

The Role of Therapy Delivery and Clinic Organizational Factors in Explaining Therapist Effects for Trauma Focused Psychotherapies in the Veterans Health Administration

Supplemental Materials 2

Appendix A Estimated Variance Components for Random Effects and Odds Ratios for Fixed Effects for Base Model for Dropout with the Addition of Session Spacing Intensity

Random Effects	Estimate	SE	Proportion of Variance	p
Therapist, σ^2_T	0.107	0.057	3.162%	0.019
Fixed Effects				
	OR	[95% CI]		p
PE (ref.: CPT)	1.287	[1.012, 1.637]		0.039
Age (mean centered)	0.986	[0.977, 0.995]		0.001
Race (ref.: all other)				
Black/African American	1.255	[0.981, 1.606]		0.071
Multiracial	2.040	[0.678, 6.144]		0.205
Ethnicity (ref.: Hispanic)				
not Hispanic	0.746	[0.523, 1.064]		0.106
missing	0.698	[0.388, 1.257]		0.231
Education (ref.: \geq college)				
\leq High school	1.495	[1.103, 2.028]		0.010
Some college or trade school	1.283	[0.977, 1.686]		0.073
missing	1.344	[1.007, 1.795]		0.045
Employment (ref.: all other)				
retired	0.791	[0.558, 1.121]		0.187
Trauma history (ref.: no multiple trauma)				
Multiple trauma	1.148	[0.931, 1.415]		0.195
Index trauma (ref.: all other)				
Other or missing	1.143	[0.893, 1.462]		0.288
Pandemic period (ref.: pre-pandemic)				
Early pandemic	2.008	[1.528, 2.639]		< 0.001
During pandemic	1.153	[0.911, 1.459]		0.235
Session spacing intensity	1.129	[1.081, 1.179]		< 0.001

Note. PE = prolonged exposure; CPT = cognitive processing therapy. Race reference group = White, Native American, Asian, Hawaiian, and missing. Employment reference group = employed, unemployed and missing. Index trauma reference group = combat military sexual trauma, other sexual trauma, and multiple sources. Bold indicates statistically significant effects.

Appendix B. *Estimated Variance Components for Random Effects and Odds Ratios for Fixed Effects for Base Model for Dropout with the Addition of Session Spacing Consistency*

Random Effects	<i>Estimate</i>	<i>SE</i>	Proportion of Variance	<i>p</i>
Therapist, σ^2_{τ}	0.155	0.060	4.509%	0.002
Fixed Effects				
	<i>OR</i>	[95% CI]		<i>p</i>
PE (ref.: CPT)	1.286	[1.009, 1.640]		0.042
Age (mean centered)	0.986	[0.977, 0.994]		0.001
Race (ref.: all other)				
Black/African American	1.258	[0.981, 1.613]		0.071
Multiracial	2.061	[0.680, 6.247]		0.201
Ethnicity (ref.: Hispanic)				
not Hispanic	0.760	[0.531, 1.087]		0.133
missing	0.694	[0.384, 1.254]		0.226
Education (ref.: \geq college)				
\leq High school	1.521	[1.121, 2.064]		0.007
Some college or trade school	1.304	[0.992, 1.714]		0.057
missing	1.404	[1.051, 1.876]		0.022
Employment (ref.: all other)				
retired	0.791	[0.558, 1.122]		0.189
Trauma history (ref.: no multiple trauma)				
Multiple trauma	1.143	[0.927, 1.410]		0.212
Index trauma (ref.: all other)				
Other or missing	1.155	[0.902, 1.479]		0.252
Pandemic period (ref.: pre-pandemic)				
Early pandemic	2.026	[1.541, 2.665]		< 0.001
During pandemic	1.134	[0.896, 1.437]		0.295
Session spacing consistency	1.085	[1.028, 1.145]		0.003

Note. PE = prolonged exposure; CPT = cognitive processing therapy. Race reference group = White, Native American, Asian, Hawaiian, and missing. Employment reference group = employed, unemployed and missing. Index trauma reference group = combat military sexual trauma, other sexual trauma, and multiple sources. Bold indicates statistically significant effects.

Appendix C. Estimated Variance Components for Random Effects and Odds Ratios for Fixed Effects for Base Model for Dropout with the Addition of Adherence

Random Effects	<i>Estimate</i>	<i>SE</i>	Proportion of Variance	<i>p</i>
Therapist, σ^2_{τ}	0.193	0.070	5.530%	< 0.001
Fixed Effects				
	<i>OR</i>	[95% CI]		<i>p</i>
PE (ref.: CPT)	1.231	[0.958, 1.582]		0.104
Age (mean centered)	0.986	[0.978, 0.995]		0.002
Race (ref.: all other)				
Black	1.275	[0.993, 1.637]		0.057
Multiracial	2.143	[0.702, 6.541]		0.181
Ethnicity (ref.: Hispanic)				
not Hispanic	0.775	[0.527, 1.083]		0.127
missing	0.684	[0.378, 1.239]		0.211
Education (ref.: \geq college)				
\leq High school	1.534	[1.130, 2.084]		0.006
Some college or trade school	1.336	[1.016, 1.757]		0.038
missing	1.434	[1.072, 1.918]		0.015
Employment (ref.: all other)				
retired	0.789	[0.556, 1.120]		0.185
Trauma history (ref.: no multiple trauma)				
Multiple trauma	1.155	[0.936, 1.425]		0.180
Index trauma (ref.: all other)				
Other or missing	1.170	[0.913, 1.501]		0.215
Pandemic period (ref.: pre-pandemic)				
Early pandemic	1.994	[1.515, 2.624]		< 0.001
During pandemic	1.118	[0.882, 1.417]		0.358
Adherence (mean centered)	0.933	[0.818, 1.064]		0.299

Note. PE = prolonged exposure; CPT = cognitive processing therapy. Race reference group = White, Native American, Asian, Hawaiian, and missing. Employment reference group = employed, unemployed and missing. Index trauma reference group = combat military sexual trauma, other sexual trauma, and multiple sources. Bold indicates statistically significant effects.

Appendix D. *Estimated Variance Components for Random Effects and Odds Ratios for Fixed Effects for Base Model for Dropout with the Addition of Implementation Leadership Scores*

Random Effects	<i>Estimate</i>	<i>SE</i>	Proportion of Variance	<i>p</i>
Therapist, σ^2_{τ}	0.195	0.116	5.609%	< 0.001
Fixed Effects				
	<i>OR</i>	[95% CI]		<i>p</i>
PE (ref: CPT)	1.266	[0.991, 1.618]		0.059
Age (mean centered)	0.986	[0.978, 0.995]		0.002
Race (ref.: all other)				
Black	1.281	[0.997, 1.647]		0.053
Multiracial	2.188	[0.716, 6.685]		0.169
Ethnicity (ref.: Hispanic)				
not Hispanic	0.737	[0.514, 1.058]		0.098
missing	0.685	[0.378, 1.240]		0.212
Education (ref.: \geq college)				
\leq High school	1.482	[1.090, 2.016]		0.012
Some college or trade school	1.309	[0.994, 1.723]		0.055
missing	1.399	[1.044, 1.874]		0.024
Employment (ref.: employed or unclear)				
retired	0.789	[0.555, 1.120]		0.184
Trauma history (ref.: no multiple trauma)				
Multiple trauma	1.148	[0.930, 1.418]		0.199
Index trauma (ref.: all other)				
Other or missing	1.136	[0.886, 1.458]		0.314
Pandemic period (ref.: pre-pandemic)				
Early pandemic	1.966	[1.492, 2.590]		< 0.001
During pandemic	1.115	[0.879, 1.414]		0.370
Implementation leadership	0.910	[0.805, 1.028]		0.129

Note. PE = prolonged exposure; CPT = cognitive processing therapy. Race reference group = White, Native American, Asian, Hawaiian, and missing. Employment reference group = employed, unemployed and missing. Index trauma reference group = combat military sexual trauma, other sexual trauma, and multiple sources. Bold indicates statistically significant effects.

Appendix E. *Estimated Variance Components for Random Effects and Odds Ratios for Fixed Effects for Base Model for Dropout with the Addition of Implementation Climate Scores*

Random Effects	<i>Estimate</i>	<i>SE</i>	Proportion of Variance	<i>p</i>
Therapist, σ^2_{τ}	0.154	0.052	4.469%	0.003
Fixed Effects				
	<i>OR</i>	[95% CI]		<i>p</i>
PE (ref: CPT)	1.275	[1.000, 1.626]		0.050
Age (mean centered)	0.986	[0.978, 0.995]		0.002
Race (ref.: all other)				
Black	1.298	[1.012, 1.664]		0.040
Multiracial	2.198	[0.723, 6.682]		0.165
Ethnicity (ref.: Hispanic)				
not Hispanic	0.731	[0.511, 1.047]		0.087
missing	0.694	[0.384, 1.255]		0.227
Education (ref.: \geq college)				
\leq High school	1.515	[1.117, 2.057]		0.008
Some college or trade school	1.311	[0.998, 1.724]		0.052
missing	1.400	[1.048, 1.872]		0.023
Employment (ref.: all other)				
retired	0.781	[0.551, 1.108]		0.166
Trauma history (ref.: no multiple trauma)				
Multiple trauma	1.168	[0.947, 1.440]		0.148
Index trauma (ref: all other)				
Other or missing	1.128	[0.881, 1.446]		0.339
Pandemic period (ref.: pre-pandemic)				
Early pandemic	1.992	[1.515, 2.619]		< 0.001
During pandemic	1.137	[0.898, 1.439]		0.287
Implementation Climate	0.739	[0.619, 0.882]		0.001

Note. PE = prolonged exposure; CPT = cognitive processing therapy. Race reference group = White, Native American, Asian, Hawaiian, and missing. Employment reference group = employed, unemployed and missing. Index trauma reference group = combat military sexual trauma, other sexual trauma, and multiple sources. Bold indicates statistically significant effects.

Appendix F. *Estimated Variance Components for Random Effects and Odds Ratios for Fixed Effects for Base Model for Dropout with the Addition of Monthly Caseload*

Random Effects	<i>Estimate</i>	<i>SE</i>	Proportion of Variance	<i>p</i>
Therapist, σ^2_{τ}	0.188	0.073	5.396%	< 0.001
Fixed Effects				
	<i>OR</i>	[95% CI]		<i>p</i>
PE (ref: CPT)	1.256	[0.983, 1.604]		0.068
Age (mean centered)	0.986	[0.978, 0.995]		0.002
Race (ref.: all other)				
Black	1.271	[0.990, 1.631]		0.060
Multiracial	2.124	[0.697, 6.476]		0.185
Ethnicity (ref.: Hispanic)				
not Hispanic	0.746	[0.520, 1.069]		0.110
missing	0.691	[0.382, 1.251]		0.223
Education (ref.: \geq college)				
\leq High school	1.532	[1.128, 2.080]		0.006
Some college or trade school	1.329	[1.010, 1.747]		0.042
missing	1.435	[1.073, 1.919]		0.015
Employment (ref.: all other)				
retired	0.788	[0.556, 1.118]		0.182
Trauma history (ref.: no multiple trauma)				
Multiple trauma	1.158	[0.938, 1.428]		0.172
Index trauma (ref.: all other)				
Other or missing	1.152	[0.899, 1.476]		0.265
Pandemic period (ref.: pre-pandemic)				
Early pandemic	2.005	[1.523, 2.638]		< 0.001
During pandemic	1.135	[0.896, 1.439]		0.294
Monthly caseload	1.017	[0.999, 1.036]		0.071

Note. PE = prolonged exposure; CPT = cognitive processing therapy. Race reference group = White, Native American, Asian, Hawaiian, and missing. Employment reference group = employed, unemployed and missing. Index trauma reference group = combat military sexual trauma, other sexual trauma, and multiple sources. Bold indicates statistically significant effects.

Appendix G. *Estimated Variance Components for Random Effects and Odds Ratios for Fixed Effects for Base Model for Dropout with the Addition of PTSD Specialty Care Involvement*

Random Effects	<i>Estimate</i>	<i>SE</i>	Proportion of Variance	<i>p</i>
Therapist, σ^2_{τ}	0.201	0.074	5.751%	< 0.001
Fixed Effects				
	<i>OR</i>	[95% CI]		<i>p</i>
PE (ref.: CPT)	1.279	[0.999, 1.638]		0.051
Age (mean centered)	0.986	[0.978, 0.995]		0.002
Race (ref.: all other)				
Black	1.280	[0.996, 1.645]		0.053
Multiracial	2.145	[0.702, 6.556]		0.181
Ethnicity (ref.: Hispanic)				
not Hispanic	0.748	[0.521, 1.073]		0.114
missing	0.684	[0.378, 1.240]		0.211
Education (ref.: \geq college)				
\leq High school	1.526	[1.123, 2.073]		0.007
Some college or trade school	1.330	[1.011, 1.750]		0.041
missing	1.427	[1.067, 1.910]		0.017
Employment (ref.: all other)				
retired	0.788	[0.555, 1.118]		0.182
Trauma history (ref.: no multiple trauma)				
Multiple trauma	1.156	[0.936, 1.426]		0.178
Index trauma (ref.: all other)				
Other or missing	1.154	[0.900, 1.480]		0.258
Pandemic period (ref.: pre-pandemic)				
Early pandemic	1.999	[1.518, 2.631]		< 0.001
During pandemic	1.130	[0.891, 1.433]		0.315
PTSD specialty care involvement	0.910	[0.705, 1.174]		0.469

Note. PE = prolonged exposure; CPT = cognitive processing therapy. Race reference group = White, Native American, Asian, Hawaiian, and missing. Employment reference group = employed, unemployed and missing. Index trauma reference group = combat military sexual trauma, other sexual trauma, and multiple sources. Bold indicates statistically significant effects.

Appendix H. *Estimated Variance Components for Random Effects and Odds Ratios for Fixed Effects for Base Model for Dropout with the Addition of Session Spacing Intensity, Adherence, Implementation Climate and Caseload*

Random Effects	<i>Estimate</i>	<i>SE</i>	Proportion of Variance	<i>p</i>
Therapist, σ^2_T	0.068	0.046	2.031%	0.140
Fixed Effects				
	<i>OR</i>	[95% CI]		<i>p</i>
PE (ref: CPT)	1.256	[0.984, 1.604]		0.067
Age (mean centered)	0.986	[0.977, 0.994]		0.001
Race (ref: all other)				
Black	1.269	[0.993, 1.621]		0.057
Multiracial	2.126	[0.709, 6.373]		0.178
Ethnicity (ref.: Hispanic)				
not Hispanic	0.734	[0.516, 1.045]		0.086
missing	0.719	[0.400, 1.292]		0.270
Education (ref: \geq college)				
\leq High school	1.491	[1.100, 2.019]		0.010
Some college or trade school	1.275	[0.972, 1.674]		0.080
missing	1.332	[0.999, 1.777]		0.051
Employment (ref.: all other)				
retired	0.782	[0.553, 1.107]		0.166
Trauma history (ref.: no multiple trauma)				
Multiple trauma	1.161	[0.943, 1.430]		0.160
Index trauma (ref.: all other)				
Other or missing	1.120	[0.875, 1.434]		0.367
Pandemic period (ref.: pre-pandemic)				
Early pandemic	1.992	[1.518, 2.614]		< 0.001
During pandemic	1.168	[0.924, 1.476]		0.194
Session spacing intensity	1.114	[1.067, 1.163]		< 0.001
Adherence (mean centered)	0.959	[0.855, 1.076]		0.473
Implementation climate	0.810	[0.686, 0.956]		0.013
Caseload	1.012	[0.995, 1.029]		0.174

Note. PE = prolonged exposure; CPT = cognitive processing therapy. Race reference group = White, Native American, Asian, Hawaiian, and missing. Employment reference group = employed, unemployed and missing. Index trauma reference group = combat military sexual trauma, other sexual trauma, and multiple sources. Bold indicates statistically significant effects.