

Affective dynamics among veterans: Associations with distress tolerance and posttraumatic  
stress symptoms

Supplemental tables. Table numbers correspond to tables in main paper but are differentiated with the additional a, b, c to signify the respective supplemental models.

A. Tables for the DSEM with only distress tolerance as a predictor.

Table 3a

Within-level standardized estimates

Parameter	$\beta$	PSD	95% CI
$\varphi_{nn}$	0.37	0.004	(0.358, 0.375)
$\varphi_{pp}$	0.48	0.004	(0.475, 0.491)
$\varphi_{np}$	-0.03	0.004	(-0.034, -0.020)
$\varphi_{pn}$	0.00	0.004	(-0.008, 0.006)
$\delta PA_{it}$	0.65	0.004	(0.641, 0.656)
$\delta NA_{it}$	0.52	0.006	(0.510, 0.533)
$\psi_{it}$ by			
PA	0.24	0.003	(0.238, 0.251)
NA	-0.48	0.005	(-0.487, -0.467)

*Note.*  $\varphi_{nn}$  = NA autoregression,  $\varphi_{pp}$  PA autoregression,  $\varphi_{pn}$ = cross-lagged effect NA->PA,  $\varphi_{np}$ = cross-lagged effect PA->NA,  $\delta PA_{it}$  positive affect innovation,  $\delta NA_{it}$  = negative affect innovation.  $\psi_{it}$  is the variance of the common factor  $\eta$  of the residuals, i.e., the residual covariance. The innovation parameters corresponding level 2 random variance terms are referred to as  $\pi PA$  and  $\pi NA$  (for the variances) and  $\psi$  for the covariance in subsequent tables of the between person effects. PSD = posterior standard deviation. CI = Bayes credibility interval.

Table 4a  
Residual variances and correlations of random effects

	Variance (CI)	1	2	3	4	5	6	7	8	9
1. $\varphi_{nn}$	0.037 (0.030,0.046)	1.00								
2. $\varphi_{pp}$	0.027 (0.022,0.034)	<b>0.34</b>	1.00							
3. $\varphi_{np}$	0.002 (0.001,0.002)	0.03	<b>-0.19</b>	1.00						
4. $\varphi_{pn}$	0.012 (0.008,0.016)	<b>-0.24</b>	-0.06	<b>0.82</b>	1.00					
5. $\log(\pi_{PA})$	0.883 (0.736,1.070)	<b>-0.23</b>	-0.06	0.01	-0.04	1.00				
6. $\log(\pi_{NA})$	2.147 (1.770,2.632)	<b>0.21</b>	<b>-0.27</b>	0.07	0.00	<b>0.15</b>	1.00			
7. $\log(\psi)$	2.334 (1.921,2.859)	0.05	0.05	<b>-0.41</b>	<b>-0.26</b>	<b>0.44</b>	0.14	1.00		
8. $\mu_{PA}$	1.198 (1.001,1.452)	<b>-0.20</b>	0.07	-0.13	-0.11	<b>0.42</b>	<b>-0.25</b>	<b>0.37</b>	1.00	
9. $\mu_{NA}$	0.261 (0.216,0.318)	<b>0.34</b>	<b>-0.16</b>	0.16	0.12	0.03	<b>0.61</b>	0.08	-0.08	1.00

Note.  $\mu_{PA}$ =positive affect mean (random intercept),  $\mu_{NA}$ = negative affect mean (random intercept).  $\varphi_{nn}$  = NA autoregression,  $\varphi_{pp}$  PA autoregression,  $\varphi_{pn}$ = cross-lagged effect NA->PA,  $\varphi_{np}$ = cross-lagged effect PA->NA,  $\log(\pi_{PA})$  = log positive affect innovation variance,  $\log(\pi_{NA})$ = log negative affect innovation variance,  $\log(\psi)$ =log of negative innovation covariance. Bold face effects are significant based on 95% credibility interval (CI).

Table 5a

## Level 2 direct effects

Variables	$\beta$	PSD	95% CI
$\varphi_{nn}$ ON			
DT	<b>-0.34</b>	<b>0.06</b>	<b>(-0.46, -0.21)</b>
$\varphi_{pp}$ ON			
DT	0.11	0.07	(-0.04, 0.24)
$\varphi_{np}$ ON			
DT	-0.02	0.09	(-0.20, 0.17)
$\varphi_{pn}$ ON			
DT	<b>0.18</b>	<b>0.09</b>	<b>(0.00, 0.34)</b>
$\log(\pi_{PA})$ ON			
DT	0.12	0.07	(-0.02, 0.24)
$\log(\pi_{NA})$ ON			
DT	<b>-0.39</b>	<b>0.06</b>	<b>(-0.50, 0.27)</b>
$\log(\psi)$ ON			
DT	<b>-0.18</b>	<b>0.07</b>	<b>(-0.31, -0.04)</b>
$\mu_{PA}$ ON			
DT	<b>0.24</b>	<b>0.07</b>	<b>(0.11, 0.37)</b>
$\mu_{NA}$ ON			
DT	<b>-0.41</b>	<b>0.06</b>	<b>(-0.52, -0.29)</b>

Note. Standardized effects are reported. PSD = posterior standard deviation.  $\mu_{PA}$ =positive affect mean (random intercept),  $\mu_{NA}$ = negative affect mean (random intercept).  $\varphi_{nn}$  = NA autoregression,  $\varphi_{pp}$  PA autoregression,  $\varphi_{pn}$ = cross-lagged effect NA->PA,  $\varphi_{np}$ = cross-lagged effect PA->NA,  $\log(\pi_{PA})$  = log positive affect innovation variance,  $\log(\pi_{NA})$ = log negative affect innovation variance,  $\log(\psi)$ =log of negative innovation covariance. Bold face effects are significant based on 95% credibility interval (CI).

## B. Tables for the DSEM with only PTSS as a predictor.

Table 3b

Within-level standardized estimates

Parameter	$\beta$	PSD	95% CI
$\varphi_{nn}$	0.37	0.004	(0.358, 0.374)
$\varphi_{pp}$	0.48	0.004	(0.475, 0.490)
$\varphi_{np}$	-0.03	0.004	(-0.035, -0.020)
$\varphi_{pn}$	0.00	0.004	(-0.008, 0.006)
$\delta PA_{it}$	0.65	0.004	(0.641, 0.656)
$\delta NA_{it}$	0.52	0.006	(0.509, 0.530)
$\psi_{it}$ by			
PA	0.24	0.004	(0.237, 0.251)
NA	-0.48	0.005	(-0.487, -0.468)

Note.  $\varphi_{nn}$  = NA autoregression,  $\varphi_{pp}$  PA autoregression,  $\varphi_{pn}$  = cross-lagged effect NA->PA,  $\varphi_{np}$  = cross-lagged effect PA->NA,  $\delta PA_{it}$  positive affect innovation,  $\delta NA_{it}$  = negative affect innovation.  $\psi_{it}$  is the variance of the common factor  $\eta$  of the residuals, i.e., the residual covariance. The innovation parameters corresponding level 2 random variance terms are referred to as  $\pi PA$  and  $\pi NA$  (for the variances) and  $\psi$  for the covariance in subsequent tables of the between person effects. PSD = posterior standard deviation. CI = Bayes credibility interval.

Table 4b  
Residual variances and correlations of random effects

	Variance (CI)	1	2	3	4	5	6	7	8	9
1. $\varphi_{nn}$	0.039 (0.032,0.048)	1.00								
2. $\varphi_{pp}$	0.027 (0.022,0.034)	<b>0.33</b>	1.00							
3. $\varphi_{np}$	0.001 (0.001,0.002)	0.03	<b>-0.18</b>	1.00						
4. $\varphi_{pn}$	0.012 (0.009,0.017)	<b>-0.29</b>	-0.05	<b>0.80</b>	1.00					
5. $\log(\pi_{PA})$	0.892 (0.744,1.082)	<b>-0.25</b>	-0.05	0.01	-0.03	1.00				
6. $\log(\pi_{NA})$	1.737 (1.420,2.141)	<b>0.19</b>	<b>-0.28</b>	0.07	-0.07	<b>0.16</b>	1.00			
7. $\log(\psi)$	2.338 (1.925,2.869)	0.07	0.05	<b>-0.40</b>	<b>-0.28</b>	<b>0.42</b>	0.13	1.00		
8. $\mu_{PA}$	1.166 (0.975,1.406)	<b>-0.20</b>	0.06	-0.13	-0.06	<b>0.44</b>	<b>-0.19</b>	<b>0.38</b>	1.00	
9. $\mu_{NA}$	0.222 (0.184,0.271)	<b>0.34</b>	<b>-0.15</b>	0.17	0.06	0.01	<b>0.53</b>	0.06	-0.01	1.00

Note.  $\mu_{PA}$ =positive affect mean (random intercept),  $\mu_{NA}$ = negative affect mean (random intercept).  $\varphi_{nn}$  = NA autoregression,  $\varphi_{pp}$  PA autoregression,  $\varphi_{pn}$ = cross-lagged effect NA->PA,  $\varphi_{np}$ = cross-lagged effect PA->NA,  $\log(\pi_{PA})$  = log positive affect innovation variance,  $\log(\pi_{NA})$ = log negative affect innovation variance,  $\log(\psi)$ =log of negative innovation covariance. Bold face effects are significant based on 95% credibility interval (CI).

Table 5b

## Level 2 direct effects

Variables	$\beta$	PSD	95% CI
$\varphi_{nn}$ ON PTSS	<b>0.29</b>	<b>0.06</b>	<b>(0.16, 0.41)</b>
$\varphi_{pp}$ ON PTSS	-0.12	0.07	(-0.25, 0.02)
$\varphi_{np}$ ON PTSS	0.00	0.09	(-0.18, 0.18)
$\varphi_{pn}$ ON PTSS	-0.04	0.09	(-0.22, 0.14)
$\log(\pi_{PA})$ ON PTSS	-0.06	0.07	(-0.19, 0.07)
$\log(\pi_{NA})$ ON PTSS	<b>0.55</b>	<b>0.05</b>	<b>(0.45, 0.64)</b>
$\log(\psi)$ ON PTSS	<b>0.17</b>	<b>0.07</b>	<b>(0.03, 0.30)</b>
$\mu_{PA}$ ON PTSS	<b>-0.29</b>	<b>0.06</b>	<b>(-0.40, -0.16)</b>
$\mu_{NA}$ ON PTSS	<b>0.54</b>	<b>0.05</b>	<b>(0.44, 0.63)</b>

Note. Standardized effects are reported. PSD = posterior standard deviation.  $\mu_{PA}$ =positive affect mean (random intercept),  $\mu_{NA}$ = negative affect mean (random intercept).  $\varphi_{nn}$  = NA autoregression,  $\varphi_{pp}$  PA autoregression,  $\varphi_{pn}$ = cross-lagged effect NA->PA,  $\varphi_{np}$ = cross-lagged effect PA->NA,  $\log(\pi_{PA})$  = log positive affect innovation variance,  $\log(\pi_{NA})$ = log negative affect innovation variance,  $\log(\psi)$ =log of negative innovation covariance. Bold face effects are significant based on 95% credibility interval (CI).

C. Tables for the DSEM with distress tolerance, PTSS, and gender as unstructured predictors.

Table 3c

Within-level standardized estimates

Parameter	$\beta$	PSD	95% CI
$\varphi_{nn}$	0.37	0.004	(0.358, 0.374)
$\varphi_{pp}$	0.48	0.004	(0.475, 0.491)
$\varphi_{np}$	-0.03	0.004	(-0.035, -0.020)
$\varphi_{pn}$	0.00	0.004	(-0.007, 0.007)
$\delta PA_{it}$	0.65	0.003	(0.641, 0.655)
$\delta NA_{it}$	0.52	0.006	(0.510, 0.533)
$\psi_{it}$ by			
PA	0.25	0.003	(0.239, 0.251)
NA	-0.48	0.005	(-0.487, -0.466)

Note.  $\varphi_{nn}$  = NA autoregression,  $\varphi_{pp}$  PA autoregression,  $\varphi_{pn}$ = cross-lagged effect NA->PA,  $\varphi_{np}$ = cross-lagged effect PA->NA,  $\delta PA_{it}$  positive affect innovation,  $\delta NA_{it}$  = negative affect innovation.  $\psi_{it}$  is the variance of the common factor  $\eta$  of the residuals, i.e., the residual covariance. The innovation parameters corresponding level 2 random variance terms are referred to as  $\pi PA$  and  $\pi NA$  (for the variances) and  $\psi$  for the covariance in subsequent tables of the between person effects. PSD = posterior standard deviation. CI = Bayes credibility interval.

Table 4c  
Residual variances and correlations of random effects

	Variance (CI)	1	2	3	4	5	6	7	8	9
1. $\varphi_{nn}$	0.037 (0.030,0.046)	1.00								
2. $\varphi_{pp}$	0.027 (0.022,0.033)	<b>0.33</b>	1.00							
3. $\varphi_{np}$	0.002 (0.001,0.002)	0.04	<b>-0.18</b>	1.00						
4. $\varphi_{pn}$	0.012 (0.008,0.016)	<b>-0.27</b>	-0.06	<b>0.81</b>	1.00					
5. $\log(\pi_{PA})$	0.890 (0.741,1.078)	<b>-0.23</b>	-0.05	0.00	-0.04	1.00				
6. $\log(\pi_{NA})$	1.746 (1.427,2.150)	<b>0.18</b>	<b>-0.29</b>	0.08	-0.06	<b>0.16</b>	1.00			
7. $\log(\psi)$	2.336 (1.919,2.869)	0.04	0.06	<b>-0.41</b>	<b>-0.27</b>	<b>0.44</b>	0.13	1.00		
8. $\mu_{PA}$	1.162 (0.970,1.406)	<b>-0.18</b>	0.07	-0.14	-0.07	<b>0.43</b>	<b>-0.19</b>	<b>0.39</b>	1.00	
9. $\mu_{NA}$	0.223 (0.184,0.272)	<b>0.34</b>	<b>-0.15</b>	0.18	0.06	0.02	<b>0.53</b>	0.06	-0.01	1.00

Note.  $\mu_{PA}$ =positive affect mean (random intercept),  $\mu_{NA}$ = negative affect mean (random intercept).  $\varphi_{nn}$  = NA autoregression,  $\varphi_{pp}$  PA autoregression,  $\varphi_{pn}$ = cross-lagged effect NA->PA,  $\varphi_{np}$ = cross-lagged effect PA->NA,  $\log(\pi_{PA})$  = log positive affect innovation variance,  $\log(\pi_{NA})$ = log negative affect innovation variance,  $\log(\psi)$ =log of negative innovation covariance. Bold face effects are significant based on 95% credibility interval (CI).

Table 5c

## Level 2 direct effects

Variables	$\beta$	PSD	95% CI
$\varphi_{nn}$ ON			
PTSS	0.13	0.09	(-0.06, 0.31)
DT	<b>-0.23</b>	<b>0.09</b>	<b>(-0.41, -0.04)</b>
gender	-0.11	0.06	(-0.23, 0.02)
$\varphi_{pp}$ ON			
PTSS	-0.08	0.10	(-0.26, 0.13)
DT	0.07	0.10	(-0.12, 0.27)
Gender	<b>-0.16</b>	<b>0.07</b>	<b>(-0.29, -0.03)</b>
$\varphi_{np}$ ON			
PTSS	0.01	0.12	(-0.23, 0.25)
DT	0.00	0.12	(-0.24, 0.25)
Gender	0.04	0.08	(-0.12, 0.20)
$\varphi_{pn}$ ON			
PTSS	0.16	0.13	(-0.10, 0.41)
DT	<b>0.27</b>	<b>0.12</b>	<b>(0.03, 0.50)</b>
Gender	0.01	0.08	(-0.15, 0.18)
log( $\pi_{PA}$ ) ON			
PTSS	0.02	0.09	(-0.17, 0.20)
DT	0.12	0.10	(-0.07, 0.30)
Gender	0.04	0.07	(-0.09, 0.16)
log( $\pi_{NA}$ ) ON			
PTSS	<b>0.54</b>	<b>0.08</b>	<b>(0.38, 0.68)</b>
DT	-0.02	0.09	(-0.18, 0.15)
Gender	-0.04	0.06	(-0.15, 0.07)
log( $\psi$ ) ON			
PTSS	0.09	0.10	(-0.11, 0.28)
DT	-0.12	0.10	(-0.31, 0.08)
Gender	-0.01	0.07	(-0.14, 0.12)
$\mu_{PA}$ ON			
PTSS	<b>-0.24</b>	<b>0.09</b>	<b>(-0.41, -0.06)</b>
DT	0.07	0.09	(-0.11, 0.26)
Gender	0.08	0.06	(-0.05, 0.20)
$\mu_{NA}$ ON			
PTSS	<b>0.48</b>	<b>0.08</b>	<b>(0.33, 0.63)</b>
DT	-0.08	0.08	(-0.25, 0.08)
Gender	0.01	0.06	(-0.10, 0.12)

Note. Standardized effects are reported. PSD = posterior standard deviation.  $\mu_{PA}$ =positive affect mean (random intercept),  $\mu_{NA}$ = negative affect mean (random intercept).  $\varphi_{nn}$  = NA autoregression,  $\varphi_{pp}$  PA autoregression,  $\varphi_{pn}$ = cross-lagged effect NA->PA,  $\varphi_{np}$ = cross-lagged effect PA->NA, log( $\pi_{PA}$ ) = log positive affect innovation variance, log( $\pi_{NA}$ )= log negative affect innovation variance, log( $\psi$ )=log of negative innovation covariance. Bold face effects are significant based on 95% credibility interval (CI).