## Running head: NEGATIVE AGING ATTITUDES PREDICT GREATER REACTIVITY

Negative aging attitudes predict greater reactivity to daily stressors in older adults

Jennifer A. Bellingtier and Shevaun D. Neupert

Department of Psychology, North Carolina State University, Raleigh, NC, 27695, USA

This is a pre-copyedited, author-produced version of an article accepted for publication in *Journal of Gerontology: Psychological Sciences* following peer review. The version of record [Bellingtier, J. A., & Neupert, S. D. (2018). Negative aging attitudes predict greater reactivity to daily stressors in older adults. *Journal of Gerontology: Psychological Sciences*, 73(7), 1155-1159. https://doi.org/10.1093/geronb/gbw086] is available online at: https://doi.org/10.1093/geronb/gbw086.

Corresponding author: Jennifer A. Bellingtier, phone: 319-400-4869, fax: 919-515-1716, email: jabellin@ncsu.edu

NEGATIVE AGING ATTITUDES PREDICT GREATER REACTIVITY

Abstract

2

Objectives: In order to understand conflicting findings regarding the emotional reactions of older

adults to daily stressors we examined the possibility that negative aging attitudes could function

as an important individual differences factor related to stressor reactivity.

Methods: Using a daily dairy design, we examined the aging attitudes of 43 older adults

reporting on 380 total days. Participants reported their aging attitudes on Day 1, followed by

their stressor exposure and negative affect on Days 2-9. Covariates included age, gender,

education, and personality.

Results: Using multilevel modeling, our results suggest that individuals with more positive aging

attitudes report consistent levels of affect across study days regardless of stressors, whereas those

with more negative aging attitudes reported increased emotional reactivity to daily stressors.

Discussion: Positive aging attitudes may serve as a resource that helps buffer reactions to daily

stressors.

Keywords: daily stressors; affect; reactivity; aging attitudes

Word Count: 2,129

Negative aging attitudes predict greater reactivity to daily stressors in older adults

Daily stressors often elicit negative emotional reactions (Almeida, 2005), although
individuals vary in their reactivity (Neupert, Almeida, & Charles, 2007). Those who report high
levels of negative affect in response to daily stressors may be more likely to experience
detrimental outcomes in regards to their mental (Charles, Piazza, Mogle, Sliwinski, & Almeida,
2013) and physical (Sin, Graham-Engeland, Ong, & Almeida, 2015) health. Older individuals
may be among those who show heightened reactivity to daily stressors (Sliwinski, Almeida,
Smyth, & Stawski, 2009), although evidence is mixed with some finding older age associated
with less reactivity (Hay & Diehl, 2010) or no difference in reactivity (Schilling & Diehl, 2014).
Differences in age-related findings may be due to individual differences in older adults (Hooker
& McAdams, 2003). We propose that individuals with more positive aging attitudes may be less
reactive to daily stressors.

## **Aging Attitudes**

Individuals vary in their response and feelings regarding the aging process (Mock & Eibach, 2011). Although aging may be associated with feelings that one has become less useful, others may feel similarly happy and lively in older age as compared to their youth (Lawton, 1975). Possessing more positive views of one's own aging is associated with higher levels of life-satisfaction (Brothers, Miche, Wahl, & Diehl, 2015), better self-rated health (Beyer, Wolff, Warner, Schuz, & Wurm, 2015), improved social networks (Menkin, Robles, Gruenewald, Tanner, & Seeman, 2016), and better well-being (Levy, 2003).

Given its association with advantageous developmental outcomes, possessing more positive aging attitudes (or self-perceptions of aging) may act as a resource that helps to protect individuals from negative reactions to stressors. For example, Levy, Hausdorff, Hencke, and Wei

(2000) subliminally primed older adult participants with words related to either positive (e.g., wise and creative) or negative (e.g., decrepit and senile) stereotypes of aging. Individuals exposed to the negative stereotypes experienced greater cardiovascular reactivity in response to stressors, whereas those exposed to positive stereotypes experienced less cardiovascular reactivity and were less reactive to additional stressors (Levy et al., 2000). Additionally, women with more negative attitudes towards aging reported experiencing more intense menopausal symptoms than women with more positive attitudes (Nosek, Kennedy, Beyene, Taylor, Gilliss, & Lee, 2010).

Negative aging attitudes could act as a stress-diathesis, such that negative aging attitudes may function as a personal vulnerability to react negatively to stressful events (Laidlaw, 2010). Similarly, older adults with negative stereotypes of aging were 50% more likely to experience a stressful event (i.e., hospitalization) than their counterparts with positive stereotypes of aging (Levy, Slade, Chung, & Gill, 2014). Thus aging attitudes may be an important individual difference factor that impacts older adults' reactions to daily stressors. However, the impact of aging attitudes on daily stressors has yet to be investigated.

## **Daily Stressors and Affect**

Referring to the everyday hassles of life, daily stressors can have a substantive impact on well-being, sometimes eclipsing the impact of major life-events (Almeida, 2005). The effect of daily stressors may be felt differently across the lifespan. Older adults may develop better emotional regulation skills over a lifetime of managing stressors, and these skills may help them to avoid or reframe the meaning of stressful events (Charles, 2010). On the other hand, older adults may be more vulnerable to stress due to diminished physiological flexibility or fewer social supports (Charles, 2010; Schilling & Diehl, 2014).

Emotional/affective reactivity refers to the degree of an individual's change in affect (typically negative) on days with, as opposed to without, stressors (Stawski et al., 2008). Empirical findings regarding developmental differences in negative emotional reactions to daily stressors have been mixed with some reporting more (Sliwinski et al., 2009), less (Hay & Diehl, 2010) or no (Schilling & Diehl, 2014) age-related differences in reactivity.

## **The Present Study**

The goal of the present study was to examine how individual differences in aging attitudes relate to daily emotional reactivity to stressors in older adults. Broadly speaking, we expect that negative aging attitudes could be an important individual differences factor that may predispose individuals to react more strongly to daily stressors. Specifically, we anticipate that individuals with more negative aging attitudes will experience higher levels of negative affect on days with stressors as compared to individuals with more positive aging attitudes.

### Method

## **Participants**

Participants were 43 community-dwelling older adults in the Anticipatory Coping Every Day (ACED) study designed to assess the relationship between anticipatory coping and reactions to daily stressors (Neupert, Ennis, Ramsey, & Gall, 2015). Participants (39 women) ranged in age from 60-96 (M = 74.65, SD = 8.19) and self-identified as African-American (n = 22), European-American (n = 20), and Asian (n = 1). Most participants were retired (n = 41) with education levels ranging from high school graduate to Ph.D. or other professional degree. On average, they reported some college education. All received a \$20 gift card as compensation for their participation.

#### **Procedure**

All participants were initially screened for cognitive impairment. Those who scored ≤ 8 on the Short Blessed Test (Katzman et al., 1983) received a packet containing nine daily surveys and prepaid return envelopes. The Day 1 survey contained baseline measures including aging attitudes and sociodemographic variables. Days 2-9 contained our repeated measurements including daily affect and daily stressors. Participants were instructed to complete each survey nightly before bed and indicate the times when they started and finished each survey. In the case where surveys were missed, participants were instructed to leave the missed survey blank and continue the next day. All participants returned at least six completed surveys by mail at the completion of the study. This resulted in a compliance rate of 98.2%, with 380 out of a possible 387 days completed.

### Measures

## **Aging Attitudes**

Aging attitudes were assessed on Day 1 with the Attitudes Towards Own Aging (ATOA) subscale of the Philadelphia Geriatric Center Morale Scale (Lawton, 1975). The measure includes five items assessing overall views of the aging process (e.g., "I am as happy now as I was when I was younger"). Items were answered on a 5-point scale from "1 – does not apply to me" to "5 – applies very well." Scores were averaged and higher scores indicated more positive attitudes towards aging (M = 3.77, SD = 0.76, Cronbach's  $\alpha = .62$ ).

## **Daily Stressors**

Daily stressors were assessed using a paper-and-pencil version of the Daily Inventory of Stressful Events (DISE; Almeida, Wethington, & Kessler, 2002). Participants checked "yes" or "no" to indicate if seven types of stressors had happened to them in the past 24 hours (e.g., disagreements, home stressors, and health stressors). A total stressor score was calculated for

each day with higher scores indicating more stressors (between-person M = 0.65, SD = 0.86). At least one stressor was reported on 36% of study days.

## **Daily Negative Affect**

Daily affect was assessed using the Positive and Negative Affect Schedule (PANAS; Watson, Clark, & Tellegen, 1988). The 10-item negative mood scale included words such as irritable, nervous, and afraid. Participants indicated the extent to which they felt each emotion in the past 24-hours on a Likert scale ranging from 1 to 5 with higher scores indicating more of the affect. Scores for each item were averaged to create a daily score (between-person M = 1.13, SD = 0.19, for Day 1 Cronbach's  $\alpha = .84$ ).

### **Covariates**

Covariates were assessed on Day 1. Gender was coded as "1 – male" and "2 – female." Education was treated as a continuous variable with responses ranging from "0 – no school or some grade school" to "11 – PhD or other professional degree" (M = 6.74, SD = 2.27). Personality was measured with the NEO Five Factor Inventory (NEO-FI; Costa & McCrae, 1992) consisting of five 12-item scales assessing extraversion (M = 3.47, SD = 0.39, Cronbach's  $\alpha$  = .65), neuroticism (M = 2.19, SD = 0.55, Cronbach's  $\alpha$  = .75), conscientiousness (M = 3.90, SD = 0.55, Cronbach's  $\alpha$  = .84), openness (M = 3.28, SD = 0.43, Cronbach's  $\alpha$  = .72), and agreeableness (M = 4.00, SD = 0.35, Cronbach's  $\alpha$  = .67). Participants indicated how well the description of each trait described themselves from "1 – strongly disagree" to "5 – strongly agree." One item from the agreeableness scale regarding cooperation was dropped as it loaded negatively on its scale, resulting in a change in Cronbach's alpha from .53 to .67.

### **Analysis**

Data were analyzed using multilevel modeling (MLM; Raudenbush & Bryk, 2002).

Between-person covariates in our model include gender, age, education, and personality.<sup>2</sup>

Personality was included because it has been shown to impact both aging attitudes (Shenkin, Laidlaw, Allerhand, Mead, Starr, & Deary, 2014), and response to daily stressors (Neupert, Mroczek, & Spiro, 2008). Additionally, a model including each personality by total daily stressor interaction was conducted. No interactions were significant and the pattern of results remained unchanged, thus the personality by stressor interactions have been removed from our model for simplicity.<sup>3</sup> In regards to our predictors, scores on the ATOA scale were grand-mean centered (i.e., deviations from the sample mean), and daily stressor scores were group-mean centered (i.e., average person-level stressors were included at Level 2) to adjust for varying levels of average daily stressor exposure. We also tested linear time (i.e., day of study) as a within-person (Level 1) covariate. It was not significantly related to negative affect and was not retained in the models.

## Results

An unconditional model was conducted to measure the level of variability within (Level 1) and between (Level 2) individuals in negative affect. Results suggest significant daily variability in affect as 39% of variance was between-people ( $\tau_{00} = .03$ , p < .0001) and 61% was within people ( $\sigma^2 = .05$ , p < .0001).

Next, we predicted daily negative affect from ATOA, daily stressors, and the interaction of ATOA with daily stressors while controlling for gender, age, education, and personality (see Table 1). There was a main effect for daily stressors on negative affect ( $\gamma_{10} = 0.08$ , t = 4.95, p < .0001), indicating that on days with more stressors individuals report higher levels of negative affect. There was no main effect for ATOA ( $\gamma_{01} = 0.04$ , t = 0.81, p = .422), but the hypothesized

cross-level interaction was significant ( $\gamma_{11} = -0.08$ , t = -3.56, p < .001). As can be seen in Figure 1, individuals with more positive aging attitudes maintained a low level of negative affect across study days regardless of stressors, whereas individuals with more negative aging attitudes had increased emotional reactivity to daily stressors. This model explained 22% of the within person variability and 44% of the between person variability in negative affect (Snijders & Bosker, 2012).

## **Discussion**

The current study investigated how individuals' aging attitudes influenced their emotional reactions to daily stressors. As predicted, individuals with more negative attitudes towards aging reported more negative emotional reactivity on days with a higher number of stressors. In contrast, individuals with more positive attitudes towards aging reported relatively stable levels of affect regardless of stressors. These findings support the view that positive aging attitudes can function as a resource that helps reduce an individual's reactivity to stressors (Levy et al., 2000) perhaps by allowing individuals to cope more effectively with stressors.

Additionally, our findings support an interpretation of negative aging attitudes as a potential stress-diathesis as the pairing of negative aging attitudes and daily stressors resulted in higher levels of emotional reactivity (Laidlaw, 2010).

In line with previous work, higher numbers of daily stressors predicted an increase in negative affect (Sliwinski et al., 2009). However, the significant cross-level interaction with ATOA suggests that this finding is mainly driven by those with negative aging attitudes. More emotional reactions to stressors have been associated with higher levels of cardiovascular reactivity which predicts negative health outcomes such as impaired vascular responsiveness and

atherosclerosis (Kaplan, Manuck, Williams, & Strawn, 1993). Our findings suggest that daily stressors may be more harmful for those with negative aging attitudes.

Our findings are limited by our sample which consisted solely of older adults living in the United States. Perceptions of aging vary from country to country (Löckenhoff et al., 2009), and thus the impact of positive or negative aging attitudes may be different in countries with alternate views of aging. Furthermore, women participants outnumbered men. Although gender was not associated with affect in our sample, a more gender balanced study is needed to explore these relationships. Given past findings of more intense menopausal symptoms in those with negative aging attitudes (Nosek et al., 2010), our results may be especially applicable for women. Future research with multiple daily measurements would allow for a more nuanced view of the interaction.

In conclusion, our results suggest that individuals' attitudes towards their own aging are an important factor in predicting how they will react to daily stressors. Programs and interventions that foster positive attitudes towards aging (Brothers & Diehl, 2015) could help older adults respond more resiliently to daily stressors.

# Funding

This work was supported by a Faculty Research and Professional Development grant from North Carolina State University (to the second author).

#### References

- Almeida, D. M. (2005). Resilience and Vulnerability to Daily Stressors Assessed via Diary Methods. *Current Directions in Psychological Science*, *14*(2), 64-68. doi:10.1111/j.0963-7214.2005.00336.x
- Almeida, D. M., Wethington, E., & Kessler, R. C. (2002). The Daily Inventory of Stressful Events: An interview-based approach for measuring daily stressors. *Assessment*, *9*, 41-55. doi:10.1177/1073191102009001006
- Bellingtier, J.A., Neupert, S.D., & Kotter-Grühn, D. (2015). The combined effects of daily stressors and major life events on daily subjective ages. *Journal of Gerontology:*\*Psychological Sciences\*. Advance online publication. doi: 10.1093/geronb/gbv101
- Beyer, A., Wolff, J. K., Warner, L. M., Schüz, B., & Wurm, S. (2015). The role of physical activity in the relationship between self-perceptions of ageing and self-rated health in older adults. *Psychology & Health*, *30*(6), 671-685. doi:10.1080/08870446.2015.1014370
- Brothers, A., & Diehl, M. (2015, November). *Evaluation of a motivation-based intervention to promote positive aging: A pilot study.* Presented at the 68<sup>th</sup> Annual Meeting of the Gerontological Society of America. Orlando, FL.
- Brothers, A., Miche, M., Wahl, H. W., & Diehl, M. (2015). Examination of associations among three distinct subjective aging constructs and their relevance for predicting developmental correlates. *The Journals of Gerontology Series B: Psychological Sciences and Social Sciences*, Advance online access. http://doi.org/10.1093/geronb/gbv085
- Charles, S. T. (2010). Strength and vulnerability integration: A model of emotional well-being across adulthood. *Psychological Bulletin*, *136*(6), 1068-1091. doi:10.1037/a0021232
- Charles, S. T., Piazza, J. R., Mogle, J., Sliwinski, M. J., & Almeida, D. M. (2013). The wear and tear of daily stressors on mental health. *Psychological Science*, *24*(5), 733-741. doi:10.1177/0956797612462222
- Costa, P. T., & McCrae, R. R. (1992). Revised NEO Personality Inventory (NEO-PI-R) and NEO Five-Factor Inventory (NEO-FFI) professional manual. Odessa, FL: Psychological Assessment Resources.
- Faul, F., Erdfelder, E., Lang, A. G., & Buchner, A. (2007). G\*Power 3: A flexible statistical power analysis program for the social, behavioral, and biomedical sciences. *Behavior Research Methods*, 39, 175-91.

- Hay, E. L., & Diehl, M. (2010). Reactivity to daily stressors in adulthood: The importance of stressor type in characterizing risk factors. *Psychology and Aging*, 25(1), 118-131. doi:10.1037/a0018747
- Hooker, K., & McAdams, D. P. (2003). Personality Reconsidered: A New Agenda for Aging Research. *The Journals of Gerontology: Series B: Psychological Sciences and Social Sciences*, 58B(6), P296-P304. doi:10.1093/geronb/58.6.P296
- Kaplan, J. R., Manuck, S. B., Williams, J. K., & Strawn, W. (1993). Psychosocial influences on atherosclerosis: Evidence for effects and mechanisms in nonhuman primates. In J. J. Blascovich et al. (Eds.), *Cardiovascular reactivity to psychological stress & disease* (pp. 3-26). Washington, DC: American Psychological Association. doi:10.1037/10125-001
- Katzman, R., Brown, T., Fuld, P., Peck, A., Schechter, R., & Schimmel, H. (1983). Validation of a short Orientation-Memory-Concentration Test of cognitive impairment. *The American Journal of Psychiatry*, 140, 734-739.
- Laidlaw, K. (2010). Are attitudes to ageing and wisdom enhancement legitimate targets for CBT for late life depression and anxiety? *Nordic Psychology*, 62(2), 27-42. doi:10.1027/1901-2276/a000009
- Lawton, M. P. (1975). The Philadelphia Geriatric Center Morale Scale: A revision. *Journal of Gerontology*, 30(1), 85-89. doi:10.1093/geronj/30.1.85
- Levy, B. R., Hausdorff, J. M., Hencke, R., & Wei, J. Y. (2000). Reducing cardiovascular stress with positive self-stereotypes of aging. *The Journals of Gerontology: Psychological Sciences and Social Sciences*, *55B*, 205-213. doi:10.1093/geronb/55.4.P205
- Levy, B. R., Slade, M. D., Chung, P. H., Gill, T. M. (2014). Resiliency over time of elders' age stereotypes after encountering stressful events. *The Journals of Gerontology:*\*Psychological Sciences and Social Sciences, 70B, 886-890. doi: 10.1093/geronb/gbu082
- Löckenhoff, C. E., De Fruyt, F., Terracciano, A., McCrae, R. R., De Bolle, M., Costa, P. T., ... Yik, M. (2009). Perceptions of aging across 26 cultures and their culture-level associates. *Psychology and Aging*, *24*(4), 941–954. http://doi.org/10.1037/a0016901
- Menkin, J. A., Robles, T. F., Gruenewald, T. L., Tanner, E. K., & Seeman, T. E. (2016). Positive expectations regarding aging linked to more new friends in later life. *Journal of Gerontology: Psychological Sciences*. Advance online publication. doi: 10.1093/geronb/gbv118

- Mock, S. E., & Eibach, R. P. (2011). Aging attitudes moderate the effect of subjective age on psychological well-being: Evidence from a 10-year longitudinal study. *Psychology and Aging*, *26*, 979-986. doi:10.1037/a0023877
- Neupert, S. D., Almeida, D. M., & Charles, S. T. (2007). Age differences in reactivity to daily stressors: The role of personal control. *The Journals of Gerontology: Psychological Sciences and Social Sciences*, 62B(4), 216-225. doi:10.1093/geronb/62.4.P216
- Neupert, S.D., Almeida, D.M., Mroczek, D.K., & Spiro, A. III. (2006). Daily stressors and memory failures in a naturalistic setting: Findings from the VA Normative Aging Study. Psychology and Aging, 21, 424-429. doi:10.1037/0882-7974.21.2.424
- Neupert, S.D. Ennis, G.E., Ramsey, J.L., & Gall, A.A. (2015). Solving Tomorrow's Problems Today? Daily Anticipatory Coping and Reactivity to Daily Stressors. *The Journals of Gerontology: Psychological Sciences*. Advance access. doi:10.1093/geronb/gbv003
- Neupert, S.D., Mroczek, D.K., & Spiro, A. III. (2008). Neuroticism moderates the daily relation between stressors and memory failures. *Psychology and Aging*, *23*, 287-296. doi:10.1037/0882-7974.23.2.287
- Nosek, M., Kennedy, H. P., Beyene, Y., Taylor, D., Gilliss, C., & Lee, K. (2010). The effects of perceived stress and attitudes toward menopause and aging on symptoms of menopause. *Journal of Midwifery & Women's Health*, 55(4), 328-334. doi:10.1016/j.jmwh.2009.09.005
- Raudenbush, S. W., & Bryk, A. S. (2002). Hierarchical linear models. Thousand Oaks, CA: Sage.
- Schilling, O. K., & Diehl, M. (2014). Reactivity to stressor pile-up in adulthood: Effects on daily negative and positive affect. *Psychology and Aging*, 29(1), 72-83. doi:10.1037/a0035500
- Shenkin, S. D., Laidlaw, K., Allerhand, M., Mead, G. E., Starr, J. M., & Deary, I. J. (2014). Life course influences of physical and cognitive function and personality on attitudes to aging in the Lothian Birth Cohort 1936. *International Psychogeriatrics*, 26(9), 1417-1430.
- Sin, N. L., Graham-Engeland, J. E., Ong, A. D., & Almeida, D. M. (2015). Affective reactivity to daily stressors is associated with elevated inflammation. *Health Psychology*, *34*(12), 1154-1165. doi:10.1037/hea0000240

- Sliwinski, M. J., Almeida, D. M., Smyth, J., & Stawski, R. S. (2009). Intraindividual change and variability in daily stress processes: Findings from two measurement-burst diary studies. *Psychology and Aging*, *24*(4), 828-840. doi:10.1037/a0017925
- Snijders, T.A. (2005). Power and sample size in multilevel modeling. In B.S. Everitt & D.C. Howell (Eds.), *Encyclopedia of Statistics in Behavioral Science*, *Vol. 3* (pp. 1570-1573). Chicester (etc.): Wiley.
- Snijders, T. A., & Bosker, R. J. (2012). *Multilevel analysis: an introduction to basic and advanced multilevel modeling*. (2nd ed). London: Sage Publications Ltd.
- Stawski, R. S., Sliwinski, M. J., Almeida, D. M., & Smyth, J. M. (2008). Reported exposure and emotional reactivity to daily stressors: The roles of adult age and global perceived stress. *Psychology and Aging*, *23*(1), 52-61. doi:10.1037/0882-7974.23.1.52
- 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. doi:10.1037/0022-3514.54.6.1063

#### **Footnotes**

- <sup>1</sup> This form of the DISE was originally used in the VA Normative Aging Study (Neupert, Almeida, Mroczek, & Spiro, 2006) as well as the ACED study (Bellingtier, Neupert, & Kotter-Grühn, 2015; Neupert et al., 2015) and individuals report similar levels of stressors to the interview version (e.g., the National Study of Daily Experiences; Almeida et al., 2002).

  <sup>2</sup> Given the small number of men in our sample, we also examined a model excluding gender.

  The pattern of results remained unchanged.
- <sup>3</sup> Additionally, we investigated the relationship between our checklist of chronic conditions measure (first used in the Midlife in the United States Survey [MIDUS]) done on Day 1 and aging attitudes; they were significantly negatively correlated (r = -0.48, p < .01). However, when we controlled for chronic conditions in our model, the relationship between aging attitudes, daily stressors, and negative affect remains significant ( $\gamma_{11} = -.08$ , p < .001), as does the main effect of daily stressors ( $\gamma_{10} = -.08$ , p < .001). The pattern of results remained unchanged and thus chronic conditions were not considered further.

Table 1
Unstandardized Coefficients (and Standard Errors) of Multilevel Model of Negative Affect

Fixed Effects	
Negative Affect, β <sub>0</sub>	
Intercept, $\gamma_{00}$	.82 (0.52)
ATOA, $\gamma_{01}$	0.04 (0.04)
Person Avg. Stress, $\gamma_{02}$	.03 (.04)
Gender, $\gamma_{03}$	-0.14 (0.09)
Age, $\gamma_{04}$	-0.003 (0.003)
Education, $\gamma_{05}$	-0.01 (0.01)
Neuroticism, γ <sub>06</sub>	0.05 (0.05)
Extraversion, $\gamma_{07}$	0.01 (0.08)
Openness, $\gamma_{08}$	-0.03 (0.07)
Conscientiousness, γ <sub>09</sub>	0.04 (0.05)
Agreeableness, γ <sub>10</sub>	0.13 (0.07)
Daily Stressor slope, β <sub>1</sub>	
Intercept, $\gamma_{10}$	0.08* (0.02)
ATOA, $\gamma_{11}$	-0.08* (0.02)
Random Effects	
Between-person $(\tau_{00})$	0.02* (0.006)
Within-person ( $\sigma^2$ )	0.04* (0.004)
Note: *n < 01	

Note: \**p* < .01

# **Figure Caption**

Figure 1. Significant interaction between aging attitudes (as measured by ATOA) and daily stressors for negative affect. Positive ATOA was operationalized as one standard deviation above the mean, and negative ATOA was operationalized as one standard deviation below the mean.

