Supplementary Materials

Table of Contents

Table S1: *Participant Exclusion Frequency and Reasons*

Participant	Age Group	N Surveys	N Valid	Reason for Exclusion
196102	YA	3	3	Too few surveys; technical problem
196103	YA	20	10	Too few surveys; technical problem
196106	YA	218	131	Too many surveys
196120	YA	9	8	Too few surveys; technical problem
196123	YA	102	94	Too many surveys
196137	YA	4	3	Too few surveys; technical problem
196138	YA	0	0	Responses did not record
196206	MA	8	8	Too few surveys; technical problem
196208	MA	9	9	Too few surveys; technical problem
196209	MA	4	4	Too few surveys; technical problem
196210	MA	3	3	Too few surveys; technical problem
196213	MA	5	4	Too few surveys; technical problem
196220	MA	3	3	Too few surveys; technical problem
196221	MA	5	3	Too few surveys; technical problem
196223	MA	117	109	Too many surveys
196224	MA	13	10	Too few surveys; technical problem
196228	MA	3	2	Too few surveys; technical problem
196305	OA	5	4	Too few surveys; unknown reason
196306	OA	36	0	Responses did not record
196310	OA	13	9	Too few surveys; technical problem
196311	OA	178	45	Too many surveys
196362	OA	43	42	Out of age range (88 years old)

Table S2: *Means and standard deviations of individual difference measures by age group*

Variable	α	Younger	Middle-Aged	Older
Age		26.22 (5.62)	50.68 (5.94)***	66.56 (4.81)***
Mini-Mental State Exam		95.13 (4.42)	94.84 (5.36)	96.67 (5.15)
Digit span forward		11.56 (2.53)	10.36 (2.60)*	10.74 (2.26)
Digit span backward		7.80 (2.43)	6.02 (2.25)**	6.82 (2.80)
Letter fluency		14.66 (4.36)	14.66 (5.01)	16.18 (5.35)
Category fluency		20.64 (4.55)	19.88 (5.55)	20.00 (5.50)
Vocabulary		12.96 (3.79)	11.52 (4.00)*	14.78 (2.79)**
Emo. Malleability T1[a]	.789	69.45 (12.01)	67.31 (12.88)	78.33 (13.41)***
Emo. Malleability T2[a]	.840	69.67 (10.01)	70.36 (12.46)	79.81 (18.90)***
ER self-efficacy[a]	.824	65.08 (17.45)	73.33 (16.72)*	76.84 (16.88)***
Trait positive affect[a]	.896	64.17 (19.50)	65.23 (20.38)	70.11 (14.72)
Trait negative affect[a]	.893	25.78 (18.97)	16.76 (14.72)*	17.09 (14.98)*
Life Satisfaction[a]	.868	68.33 (32.90)	61.53 (32.14)	73.33 (31.22)
Depression[a]	.896	24.52 (17.14)	21.93 (16.04)	14.16 (12.00)**
Optimism[a]	.830	59.83 (21.62)	68.86 (14.93)*	78.08 (17.81)***
Trait reappraisal[a]	.839	67.18 (15.57)	67.86 (18.03)	77.11 (16.70)**
Trait suppression[a]	.742	43.92 (19.77)	40.67 (20.99)	37.70 (22.83)
Savoring anticipation[a]	.843	69.56 (14.33)	69.10 (18.45)	75.81 (16.47)
Savoring present[a]	.843	63.86 (16.82)	68.51 (19.52)	76.94 (15.31)***
Savoring reminiscence[a]	.850	68.73 (17.61)	71.62 (17.31)	80.21 (14.95)***
Savoring total[a]	.928	67.39 (12.95)	69.62 (17.16)	77.62 (17.16)***
Mood repair[a]	.771	63.78 (22.18)	70.18 (17.74)	78.59 (18.34)***
Mood attention[a]	.776	69.40 (13.28)	68.87 (12.85)	72.84 (17.77)
Mood clarity[a]	.849	62.04 (17.71)	70.18 (15.54)*	75.41 (16.86)***
Personal control[a]	.868	69.52 (16.53)	70.77 (16.68)	77.64 (17.11)*
Control- mastery[a]	.797	75.28 (18.26)	74.83 (18.38)	80.28 (15.35)
Control- constraints[a]	.836	33.76 (18.03)	31.60 (18.56)	23.92 (21.41)*
BFI extraversion[a]	.844	60.92 (16.28)	62.59 (16.60)	70.98 (16.95)**

Sociability[a]	.767	51.88 (23.77)	55.65 (23.18)	65.88 (20.45)**
Assertiveness[a]	.685	60.88 (18.68)	64.29 (20.24)	69.88 (20.43)*
Energy level[a]	.662	70.00 (18.60)	67.60 (16.66)	77.21 (19.73)
BFI agreeableness[a]	.809	68.74 (15.11)	72.29 (14.17)	78.19 (15.02)**
Compassion[a]	.497	70.63 (19.01)	70.13 (18.57)	72.19 (21.91)**
Respectfulness[a]	.733	75.75 (18.93)	79.85 (16.67)	84.71 (16.49)*
Trust[a]	.682	60.46 (20.73)	64.63 (20.23)	68.63 (19.25)*
BFI conscientiousness[a]	.880	68.21 (16.84)	75.79 (18.53)*	77.89 (16.08)**
Organization[a]	.836	71.50 (23.66)	78.06 (22.32)	75.11 (23.40)
Productiveness[a]	.765	68.04 (20.00)	74.96 (22.58)	78.46 (18.40)**
Responsibility[a]	.648	66.13 (17.91)	74.49 (18.66)*	79.38 (17.37)***
BFI negative emotion[a]	.829	48.46 (17.42)	41.35 (16.66)*	36.10 (17.66)***
Anxiety[a]	.777	56.75 (22.79)	49.79 (22.65)	43.67 (23.76)**
Depression[a]	.781	40.75 (24.91)	29.97 (20.33)*	24.13 (21.24)***
Emotional volatility[a]	.804	43.13 (24.00)	39.67 (24.59)	28.04 (21.06)**
BFI openness[a]	.807	73.41 (11.80)	70.27 (19.09)	79.12 (13.07)
Intellectual curiosity[a]	.632	78.88 (14.87)	70.15 (21.59)*	83.00 (15.31)
Aesthetic sensitivity[a]	.646	69.50 (15.34)	67.81 (23.23)	76.60 (18.54)
Creative imagination[a]	.670	71.88 (16.43)	73.04 (21.76)	78.25 (18.13)
Current stress[b]		2.38 (.97)	2.16 (1.14)	1.83 (1.00)**
Self-esteem[b]		3.60 (1.11)	3.47 (1.21)	5.06 (1.11)*
Self-reported health T1[b]		3.67 (.90)	3.56 (.71)	3.68 (.84)
Self-reported health T2[b]		2.44 (.88)	2.54 (.82)	2.22 (.91)

	Total	YA	MA	OA
N total	150	50	50	50
N (%) Female	79 (52.7)	28 (56.0)	27 (54.0)	24 (48.0)
N (%) Hispanic	10 (7.1)	5 (10.4)	3 (6.7)	2 (4.3)
N (%) White	72 (49.0)	20 (40.8)	20 (40.8)	32 (65.3)
N (%) Black/Afr.-Am.	50 (34.0)	9 (18.4)	27 (55.1)	13 (28.6)
N (%) Asian-Am.	30 (20.3)	25 (50.0)	2 (4.1)	3 (6.1)
N (%) Native English	121 (81.8)	29 (59.2)	44 (88.0)	48 (98.0)

N (%) College degree	74 (50.3)	27 (55.1)	14 (28.6)	33 (67.3)
N (%) Employed	63 (43.4)	24 (50.0)	22 (44.9)	17 (35.4)
N (%) Single	92 (63.0)	41 (83.7)	31 (63.3)	20 (41.7)
N (%) Mental Illness	16 (11.0)	7 (14.6)	3 (6.4)	6 (12.0)
N (%) Excluded	20 (11.8)	5 (9.1)	10 (16.7)	5 (9.1)
N surveys		48.27 (14.77)	57.40 (17.65)**	56.10 (15.30)*
N valid surveys		44.96 (13.62)	51.64 (12.89)*	51.54 (12.25)*
% surveys excluded		6.28 (9.18)	8.65 (9.32)	7.23 (10.51)

[a] These measures were rescaled to range from 0-100 using POMP scoring (Cohen, Cohen, Aiken, & West, 1999). [b] Single-item measures. Planned contrasts compared middle-aged to younger and older to younger. * $p < .05$, ** $p < .01$, *** $p < .001$.

Cohen, P., Cohen, J., Aiken, L. S., & West, S. G. (1999). The problem of units and the circumstance for POMP. *Multivariate behavioral research*, *34*, 315-346. http://dx.doi.org/10.1207/S15327906MBR3403_2

Individual Difference Measures

Mini-Mental State Exam (Folstein, Folstein, & McHugh, 1975)

WAIS forward- and backward-digit span task (Wechsler, 1997)

Shipley vocabulary test (Zachary, 1991)

Positive and Negative Affect Schedule (Watson, Clark, & Tellegen, 1988)

Emotion Regulation Questionnaire (Gross & John, 2003)

Center for Epidemiological Studies—Depression (Radloff, 1977)

Emotion Regulation Self-Efficacy (Kirk, Schutte, & Hine, 2008)

Emotional Mindset Scale (Livingstone, 2012)

Midlife Control Scale (Lachman & Weaver, 1998)

Life Orientation Test (revised) (Scheier, Carver, & Bridges, 1994)

Satisfaction with Life Scale (Diener, Emmons, Larsen, & Griffin, 1985)

Savoring Beliefs Inventory (Bryant, 2003)

Trait Meta-Mood Scale (Salovey, Mayer, Goldman, Turvey, & Palfai, 1995)

Big Five Inventory 2 (Soto & John, 2017)

Bryant, F. (2003). Savoring Beliefs Inventory (SBI): A scale for measuring beliefs about savouring. *Journal of Mental Health*, *12*, 175-196.

Diener, E. D., Emmons, R. A., Larsen, R. J., & Griffin, S. (1985). The satisfaction with life scale. *Journal of Personality Assessment*, *49*, 71-75.

Folstein, M. F., Folstein, S. E., & McHugh, P. R. (1975). "Mini-mental state": A practical method for grading the cognitive state of patients for the clinician. *Journal of Psychiatric Research, 12,* 189-198.

John, O. P., & Gross, J. J. (2004). Healthy and unhealthy emotion regulation: Personality processes, individual differences, and life span development. *Journal of Personality*, *72*, 1301-1334. http://dx.doi.org/10.1111/j.1467-6494.2004.00298.x

Kirk, B. A., Schutte, N. S., & Hine, D. W. (2008). Development and preliminary validation of an emotional self-efficacy scale. *Personality and Individual Differences, 45,* 432-436.

Lachman, M. E., & Weaver, S. L. (1998). The sense of control as a moderator of social class differences in health and well-being. *Journal of Personality and Social Psychology, 74,* 763-773.

Livingstone, K. M. (2012). *The effects of implicit theories of emotion regulation and experience* (Doctoral dissertation). University of Oregon, Eugene, OR.

Radloff, L. S. (1977). The CES-D Scale: A self-report depression scale for research in the general population. *Journal of Applied Psychological Measures, 1*, 385-401.

Salovey, P., Mayer, J. D., Goldman, S. L., Turvey, C., & Palfai, T. P. (1995). Emotional attention, clarity, and repair: Exploring emotional intelligence using the Trait Meta-Mood

Scale. In J.W. Pennebaker (Ed.), *Emotion, Disclosure, and Health* (pp. 125-154). Washington, DC: American Psychological Association.

Scheier, M. F., Carver, C. S., & Bridges, M. W. (1994). Distinguishing optimism from neuroticism (and trait anxiety, self-mastery, and self-esteem): A re-evaluation of the Life Orientation Test. *Journal of Personality and Social Psychology, 67*, 1063-1078.

Soto, C. J., & John, O. P. (2017). The next Big Five Inventory (BFI-2): Developing and assessing a hierarchical model with 15 facets to enhance bandwidth, fidelity, and predictive power. *Journal of personality and social psychology*, *113*, 117-143.

Watson, D., Clark, L.A., & Tellegen, A. (1988). Development and validation of brief measures of positive and negative affect: The PANAS scales. *Journal of Personality and Social Psychology, 54,* 1063-1070.

Weschler, D., Coalson, D. L., & Raiford, S. E. (1997). *WAIS-III: Wechsler adult intelligence scale.* San Antonio, TX: Psychological Corporation.

Zachary, R. A. (1991). Shipley institute of living scale: Revised manual. Los Angeles, CA: Western Psychological Services.

Experience Sampling Survey Items

1. How are you feeling right now?

Very negative	Negative	A little negative	Neutral	A little positive	Positive	Very positive
1	2	3	4	5	6	7

2. Since the last survey, have you done anything to influence your feelings?
   - ☐ Yes [branch to YES survey Y01]
   - ☐ No [branch to NO survey N01]

NO REGULATION:

N01. You said that you DID NOT try to influence your feelings. Did you experience any strong positive or negative emotions?

- ☐ No
- ☐ Yes, I accepted them/let them play out

N02. What are you doing right now?

- ☐ Work or school activity
- ☐ Leisure activity
- ☐ Socializing
- ☐ Traveling/commuting
- ☐ Personal errands/tasks/chores
- ☐ Other

N03. Are you currently interacting with anyone?

- ☐ No [skip to N05]
- ☐ Yes, one other person [show N04]
- ☐ Yes, two or more other people [show N04]

N04. With whom are you interacting?

- ☐ Close friend(s) or family
- ☐ Acquaintance(s)
- ☐ Stranger(s)
- ☐ No one

[END SURVEY]

REGULATION

Y01. Please think of ONE event where you tried to influence your feelings. What was your goal?

- ☐ Decrease or stop negative feelings.
- ☐ Decrease or stop positive feelings.
- ☐ Increase or create positive feelings.
- ☐ Increase or create negative feelings.

Y02. What did the situation involve? Check all that apply.

- ☐ Family/Close friends
- ☐ Romantic partner
- ☐ Strangers/Acquaintances
- ☐ Work/School
- ☐ Health
- ☐ Money
- ☐ Leisure/Recreation
- ☐ Other

Y03. In this event, did you SELECT to enter or avoid a situation to influence your feelings?

- ☐ Yes [if selected, show Y04]
- ☐ No [if selected, skip to Y05]

Y04. You said that you SELECTED a situation. Did you:

- ☐ Avoid or leave a negative situation?
- ☐ Enter or seek out a positive situation?
- ☐ Enter or seek out a negative situation?

Y05. In this event, did you TAKE ACTION to change a situation to influence your feelings?

- ☐ Yes [if selected, show Y06]
- ☐ No [if selected, skip to Y07]

Y06. You said that you TOOK ACTION. Did you:

- ☐ Do or say something that would make the situation less negative?
- ☐ Do or say something that would make the situation more positive?
- ☐ Do or say something that would make the situation more negative?

Y07. In this event, did you SHIFT YOUR ATTENTION to influence your feelings?

☐ Yes [if selected, show Y08]

☐ No [if selected, skip to Y09]

Y08. You said that you SHIFTED YOUR ATTENTION. Did you:

☐ Ignore or distract yourself from the negative aspects of your environment?

☐ Pay attention to the positive aspects of your environment?

☐ Pay attention to the negative aspects of your environment?

Y09. In this event, did you CHANGE YOUR THINKING to influence your feelings?

☐ Yes [if selected, show Y10]

☐ No [if selected, skip to Y11]

Y10. You said that you CHANGED YOUR THINKING. Did you:

☐ Distance yourself or analyze the situation objectively, without emotion?

☐ Think about the positive aspects or consequences of the situation?

☐ Think about the negative aspects or consequences of the situation?

Y11. In this event, did you CHANGE YOUR EMOTIONAL EXPRESSION to influence your feelings?

☐ Yes [if selected, show Y12]

☐ No [if selected, skip to Y13]

Y12. You said that you CHANGED YOUR EMOTIONAL EXPRESSION. Did you:

☐ Hide the expression of the emotion you were feeling?

☐ Put on a smile even though you felt negative?

☐ Intentionally express or exaggerate your expressions?

Y13. BEFORE trying to change your emotions, how did you feel?

Very negative	Negative	A little negative	Neutral	A little positive	Positive	Very positive
1	2	3	4	5	6	7

Y14. AFTER trying to change your emotions, how did you feel?

Very negative	Negative	A little negative	Neutral	A little positive	Positive	Very positive
1	2	3	4	5	6	7

[END SURVEY]

Data Cleaning

Participants. One participant was excluded because they fell well outside of the age range (age=88, recruitment criteria ages 20-80). Those with fewer than 20% valid responses were also excluded (*N*=16; 5 YA, 9 MA, 3 OA). Two participants were extreme outliers in number of surveys submitted (1 YA with 218 submissions, 1 OA with 178 submissions). After data cleaning, two additional participants were outliers in number of valid surveys (1 YA with 94 surveys—and about half without timestamps meaning survey lag could not be determined—and 1 MA with 109 surveys). These participants were excluded. In total, 5 YAs, 10 MAs, and 5 OAs were excluded).

Surveys. Of all 8739 surveys submitted, 799 (9.1% of surveys) were excluded from participants who were excluded for reasons explained in the main text. Of these, 614 came from participants who submitted too many surveys, 104 from those who recorded less than 10, 38 from participants who experienced technical problems, and 43 from the participant who was outside of the age range.

Within the 7938 surveys, 74 duplicate surveys were deleted. During the intake session, participants were told that surveys must be at least 30 minutes apart. Data were marked if they were submitted within 30 minutes of the previous report (*N*=664, 8.4% of surveys). Some of these were likely mistakes. Others occurred within cramming sessions, in which participants completed four or more surveys within a 20-minute period.

Mistakes. Because there was no “back” button on the app, and several participants had indicated that they had completed second or third surveys to correct mistakes, we examined all cases within 5 minutes of the previous survey. Of these, 67 were possible “corrections” where either a) the previous survey was partial, indicating the participant had closed the survey and began a new one, and/or b) all responses except one were identical to the previous. The clear

majority of these occurred within 1 minute of completing the previous survey (83%, *N*=59); all occurred within 3 min. (maximum 2 min. 33s). Because of the inherent ambiguity of these data, both mistakes (*N*=75) and corrections (*N*=67) were removed (total excluded = 142).

Cramming. Of those with lags less than 30 minutes, 95 were labeled as "cramming," which we defined as submitting four or more surveys within a 20-minute period. To be conservative, we excluded all surveys associated with cramming sessions, even if the first instance occurred more than 30 minutes after the previous survey (total excluded = 117).

Besides mistakes and cramming, 499 were completed within 30 minutes of the previous survey and were excluded, leaving 7106 valid surveys.

Table S3: *Proportion of Characteristics Endorsed in of Non-Regulatory Episodes*

Question	YA	MA	OA	All
	Means (SD) of Proportion Scores			
Had no emotion[a]	.66 (.27)	.66 (.27)	.74 (.24)	.69 (.26)
Accepted emotion[a]	.34 (.27)	.34 (.27)	.26 (.24)	.31 (.26)
Doing work[b]	.23 (.22)	.15 (.22)	.10 (.16)	.16 (.21)
Doing leisure[b]	.34 (.23)	.29 (.23)	.53 (.25)	.39 (.25)
Socializing[b]	.12 (.13)	.12 (.14)	.06 (.08)	.10 (.12)
Traveling[b]	.13 (.12)	.11 (.17)	.08 (.10)	.10 (.13)
Personal tasks[b]	.16 (.15)	.16 (.17)	.18 (.19)	.17 (.17)
Doing other[b]	.15 (.16)	.27 (.29)	.14 (.16)	.19 (.22)
Interacting[a]	.44 (.31)	.44 (.30)	.29 (.27)	.39 (.30)
w/close others[bc]	.24 (.16)	.20 (.20)	.16 (.17)	.20 (.18)
w/acquaintances[bc]	.09 (.13)	.09 (.10)	.05 (.07)	.07 (.10)
w/strangers[bc]	.03 (.05)	.04 (.09)	.02 (.05)	.03 (.07)
Total sit sel ppl.	.23 (.27)	.21 (.26)	.11 (.18)	.18 (.25)
Avoided neg. ppl.[b]	.08 (.16)	.15 (.24)	.06 (.16)	.09 (.20)
Sought pos. ppl.[b]	.13 (.17)	.08 (.13)	.05 (.08)	.09 (.14)
Sought neg. ppl.[b]	.02 (.04)	.01 (.03)	.00 (.01)	.01 (.03)
Total sit sel act.	.21 (.27)	.16 (.26)	.13 (.21)	.17 (.25)
Avoided neg. act.[b]	.07 (.14)	.11 (.22)	.03 (.08)	.07 (.16)
Sought pos. act.[b]	.12 (.17)	.07 (.16)	.10 (.20)	.09 (.18)
Sought neg. activ.[b]	.02 (.040	.01 (.06)	.01 (.02)	.01 (.04)

Note. Proportions are a function of the number of surveys in which participants saw and responded to the question. [a] Forced choice questions in which participants could choose only one answer. [b] Checkbox questions in which participants could choose as many answers as applied. [c] Participants only saw the "who are you interacting with" question if they indicated they were interacting with one or more people. Sit sel = situation selection; ppl = people; act. = activity; neg = negative; pos = positive. YA N=48, MA N=49, OA N=48.

What were participants' goals for emotion regulation?

Table S4: *Average Frequency of Regulatory Goals During Regulation Episodes*

Goal	YA	MA	OA	All
Decrease Negative	.45 (.25)	.50 (.29)	.36 (.24)	.43 (.27)
Decrease Positive	.07 (.15)	.06 (.13)	.01 (.01)**	.04 (.12)
Increase Positive	.56 (.25)	.53 (.27)	.66 (.23)	.58 (.25)
Increase Negative	.04 (.07)	.03 (.07)	.01 (.03)*	.03 (.06)
Effect	*F*	df	*p*	η_p^2
Decrease Negative	3.80	2, 146	.025	.049
Decrease Positive	4.18	2, 146	.017	.054
Increase Positive	3.73	2, 146	.026	.049
Increase Negative	2.76	2, 146	.066	.036

Note. * differs from YA group at $p < .01$, ** differs from YA group at $p < .01$.

In what contexts did participants regulate their emotion?

Table S5: *Proportion of Regulatory Contexts Across Age Groups*

Context	YA	MA	OA	All
Family/Friends	.33 (.22)	.35 (.27)	.33 (.23)	.34 (.24)
Romantic Partner	.17 (.21)	.23 (.31)	.05 (.10)**	.15 (.23)
Non-Close Others	.12 (.14)	.13 (.17)	.15 (.13)	.13 (.14)
Work	.26 (.19)	.15 (.21)**	.16 (.20)*	.19 (.20)
Health	.10 (.14)	.13 (.19)	.14 (.20)	.13 (.18)
Money	.09 (.12)	.18 (.28)*	.09 (.16)	.12 (.20)
Leisure	.18 (.18)	.21 (.24)	.27 (.22)	.22 (.22)*
Other	.08 (.11)	.19 (.23)**	.19 (.19)**	.15 (.19)
Effect	F	df	p	η_p^2
Family/Friends	0.16	2, 146	.854	.002
Romantic Partner	8.30	2, 146	<.001	.102
Non-Close Others	0.65	2, 146	.524	.009
Work	4.60	2, 146	.012	.059
Health	0.59	2, 146	.554	.009
Money	3.37	2, 146	.037	.044
Leisure	2.11	2, 146	.125	.028
Other	5.52	2, 146	.005	.070

Table S6: *Descriptive Statistics for Age x Strategy and Age x Tactic ANOVA*

Outcome	YA	MA	OA	All
Aggregated by Strategy Item				
Situation Selection	.70 (.26)	.62 (.27)	.78 (.24)	.70 (.26)
Situation Modification	.66 (.23)	.71 (.26)	.79 (.21)	.72 (.24)
Attentional Deploy.	.60 (.24)	.64 (.29)	.72 (.26)	.65 (.27)
Cognitive Change	.57 (.23)	.62 (.28)	.66 (.30)	.62 (.27)
Response Modulation	.34 (.22)	.41 (.29)	.40 (.29)	.39 (.27)
Aggregated by Tactic Type				
Decrease negative aspects	.20 (.14)	.25 (.20)	.18 (.15)	.21 (.17)
Increase positive aspects	.33 (.15)	.33 (.18)	.41 (.16)	.36 (.17)
Engage negative aspects	.06 (.06)	.05 (.05)	.05 (.05)	.05 (.06)

Note. Significant effects indicate the age group significantly differed from the younger adult group: * p <.05, ** p < .01, *** p < .001.

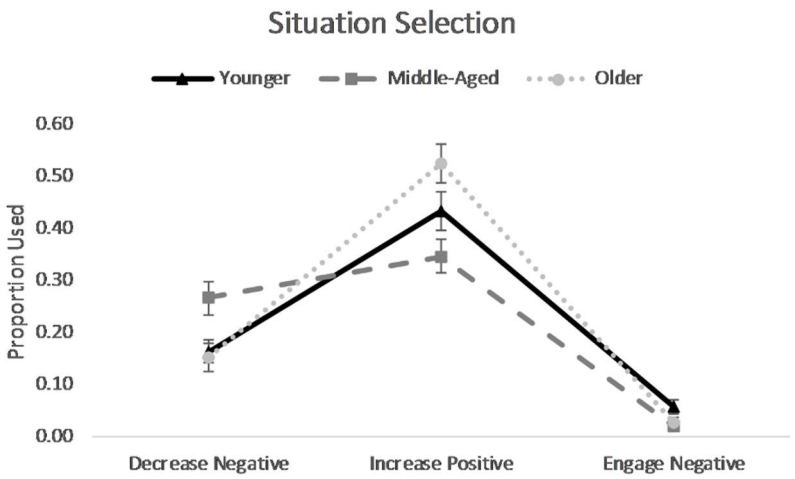
Table S7: *Full Results of Age x Strategy x Tactic ANOVA*

Effect	*F*	df	*p*	η_p^2
Age	0.87	2, 144	.422	.012
Strategy	46.44	3.40, 488.93	<.001	.244
Age x Strategy	0.85	6.79, 488.93	.542	.012
Tactic	202.75	1.58, 228.01	<.001	.585
Age x Tactic	3.47	3.17, 228.01	.015	.046
Strategy x Tactic	44.99	5.81, 836.06	<.001	.238
Age x Strategy x Tactic	4.38	11.61, 836.06	<.001	.057

Alternative Simple Effects for Three-Way Interaction

Table S8. *Tactic x Age for each Strategy*

Effect	*F*	df	*p*	η_p^2
Situation Selection				
Age	0.74	2, 146	.480	.010
Tactic	162.37	1.51, 219.81	<.001	.527
Age x Tactic	8.15	3.01, 219.81	<.001	.100
Situation Modification				
Age	1.45	2, 145	.238	.020
Tactic	212.65	1.55, 223.99	<.001	.595
Age x Tactic	5.22	3.09, 223.99	.001	.067
Attentional Deployment				
Age	0.57	2, 145	.572	.008
Tactic	113.40	1.60, 231.29	<.001	.439
Age x Tactic	3.87	3.19, 231.29	.009	.051
Cognitive Change				
Age	0.41	2, 145	.666	.006
Tactic	79.69	1.55, 225.04	<.001	.355
Age x Tactic	1.25	3.10, 225.04	.291	.017
Response Modulation				
Age	0.96	2, 144	.387	.013
Tactic	7.93	1.93, 263.05	<.001	.052
Age x Tactic	0.63	3.65, 263.05	.631	.009


Situation Selection
Younger
Middle-Aged
Older
Proportion Used
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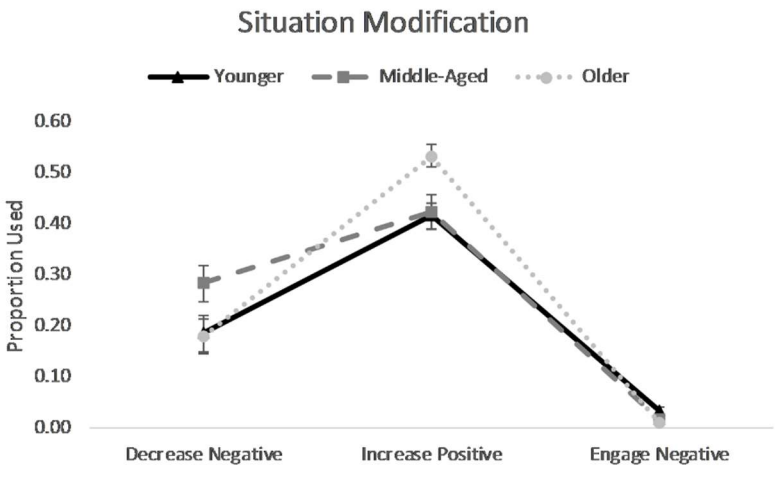
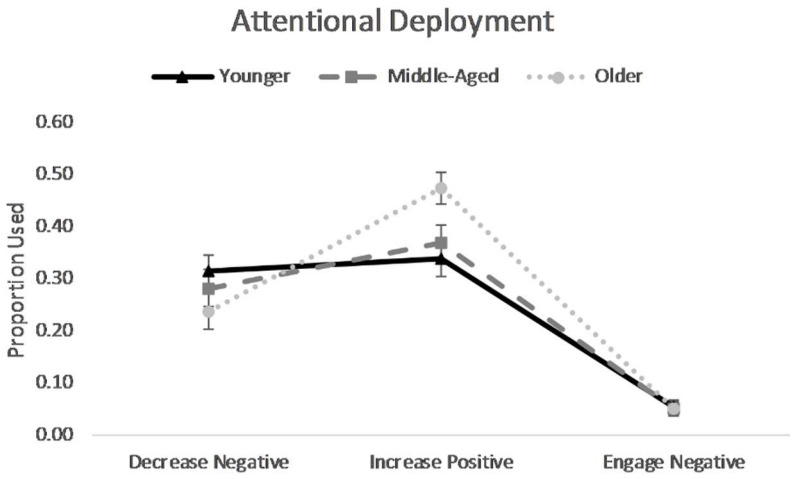
0.50
0.40
0.30
0.20
0.10
0.00
Decrease Negative
Increase Positive
Engage Negative


Situation Modification
Younger
Middle-Aged
Older
Proportion Used
0.60
0.50
0.40
0.30
0.20
0.10
0.00
Decrease Negative
Increase Positive
Engage Negative


Attentional Deployment
Younger
Middle-Aged
Older
Proportion Used
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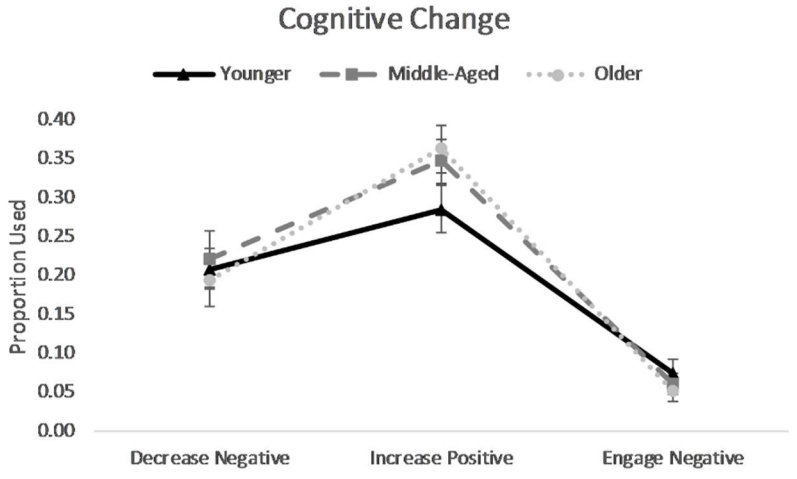
0.50
0.40
0.30
0.20
0.10
0.00
Decrease Negative
Increase Positive
Engage Negative


Cognitive Change
Younger
Middle-Aged
Older
Proportion Used
0.40
0.35
0.30
0.25
0.20
0.15
0.10
0.05
0.00
Decrease Negative
Increase Positive
Engage Negative

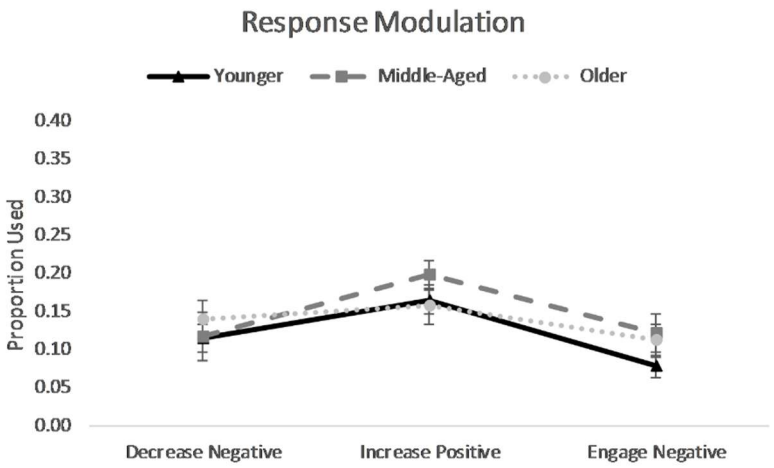
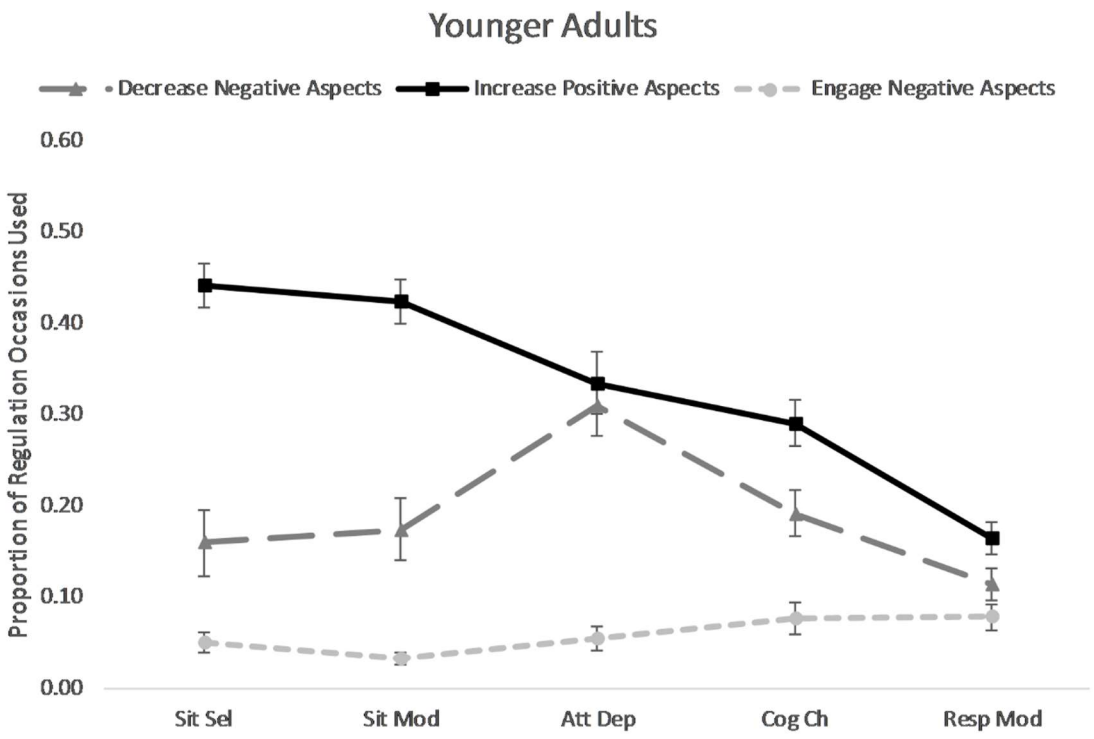
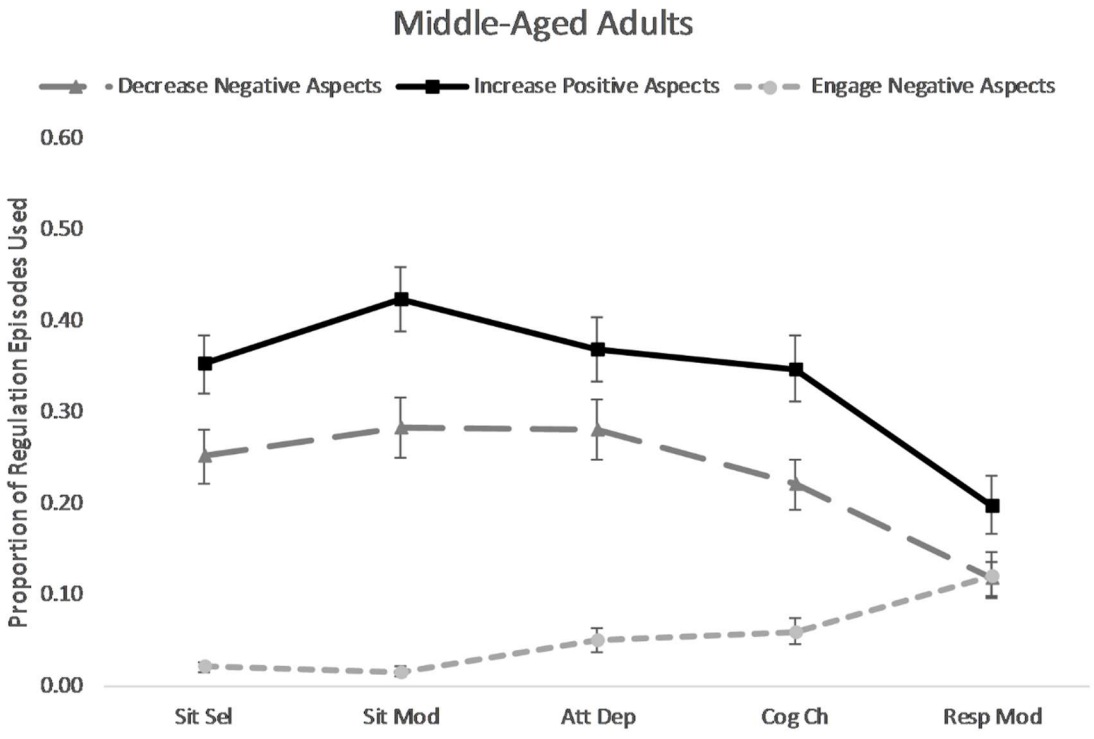
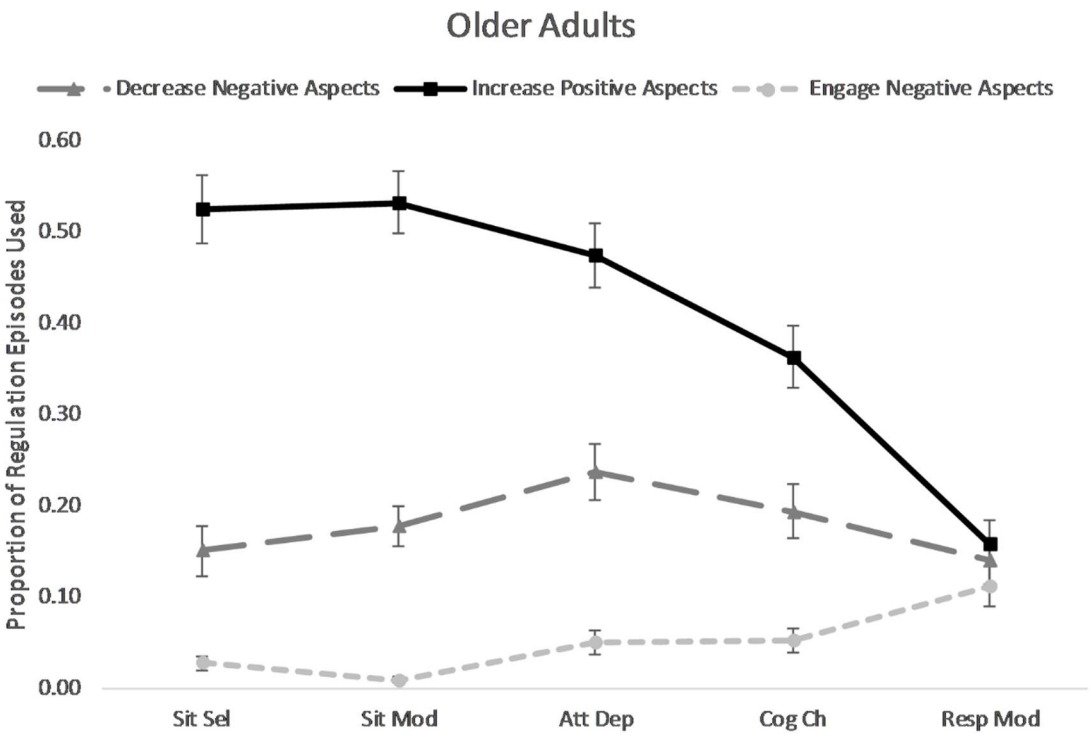

Response Modulation
Younger
Middle-Aged
Older
Proportion Used
0.40
0.35
0.30
0.25
0.20
0.15
0.10
0.05
0.00
Decrease Negative
Increase Positive
Engage Negative

Table S9. *Tactic x Strategy for each Age Group*

Effect	*F*	df	*p*	η_p^2
Younger Adults				
Strategy	14.81	2.80, 131.39	<.001	.240
Tactic	62.34	1.58, 74.14	<.001	.570
Strategy x Tactic	19.50	5.34, 251.13	<.001	.393
Middle-Aged Adults				
Strategy	14.62	3.26, 156.51	<.001	.233
Tactic	54.82	1.75, 84.15	<.001	.533
Strategy x Tactic	10.91	4.68, 224.64	<.001	.185
Older Adults				
Strategy	18.54	3.20, 156.74	<.001	.275
Tactic	92.37	1.41, 69.06	<.001	.653
Strategy x Tactic	23.76	5.77, 282.94	<.001	.327


Younger Adults
Decrease Negative Aspects
Increase Positive Aspects
Engage Negative Aspects
Proportion of Regulation Occasions Used
0.60
0.50
0.40
0.30
0.20
0.10
0.00
Sit Sel
Sit Mod
Att Dep
Cog Ch
Resp Mod


Middle-Aged Adults
Decrease Negative Aspects
Increase Positive Aspects
Engage Negative Aspects
Proportion of Regulation Episodes Used
0.60
0.50
0.40
0.30
0.20
0.10
0.00
Sit Sel
Sit Mod
Att Dep
Cog Ch
Resp Mod


Older Adults
Decrease Negative Aspects
Increase Positive Aspects
Engage Negative Aspects
Proportion of Regulation Episodes Used
0.60
0.50
0.40
0.30
0.20
0.10
0.00
Sit Sel
Sit Mod
Att Dep
Cog Ch
Resp Mod

How many strategies and tactics did participants tend to use in each episode?

Table S10. *Episode-Level Average Numbers of Strategies and Tactics Used Per Episode*

Sum of	Possible	Mean	SD	Min.	Max.
Strategies	5	3.25	1.44	0	5
Tactics	18	3.64	1.94	0	14
Situation Selection Tactics	4	0.82	0.53	0	3
Situation Modification Tactics	4	0.85	0.58	0	3
Attentional Deployment Tactics	3	0.75	0.60	0	3
Cognitive Change Tactics	4	0.77	0.72	0	4
Response Modulation Tactics	3	0.44	0.56	0	3
Increasing Positive Aspects	5	1.97	1.48	0	5
Decreasing Negative Aspects	5	1.03	1.24	0	5
Engaging Negative Aspects	5	0.32	0.65	0	5

Were there age differences in number of strategies and tactics used within episodes?

Table S11. *Person-Level Average Numbers of Strategies and Tactics Used Per Episode*

Outcome	YA	MA	OA	All
Strategies	2.87 (.83)	3.01 (1.16)	3.34 (.97)*	3.08 (1.01)
Tactics	3.31 (1.18)	3.49 (1.56)	3.49 (1.13)	3.39 (1.30)
Situation Selection Tactics	.78 (.31)	.67 (.32)	.79 (.27)	.75 (.30)
Situation Modification Tactics	.77 (.28)	.81 (.36)	.93 (.27)	.80 (.31)
Attentional Deployment Tactics	.69 (.34)	.69 (.36)	.74 (.28)	.71 (.33)
Cognitive Change Tactics	.74 (.43)	.73 (.44)	.71 (.34)	.72 (.40)
Response Modulation Tactics	.35 (.23)	.44 (.34)	.41 (.30)	.40 (.29)
Increasing Positive Aspects	1.71 (.74)	1.69 (.90)	2.05 (.81)*	1.82 (.83)
Decreasing Negative Aspects	.91 (.62)	1.15 (.86)	.98 (.75)	.98 (.75)
Engaging Negative Aspects	.31 (.32)	.27 (.28)	.24 (.27)	.27 (.29)

Note. None of the one-way ANOVA were significant at $p < .05$. * Two pairwise contrasts between younger and older adults were significant at $p < .05$.

Was the number of strategies or tactics related to change in affect from before to after regulation?

Table S12. *Affect Change as a Function of Sums of Strategies and Tactics*

Outcome	Intercept	MA	OA	Sum	Sum*MA	Sum*OA
All strategies	1.19 (.10)***	-.48 (.14)**	-.32 (.14)*	.22 (.04)***	-.08 (.05)	-.06 (.06)
All Situation Selection	1.14 (.11)***	-.42 (.15)**	-.22 (.15)	.15 (.08)	-.13 (.11)	-.33 (.13)*
All Situation Modification	1.16 (.10)***	-.42 (.15)**	-.22 (.14)	.35 (.10)***	-.07 (.12)	-.06 (.14)
All Attentional Deployment	1.13 (.09)***	-.41 (.14)**	-.23 (.13)	.21 (.09)*	.05 (.14)	.22 (.15)
All Cognitive Change	1.13 (.09)***	-.40 (.15)**	-.20 (.14)	.18 (.08)*	.13 (.11)	.11 (.11)
All Response Modulation	1.13 (.10)***	-.42 (.15)**	-.21 (.14)	.18 (.08)*	-.04 (.11)	-.06 (.12)
All Tactics	1.17 (.10)***	-.41 (.15)**	-.23 (.14)	.15 (.03)***	-.31 (.05)	-.02 (.05)
All Positive-Increasing Tactics	1.16 (.10)***	-.47 (.15)*	-.24 (.14)	.15 (.05)**	.01 (.07)	-.03 (.07)
All Negative-Decreasing Tactics	1.14 (.10)***	-.42 (.15)**	-.22 (.14)	.14 (.05)**	-.12 (.06)*	-.10 (.06)
All Negative-Engaging Tactics	1.11 (.10)***	-.40 (.15)**	-.21 (.14)	-.08 (.10)	-.08 (.17)	.00 (.14)

Note. Each row represents a separate multilevel model. Use of more overall strategies and overall tactics were associated with greater change in affect. Use of more situation modification, attentional deployment, cognitive change, and response modulation were

associated with greater changes in affect (more positive affect from before to after regulation). Use of more tactics that increased positive aspects of the situation or experience, and use of more tactics that decreased negative aspects, were both associated with greater change in affect. The number of tactics aimed at decreasing negative aspects of the situation or experience was not associated with affect change for middle-aged adults. The number of situation selection tactics used was not associated with affect change for older adults.

* p <.05, ** p < .01, *** p < .001.

How were the strategies correlated within episodes?

Table S13. *Episode-level correlations among emotion regulation strategies*

	Situation Selection	Situation Modification	Attentional Deployment	Cognitive Change	Response Modulation
Sit. Sel.	1.00	**0.30**	0.16	0.13	0.11
Sit. Mod.		1.00	**0.31**	**0.27**	0.17
Att. Dep.			1.00	**0.44**	**0.25**
Cog. Change				1.00	**0.29**
Resp. Mod.					1.00

Note. Correlations above |.20| are bolded.

How were the tactics correlated within episodes?

Table S14. *Episode-Level Correlations Among Emotion Regulation Tactics*

	1 SS Pos	2 SS Avd	3 SS Neg	4 SM Pos	5 SM Lss	6 SM Neg	7 AD Pos	8 AD Dis	9 AD Neg	10 CC Pos	11 CC Det	12 CC Neg	13 RM Pos	14 RM Sup	15 RM Expr
2	**-.24**														
3	-.14	-.10													
4	**.41**	-.11	-.09												
5	-.07	**.30**	.04	**-.21**											
6	-.09	-.02	**.24**	-.12	-.05										
7	**.25**	-.09	-.09	**.29**	.00	-.07									
8	-.12	**.27**	-.02	-.10	**.24**	-.04	-.22								
9	-.09	.03	.18	-.09	.06	.16	-.11	-.08							
10	**.24**	-.06	-.06	**.30**	-.03	-.08	**.37**	-.04	-.05						
11	-.08	**.26**	-.02	-.02	**.22**	.00	.01	**.28**	.02	-.09					
12	-.05	.07	.10	-.01	.08	.07	.01	.11	**.28**	-.03	.04				
13	.02	.08	.00	.08	.07	-.05	.13	.09	-.02	.14	.07	.05			
14	-.05	.17	.04	-.05	.15	-.02	.02	.18	.02	.00	**.20**	.04	.00		
15	.04	-.04	.05	.09	-.03	.09	.09	-.06	.10	.11	-.05	.08	-.11	-.12	

Note. Correlations above |.20| are bolded. SS = Situation Selection, SM = Situation Modification, AD = Attentional Deployment, CC = Cognitive Change, RM = Response Modulation

Which tactics tended to co-occur within people?

Table S15. *Person-level exploratory principal components analysis on emotion regulation tactic use*

	Factor 1	Factor 2	Factor 3	Factor 4	Factor 5
AD Distract Negative	.828				
SS Avoid Negative	.817				
CC Detached Reappraisal	.811				
RM Suppression	.720				
SM Less Negative	.646				
RM Masking	.482				
SM More Positive		.822			
AD Attend to Positive		.814			
CC Positive Reappraisal		.798			
SS Seek Positive		.729			
AD Attend to Negative			.763		
CC Negative Focus			.708		
CC Accept Emotions			.588	.438	
RM Express Emotions			.565		
SS Stay in Situation				.754	
SM Accept Situation	.465			.750	
SS Seek Negative					.754
SM More Negative					.672

Note. Only factor loadings above .40 are shown. Factors indicate that people who used one tactic within the grouping more frequently also tended to use the others within the grouping, aggregated across episodes.

Which strategies tended to co-occur within episodes?

Table S16. *Episode-level exploratory principal components analysis on emotion regulation tactic use*

	Factor 1	Factor 2	Factor 3	Factor 4	Factor 5
AD Attend to Positive	-.741				
CC Positive Reappraisal	-.702				
SM More Positive	-.603				
SS Seek Positive	-.468			-.452	
RM Mask with Positive	-.409				
SS Avoid Negative		.668			
SM Less Negative		.631			
AD Distract Negative		.620			
CC Detached Reappraisal		.613			
RM Suppress Expression		.465			
RM Express Emotion			.583		
CC Negative Focus			.577		
AD Attend to Negative			.530		.428
SM Accept Situation				.685	
CC Accept Emotion				.639	
SS Stay in Situation				.546	
SS Seek Negative					.700
SM More Negative					.631

Note. Only factor loadings above .40 are shown. Factors indicate that across people, in episodes in which one tactic within the grouping was used, the other tactics within the group also tended to be used.

What was the effectiveness of strategies on affect change when controlling for use of multiple strategies?

Table S17. *Effectiveness of Multiple Emotion Regulation Strategies within Episodes*

Effect	Coefficient	*t*	df	*p*
Intercept	0.47 (.15)	3.17	142	.002**
Main Effect MA	-0.19 (.20)	-0.95	142	.344
Main Effect OA	-0.00 (.22)	-0.02	142	.985
Situation Selection	0.17 (.09)	1.83	2359	.067
MA x SS	-0.27 (.12)	-2.19	2359	.020*
OA x SS	-0.47 (.14)	-3.25	2359	.001**
Situation Modification	0.34 (.11)	3.12	2359	.002**
MA x SM	-0.09 (.16)	-0.58	2359	.561
OA x SM	-0.05 (.15)	-0.37	2359	.713
Attentional Deployment	0.14 (.10)	1.46	142	.147
MA x AD	-0.04 (.17)	-0.22	142	.825
OA x AD	0.19 (.15)	1.23	142	.221
Cognitive Change	0.25 (.09)	2.56	2359	.010*
MA x CC	0.07 (.13)	0.50	2359	.618
OA x CC	0.04 (.13)	0.34	2359	.734
Response Modulation	0.18 (.10)	1.93	142	.056
MA x RM	-0.12 (.13)	-0.90	142	.371
OA x RM	-0.18 (.13)	-1.37	142	.172

Note. Predictors were entered into a single multilevel model. When controlling for all other strategies, situation modification and cognitive change were uniquely related to greater change in affect from before to after regulation. When controlling for other strategies, situation selection was less effective for both middle-aged and older adults, compared to younger adults.

What was the effectiveness on affect change when controlling for use of multiple tactics?

Table S18. *Effectiveness of Multiple Emotion Regulation Tactics that Introduced or Increased Positive Aspects of the Situation or Experience*

Effect	Coefficient	*t*	df	*p*
Intercept	.66 (.07)	8.84	143	<.001***
Seek Positive Situations	.04 (.05)	.87	2278	.383
Situation Modification	.21 (.06)	3.77	143	<.001***
Attentional Deployment	.10 (.06)	1.74	143	.085
Positive Reappraisal	.15 (.05)	3.34	2278	<.001***
Masking	.23 (.07)	3.11	2278	.002**

Note. Predictors were entered into a single multilevel model. When controlling for all other tactics that introduced or increased positive aspects of the situation or experience, making situations more positive, positive reappraisal, and masking emotions with a smile were related to change in affect (more positive affect) from before to after regulation. There were no interactions with age (p's > .10).

Table S19. *Effectiveness of Multiple Emotion Regulation Tactics that Avoided or Decreased Negative Aspects of the Situation or Experience*

Effect	Coefficient	*t*	df	*p*
Intercept	0.85 (.07)	13.79	143	<.001***
Avoid Negative Situations	-0.16 (.06)	-2.52	143	.013*
Situation Modification	0.14 (.06)	2.45	2135	.015*
Attentional Deployment	0.09 (.06)	1.48	2135	.138
Detached Reappraisal	0.19 (.07)	2.82	143	.006**
Expressive Suppression	-0.02 (.08)	-0.22	143	.828

Note. When controlling for all other tactics that decreased or avoided negative aspects of the situation or experience, situation modification and detached reappraisal were significantly related to increases in positive affect, whereas avoiding negative situations was associated with increases in negative affect. No interactions with age were significant (p's > .05).

* p <.05, ** p < .01, *** p < .001.

Table S20. *Effectiveness of Multiple Negative-Engaging Emotion Regulation Tactics on Affect Change*

Effect	Coefficient	*t*	df	*p*
Intercept	0.92 (.06)	15.04	143	<.001***
Seek Negative Situations	-0.14 (.18)	-0.80	143	.426
Situation More Negative	-0.48 (.22)	-2.22	143	.028*
Attend to Negative	-0.10 (.15)	0.66	2135	.509
Focus on Negative	-0.15 (.12)	-1.24	143	.217
Express Emotions	0.02 (.10)	0.26	2135	.796

Note. When controlling for all other tactics that engaged with aspects of the situation or experience only situation modification was related to affect change from before to after regulation. No interactions with age were significant (*p*'s > .25).

* p <.05, ** p < .01, *** p < .001.

Table S21. *Effectiveness of Multiple Emotion Regulation Tactics Within Strategy on Affect Change*

Effect	Coefficient	*t*	df	*p*
		Situation Selection		
Intercept	0.89 (.07)	12.40	144	<.001***
Avoid Negative	-0.04 (.07)	-0.52	144	.602
Seek Positive	0.11 (.05)	1.97	144	.051
Seek Negative	-0.28 (.18)	-1.49	144	.137
Stay in Situation	-0.19 (.13)	-1.46	144	.146
		Situation Modification		
Intercept	0.67 (.07)	9.48	144	<.001***
Less Negative	0.26 (.07)	4.00	144	<.001***
More Positive	0.37 (.07)	5.34	144	<.001***
More Negative	-0.32 (.23)	-1.46	144	.177
Accept Situation	0.19 (.09)	2.13	144	.035*
		Attentional Deployment		
Intercept	0.70 (.07)	10.40	144	<.001***
Distract from Negative	0.25 (.07)	3.71	144	<.001***
Attend to Positive	0.33 (07)	4.84	144	<.001***
Attend to Negative	-0.13 (.15)	-0.89	144	.373
		Cognitive Change		
Intercept	0.72 (.07)	11.62	144	<.001***
Detached Reappraisal	0.27 (.07)	3.97	2359	<.001***
Positive Reappraisal	0.33 (.06)	6.68	144	<.001***

Focus on Negative	-0.10 (.13)	-0.78	144	.435
Accept Emotions	0.19 (.07)	2.64	2359	.008**
	Response Modulation			
Intercept	0.85 (.07)	13.56	143	<.001***
Suppress Expression	0.05 (.07)	0.68	143	.499
Mask with Positive	0.28 (.08)	3.69	143	<.001***
Express Emotion	0.03 (.10)	0.35	143	.726

Note. All tactics within the strategy were entered simultaneously. Each strategy was tested separately; therefore, number of predictors ranged from 3 to 4. None of the age interactions were significant for situation selection (p's > .05), situation modification (p's > .10), attentional deployment (p's > .10), cognitive change (p's > .15), or response modulation (p's > .20).

* p <.05, ** p < .01, *** p < .001.

Age as a Continuous Predictor

Table S22. *Results of Multiple Regression with Age as a Continuous Predictor of Goals and Regulation (Linear & Quadratic Effects)*

	Age β	*t*	*p*	Age^2 β	*t*	*p*
Affect Now	.221*	2.62	.010	.056	0.67	.507
Regulation	.013	0.15	.879	.073	0.85	.397
Goal: Down negative	-.173*	-2.04	.043	-.164	-1.93	.056
Goal: Down positive	-.236**	-2.80	.007	.016**	0.19	.006
Goal: Up positive	.202*	2.38	.019	.127	1.50	.136
Goal: Up negative	-.209*	-2.47	.015	.011	0.13	.899
Situation Selection	.165	1.95	.053	.184*	2.17	.032
Avoid negative	-.099	-1.18	.241	-.248**	-2.95	.004
Seek positive	.226**	2.70	.008	.226**	2.70	.008
Seek negative	-.115	-1.37	.173	.185*	2.19	.030
Stay	-.058	-0.68	.497	.210*	2.49	.014
Situation Modification	.191*	2.23	.027	-.015	-0.17	.864
Less negative	-.052	-0.61	.542	-.195*	-2.28	.024
More positive	.223*	2.62	.010	.074	0.87	.386
More negative	-.221*	-2.60	.010	-.016	-0.18	.854
Accept situation	-.073	-0.85	.397	.088	1.01	.313
Attention Deployment	.230**	2.71	.008	.086	1.02	.312
Distract	-.136	-1.58	.117	-.038	-0.44	.664
Toward positive	.281**	3.36	.001	.151	1.80	.073
Toward negative	-.006	-0.07	.946	.082	0.94	.349

Cognitive Change	.144	1.67	.097	.041	0.47	.637
Detached rea	-.051	-0.59	.557	-.037	-0.42	.673
Positive rea	.176*	2.05	.042	.014	0.16	.874
Negative focus	-.131	-1.51	.133	-.011	-0.13	.895
Accept emotions	-.113	-1.32	.188	.133	1.56	.121
Response Modulation	.087	1.00	.319	.053	0.61	.544
Suppression	.042	0.48	.631	.046	0.52	.602
Masking	-.006	-0.07	.941	-.031	-0.35	.725
Express	.101	1.16	.247	.024	0.28	.783

Note. Each row represents a separate multiple regression model.

* p <.05, ** p < .01, *** p < .001.

Table S23. *Results of Multilevel Linear Models with Age as a Continuous Predictor of Affect Change*

	Intercept	Age	Age^2	Regulation	Age x Reg	Age^2 x Reg
Affect Change	.924 (.058)***	-.002 (.003)	.0008 (.0002)***			
Situation Selection	.912 (.071)***	.002 (.004)	.0007 (.0003)*	.019 (.055)	-.005 (.004)	.0002 (.0003)
Avoid Negative	.945 (.059)***	-.002 (.003)	.0008 (.0002)***	-.051 (.071)	.003 (.005)	.0004 (.0003)
Seek Positive	.868 (.062)***	-.000 (.003)	.0009 (.0002)***	.145 (.056)*	-.005 (.003)	-.0003 (.0002)
Seek Negative	.929 (.058)***	-.002 (.003)	.0008 (.002)***	-.182 (.221)	.002 (.010)	.0009 (.0007)
Stay	.949 (.059)***	-.001 (.003)	.0008 (.0002)***	-.261 (.113)*	-.007 (.008)	.0005 (.0006)
Situation Modification	.628 (.075)***	-.003 (.004)	.0005 (.0003)	.397 (.068)***	.000 (.004)	.0004 (.0003)
Less Negative	.891 (.058)***	-.001 (.003)	.0007 (.0002)***	.184 (.056)**	-.003 (.004)	.0005 (.0002)*
More Positive	.800 (.063)***	.000 (.004)	.0009 (.0002)***	.283 (.064)***	-.005 (.004)	-.0001 (.0003)
More Negative	.933 (.058)***	-.002 (.003)	.0008 (.0002)***	-.442 (.228)	.004 (.013)	.0005 (.0008)
Accept Situation	.928 (.057)***	-.002 (.003)	.0008 (.0002)***	-.000 (.084)	.002 (.005)	-.0001 (.0004)
Attentional Deployment	.664 (.069)***	-.010 (.005)*	.0003 (.0003)	.349 (.074)***	.009 (.005)	.0006 (.0003)
Distract from Negative	.896 (.059)***	-.001 (.003)	.0007 (.0002)**	.924 (.056)	-.002 (.003)	.0005 (.0002)
Attend to Positive	.832 (.063)***	-.004 (.004)	.0008 (.0002)***	.217 (.064)***	.002 (.003)	-.0001 (.0002)
Attend to Negative	.929 (.056)***	-.003 (.003)	.0008 (.0002)***	-.289 (.150)	.009 (.010)	.0000 (.0001)
Cognitive Change	.667 (.059)***	-.006 (.003)	.0007 (.0002)**	.399 (.056)***	.004 (.003)	.0001 (.0002)

Detached Reappraisal	.890 (.058)***	-.001 (.003)	.0008 (.0002)***	.197 (.069)**	-.004 (.005)	-.0000 (.0003)
Positive Reappraisal	.929 (.056)***	-.003 (.003)	.0008 (.0002)***	-.289 (.150)	.009 (.010)	.0000 (.0007)
Negative Focus	.932 (.058)***	-.003 (.003)	.0008 (.0002)***	-.064 (.113)	.010 (.006)	.0006 (.0005)
Accept Emotions	.920 (.057)***	-.002 (.003)	.0008 (.0002)***	.054 (.073)	.002 (.004)	.0003 (.0003)
Response Modulation	.850 (.061)***	-.002 (.003)	.0009 (.0002)***	.182 (.055)**	.001 (.003)	-.0001 (.0002)
Expressive Suppression	.926 (.059)***	-.003 (.003)	.0008 (.0002)***	-.016 (.073)	.006 (.005)	.0002 (.0003)
Masking with Positive	.875 (.059)***	-.001 (.003)	.0008 (.0002)***	.273 (.077)***	-.001 (.004)	.0000 (.0003)
Express Negative	.992 (.058)***	-.002 (.003)	.0008 (.0002)***	.009 (.099)	-.004 (.005)	-.0002 (.0003)

Note. Each row represents a separate multilevel model. * p <.05, ** p < .01, *** p < .001.

Multiverse Analysis

Note. All analyses were conducted using a strict alpha level of .05. SS = situation selection, SM = situation modification, AD = attentional deployment, CC = cognitive change, RM = response modulation. POS = tactics that introduced or increased positive aspects of the situation or experience, NEU = tactics that avoided or decreased negative aspects, NEG = tactics that engaged with negative aspects. YA = younger adults, MA = middle-aged adults, OA = older adults. An equivalent sign (≈) indicates no significant difference, not statistical equivalence. Surveys in the data sets were filtered as follows:

A. The original data set from the first submission, which originally included suspected corrections and the first episode in a cramming session (if it occurred more than 30 minutes after the previous one).
B. **Reported in main manuscript**. Reflects more stringent exclusion criteria, as requested by reviewers, adding to the exclusion list both suspected mistakes and corrections, as well as all surveys associated with a cramming session.
C. Surveys valid according to Version B, but only complete surveys, in which participants saw and responded to the minimum questions one would see if one completed a survey (this differed between the regulation and no regulation branches and so was determined separately)
D. Surveys valid according to Version B but completed only within the first 10 days
E. Surveys valid according to Version B but only the first five surveys of the day
F. Surveys valid according to Version B but only the first five of the day, for the first 10 days (this meant that the maximum number of surveys was 50).
G. All surveys from included participants (including mistakes/corrections, cramming, those partial surveys, those completed within 30 minutes of the previous one)
H. All surveys from all participants, including those previously excluded.

Table S24. *Frequency of Regulation*

Analysis	Result	Conclusion
First Submission (A)	$F(2,146)=.26$, $p=.773$	No age differences
Main Manuscript (B)	$F(2,145)=.14$, $p=.870$	No age differences
Complete Only (C)	$F(2,145)=.25$, $p=.777$	No age differences
Within 10 Days (D)	$F(2,145)=.25$, $p=.247$	No age differences
First 5 Surveys of the Day (E)	$F(2,145)=.19$, $p=.830$	No age differences
Within both Time Parameters (F)	$F(2,145)=.24$, $p=.784$	No age differences
All Surveys from Valid Participants (G)	$F(2,145)=.24$, $p=.789$	No age differences
All Surveys from All Participants (H)	$F(2,166)=.24$, $p=.788$	No age differences

Table S25. *Age Differences in Strategy Use: 5 (Strategy) x 3 (Age Group) ANOVA)*

Analysis	Result	Contrasts/Conclusions
Main Effect of Strategy		
First Submission	$F(3.18, 456.43)=79.01$, $p<.001$, $\eta_p^2=.354$	SS ≈ SM > AD > CC > RM
Main Manuscript	$F(3.39, 453.81)=78.58$, $p<.001$, $\eta_p^2=.355$	SS ≈ SM > AD > CC > RM
Complete Only	$F(3.16, 452.51)=76.42$, $p<.001$, $\eta_p^2=.348$	SS ≈ SM > AD > CC > RM
Within 10 Days	$F(3.25,456.61)=72.40$, $p<.001$, $\eta_p^2=.336$	SS ≈ SM > AD ≈ CC > RM
First 5 Surveys of the Day	$F(3.15,450.68)=75.04$, $p<.001$, $\eta_p^2=.344$	SS ≈ SM > AD > CC > RM
Within both Time Parameters	$F(3.19,455.87)=70.96$, $p<.001$, $\eta_p^2=.332$	SS ≈ SM > AD ≈ CC > RM
All Surveys from Valid Participants	$F(3.17,456.65)=83.53$, $p<.001$, $\eta_p^2=.367$	SS ≈ SM > AD > CC > RM
All Surveys from All Participants	$F(3.21,522.82)=67.57$, $p<.001$, $\eta_p^2=.293$	SS ≈ SM > AD > CC > RM
Main Effect of Age		
First Submission	$F(2,144)=2.77$, $p=.066$, $\eta_p^2=.037$	No significant difference
Main Manuscript	$F(2,143)=2.85$, $p=.061$, $\eta_p^2=.038$	No significant difference
Complete Only	$F(2,143)=3.00$, $p=.053$, $\eta_p^2=.040$	No significant difference
Within 10 Days	$F(2,143)=3.48$, $p=.034$, $\eta_p^2=.046$	OA > YA
First 5 Surveys of the Day	$F(2,143)=3.31$, $p=.039$, $\eta_p^2=.045$	OA > YA

Within both Time Parameters	$F(2,143)=3.83$, $p=.024$, $\eta_p^2=.051$	OA > YA
All Surveys from Valid Participants	$F(2,144)=3.44$, $p=.035$, $\eta_p^2=.046$	OA > YA
All Surveys from All Participants	$F(2,163)=4.23$, $p< .016$, $\eta_p^2=.049$	OA > YA
Age x Strategy Interaction		
First Submission	$F(6.35, 457.43)=1.81$, $p=.092$, $\eta_p^2=.024$	No significant interaction
Main Manuscript	$F(6.35, 453.81)=1.79$, $p=.092$, $\eta_p^2=.024$	No significant interaction
Complete Only	$F(6.33,452.51)=1.82$, $p=.090$, $\eta_p^2=.025$	No significant interaction
Within 10 Days	$F(6.39,456.61)=1.71$, $p=.111$, $\eta_p^2=.023$	No significant interaction
First 5 Surveys of the Day	$F(6.30,450.68)=2.16$, $p=.043$, $\eta_p^2=.029$	SM, AD: OA > YA
Within both Time Parameters	$F(6.38,455.87)=2.03$, $p=.041$, $\eta_p^2=.028$	SM, AD: OA > YA
All Surveys from Valid Participants	$F(6.34,456.65)=1.48$, $p=.181$, $\eta_p^2=.020$	No significant interaction
All Surveys from All Participants	$F(6.52,522.82)=1.57$, $p=.149$, $\eta_p^2=.019$	No significant interaction

Table S26. *Age Differences in Tactic Use: 5 (Strategy) x 3 (Tactic Type) x 3 (Age Group) ANOVA*

Analysis	Result	Contrasts/Conclusions
Main Effect of Strategy		
First Submission	$F(3.37,481.45)=46.18$, $p<.001$, $\eta_p^2= .244$	SS ≈ SM ≈ AD > CC > RM
Main Manuscript	$F(3.38,479.68)=46.60$, $p<.001$, $\eta_p^2= .247$	SS ≈ SM ≈ AD > CC > RM
Complete Only	$F(3.37,479.12)=45.76$, $p<.001$, $\eta_p^2=.244$	SS ≈ SM ≈ AD > CC > RM
Within 10 Days	$F(3.36,477.09)=43.92$, $p<.001$, $\eta_p^2=.236$	SS ≈ SM ≈ AD > CC > RM
First 5 Surveys of the Day	$F(3.35,475.82)=44.71$, $p<.001$, $\eta_p^2=.239$	SS ≈ SM ≈ AD > CC > RM
Within both Time Parameters	$F(3.33,473.39)=42.96$, $p<.001$, $\eta_p^2=.232$	SS ≈ SM ≈ AD > CC > RM
All Surveys from Valid Participants	$F(3.36, 480.08)=49.72$, $p<.001$, $\eta_p^2=.258$	SS ≈ SM ≈ AD > CC > RM
All Surveys from All Participants	$F(3.55,499.99)=20.74$,$p<.001$, $\eta_p^2=.128$	SS ≈ SM ≈ AD > CC > RM
Main Effect of Tactic		
First Submission	$F(1.59, 227.46)=205.12$, $p<.001$, $\eta_p^2=.589$	Pos > Neu > Neg
Main Manuscript	$F(1.59, 226.26)=202.62$, $p<.001$, $\eta_p^2=.588$	Pos > Neu > Neg
Complete Only	$F(1.59, 226.38)=205.21$, $p<.001$, $\eta_p^2=.591$	Pos > Neu > Neg
Within 10 Days	$F(1.58,223.75)=206.72$, $p<.001$, $\eta_p^2=.593$	Pos > Neu > Neg
First 5 Surveys of the Day	$F(1.59,225.76)=205.80$, $p<.001$, $\eta_p^2=.592$	Pos > Neu > Neg

Within both Time Parameters	$F(1.57,223.02)=208.53$, $p<.001$, $\eta_p^2=.595$	Pos > Neu > Neg
All Surveys from Valid Participants	$F(1.60,228.61)=208.90$, $p<.001$, $\eta_p^2=.594$	Pos > Neu > Neg
All Surveys from All Participants	$F(1.54,217.05)=202.93$, $p<.001$, $\eta_p^2=.590$	Pos > Neu > Neg
Main Effect of Age		
First Submission	$F(2, 143)=.77$, $p=.463$, $\eta_p^2=.011$	No significant difference
Main Manuscript	$F(2, 142)=.75$, $p=.473$, $\eta_p^2=.010$	No significant difference
Complete Only	$F(2,142)=.68$, $p=.509$, $\eta_p^2=.009$	No significant difference
Within 10 Days	$F(2,142)=.71$, $p=.492$, $\eta_p^2=.010$	No significant difference
First 5 Surveys of the Day	$F(2,142)=.75$, $p=.476$, $\eta_p^2=.010$	No significant difference
Within both Time Parameters	$F(2,142)=.79$, $p=.456$, $\eta_p^2=.011$	No significant difference
All Surveys from Valid Participants	$F(2,143)=.91$, $p=.406$, $\eta_p^2=.013$	No significant difference
All Surveys from All Participants	$F(2,141)=2.20$, $p=.115$, $\eta_p^2=.030$	No significant difference
Age x Strategy Interaction		
First Submission	$F(6.73, 481.45)=0.78$, $p=.599$, $\eta_p^2=.011$	No significant interaction
Main Manuscript	$F(6.76, 479.68)=0.83$, $p=.561$, $\eta_p^2=.012$	No significant interaction
Complete Only	$F(6.75,479.12)=.86$, $p=.551$, $\eta_p^2=.012$	No significant interaction

Within 10 Days	$F(6.72,477.09)=.73$, $p=.639$, $\eta_p^2=.010$	No significant interaction
First 5 Surveys of the Day	$F(6.70,475.82)=1.00$, $p=.432$, $\eta_p^2=.014$	No significant interaction
Within both Time Parameters	$F(6.67,473.39)=.87$, $p=.524$, $\eta_p^2=.012$	No significant interaction
All Surveys from Valid Participants	$F(6.71,480.08)=.78$, $p=.597$, $\eta_p^2=.011$	No significant interaction
All Surveys from All Participants	$F(7.09,499.99)=1.19$, $p=.303$, $\eta_p^2=.017$	No significant interaction
Age x Tactic Interaction		
First Submission	$F(3.18, 227.46)=3.13$, $p=.024$, $\eta_p^2=.042$	Positive tactics: OAs > YAs
Main Manuscript	$F(11.61,824.71)=4.10$, $p<.001$, $\eta_p^2=.055$	Positive tactics: OAs > YAs
Complete Only	$F(3.19,226.38)=3.43$, $p=.016$, $\eta_p^2=.046$	Positive tactics: OAs > YAs
Within 10 Days	$F(3.15,223.75)=3.33$, $p=.019$, $\eta_p^2=.045$	Positive tactics: OAs > YAs
First 5 Surveys of the Day	$F(3.18,225.76)=3.10$, $p=.025$, $\eta_p^2=.042$	Positive tactics: OAs > YAs
Within both Time Parameters	$F(3.14,223.02)=3.05$, $p=.028$, $\eta_p^2=.041$	Positive tactics: OAs > YAs
All Surveys from Valid Participants	$F(3.20,228.61)=3.71$, $p=.011$, $\eta_p^2=.049$	Positive tactics: OAs > YAs
All Surveys from All Participants	$F(3.08,217.05)=1.41$, $p=.240$, $\eta_p^2=.020$	no significant age differences
Strategy x Tactic Interaction		

First Submission	$F(5.77, 825.39)=45.75$, $p<.001$, $\eta_p^2=.242$	POS > NEU > NEG for all except RM: Sup & Expr did not differ
Main Manuscript	$F(5.81, 824.71)=45.16$, $p<.001$, $\eta_p^2=.241$	Same
Complete Only	$F(5.77,819.57)=44.78$, $p<.001$, $\eta_p^2=.240$	Same
Within 10 Days	$F(5.80,823.94)=44.53$, $p<.001$, $\eta_p^2=.239$	Same
First 5 Surveys of the Day	$F(5.79,822.70)=43.85$, $p<.001$, $\eta_p^2=.236$	Same
Within both Time Parameters	$F(5.80,823.68)=43.06$, $p<.001$, $\eta_p^2=.233$	Same
All Surveys from Valid Participants	$F(5.76,823.87)=43.48$, $p<.001$, $\eta_p^2=.233$	Same
All Surveys from All Participants	$F(4.48,631.64)=22.62$, $p<.001$, $\eta_p^2=.138$	Same
Age x Strategy x Tactic Interaction		
First Submission	$F(11.54, 825.39)=4.17$, $p<.001$, $\eta_p^2=.055$	POS tactics held for SS, SM, and AD
Main Manuscript	$F(11.62, 824.71)=4.10$, $p<.001$, $\eta_p^2=.055$	POS tactics held for SS, SM, and AD
Complete Only	$F(11.54,819.57)=4.08$, $p<.001$, $\eta_p^2=.054$	POS tactics held for SM, AD
Within 10 Days	$F(11.61, 823.94)=3.53$, $p<.001$, $\eta_p^2=.047$	POS tactics held for SM, AD
First 5 Surveys of the Day	$F(11.59,822.70)=4.31$, $p<.001$, $\eta_p^2=.057$	POS tactics held for SM, AD
Within both Time Parameters	$F(11.60,823.68)=3.75$, $p<.001$, $\eta_p^2=.050$	POS tactics held for SM, AD

All Surveys from Valid Participants	$F(11.52,823.87)=4.19$, $p<.001$, $\eta_p^2=.055$	POS tactics held for SM, AD
All Surveys from All Participants	$F(8.96,631.64)=2.81$, $p=.003$, $\eta_p^2=.038$	No POS tactic age differences

Follow-Up One-Way ANOVA	
First Submission	SS pos, SM pos, AD pos OA > YA
	SS avd, SM less neg MA > YA
	SS neg, SM more neg YA > MA, OA
Main Manuscript	SS pos, SM pos, AD pos OA > YA
	SS avd, SM less neg MA > YA
	SS neg, SM more neg YA > MA, OA
Complete Only	SM pos, AD pos OA > YA (SS now marg sig)
	SS avd neg, SM less neg MA > YA
	SS seek neg, SM more neg YA > MA, OA
Within 10 Days	SM pos, AD pos OA > YA (SS now marg sig)
	SS avd neg, SM less neg MA > YA
	SS seek neg, SM more neg YA > MA, OA

First 5 Surveys of the Day	SM pos, AD pos OA > YA (SS now marg sig)
	SS avd neg, SM less neg MA > YA
	SS seek neg, SM more neg YA > MA, OA
Within both Time Parameters	SM pos, AD pos OA > YA (SS now marg sig)
	SS avd neg, SM less neg MA > YA
	SS seek neg, SM more neg YA > MA, OA
All Surveys from Valid Participants	SM pos, AD pos OA > YA (SS now marg sig)
	SS avd neg, SM less neg MA > YA
	SS seek neg, SM more neg YA > MA, OA
All Surveys from All Participants	Neu: MA > YA avoid neg, YA > OA distract
	Neg: YA > MA, OA seek neg & make more neg, YA > OA neg cog focus

Table S27. *Summary of Multiverse Analysis*

Effect	Conclusion
Frequency of regulation	There was never a significant effect of age on frequency of regulation.
Strategy Use: 5 x 3 ANOVA	
Main effect of strategy	The main effect of strategy was always significant at $p < .001$, with effect sizes around .33-.35. Situation selection and modification did not differ in any analyses, and were always more frequently used than the others. In some cases, attentional deployment was more frequently used than cognitive change, though this effect was not significant in all analyses. Response modulation was always used least frequently.
Main effect of age	A main effect of age emerged when examining surveys within expected time parameters, with OAs reporting more strategy use overall than YAs. Previous results had been non-significant with *p*-values > .07.
Strategy x age interaction	An interaction emerged when examining the first five surveys of each day, with OAs reporting more situation modification and attentional deployment than YAs. This effect did not otherwise emerge.
Tactic Use: 5 x 3 x 3 ANOVA	

Main effect of strategy	The main effect of strategy was always significant at $p < .001$. In all cases, situation selection, situation modification, and attentional deployment tactics were used more frequently than cognitive change, with response modulation tactics being the most rarely used.
Main effect of tactic	The main effect of tactic was always significant at $p < .001$. In all cases, people reported more frequent use of tactics that introduced or increased positive aspects of the situation or experience, and least frequent use of tactics that engaged with negative aspects, with those tactics that focused on avoiding or reducing negative aspects falling in the middle.
Main effect of age	The main effect of age was never significant, with *p*-values above .45.
Strategy x age interaction	The strategy x age interaction was never significant, with *p*-values over .40.
Tactic x age interaction	The tactic x age interaction was always significant at $p < .05$. In all cases, older adults (but not middle-aged) reported more use of tactics that increased positive aspects of the situation or experience, compared to younger adults.
Strategy x tactic interaction	The strategy x tactic interaction was always significant at $p < .001$. In all cases, positive-aspect increasing tactics were used more frequently than negative-aspect reducing, with negative-engaging tactics used the least, except for the strategy of response modulation, in

	which expression (engaging negative aspects) and suppression (reducing negative aspects) did not differ; both were used less frequently than masking (increasing positive aspects).
Strategy x tactic x age interaction	The interaction was always significant at $p < .001$. Older adults always used more positive situation modification and attentional deployment than younger adults; the age difference for situation selection was sometimes significant but more often not. For negative-decreasing tactics, MAs (but not OAs) always used more SS avoidance and SM making situations less negative than YAs. For negative-engaging tactics, YAs always used more SS seeking negative situations and SM making situations more negative than both MAs and OAs.