

Electronic Supplement

**Different Relations of Religion and Mental Health:
Comparing Middle Eastern Muslim Refugee and Immigrant Adolescents**

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- 1. Table S1**
- 2. Table S2**
- 3. Table S3**
- 4. Figure S1**
- 5. Figure S2**
- 6. Figure S3**
- 7. Measurement Invariance**

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Group-specific Differences regarding the Moderation Effect of Religiosity on the Relationship between Potentially Traumatic Events and Internalizing Symptoms

Predictor	<i>b</i>	CI _{95%} for <i>b</i> ^a		<i>SE</i> ^a	<i>t</i>	<i>p</i>
		Lower	Upper			
Age	-0.26	-1.54	1.03	0.65	-0.40	.690
RE	-3.27	-5.98	-0.56	1.37	-2.38	.018
PTE	1.97	1.14	2.74	0.38	5.17	< .001
Group	-1.04	-5.69	3.60	2.35	-0.45	.657
PTE x RE	-0.15	-1.02	0.73	0.44	-0.34	.738
PTE x Group	1.09	-0.44	2.63	0.78	1.41	.161
RE x Group	1.05	-4.31	6.40	2.70	0.39	.700
PTE x RE x Group	1.09	-0.68	2.86	0.89	1.22	.226

Note. *N* = 133. Model fit $R^2 = .22$, $F(8, 124) = 4.46$, $p < .001$. Group = binary variable (0 = refugee adolescents, 1 = first- and second-generation immigrant adolescents). RE = religiosity; PTE = CATS potentially traumatic events subscale.

^a Percentile bootstrap confidence interval based on 10,000 resamples.

Group-specific Differences regarding the Moderation Effect of Intrinsic Religiosity and Religious Activity on the Relationship between Potentially Traumatic Events and Internalizing Symptoms

Predictor/ Model	<i>b</i>	CI _{95%} for <i>b</i> ^a		<i>SE</i> ^a	<i>t</i>	<i>p</i>
		Lower	Upper			
Model 1: Intrinsic Religiosity						
Age	-0.09	-1.38	1.20	0.65	-0.14	.890
IR	-2.04	-3.80	-0.28	0.89	-2.30	.023
PTE	1.78	1.03	2.53	0.38	4.71	< .001
Group	-0.70	-5.37	3.98	2.36	-0.30	.768
PTE x IR	-0.12	-0.68	0.44	0.28	-0.43	.669
PTE x Group	1.03	-0.49	2.55	0.77	1.35	.181
IR x Group	0.17	-3.28	3.63	1.75	0.10	.920
PTE x IR x Group	0.10	-1.03	1.23	0.57	0.18	.858
Model 2: Religious Activity						
Age	-0.29	-1.57	0.99	0.65	-0.44	.659
RelAct	-1.48	-2.92	-0.03	0.73	-2.02	.045
PTE	2.06	1.32	2.81	0.38	5.46	< .001
Group	-0.56	-5.17	4.05	2.33	-0.24	.810
PTE x RelAct	0.06	-0.40	0.52	0.23	0.26	.795
PTE x Group	1.36	-0.17	2.89	0.77	1.76	.081
RelAct x Group	0.65	-2.25	3.55	1.46	0.44	.657
PTE x RelAct x Group	0.98	0.02	1.94	0.48	2.02	.045

Note. $N = 133$; Fit for Model 1: $R^2 = .21$, $F(8, 124) = 4.04$, $p < .001$; fit for Model 2: $R^2 = .22$, $F(8, 124) = 4.49$, $p < .001$. Group = binary variable (0 = refugee adolescents, $n_{RA} = 74$; 1 = first- and second-generation immigrant adolescents, $n_{IA} = 59$); IR = DUREL intrinsic religiosity subscale; RelAct = religious activity (combined DUREL ORA/ NORA subscales); PTE = CATS potentially traumatic events subscale.

^a Percentile bootstrap confidence interval based on 10,000 resamples.

3. Table E3

Refugee Group-specific Differences regarding the Moderation Effect of Religiosity on the Relationship between Potentially Traumatic Events and Internalizing Symptoms

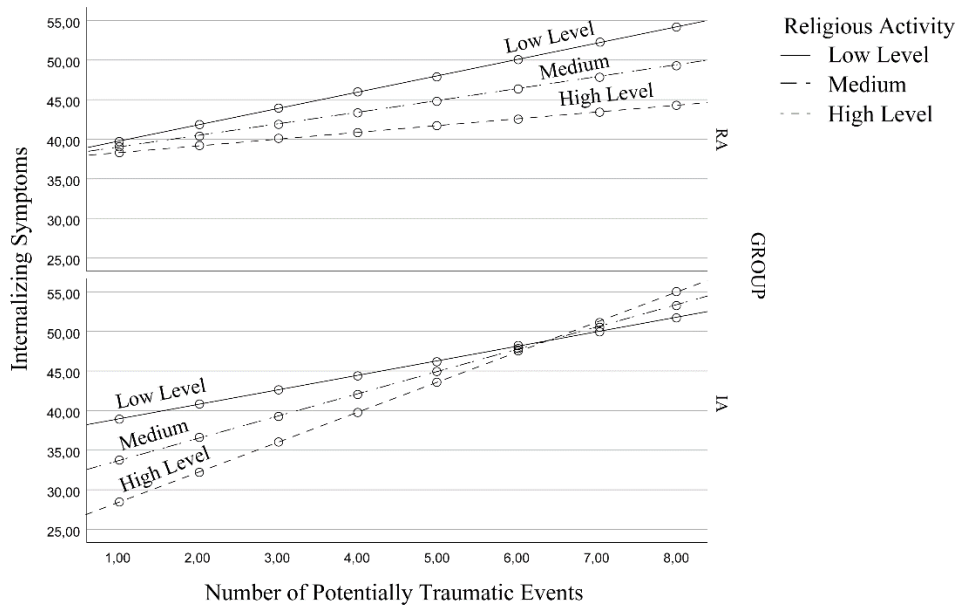
Predictor	<i>b</i>	CI _{95%} for <i>b</i> ^a		<i>SE</i> ^a	<i>t</i>	<i>p</i>
		Lower	Upper			
Age	-1.32	-3.18	0.56	0.93	-1.40	.166
Length of Stay	-0.71	-3.19	1.56	1.13	-0.63	.534
RE	-4.08	-8.09	-0.06	2.01	-2.03	.046
PTE	1.42	0.54	2.30	0.44	3.23	.002
Group	8.80	2.72	14.89	3.04	2.90	.005
PTE x RE	-0.99	-2.32	0.34	0.67	-1.50	.140
PTE x Group	-1.60	-3.38	0.18	0.89	-1.79	.078
RE x Group	7.15	-0.87	15.18	4.01	1.78	.079
PTE x RE x Group	-0.33	-2.95	2.29	1.31	-0.25	.802

Note. $N = 74$; fit for model $R^2 = .35$, $F(8, 65) = 4.39$, $p < .001$. Group = binary variable (0 = accompanied refugee adolescents, $n_{\text{accompanied}} = 38$; 1 = unaccompanied refugee adolescents, $n_{\text{unaccompanied}} = 36$); RE = religiosity (DUREL score); PTE = CATS potentially traumatic events subscale.

^a Percentile bootstrap confidence interval based on 10,000 resamples.

4. Figure E1

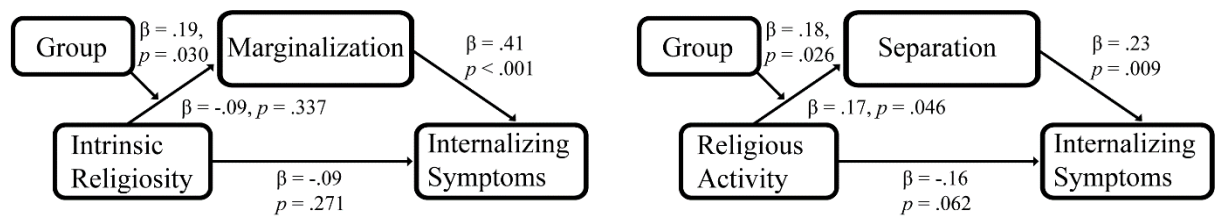
Group-specific Buffering Effect for Religious Activity among RA and IA



Note. RA = refugee adolescents ($n_{RA} = 74$), IA = first- and second-generation immigrant adolescents ($n_{IA} = 59$). Low Level = -1 SD (1.46), Medium = Mean (3.09), High Level = +1 SD (4.72).

5. Figure E2

Significant Religion Domain-specific Mediation Analyses (Control Variable: Age)



Note. CFI = .99; SRMR = .023. Conditional Indirect Effect for RA: $b = -1.01, p = .029$; for IA: $b = 0.50, p = .242$. Index of Moderated Mediation: $b = 1.50, p = .011$.

Note. CFI = .99; SRMR = .016. Conditional Indirect Effect for RA: $b = 0.01, p = .978$; for IA: $b = 0.75, p = .013$. Index of Moderated Mediation: $b = 0.74, p = .023$.

6. Figure E3

3D Surface Plot on the Relationship between Potentially Traumatic Events, Religiosity, and Internalizing Symptoms

Please visit the following URL (see file *Animated_3D_Surface_Plot.gif* in the OSF Storage):

<https://osf.io/n8pv9/>

7. Measurement Invariance

Measurement invariance among the groups was tested for the DUREL scale using IBM AMOS 27. For enabling multigroup CFA with small sample sizes and to improve test power, item parcels were previously built for the two single item subscales ORA and NORA by averaging them according Little et al. (2013), yielding four indicators to the latent factor overall religiosity. According to Chen (2007), measurement invariance on different levels is given when changes of both *CFI* and *RMSEA* move within the range of $\Delta CFI \leq 0.01$ and $\Delta RMSEA \leq 0.015$.

Testing the configural invariance yielded values of *CFI* = 0.977 and *RMSEA* = .085, and $\Delta CFI = .002$ and $\Delta RMSEA = -.027$ on metric invariance level, $\Delta CFI = .068$ and $\Delta RMSEA = .054$ on scalar invariance level. This suggests that measurement invariance is present at least at the metric level between the groups.

Literature

Chen, F. F. (2007). Sensitivity of goodness of fit indexes to lack of measurement invariance. *Structural Equation Modeling: A Multidisciplinary Journal*, 14(3), 464-504. <https://doi.org/10.1080/10705510701301834>.

Little, T. D., Rhemtulla, M., Gibson, K., & Schoemann, A. M. (2013). Why the items versus parcels controversy needn't be one. *Psychological methods*, 18(3), 285. <https://psycnet.apa.org/doi/10.1037/a0033266>.