Why does the protective effect of optimism for maintaining mental health decreases in older age?

Christel Salewski & Manja Vollmann

Health Psychology, FernUniversität in Hagen, Germany

Background

Previous research has shown that the protective effect of optimism against emotional disturbance seems to decline in older age (Armbruster, Pieper, Klotsche, & Hoyer, 2015; Wrosch, Jobin, & Scheier, 2017). However, little is known about the mechanistic underlying processes. Windisch et al. (2017) suggested that one core mechanism could be the change of effectiveness of coping strategies over the life span. Active problem solving is a coping strategy typically used by optimists (Carver & Scheier, 2014). It can be expected that the use of active problem solving coping becomes less effective with increasing age as older people face more uncontrollable stressors (Heckhausen & Wrosch, 2016).

Thus, the present study investigated whether the decrease of the protective effect of optimism on depression with increasing age is due to the decreasing effectiveness of active problem solving coping with increasing age.

Method

Participants

N = 266
Sex: 177 (66.5%) women and 89 (33.5%) men
Age: 40-94 years, M = 61.5 years (SD = 11.7 years)

Measures

Dispositional optimism (LOT-R, Scheier, Carver, & Bridges, 1994)
3 items, α=.65 (e.g., In uncertain times, I usually expect the best)
Active problem solving coping (COPE, Carver, Scheier, & Weintraub, 1989)
4 items, α=.62 (e.g., I've been taking action to try to make the situation better)
Depression (Non-clinical Depression Questionnaire, Mohr & Müller, 2014)
8 items, α=.80 (e.g. I feel lonely even when I am in company of others)

Results

The model was tested by (moderated) mediation analyses using PROCESS (Hayes, 2013) with 5000 bootstrap samples. Unstandardized coefficients are reported.

Mediation analysis

\[
\begin{align*}
\text{Problem solving} & \rightarrow \text{Optimism} \\
\text{Optimism} & \rightarrow \text{Depression}
\end{align*}
\]

Indirect effect: -0.02, 95% CI [-0.049, -0.002]

Moderated mediation analysis

\[
\begin{align*}
\text{Problem solving} & \rightarrow \text{Optimism} \\
\text{Optimism} & \rightarrow \text{Depression}
\end{align*}
\]

Age

(1) Conditional direct effects of optimism on depression

Optimism

Problem solving

Depression

10th (47 years): -0.57, 95% CI [-0.708, -0.425]
25th (52 years): -0.49, 95% CI [-0.605, -0.374]
50th (61 years): -0.35, 95% CI [-0.442, -0.261]
75th (69 years): -0.23, 95% CI [-0.334, -0.124]
90th (77 years): -0.11, 95% CI [-0.251, 0.038]

Indirect effect: -0.02, 95% CI [-0.049, -0.002]

(2) Conditional indirect effects of optimism on depression via problem solving

Optimism

Problem solving

Depression

10th (47 years): -0.02, 95% CI [-0.054, 0.010]
25th (52 years): -0.02, 95% CI [-0.078, 0.010]
50th (61 years): -0.02, 95% CI [-0.043, 0.003]
75th (69 years): -0.02, 95% CI [-0.046, 0.010]
90th (77 years): -0.02, 95% CI [-0.053, 0.021]

Conclusions

As expected, the protective effect of optimism decreased with increasing age.

Contrary to the assumptions, this effect cannot be explained by changes in the effectiveness of active problem solving coping.

Future research should consider the role of situation-specific coping strategies, perceived control (Ferguson & Goodwin, 2010), and the appropriateness of the operationalization of dispositional optimism in older age.

References


Correspondence

Prof. Dr. Christel Salewski
FernUniversität in Hagen, Institut für Psychologie
Lehrstuhl für Gesundheitspsychologie
D-58084 Hagen
Christel.Salewski@fernuni-hagen.de