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Self-Esteem Buffers the Effect of Physical Symptoms on Negative Affect Less in Older Adults

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Risk and Resilience in Daily Stress

- Although **daily hassles** tend to be less dramatic than major **life events** or chronic stressors, daily stressors can pile up within and across days, and can turn into chronic stressors if no resolution is found (Diehl & Hay, 2010).
- Both **risk** and **resilience** factors play a role in everyday emotional well-being.
- However, the effects of **risk and resilience factors** on everyday emotional well-being may **change with age** (Davis, Zautra, Johnson, Murray, & Okvat, 2007).



Risk and Resilience in Daily Stress

- Negative age-related changes increase with age, e.g. poorer physical health and social losses, but studies have shown that for the large majority of older people, **subjective well-being does not decrease until very late life** (Staudinger, 2000).
- What is the **different mechanisms** at work which **buffer** the impact of increasing challenges in old age? (Greve, 2006)



Present study

- The present study focused on **physical symptoms** as a **risk factor** and **self-esteem** as a **resilience factor**, and examined their effects on daily affect in a lifespan sample ranging from young to older adults.



Research questions

- Does the effect of self-esteem on the association between physical symptoms and daily affect change with age?



Method

- Participants
 - $n = 128$
 - M age = 56.7 years (SD = 18.7, range = 24.2–90.2)
 - 46% women
 - 91% European Americans, 9% African Americans

Method

- 7-day daily diary study with one assessment per day
- Measures
 1. Daily affect
 - Positive Affect Negative Affect Schedule ([PANAS; Watson, et al., 1988](#)).
 - Across individuals and days
 - PA, $M = 31.92$, $SD = 8.14$, range = 10–50;
 - NA, $M = 13.70$, $SD = 4.73$, range = 10–37
 2. Physical symptoms
 - 11 symptoms, e.g. headache (1 = none; 4 = most)
 - Across individuals and days
 - $M = 14.21$, $SD = 3.48$, range = 11–38



Method

3. Self-esteem

- Rosenberg's Self-Esteem Scale (1965)
- 10 items (1 = Strongly agree; 4 = Strongly disagree; later recoded)
- Across individuals and days
 - $M = 24.51$, $SD = 5.05$, range = 0–30

4. Control variables: Self-rated health, depressive symptoms, neuroticism

Method

- Multilevel modeling
- Level 1

$$PA_{ti} = \pi_{0i} + \pi_{1i} \times PS_{ti} + \pi_{2i} SES_{ti} + \pi_{3i} PS_{ti} \times SES_{ti} + e_{ti}$$

- Level 2

$$\pi_{0i} = \beta_{00} + r_{0i}$$

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

$$\pi_{2i} = \beta_{20} + r_{2i}$$

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

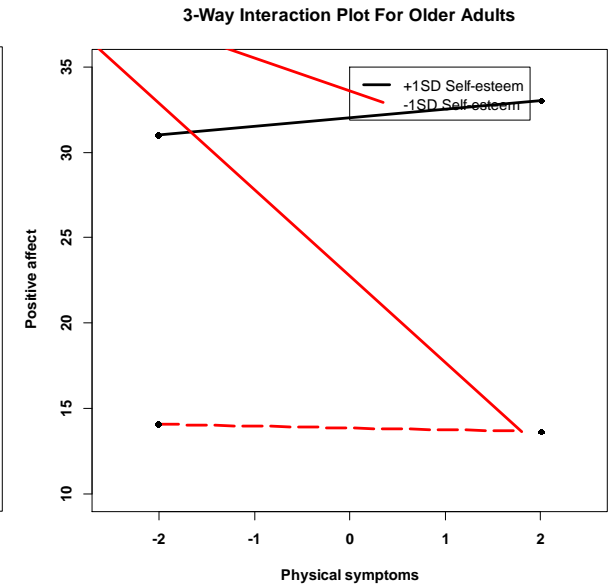
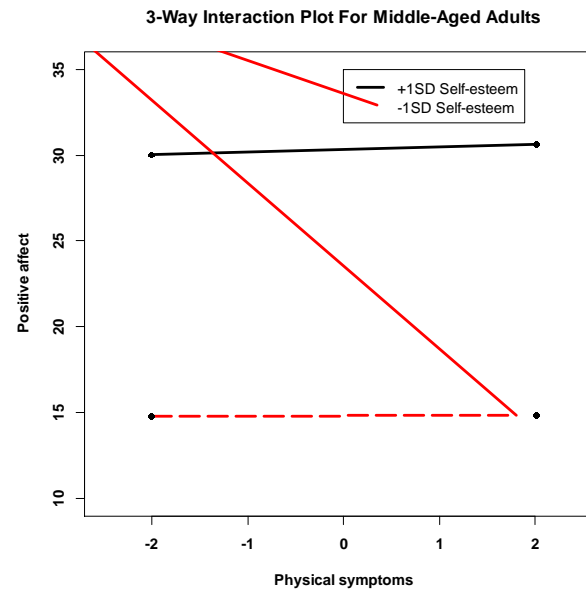
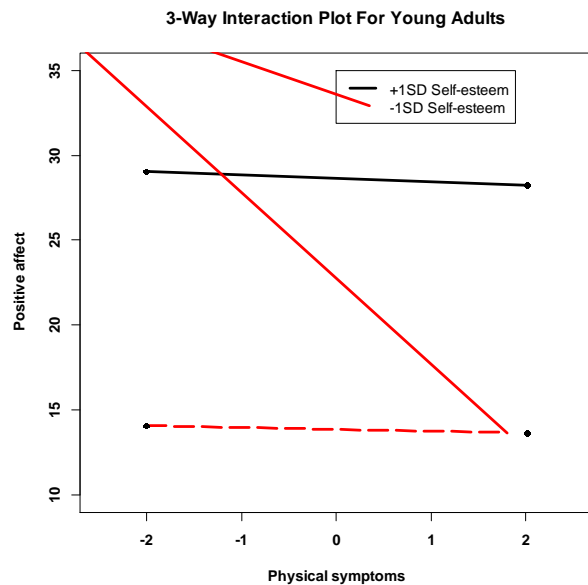


Method

- Within-person centered: Physical symptoms, self-esteem
- Grand-mean centered: Age, self-rated health, depressive symptoms, neuroticism

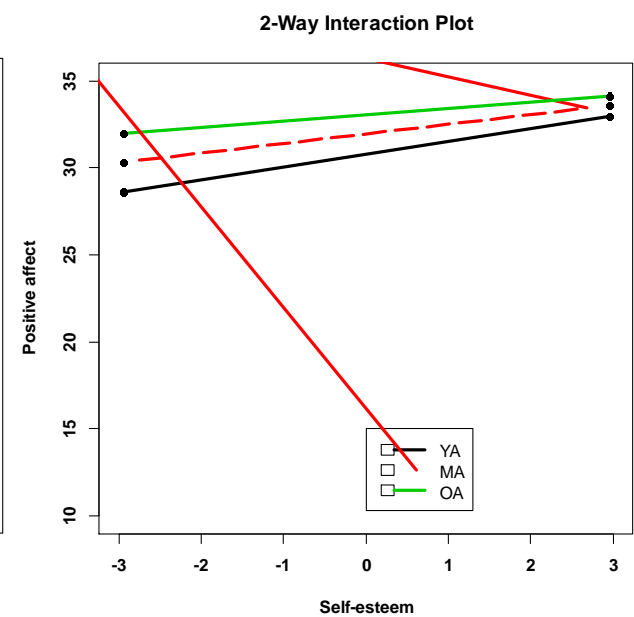
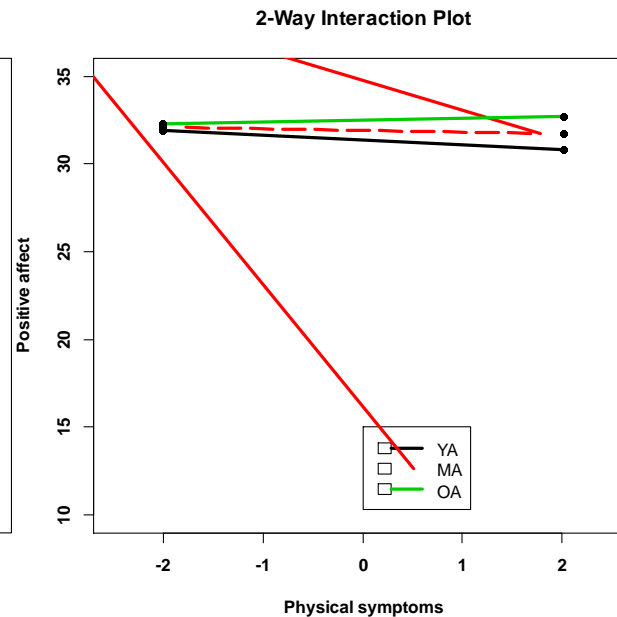
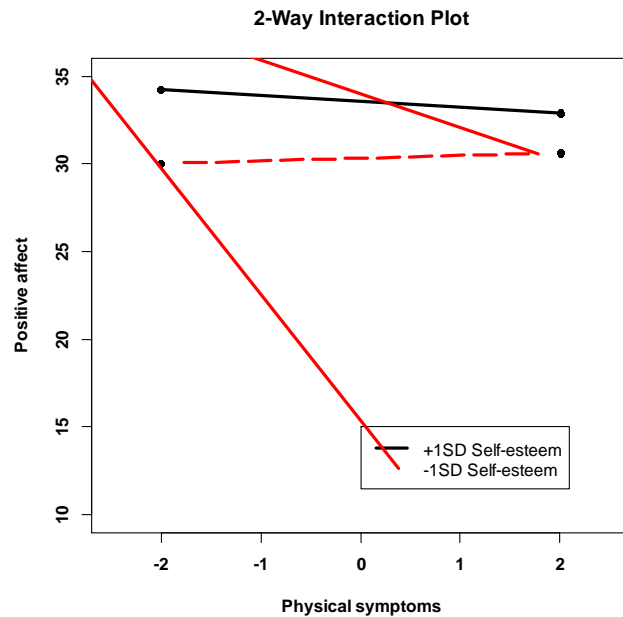
Results

- Positive affect



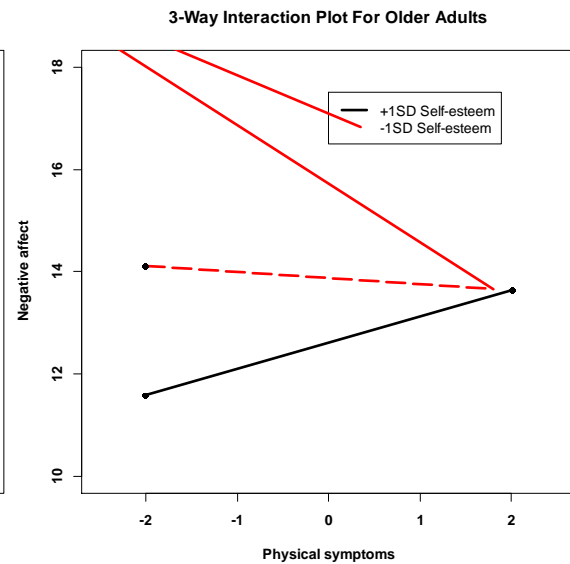
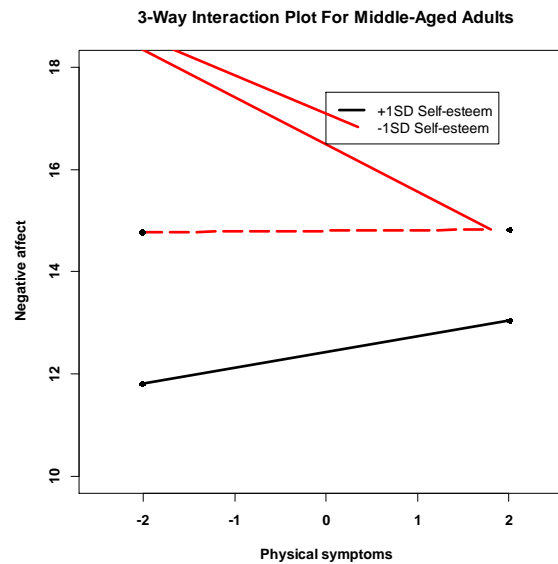
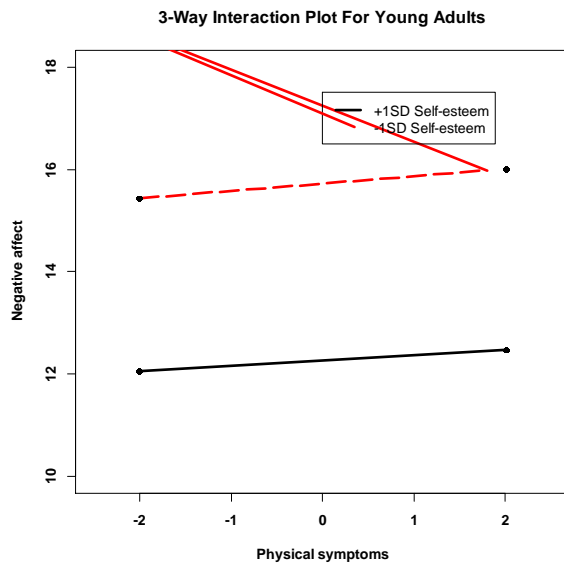
Results

- Positive affect



Results

- Negative affect



Conclusion

- **Across age groups, self-esteem is a resilient factor for PA**, i.e. higher self-esteem, higher PA, regardless of the level of physical symptoms.
- **With increasing age**, the **buffering effect of self-esteem** on the association between NA and physical symptoms **decreased**.
- Results suggests that there is **no universal generalization** that can be made regarding whether chronological age, in and of itself, confers greater vulnerability or resilience on adults (Diehl et al., 2012).

Q & A

- Thank you very much!



```

Fixed effects: PA ~ wc.PSint + wc.ses + wc.PSint:wc.ses + gc.age + gc.health
+      gc.cesd + gc.neo_n + wc.PSint:gc.age + wc.ses:gc.age +
wc.PSint:wc.ses:gc.age +      gc.PSint + gc.ses + 1
      Value Std.Error DF t-value p-value
(Intercept)      31.92614 0.5101594 718 62.58072 0.0000
wc.PSint          -0.08964 0.0838416 718 -1.06915 0.2854
wc.ses             0.55217 0.0539593 718 10.23302 0.0000
gc.age             0.06477 0.0289582 121  2.23671 0.0271
gc.health          1.64800 0.5577676 121  2.95464 0.0038
gc.cesd           -0.18694 0.1038232 121 -1.80058 0.0743
gc.neo_n           0.19996 0.0923199 121  2.16597 0.0323
gc.PSint          -0.04851 0.1933588 121 -0.25089 0.8023
gc.ses             0.67390 0.1719482 121  3.91918 0.0001
wc.PSint:wc.ses   -0.08256 0.0284306 718 -2.90375 0.0038
wc.PSint:gc.age    0.01000 0.0042481 718  2.35378 0.0189
wc.ses:gc.age     -0.01036 0.0032672 718 -3.17034 0.0016
wc.PSint:wc.ses:gc.age -0.00259 0.0015234 718 -1.69965 0.0896
Correlation:

```



Fixed effects: NA. ~ wc.PSint + wc.ses + wc.PSint:wc.ses + gc.age + gc.health
 + gc.cesd + gc.neo_n + wc.PSint:gc.age + wc.ses:gc.age +
 wc.PSint:wc.ses:gc.age + gc.PSint + gc.ses + 1

	Value	Std.Error	DF	t-value
(Intercept)	13.616325	0.21238099	718	64.11273
wc.PSint	0.160627	0.06153802	718	2.61022
wc.ses	-0.397772	0.03959404	718	-10.04625
gc.age	-0.019695	0.01204988	121	-1.63445
gc.health	-0.033381	0.23195017	121	-0.14392
gc.cesd	0.136296	0.04327883	121	3.14926
gc.neo_n	0.049978	0.03839322	121	1.30175
gc.PSint	0.321729	0.08043160	121	4.00004
gc.ses	-0.095932	0.07168921	121	-1.33817
wc.PSint:wc.ses	0.050699	0.02016761	718	2.51390
wc.PSint:gc.age	0.001601	0.00311671	718	0.51362
wc.ses:gc.age	0.010821	0.00240199	718	4.50494
wc.PSint:wc.ses:gc.age	0.002472	0.00109536	718	2.25662

	p-value
(Intercept)	0.0000
wc.PSint	0.0092

wc.ses	0.0000
gc.age	0.1048
gc.health	0.8858
gc.cesd	0.0021
gc.neo_n	0.1955
gc.PSint	0.0001
gc.ses	0.1833
wc.PSint:wc.ses	0.0122
wc.PSint:gc.age	0.6077
wc.ses:gc.age	0.0000
wc.PSint:wc.ses:gc.age	0.0243

Correlation: