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Wisdom and Hard Times: The Ameliorating Effect of Wisdom on the Negative Association Between Adverse Life Events and Well-Being

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Abstract

Objectives: Old age is characterized by many physical and social losses that adversely affect subjective well-being (SWB). Yet, past studies have shown that wisdom tends to be positively related to SWB in old age, particularly under adverse circumstances. We tested whether three-dimensional wisdom, measured as a combination of cognitive, reflective, and compassionate (affective) personality qualities, moderated the inverse association between adverse life events and well-being.

Method: A sample of 994 adults aged 51–99 years ($M = 77$) from the Successful AGing Evaluation (SAGE) study and structural equation models with well-being as a latent variable were used to test the hypothesis.

Results: Greater wisdom, in particular the reflective wisdom dimension, was positively associated with SWB and buffered the inverse relation between the experience of adverse life events during the previous year and current well-being.

Discussion: Wisdom appears to strengthen older adults' ability to cope with aging-related losses and, therefore, is a valuable psychological resource in old age.

Keywords: Coping—Equanimity—Subjective well-being—Three-dimensional wisdom

Old age is often marked by declining physical and cognitive functioning, widowhood, and the death of relatives and close friends, which tend to have an adverse impact on well-being (Clemence, Karmaniola, Green, & Spini, 2007; Kraaij, Arensman, & Spinhoven, 2002). Wisdom, by contrast, has been found to be positively related to subjective well-being (SWB) among older adults (Ardelt, 2003; Etezadi & Pushkar, 2013; Grossmann, Na, Varnum, Kitayama, & Nisbett, 2013; Le, 2011; Takahashi & Overton, 2002), even after controlling for social and economic assets and physical health (Ardelt, 1997). However, the association between wisdom and well-being in old age could be seen as a paradox. If wise older people perceive life more clearly, including the reality of aging-related declines and their own

shortcomings, keeping up the illusion that “everything is well” would be difficult (Staudinger & Glück, 2011). On the other hand, wisdom provides not only clarity of insight but also tools and coping resources to deal with stressors and hardship (Ardelt, 2011b).

The purpose of the present study was to test whether wisdom, in addition to being positively related to well-being in old age, might also buffer the inverse relation of adverse life events on well-being.

Definition of Wisdom and Well-Being

A number of definitions of wisdom have been proposed over the past four decades by researchers in gerontology,

psychology, and sociology (Staudinger & Glück, 2011; Walsh, 2015), and wisdom has been assessed in a variety of ways (Bangen, Meeks, & Jeste, 2013; Glück et al., 2013), ranging from expert (or explicit) definitions of general wisdom-related knowledge in the fundamental pragmatics of life related to life management, life planning, and life review (Baltes & Staudinger, 2000) or wisdom as applied tacit knowledge toward the realization of a common good by balancing intrapersonal, interpersonal, and extrapersonal interests (Sternberg, 1998, p. 347) to lay (or implicit) conceptions of personal wisdom that tend to encompass cognition, insight, reflection, concern for others, and real-world skills (Bluck & Glück, 2005). In contrast to definitions of general wisdom with their emphasis on life knowledge, most definitions of personal wisdom also include affective prosocial elements (Staudinger & Glück, 2011). Common components of personal wisdom are a general knowledge of life, good social decision-making skills, emotional regulation, insight, self-reflection, decisiveness in the face of uncertainty, tolerance of divergent value systems, and prosocial attitudes and behaviors, such as empathy, compassion, and altruism (Meeks & Jeste, 2009).

In the present study, we used the three-dimensional wisdom model to operationalize personal wisdom as an integration of cognitive, reflective, and compassionate (affective) dimensions (Ardelt, 1997, 2003). This definition of wisdom was derived from Clayton and Birren's (1980) research on implicit wisdom theories, is relatively parsimonious, and appears to be consistent with most lay and expert definitions of personal wisdom (Bluck & Glück, 2005; Jeste et al., 2010). Wisdom is understood as a developmental construct rather than a personality trait, which implies that wisdom can increase with age if the motivation exists to engage in psychosocial growth (Ardelt, 2011b; Baltes & Staudinger, 2000). In fact, in Erikson's (1982) stage model of psychosocial development, wisdom is the virtue that is gained in old age if all eight developmental life crises are successfully resolved.

The *cognitive dimension* of the three-dimensional wisdom model refers to the desire to understand a deeper truth, particularly as it pertains to the intrapersonal and interpersonal aspects of life. This necessitates knowledge of the positive and negative aspects of human nature, of the inherent limits of knowledge, and of life's unpredictability and uncertainties. To reach such understanding, individuals need to engage in (self-)reflective thinking to perceive phenomena and events from multiple perspectives—the *reflective dimension* of wisdom. This process tends to reduce self-centeredness and increase acceptance of human nature and an awareness of the suffering of others, resulting in greater sympathy and compassion for others and the motivation to help others in need—the *compassionate (affective) dimension* of wisdom.

SWB is defined as a combination of positive emotional states, such as happiness and mental health, and life satisfaction, denoting a cognitive global assessment of life

(Diener, Lucas, & Oishi, 2002). Defined in this way, SWB is a combination of happiness, which appears most affected by stimuli from the environment, mental health, a more stable emotional state, and life satisfaction, a relatively stable cognitive orientation toward life (George, 2010).

Wisdom, Coping With Adversity, and Well-Being

Old age is often accompanied by physical, mental, and social losses (Aldwin & Igarashi, 2015). Although adverse life events happen at all stages of the life course, older adults are more likely to encounter a serious illness or the death of family members and friends, which tend to inversely impact SWB (Clemence et al., 2007; Kraaij et al., 2002). However, wise older adults might have the ability and equanimity to cope with adversity without affecting their sense of well-being (Aldwin & Igarashi, 2015; Ardel et al., 2014), particularly if they gained wisdom through the process of successfully overcoming earlier adversity (Linley, 2003). For example, older adults who were either nominated as wise or who were rated and scored relatively high on the cognitive, reflective, and compassionate personality qualities of wisdom reported that they applied valuable life lessons gained from previous experiences of coping with adversity to deal successfully with crises and obstacles in their lives (Ardelt, 2005; Choi & Landeros, 2011).

In fact, wise persons could be considered experts in dealing with the vicissitudes of life, which might explain why wisdom tends to be positively related to SWB, particularly when objective circumstances are less than ideal (Ardelt, 2011b). For example, in studies of older adults, wisdom was more strongly related to life satisfaction than physical health, finances, socioeconomic status, social involvement, physical environment, and age (Ardelt, 1997), and the association between wisdom and SWB was significantly stronger for older hospice patients and nursing home residents than relatively healthy older community residents (Ardelt & Edwards, 2016). Hence, wise individuals might know how to cope with adversity to preserve SWB (Ardelt, 2005; Randall & Kenyon, 2001). According to Walsh (2015, p. 285), "... wisdom involves expertise in reducing suffering and enhancing wellbeing for both oneself and others."

Therefore, we predicted a positive association between wisdom and SWB, even after controlling for the occurrence and severity of adverse life events, self-rated health, and demographic characteristics (Hypothesis 1), and a significant positive interaction between wisdom and adverse life events on SWB (Hypothesis 2). That is, wisdom was expected to buffer or even neutralize the negative impact of adverse life events on well-being and, conversely, the positive relation between wisdom and well-being was assumed to be stronger in times of adversity when SWB might be sustained more by the internal resources and strengths that wisdom entails than by events in the external world.

More specifically, the reflective dimension of the three-dimensional wisdom model appears most pivotal for greater well-being. Through reflection, people perceive a challenging situation from multiple angles instead of trying to blame others or circumstances for their misery (Ardelt, 2003). By being mindful and aware of their emotions, wise individuals are better able to regulate and ultimately overcome negative emotions, such as bitterness, blame, and despair through an acceptance of reality and forgiveness of others and oneself (Ardelt, 2011a; Ardel & Ferrari, 2014; Glück, 2011). The cognitive wisdom component, by contrast, allows individuals to see reality more clearly, including the negative aspects of life and oneself, which by itself might result in despair (Staudinger & Glück, 2011) if it is not counterbalanced by the reflective wisdom component. Similarly, having sympathy and compassion for others (the compassionate wisdom component) might lead to frustration and hopelessness if the perceived need for help surpasses one's ability to relieve the suffering of others. Only through the reflective wisdom dimension are individuals able to keep their equanimity when confronted with adverse life events. The reflective wisdom dimension enables wise people to cognitively understand and *accept* reality as it is by perceiving phenomena and events through the perspective of a larger existential and cosmic reality and also to engage in compassionate and benevolent actions toward others without becoming attached to the outcome (Ardelt, Achenbaum, & Oh, 2013; Walsh, 2015). Hence, among the three wisdom dimensions, the reflective dimension was predicted to have the strongest association with well-being (Hypothesis 3) and to buffer the negative relation between adverse life events and well-being (Hypothesis 4).

Method

Procedure

Details of the study methods have been published elsewhere (Jeste et al., 2013; Martin, Palmer, Rock, Gelston, & Jeste, 2015). Briefly, the University of California, San Diego (UC San Diego) Successful AGing Evaluation (SAGE) study used a structured multi-cohort design and list-assisted random digit dialing to recruit 1,300 community-dwelling residents of San Diego County, aged 50–99 years, with an over-representation of those over age 75. The procedure included an initial 25-min telephone interview, followed by a mail-in survey questionnaire. A total of 1,006 adults returned the survey, representing a response rate of 77%. The 1,006 study participants were on average 2 years older and contained a larger proportion of whites (81.0% vs 72.8%) than the 294 respondents who only completed the phone interview. The study was approved by the UC San Diego Human Research Protections Program, and all the participants provided written informed consent. Study participants received \$10 of compensation for the phone interview and \$20 for completing the survey.

Sample

Of the 1,006 study participants, 12 had 6–15 study variables with missing values and were, therefore, removed from the sample. The remaining 994 respondents ranged in age from 51 to 99 years with a median age of 81 and a mean age of 77.3 (standard deviation [*SD*] = 12.2). About half of the respondents (48.8%) were women, 81.2% were white, 49.1% were married, 23.6% had not attended college, 32% had attended some college or had an associate degree, 25% had an undergraduate degree or some postgraduate or professional degree, 11.7% had a Master's degree, and 7.7% had a doctoral degree.

Measures

SWB was assessed as a latent variable with positive mental health, happiness, and satisfaction with life as effect indicators. *Mental health* was measured by a 4-item mental health subscale of the Mental Health Component of the SF-36 (Ware & Sherbourne, 1992). Items assessed two positive mental states (feeling calm and happy) and two negative mental states (feeling down and downhearted) on 6-point scales (1 = *all of the time* and 6 = *none of the time*). The four items were averaged after the scores for the positive mental states were reversed, yielding a reliability coefficient Cronbach's α of .79. *Happiness* was evaluated as the average of the four positively worded items (e.g., I was happy) of the CES-D (Radloff, 1977) on 4-point scales (0 = *rarely or none of the time* and 3 = *most or all of the time*). Cronbach's α was .80. To reduce the high kurtosis of this scale from 4.58 to -0.37 , the scale was transformed by computing the exponential of e and then dividing it by 4 to make the scale compatible with the other scales, resulting in a range from 0.25 to 5.02. *Life satisfaction* was assessed on a 7-point scale (1 = *strongly disagree* and 7 = *strongly agree*) as the average of the 5-item (e.g., My life is close to ideal) Satisfaction with Life Scale (Pavot & Diener, 1993), with a Cronbach's α of .90. Mental health, happiness, and life satisfaction were moderately intercorrelated (varying between .51 and .58) and, therefore, could serve as effect indicators of the latent variable SWB.

Three-dimensional wisdom was assessed by the cognitive, reflective, and compassionate (affective) dimensions of the Three-Dimensional Wisdom Scale (3D-WS), whose content, predictive, discriminant, and convergent validity had been confirmed in an earlier study (Ardelt, 2003). Two 5-point scales (1 = *strongly agree* and 5 = *strongly disagree* or 1 = *definitely true of myself* and 5 = *not true of myself*) were used to assess the items, and all items were scored in the direction of greater wisdom before the average of each wisdom dimension was computed.

The *cognitive wisdom dimension* contains 14 items (Cronbach's α = .81) that assess the ability or willingness to understand a situation or phenomenon thoroughly, knowledge of the positive and negative aspects of human nature, an acknowledgement of ambiguity and uncertainty in life,

and the ability to make important decision despite life's unpredictability and uncertainties (e.g., Ignorance is bliss—reversed). The *reflective wisdom dimension* comprises 12 items (Cronbach's $\alpha = .75$) that measure the ability and willingness to look at phenomena and events from different perspectives and the absence of bitterness, subjectivity, and projections (e.g., I always try to look at all sides of a problem). The 13 items of the *compassionate wisdom dimension* (Cronbach's $\alpha = .71$) gauge the presence of positive, caring, and nurturing emotions and behavior and the absence of indifferent or negative emotions and behavior toward others (e.g., Sometimes I feel a real compassion for everyone). A composite 3D-WS score was calculated by averaging across the three dimensions, resulting in a Cronbach's α of .67 (.86 for the 39 items). The correlations between the reflective and cognitive dimensions ($r = .41$) and the reflective and compassionate dimensions ($r = .48$) were higher than the correlation between the cognitive and compassionate wisdom dimensions ($r = .35$), indicating the central role of the reflective dimension in the three-dimensional wisdom model.

The Life Events Scale (Michael et al., 2009) was used to determine the *occurrence and severity of adverse life events*. Respondents were asked whether they had experienced any of the listed 11 life events during the previous year (e.g., Did your spouse die?). If they answered in the affirmative, participants were asked how much the event had upset them (1 = *not too much* and 3 = *very much*). Hence, item scores ranged from 0 (*event did not happen*) to 3 (*event happened and it upset me very much*). Of the 982 respondents who completed the adverse life events scale, 24.7% ($n = 243$) reported no adverse life event. Among those who reported any adverse life events, the average "upset level" was 2.02 and 70.2% reported 1 or 2 adverse events. The most often mentioned adverse life event was the death or serious illness of a family member or close friend, which was experienced by 450 respondents (45.3%), and the majority (83.6%) reported that it upset them "moderately" or "very much." The average of all valid items was computed to take both the reported number of adverse life events and the average stress level into account. The rationale for this approach is that low-level stress from the experience of several adverse life events might accumulate and end up being as stressful as the experience of one highly stressful adverse event. A natural log transformation was performed after adding 1 to the index to reduce the very large kurtosis of this index from 10.12 to 1.68. The transformed index ranged between 0 and 1.39 and correlated highly with the reported total number of adverse life events ($r = .90, p < .0001$) and the average stress severity of those events ($r = .74, p < .0001$).

Four *interaction terms* between adverse life events and three-dimensional wisdom, including its individual dimensions, were created by multiplying the transformed adverse life events index with the 3D-WS and the cognitive, reflective, and compassionate dimensions of wisdom, respectively,

after centering all five variables at their respective means to reduce multicollinearity and aid in the interpretation of the results (Aiken & West, 1991; Dawson, 2014).

Control variables were age (in years), gender (0 = *female* and 1 = *male*), race (0 = *non-White* and 1 = *White*), current marital status (0 = *not married* and 1 = *married*), highest educational degree (1 = *did not go to school* and 12 = *doctoral degree*), and self-rated health. *Self-rated health* was gauged by the average of three reversed items from the general health subscale of the SF-36 (Ware & Sherbourne, 1992), asking respondents to judge their general health (1 = *excellent* and 5 = *poor*) and the items "I am as healthy as anybody I know" and "My health is excellent" (1 = *definitely true* and 5 = *definitely false*). Cronbach's α was .83.

To construct the scales, the average of all valid items was computed to reduce the number of missing cases. Between 92% and 98% of participants answered all the items of a scale, and at least 98% responded to half or more of the scale items. Descriptive statistics of all variables before centering are available online (Supplementary Table 1).

Results

After deleting the 12 cases of the original data set with 6–15 missing values to increase the likelihood that the remaining missing values of the 994 study participants were missing at random, the multiple imputation method provided in LISREL 8.80 was used to impute missing values (Schafer, 1999). Without counting the interaction terms, 48 participants had one missing value, 12 had two missing values, and 1 had three missing values.

The imputed data set of 994 cases was subsequently used to analyze structural equation models with SWB as a latent variable to take measurement error in the well-being variable into account (Bollen, 1989). To scale the latent variable, its variance was set to 1. Wisdom was treated as a manifest variable to include interaction terms and obtain a satisfactory model fit. Because the variables did not follow a multivariate normal distribution, covariance and asymptotic covariance matrices were created in PRELIS 2.80 and a weighted least squares (WLS) estimation was used in LISREL 8.80 to obtain corrected χ^2 -statistics and estimate corrected standard errors and t -values of the coefficient estimates (Jöreskog, Sörbom, du Toit, & du Toit, 1999). The WLS estimator is asymptotically sufficient even under the condition of nonnormality (Bollen, 1989). A comparison of the results with those produced through a listwise deletion of cases ($n = 933$) showed that all coefficient estimates were very close with no differences in the completely standardized coefficient estimates greater than .02, suggesting relatively stable results.

Due to the large sample size, only coefficient estimates that were statistically significant at a more conservative alpha-level of .01 or lower were given consideration. All control variables were initially entered into the model, but nonsignificant effects ($p > .05$) were eliminated in a step-wise

procedure, starting with the coefficient estimate with the lowest *t*-value, to improve the overall model fit. It should be noted that we use the term “effect” in the statistical sense without implying a causal relation between the variables.

Bivariate Correlations

Bivariate correlations of all variables are displayed in Table 1. The three well-being indicators were positively associated with the three wisdom dimensions and had the highest correlations with the reflective wisdom dimension, followed by the correlations with the compassionate wisdom dimension and the cognitive wisdom dimension. The well-being indicators were also positively correlated with subjective health, marital status, and educational degree and negatively with adverse life events. Compared with middle-aged sample members and women, older adults and men tended to have higher scores on mental health and life satisfaction, but not happiness. There was no significant association between race and any of the indicators of SWB.

Three-Dimensional Wisdom and Well-Being

Model 1 in Table 2 shows that composite three-dimensional wisdom was moderately positively related to the latent variable SWB, even after controlling for the negative association of adverse life events and the positive relations of self-rated health, age, non-White minority status, and being married on SWB, supporting Hypothesis 1. The factor loadings of the three effect indicators of the latent variable SWB were significant and sufficiently large.

The model explained 46% of the variation in the latent variable SWB. According to the overall fit statistics, the model fit the data reasonably well, with a comparative fit (*CFI*) index above the recommended value of .90, a root mean square error of approximation (*RMSEA*) of only slightly above .05, signaling a close approximate fit (Kline, 2005), and a Critical *N* (*CN*) above the recommended minimum value of 200 (Bollen, 1989). Yet, the normed chi-square (*NC*), which divides χ^2 by the degrees of freedom and is more appropriate for large sample sizes, resulted in a value of 4.35, which is somewhat higher than the recommended value of <3.

Model 2 in Table 2 added the interaction effect between composite wisdom and adverse life events, resulting in an overall better model fit compared with Model 1 ($\Delta\chi^2 = 14.2, \Delta df = 1, p < .001$), with a drop in the *NC* value to 3.87, a *CN* of 485.14, and an increase in the explanatory power of the model of 4%. The interaction between wisdom and adverse life events on SWB was positive and significant as stated in Hypothesis 2. The coefficient estimates for the main effects of wisdom and adverse life events in Model 2 represent the relations for average levels of three-dimensional wisdom and adverse life events, respectively, on well-being. Yet as expected and illustrated in Figure 1a for average values of the control variables, high wisdom

Table 1. Bivariate Correlation Analyses Between Well-Being Indicators, Wisdom Dimensions, and Control Variables; Pearson's *r*

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	M	SD
Mental health	—	.55*	.58*	.16*	.42*	.22*	.33*	-.27*	.42*	.11*	.10*	-.02	.09*	.10*	5.07	.70
Happiness (<i>e</i> ^{3/4})		—	.51*	.18*	.38*	.24*	.34*	-.17*	.40*	-.05	-.01	.01	.10*	.08*	3.96	1.41
Life satisfaction			—	.10*	.41*	.19*	.29*	-.22*	.41*	.14*	.09*	-.05	.14*	.09*	5.24	1.14
3D-WS cognitive				—	.41*	.35*	.77*	-.04	.16*	-.21*	.01	.14*	.10*	.38*	3.49	.59
3D-WS reflective					—	.48*	.80*	-.15*	.30*	-.05	.00	.12*	.05	.17*	3.79	.55
3D-WS compassionate						—	.77*	.03	.15*	-.05	-.26*	.03	-.10*	.04	3.40	.52
3D-WS composite							—	-.07*	.26*	-.13*	-.09*	.12*	.03	.26*	3.56	.43
Occurrence/severity of adverse life events (<i>ln</i>)								—	-.08*	-.16*	-.17*	-.12*	-.15*	-.11*	.25	.22
Self-rated health									—	-.08*	.03	.05	.10*	.14*	3.72	.90
Age										—	.00	.12*	-.23*	-.14*	77.26	12.17
Gender (1 = male)											—	-.01	.44*	.23*	.51	.50
Race (1 = white)												—	-.06	.05	.81	.39
Married (1 = yes)													—	.21*	.49	.50
Educational degree														—	8.36	2.19

Note. 3D-WS = Three-Dimensional Wisdom scale. *n* = 994. * *p* < .01. † *p* < .05.

Table 2. Subjective Well-Being Regressed on Wisdom, Adverse Life Events, and Control Variables

Independent variables	Subjective well-being			
	Model 1		Model 2	
	Unstandardized	Standardized	Unstandardized	Standardized
Three-dimensional wisdom	0.99***	0.31	1.10***	0.34
Adverse life events	-1.18***	-0.18	-1.18***	-0.18
Wisdom × adverse life events	—	—	1.73**	0.12
Control variables				
Self-rated health	0.70***	0.46	0.71***	0.45
Age	0.02***	0.19	0.02***	0.18
Gender (0 = female, 1 = male)	<i>ns</i>	<i>ns</i>	<i>ns</i>	<i>ns</i>
Race (0 = non-White, 1 = white)	-0.52***	-0.15	-0.53***	-0.15
Married (0 = no, 1 = yes)	0.31**	0.11	0.31**	0.11
Educational degree	<i>ns</i>	<i>ns</i>	<i>ns</i>	<i>ns</i>
Factor loadings for SWB				
Mental health	0.37***	0.77	0.38***	0.79
Happiness	0.70***	0.70	0.70***	0.72
Life satisfaction	0.61***	0.75	0.60***	0.75
Overall model fit statistics				
R ² for structural equations	.46		.50	
Degrees of freedom	21		20	
Minimum fit function χ^2	91.25		77.05	
Normed chi-square (NC)	4.35		3.85	
Comparative fit index (CFI)	.94		.95	
RMSEA	.058		.054	
<i>p</i> for close fit (RMSEA < .05)	.13		.30	
Critical N (CN)	424.67		485.14	

Note. *n* = 994; WLS estimation using LISREL 8.80; standard errors, *t*-values, and χ^2 statistics corrected for non-normality; RMSEA = root mean square error of approximation; *ns* = path was eliminated because coefficient estimate was not statistically significant at *p* < .05. ****t*-value > 3.90 (*p* < .0001), ** *t*-value > 3.29 (*p* < .001).

scores neutralized the negative association between adverse life events and SWB, whereas low wisdom scores exacerbated the negative relation. A simple slope test (Dawson, 2014) showed that the negative unstandardized effect of adverse life events on well-being changed from -1.18 (*p* < .0001) for respondents with average wisdom scores to nonsignificant -.43 (*p* = .26) and .32 (*p* = .57), respectively, for participants with wisdom scores 1 and 2 SDs above the mean (scores of 4.00 and 4.43, respectively, on the original 1–5 scale) but increased to -2.68 (*p* < .0001) for those respondents with wisdom scores 2 SDs below the mean (a score of 2.70). Conversely, as depicted in Figure 1b, for those respondents who recounted no adversity in the previous year, the unstandardized effect of wisdom on well-being was reduced to .68 (*p* < .0001) from 1.10 (*p* < .0001) for average adversity but increased to 1.88 (*p* < .0001) for those respondents who reported adverse life events 2 SDs above the mean (a score of 1 on the original 0–3 index).

Individual Wisdom Dimensions and Well-Being

Even though all three indicators of SWB were positively correlated with all three wisdom dimensions in the bivariate analyses (Table 1), Model 1 in Table 3 demonstrates

that only the reflective wisdom dimension remained significantly associated with SWB at an alpha-level of .01 when all three dimensions were added individually to the model, as predicted by Hypothesis 3. The coefficient estimates for adverse life events and the control variables were similar to those of Model 1 in Table 2. Based on the overall fit statistics, Model 1 in Table 3 fit the data well and explained 50% of the variation in the latent variable SWB.

Model 2 in Table 3 shows that the reflective wisdom dimension buffered the negative association between adverse life events and SWB, confirming Hypothesis 4. The interactions between either the cognitive or the compassionate wisdom dimension and adverse life events were not statistically related to SWB after controlling for the interaction between the reflective wisdom dimension and adverse life events. Adding the interaction between the reflective wisdom dimension and adverse life events to the model improved the overall model fit. Compared with Model 1, Model 2 fit the data significantly better ($\Delta\chi^2 = 18.86, \Delta df = 1, p < .0001$), with a smaller NC (3.24) and RMSEA (.048), a larger CN (549.54), and an increase in the explanatory power of the model of 5%. Similar to the composite wisdom score, high scores on the reflective wisdom dimension neutralized the inverse relation between adverse life events and SWB. Yet

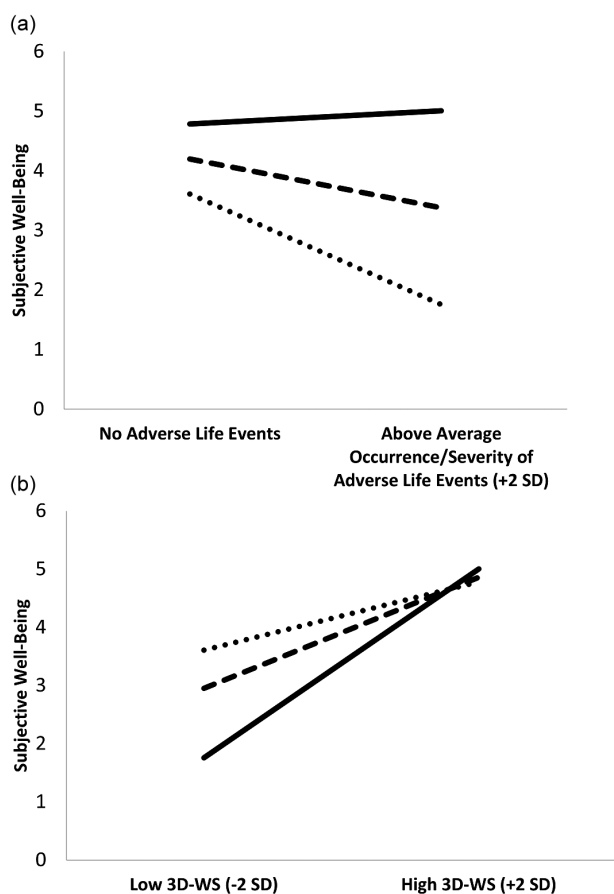


Figure 1. Interaction between three-dimensional wisdom and occurrence/severity of adverse life events on subjective well-being. (a) Relation between occurrence/severity of adverse life events and subjective well-being moderated by 3D-wisdom. Dotted line represents low 3D-WS (-2 SD), dashed line represents average 3D-WS, and solid line represents high 3D-WS ($+2$ SD). (b) Relation between 3D-wisdom and subjective well-being moderated by occurrence/severity of adverse life events. Dotted line represents no adverse life events, dashed line represents average occurrence/severity of adverse life events, and solid line represents above average occurrence/severity of adverse life events ($+2$ SD).

low scores on the reflective wisdom dimension exacerbated the negative association between adverse life events and SWB. For example, the unstandardized negative effect of adverse life events on SWB changed from -1.10 ($p < .0001$) for older adults with average reflective wisdom dimension scores to nonsignificant $-.21$ ($p = .58$) and $.69$ ($p = .23$), respectively, for those with scores one and 2 SDs above the mean (scores of 4.35 and 4.90, respectively, on the original 1–5 scale). By contrast, for participants with reflective wisdom dimension scores 2 SDs below the mean (a score of 2.69), the unstandardized negative effect of adverse life events on SWB increased to -2.89 ($p < .0001$).

Discussion

This research tested whether (a) wisdom was positively related to SWB during the later years of life, (b) wisdom ameliorated the negative impact of adverse life events on

well-being, and (c) the reflective dimension among the three wisdom dimensions was primarily responsible for the salutary effect on well-being, particularly when confronted with adverse life events.

As in prior research (Ardelt, 1997, 2003; Etezadi & Pushkar, 2013; Grossmann et al., 2013; Le, 2011; Takahashi & Overton, 2002), wisdom in old age was positively related to SWB, even after controlling for the number and severity of adverse life events during the past year, self-rated health, age, race, and marital status, confirming Hypothesis 1. Of course, it is not necessary to be wise to experience SWB when life does not present any obstacles or hardships. Yet, wisdom also buffered the negative association between adverse life events and SWB, supporting Hypothesis 2 and indicating that the well-being of relatively wise older adults was not negatively affected by adverse life events, while less wise individuals might falter and succumb to depression and despair. The inverse relation between adverse life events and SWB disappeared for older adults with relatively high wisdom scores, whereas it became stronger for participants with relatively low wisdom scores. As predicted by Hypotheses 3 and 4, the reflective wisdom dimension was primarily responsible for the positive association between wisdom and SWB and buffered the negative relation between adverse life events and SWB. After adding the three dimensions individually to the model, the cognitive and compassionate wisdom dimensions were no longer statistically related to SWB. The results might explain the paradox of the wisdom and well-being relationship. Seeing reality more clearly and feeling sympathy and compassion for others might not promote well-being, particularly in times of crises and hardships, unless individuals are also able to develop the necessary equanimity to accept the present reality as it is and to see beyond the immediate circumstances to place the current situation in a larger context.

Apparently, wise elders possess the psychological resources to reflect on phenomena and events from a broader perspective, which enables them to preserve their sense of well-being when confronted by crises and hardships. For example, among relatively wise older adults, SWB of hospice patients and nursing home residents did not significantly differ from the well-being of healthy community residents, while less wise hospice patients and nursing home residents had significantly lower scores on SWB than community residents (Ardelt & Edwards, 2016). Wise older adults seem to understand and accept the realities of life, aging, and death with equanimity and, therefore, are not distressed when adverse events happen to them. However, wise persons probably also react to positive events with greater equanimity and less exuberance than less wise people, because they place both positive and negative life events in perspective and know that both will change eventually (Ardelt et al., 2013). They tend to exude a calm contentment of inner joy that is less affected by external events.

Table 3. Subjective Well-Being Regressed on Three Dimensions of Wisdom, Adverse Life Events, and Control Variables

Independent variables	Subjective well-being			
	Model 1		Model 2	
	Unstandardized	Standardized	Unstandardized	Standardized
Cognitive wisdom dimension	-0.07	-0.03	-0.05	-0.02
Reflective wisdom dimension	0.97***	0.37	1.01***	0.38
Compassionate wisdom dimension	0.20*	0.07	0.19*	0.07
Adverse life events	-0.93***	-0.14	-1.10***	-0.16
Reflective × adverse life events	—	—	1.62***	0.13
Control variables				
Self-rated health	0.68***	0.43	0.69***	0.41
Age	0.02***	0.18	0.02***	0.16
Gender (0 = female, 1 = male)	<i>ns</i>	<i>ns</i>	<i>ns</i>	<i>ns</i>
Race (0 = non-White, 1 = white)	-0.57***	-0.16	-0.58***	-0.15
Married (0 = no, 1 = yes)	0.34***	0.12	0.33***	0.11
Educational degree	<i>ns</i>	<i>ns</i>	<i>ns</i>	<i>ns</i>
Factor loadings for SWB				
Mental health	0.35***	0.75	0.36***	0.78
Happiness	0.67***	0.70	0.66***	0.72
Life satisfaction	0.58***	0.76	0.58***	0.77
Overall model fit statistics				
R ² for structural equations	.50		.55	
Degrees of freedom	25		24	
Minimum fit function χ^2	96.66		77.80	
Normed chi-square (NC)	3.87		3.24	
Comparative fit index (CFI)	.95		.96	
RMSEA	.054		.048	
<i>p</i> for close fit (RMSEA < .05)	.28		.61	
Critical N (CN)	456.26		549.54	

Note. *n* = 994; WLS estimation using LISREL 8.80; standard errors, *t*-values, and χ^2 statistics corrected for non-normality; RMSEA = root mean square error of approximation. *ns* = path was eliminated because coefficient estimate was not statistically significant at *p* < .05. ****t*-value > 3.90 (*p* < .0001), ***t*-value > 3.29 (*p* < .001), **t*-value > 2.58 (*p* < .01), †*t*-value > 1.96 (*p* < .05).

Given that the results were similar for the composite measure of three-dimensional wisdom and the reflective wisdom dimension, does this mean that wisdom can be defined and assessed by the reflective dimension alone? We propose that wisdom is best represented by all three dimensions of the three-dimensional wisdom model, both for theoretical and empirical reasons. Although the reflective dimension appears to be the cornerstone of wisdom, which makes a clearer perception of reality and deeper understanding of life (cognitive wisdom dimension) possible and leads to the development of sympathy and compassion for others (compassionate wisdom dimension) through a reduction in self-centeredness and the transcendence of subjectivity and projections (Ardelt, 1997, 2003), theoretically, insight, a deeper understanding of life, and prosocial attitudes and behaviors, such as compassion and altruism, are an inherent part of wisdom (Meeks & Jeste, 2009) and should not be ignored when defining and assessing wisdom. Empirically, the reflective wisdom dimension is often but not always the strongest correlate with other constructs. For example, among the three dimensions, the

cognitive wisdom dimension had the highest associations with an orientation toward personal growth, autonomy, and openness to experiences, whereas the compassionate wisdom dimension had the highest correlation with forgiveness of others. Moreover, the three dimensions combined had stronger associations with emotional regulation, forgiveness of situations, orientation toward personal growth, openness to experiences, purpose in life, positive relations with others (Ardelt, 2011a), and ethical attitudes (Oden, Ardelt, & Ruppel, 2015) than the three dimensions individually. This suggests that it is advisable to define and assess wisdom as a combination of cognitive, reflective, and compassionate dimensions than as the reflective dimension alone.

Limitations of this study include the fact that all data were based on self-reports, which are more likely than performance measures to be affected by a social desirability bias (Staudinger & Glück, 2011). For example, if wise persons are more aware of their own limitations than less wise individuals, they might score lower on the 3D-WS (Bangen et al., 2013). However, an earlier study showed that social

desirability did not confound subjective reports on measures such as well-being by older women (Dawes, Palmer, Allison, Ganiats, & Jeste, 2011). Other limitations include limited generalizability of the results to ethnic minorities due to the small number of older minorities in the sample. It is also likely that highly educated older adults were overrepresented. Finally, because the data in this study were cross-sectional, we cannot draw conclusions about causal relations between the variables, although an earlier short-term longitudinal study found that after controlling for baseline scores, baseline wisdom was still positively associated with well-being 10 months later but not vice versa (Ardelt, in press). Future experimental and longitudinal studies are necessary to test the causal relations among the variables further.

Notwithstanding its limitations, this study might help explain why wise older people tend to age well despite physical, cognitive, and social losses. The findings are consistent with growing evidence for neuroplasticity of aging (Jeste & Harris, 2010) and might guide social interventions to enhance wisdom and well-being in older adults (Parisi et al., 2009). Our study advances the field of wisdom research by suggesting possible psychological mechanisms that might underlie the association between wisdom and well-being in later life.

Supplementary Material

Please visit the article online at <http://gerontologist.oxfordjournals.org/> to view supplementary material.

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Conflict of Interest

Neither of the authors have any disclosures of interest to report.

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