β_{08}	-1.062111	0.345725	(0.217,0.550)
IA_VISMI, β_{09}	-1.698577	0.182944	(0.042,0.793)
For EXECUTIV slope, π_1			
INTRCPT2, β_{10}	-1.050627	0.349719	(0.212,0.577)
For WP_HLM slope, π_2			
INTRCPT2, β_{20}	0.131776	1.140853	(0.751,1.732)
VISMIN_M, β_{21}	0.001140	1.001140	(0.640,1.566)
For MONATE slope, π_3			
INTRCPT2, β_{30}	0.012666	1.012746	(1.001,1.025)
For ANFRAGEN slope, π_4			
INTRCPT2, β_{40}	0.011684	1.011753	(1.007,1.017)
For POSITION slope, π_5			
INTRCPT2, β_{50}	-0.421407	0.656123	(0.499,0.863)